MONSANTO INDUSTRIAL CHEMICAL COMPANY
1500 PINE STREET
CAMDEN, CAMDEN COUNTY, NEW JERSEY
EPA ID# NJD 001700830

GENERAL INFORMATION AND SITE HISTORY

The Monsanto Chemical site is located on six acres on both sides of 1500 Pine Street in Camden, Camden County. It lies in a business section of Central Camden with the nearest residential area about one quarter mile away to the east on Park Boulevard. Monsanto is bordered on the north by the Cooper River and adjacent to Garden State Wholesale Inc., which is at the corner of Pine Street and Magnolia Avenue.

The property has been used for industrial purposes since 1899 and has had several owners since then. The first owner on record was Howard T. Justice who sold the property to the Wilckes Company, who inturn sold the property to either Swan Oil or Monsanto. The former operations and transactions are not clear but it is on record that Monsanto purchased the property on February 1, 1936.

SITE OPERATIONS OF CONCERN

Monsanto Industrial Chemical Company -

From 1936 to 1981, Monsanto was solely involved in the manufacture of Lampblack. Lampblack is composed of pure carbon and is formed from the burning of #6 fuel oil in an oxygen deficient atmosphere. It was used as a pigment in automobile tires and electrical wire brushes. The facility had a large above ground tank capacity to contain fuel oil and the Lampblack product.

The waste products from the operation included off-spec Lampblack, floor sweeping of soot, scrubber effluent (Lampblack and water), cinders, wood, and paper products.

An onsite, unlined landfill, adjacent to the Cooper River received all waste generated from the Lampblack operation until 1972 when it was closed and capped with soil. From 1972 to 1981, all Lampblack residues were transported off site as solid waste. In June 1981, the entire Lampblack operation was dismantled. All tanks were removed and the landfill was capped with an additional six inches of clay and 1 1/2 inches of clean fill.

From 1981 to the present, Monsanto has been operating a three shift, Monday thru Friday, 32 personnel business involved in the manufacture of specialty chemicals with three basic product categories:

1. Ammonium polyphosphate in powder form used mostly as a fire retardant additive in paint application.

2. Natural bone ash using calcined cattle bone meal as a raw material.

3. Synthetic bone ash using tricalcium phosphate as a raw material.

246643

The bone ash products consist chemically of calcium phosphate and are used mostly in the metallurgical industry as a liner in troughs to prevent metallic parts from adhering to the mold.

There are no hazardous waste streams associated with these operations. The only wastes reported are paper bags which are compacted on site and disposed at a sanitary landfill. The only hazardous waste associated with the facility is drain oil from plant vehicles which is generated at a rate of five gallons every three months. The waste oil is serviced by Pittco periodically.

Monsanto did hold permits pursuant to RCRA prior to 1980 because of the tank storage associated with the Lampblack operation.

In 1980, they applied for interim status because their tank storage deminished and were considered a small scale generator in New Jersey with their waste oil. The facility was finally delisted by the DHWE in 1984 but retained their EPA ID in the event that a need arises for its use.

GROUNDWATER ROUTE

The site is situated within the Atlantic Coastal Plain physiographic province on a low lying, gently rolling plain approximately eighty feet above mean sea level. Underlying the site are unconsolidated sediments of Quaternary, Tertiary, and Cretaceous age, consisting of mostly alternating sands and confining units of silts and clays. The sediments dip to the southeast and are approximately forty feet deep at the site. Below the unconsolidated sediments is the Pre-Cretaceous crystalline bedrock. The major fresh-water aquifer is the Potomac-Raritan-Magothy Formation system. Three major aquifer units, lower, middle, and upper, have been defined within the system and are under artesian conditions. The site borders on the outcrop area of the system which contains leaky confining units between aquifers which allows recharge vertically. There is also chance of hydraulic connections between aquifers here.

The potable water supplied to Camden County is received from several sources. Most comes from the well fields in Pennsauken and Cherry Hill and is purchased from the New Jersey American Water Company. There is also a well as close as one mile away in northern Camden which can supply water to parts of the county. There are no private wells in the area used for drinking but many wells used for industrial purposes.

According to a report, Monsanto installed twelve monitoring wells on the site in August 1980. Four indicating parameters for Lampblack were tested which included naphthalene, acenaphthalene, phenanthrene, and pH. Initial samples taken in 1981 indicated total levels of the selected constituents of approximately 100 ppb and the most recent results of October 26, 1987 indicate levels of the parameters below detectable limits. The testing was done by Chemical Samples and Analytical SVCS Co. in Thorofare, New Jersey. The potential for groundwater contamination does exist for Lampblack as the initial sampling indicated the presence of the indicating parameters for Lampblack was detected at 100 ppb.

SURFACE WATER ROUTE

Surface water use includes industrial as well as recreational use of the Cooper River which is adjacent to the rear of the site.

The potential for surface water contamination via runoff is low since there are no hazardous waste streams associated with the process. There is no record of Monsanto ever possessing any discharge to surface water permits.

AIR ROUTE

In the past, Monsanto held several permits regulating the equipment and control apparatus from the Lampblack operation. Most of the equipment used was bag houses and scrubber systems. The emissions from the Lampblack operation was mainly nuisance dust. SO_2 gas was evolved from the burning of #6 fuel oil but was not a regulated emission. Presently, Monsanto holds similar permits on bag houses and scrubber systems. Nuisance dusts are a major concern along with ammonia given off from the ammonium polyphosphate process.

Several inspections were made on the equipment and control apparatus and there are no records of any permit violations.

The potential for air contamination does exist in the form of nuisance dust and ammonia releases.

SOIL

The only soil sampling on record occurred in November 1983 when it was confirmed that thirty-two tote bins contaminated with 2, 3, 7, 8-TCDD (dioxin) were stored at the facility in the warehouse complex. The bins were never used in any process at the site and were removed and landfilled by CECOS. These bins were acquired from the West Virginia and St. Louis Monsanto facilities.

Three 100 cm^2 wipe samples from the storage area and two soil samples adjacent to the warehouse were taken by Environmental Testing and Certification Corporation. 2, 3, 7, 8-TCDD was not detected in any of the samples. The potential for soil contamination does exist for Lampblack as the initial groundwater sampling indicated the presence of the indicating parameters for Lampblack at 100 ppb.

DIRECT CONTACT

The potential for direct contact is low. The entire facility is enclosed by a barbed wire fence and a ten foot high brick wall to prevent entry.

The nearest residence is approximately one quarter mile away on Park Boulevard.

FIRE AND EXPLOSION

There have been no reported fires or explosions. The potential is minimal due to the nature of the waste landfilled on site and the current materials used in Monsanto's manufacturing process.

ENFORCEMENT ACTION

In November 1983, the NJDEP directed Monsanto to test for 2, 3, 7, 8-TCDD when it was confirmed that it was stored at the facility at one time. All tests proved negative.

Several inspections were done on the equipment and control apparatus at Monsanto but there are no reports of any Notice's of Violation issued.

receives a low priority for inspection rating. Even though Lampblack is considered non-hazardous, in 1981 initial groundwater samples were collected and analyzed for the indicating parameters of Lampblack (namely the polycyclic aromatic hydrocarbons acenaphthene, anthracene, and phenanthrene). Total levels of the selected constituents were detected at ± 100 ppb. The most recent sample results of October 1987 indicate levels below detectable limits.

RECOMMENDATIONS

No further action is required by the Bureau of Planning and Assessment but it is recommended that the Bureau of Solid Waste Management review the case to determine if proper closure procedures for the landfill were followed.

Submitted by:

Frank Sorce, HSMS IV
NJDEP Bureau of Planning and Assessment

Preliminary Assessment

MONSANTO INDUSTRIAL CHEMICAL COMPANY
1500 PINE STREET
CAMDEN, NEW JERSEY
CAMDEN COUNTY

EPA ID NJD 001700830

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Monsanto Industrial Chemical Co.	1500 Pine Street				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Camden	NJ	08103	Camden		
09 COORDINATES LATITUDE	LONGITUDE				
39° 56' 20"	75° 06' 15"	Block 1262	Lot 17	Block 1261	Lot 2

10 DIRECTIONS TO SITE (Starting from nearest public road)

Route 130 south to Airport Circle, Route 30 west (Admiral Wilson Blvd.) to Baird Ave. Exit west to Magnolia Rd. make a right to Pine Street. Make a right at Pine, Monsanto is there.

III. RESPONSIBLE PARTIES

01 OWNER (if known)	02 STREET (Business, mailing, residential)		
Monsanto Company	800 North Lindberg Blvd.		
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
St. Louis	MO	63166	(314) 694-1000
07 OPERATOR (if known and different from owner)	08 STREET (Business, mailing, residential)		
Monsanto Company	800 North Lindberg Blvd.		
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
St. Louis	MO	63166	(314 694-1000

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 9, 15, 87 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)

☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1900 (BEGINNING YEAR) | Present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Lampblack was manufactured from 1900 to 1981. It was formed from the burning of #6 fuel oil in an oxygen deficient atmosphere. Ammonium polyphosphate, natural bone ash, and synthetic bone ash are produced by Monsanto at present.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

All materials are considered non-hazardous and no hazardous waste streams are generated.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)			03 TELEPHONE NUMBER
	NJDEP/DHWM/BHW SFO			(609) 346-8000
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Frank Sorce, Jr.	NJDEP	DHWM/BPA	(609) 633-2215	11 23 88 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A SOLID
- [ ] B POWDER, FINES
- [ ] C SLUDGE
- [X] E SLURRY
- [ ] F LIQUID
- [ ] G GAS
- [ ] D OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 1

03 WASTE CHARACTERISTICS (Check all that apply)

- [ ] A TOXIC
- [ ] B CORROSIVE
- [ ] C RADIOACTIVE
- [ ] D PERSISTENT
- [ ] E SOLUBLE
- [ ] F INFECTIOUS
- [ ] G FLAMMABLE
- [ ] H IGNITABLE
- [ ] I HIGHLY VOLATILE
- [ ] J EXPLOSIVE
- [ ] K REACTIVE
- [ ] L INCOMPATIBLE
- [ ] M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	1020	Gallon/year	Oil tank bottoms and drain oil
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	Lampblack		Landfill		
IOC	Ammonium Polyphosphate	12259926	BAG		
ACD	Phosphoric Acid	7664382	Drum		
IOC	Tricalcium Phosphate	7758-238	BAG		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D001700830

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [XX] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE: 1981) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

In August 1980, twelve monitoring wells were installed. Initial groundwater samples were analyzed for the indicating parameters of lampblack. The polycyclic aromatic hydrocarbons were detected at 100 ppb.

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The potential for surface water contamination is low because lampblack,which is stored on site, is considered non-hazardous and there are no hazardous waste streams associated with the current manufacturing process.

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No record of air releases or Notices of Violations although the potential does exist for nuisance dusts and ammonia.

01 [ ] D. FIRE EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

There havebeen no reports of fire/explosion and the potential is minimal due to the nature of the waste landfilled on site and the current materials used in Monsanto's manufacturing process.

01 [ ] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The potential for direct contact is low for workers and outside people. A barbed wire fence surrounds the property to prevent entry.

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

The landfill on site contains residues from previous lampblack production. The landfill has been closed and capped as of 1982. The observed groundwater contamination potentially may contaminate soil also.

01 [ ] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The potential for drinking water contamination is low because lampblack, which is stored on site, is considered non-hazardous and there are no hazardous waste streams associated with the current manufacturing process.

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The potential does exist for worker exposure to nuisance dusts and ammonia fumes.

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The potential for population exposure does exist if a release of ammonia was to occur.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

The area was completely seeded as of December 1987. There is no evidence of any damage to flora.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

The potential for damage to fauna is low because lampblack, which was landfilled on site , is considered non-hazardous.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

The potential for damage to the food chain is low because lampblack, which was landfilled on site, is considered non-hazardous.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

The on site landfill contains residues of a lampblack operation. The landfill is unlined.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

There is no evidence of damage to offsite property.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

There are no reports of any contamination to sewers, storm drains, or waste water treatment plants.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Ther is no evidence of illegal or unauthorized dumping.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

In December 1983, testing was done for 2,3,7,8-TCDD because it was stored on site for a short period. All tests were negetive.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A NPDES				
☐ B UIC				
☐ C AIR	See Stack Log	Attachment		
☐ D RCRA	NJD001700830		1980	
☐ E. RCRA INTERIM STATUS		1980	3/19/84	Delisted by DHWE 3/21/84
☐ F SPCC PLAN				
☐ G STATE (Specify)				
☐ H LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J NONE				

III. SITE DESCRIPTION

01 STORAGE DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A SURFACE IMPOUNDMENT		
☐ B PILES		
☐ C. DRUMS, ABOVE GROUND		
☒ D. TANK, ABOVE GROUND	10,000	Gallons
☐ E TANK, BELOW GROUND		
☒ F LANDFILL		12 ft. deep
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE: 25 Acres

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC

Lampblack was placed in onsite unlined landfill until 1981 when it was capped. Waste oil stored on site in a closed metal container.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☐ YES ☐ NO

02 COMMENTS

Landfill containing waste from lampblack process is capped and is not accessable to workers or outside people.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. X
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 1 (mi)
B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
X B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER _____

03 DISTANCE TO NEAREST DRINKING WATER WELL 1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
6' (ft)	Southwest	_____ (ft)	_____ (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (including useage, depth, and location relative to population and buildings)

Camden County pulls its potable water supply from several sources. Most of the water supply comes from both the Pennsauken and Cherry Hill well field and is purchased from the New Jersey American Water Company. There is also a well in Northern Camden. The exact amounts cannot be determined.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES	COMMENTS	☐ YES	COMMENTS
☐ NO		☐ NO	

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X A. RESERVOIR, RECREATION, DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Copper River	☐	Adjacent (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 200 NO. OF PERSONS	B. 1000 NO. OF PERSONS	C. 10,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION .25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 250

04 DISTANCE TO NEAREST OFF-SITE BUILDING .1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Monsanto is located in a buisiness section of Camden. There are several small businesses in the immediate area, a high school .5 miles away, and areas of row homes as close as .25 miles away.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☒ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
40 (ft)	(ft)	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
12 (in)	2.5 (in)	< 10 %		%

09 FLOOD POTENTIAL: 100 to 500 SITE IS IN ____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A 5 (mi) OTHER: B ____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species): ____ (mi)

ENDANGERED SPECIES: NA

13 LAND USE IN VICINITY

DISTANCE TO

COMMERCIAL INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A .25 (mi)	B .5 (mi)	C ____ (mi)	D. ____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Monsanto is located in a business section of Camden with the nearest residence about .25 miles away. It is bordered on the north by the Cooper River. The site is situated in a low lying plain about 80 feet above mean sea level.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	5	Chemical samples & analytical Svcs.	
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	Environmental Testing & Certification Corp.	
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF _____ (Name of organization or individual)

03 MAPS ☐ YES ☐ NO

04 LOCATION OF MAPS _____

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Monsanto Company	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
800 North Lindberg Blvd.	

05 CITY	06 STATE	07 ZIP CODE
St. Louis	Mo	63166

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

PARENT COMPANY (if applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Swan Oil	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
1500 Pine Street	

05 CITY	06 STATE	07 ZIP CODE
Camden	NJ	08103

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D001700830

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME: Monsanto Company		02 D+B NUMBER	10 NAME: Monsanto Company		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 1500 Pine Street		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.): 800 North Lindberg Blvd.		13 SIC CODE
05 CITY: Camden	06 STATE: NJ	07 ZIP CODE: 08103	14 CITY: St. Louis	15 STATE: Mo	16 ZIP CODE: 63166
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S) (List most recent first, provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D001700830

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Monsanto Company	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
1500 Pine Street	

05 CITY	06 STATE	07 ZIP CODE
Camden	NJ	08103

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D001700830

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D001700830

II PAST RESPONSE ACTIVITIES *Continued*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D001700830

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

1. In November 1983, the NJDEP directed Monsanto to test for 2,3,7,8-TCDD when it was confirmed that it was stored at the facility at one time. All tests proved negative.

2. Several inspections were done on the equipment and control apparatus at Monsanto but there are no reports of any Notices of Violation issued.

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
POTENTIAL HAZARDOUS WASTE SITE

SEVERITY INDEX SCORE SHEET

Site Name : MONSANTO INDUSTRIAL CHEMICAL
Alias :
Address : 1500 PINE STREET
City : CAMDEN
County : CAMDEN
Municipality Code :
EPA ID # : NJD001700530 SIN Number: 1
DEP Case # : (0=No SIN, 1-9=SIN evaluations)
Latitude (dd-mm-ss) : 39 N 56' 26"
Longitude (dd-mm-ss) : 76 W 06' 15"

Master List Status : C (A = Publicly funded or recalcitrant RP funding
B = Potential Master List site
C = Not publicly funded)

WASTE CHARACTERISTICS

Individual Waste Characteristic Scores:		Data Quality
Toxicity and Persistence :	15	A
Waste Quantity :	1	C
Containment :	3	A

EXPOSURE POTENTIAL

Population Density/Sensitive Environment : 2

Individual Exposure Media Scores:		Observed?(Y/N)	Data Quality
Groundwater :	2	Y	A
Surface Water :	2	N	C
Air :	0	N	C
Soil :	3	Y	C
Fire/Explosion :	0	N	C
Direct Contact :	0	N	C

TOTAL SCORE = 11.5

Comments on this site: LAMPBLACK Residue were landfilled on site and considered NON-hazardous

Site remediation activities:

Is there a partial remedial action that should occur at this site on an immediate basis ? NO

Has there been a prior remedial action that addresses the problems evaluated ? NO

Is this an operating facility ? YES
Is the owner known ? YES
If not, does a PRP exist ? _____
Is public funding anticipated to achieve cleanup ? _____

What program currently has the lead for this site ?

DHSM _____	BFO _____	RCRA _____	ECRA _____
SW Eng. _____	BPA _____	Emerg. Resp. _____	NJPDES _____
EPA _____	BCM _____	DWR Enf. _____	DEC Enf. _____
Other (Specify) _____			

If in a regulatory program, what status is the permit?

Pre-application _____	Application _____
Issued _____	Other (specify) _____

Site assignment: (Program options: DHSM, BFO, BCM, RCRA, ECRA, SW ENG., BSA, ER, NJPDES, EPA, DWR ENF., DEC ENF. or OTHER.)

Site status:

Date : 10/19/87 Evaluator : FRANK SORCE JR.

Preliminary

Facility Name: MONSANTO INDUSTRIAL CHEMICAL CO.

Location: 1500 Pine St CAMDEN CAMDEN County

EPA Region:

Person(s) in Charge of the Facility:

Name of Reviewer: Frank Sorce Jr Date: 10/27/88

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

LAMPBLACK [illegible] have been landfilled on site

The landfill is capped and unlined.

Scores: S_M = 436 (S_{gw} = 754 S_{sw} = 0 S_a = 0)

S_{FE} =

S_{DC} =

HRS COVER SHEET

GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	45	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
	Total Route Characteristics Score			15	
3 Containment	0 1 2 3	1		3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8	
	Total Waste Characteristics Score		16	26	
5 Targets					3.5
Ground Water Use	0 1 2 3	3	6	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 35 40	1	0	40	
	Total Targets Score		6	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			4320	57,330	
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 7.54				

SURFACE WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 3	2	6	6	
Physical State	0 1 2 3	1	2	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 3	1	0	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8	
	Total Waste Characteristics Score		16	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	6	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
	Total Targets Score		6	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7 Divide line 6 by 64,350 and multiply by 100	S_{sw} = 0				

AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1		45	5.1
Date and Location:					
Sampling Protocol:					-
If line 1 is 0, the S = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100 S_a =					

	S	S^2
Groundwater Route Score (S_{gw})	7.54	56.8
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		56.8
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		7.54
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$		S_M = 4.36

WORKSHEET FOR COMPUTING S_M

Projected

Facility Name: MONSANTO INDUSTRIAL CHEMICAL CO.

Location: 1500 Pine St. Camden, Camden Co.

EPA Region:

Person(s) in Charge of the Facility:

Name of Reviewer: Frank Sorr Date: 10/27/88

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Lampblack residues have been landfilled on site. The landfill is capped and unlined

Scores: S_M = 9.93 (S_{gw} = 7.54 S_{sw} = 7.54 S_a = 17.2)

S_{FE} =

S_{DC} =

HRS COVER SHEET

GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	45	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
	Total Route Characteristics Score			15	
3 Containment	0 1 2 3	1		3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8	
	Total Waste Characteristics Score		16	26	
5 Targets					3.5
Ground Water Use	0 1 2 3	3	6	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 35 40	1	0	40	
	Total Targets Score		6	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			720	57,330	
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 1.54				

SURFACE WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	45	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1		3	
1-yr. 24-hr. Rainfall	0 1 2 3	1		3	
Distance to Nearest Surface Water	0 1 2 3	2		6	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			16	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	6	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			6	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			4320	64,350	
7 Divide line 6 by 64,350 and multiply by 100	S_{sw} = 7.54				

AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	45	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 (1) 2 3	1	1	3	
Toxicity	0 1 2 (3)	3	3	9	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
	Total Waste Characteristics Score		5	20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 (18) 21 24 27 30	1	18	30	
Distance to Sensitive Environment	(0) 1 2 3	2	0	6	
Land Use	0 1 2 (3)	1	3	3	
	Total Targets Score		21	39	
4 Multiply 1 x 2 x 3			4725	35,100	
5 Divide line 4 by 35,100 and multiply by 100 S_a = 13.46					

	S	S^2
Groundwater Route Score (S_{gw})	7.54	56.86
Surface Water Route Score (S_{sw})	7.54	56.86
Air Route Score (S_a)	13.46	181.17
$S_{gw}^2 + S_{sw}^2 + S_a^2$		294.89
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		17.2
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$		S_M = 9.93

WORKSHEET FOR COMPUTING S_M

BUREAU OF PLANNING AND ASSESSMENT
FILE/DATA CHECK SHEET
Deve[illegible]ed bu NJDEP DHWM/BPA 1/ [illegible]988

Agency	Phone No.	Contact	Date	File Y/N Reviewed
N.J.DEP Div. Water Resources				
A. Central File	(609)292-0400			
B. Regional Enforcement Office.	346-8032			NO
C. Geological Survey	(609)292-0668	Peter [illegible]		yes
D. Water Allocation (well logs) (radius program)	(609)984-6831 (609)292-2957			
E. Groundwater Quality Mgt.	(609)292-0424			No
F. Indust. Waste Mgt. (NJPDES permits)	(609)292-4860			NO
G. Other				
Div. Waste Management				
A. Regional Enforcement Office	346-8000			yes
B. Case Management	(609)633-0701			NO
C. ECRA	(609)633-7141			NO
D. Haz. Waste Eng.	(609)292-9880	JOE		yes
E. Other [illegible]	4-2991			NO
Div. Env. Quality				
A. Reg. Air Pollution Control Office	346-8071	Jules Tivaldi		yes
B. Office of Quality Assurance	(609)292-3950			
C. Other				
Div. Solid Waste Mgt.				
A. File Room	4-2556 (609)292-0112			NO
B. Enforcement Office	(609)426-0791			
C. Solid Waste Eng.	(609)292-7875			

Agency	Phone No.	Contact	Date	File Y/N Reviewed
Div. Hazardous Site Mitigation				
A. Central File	(609)292-3209			
B. B.of Env.Evaluation and Risk Assmnt.	(609)633-6801 9-7135	NOREEN		YES
C. Site Management	(609)984-2900			NO
D. Other	_____			
Other N.J.DEP				
A. ORS (DEP Attorneys)	(609)292-5697			
B. Div.of Law (Att.Gen.Office)	(609)984-3900			
C. Office of Science and Research	(609)984-6070			
D. Div.of Fish & Game	_____			
E. Right to Know	(609)292-6714			
F. Off.of Env.Anal. (aerial photos)	(609)292-8806			
F. Other	_____			
N.J. Dept.of Health	_____			
N.J. State Library	(609)292-6220			
U.S.EPA				
A. Surveilance and Monitoring Branch	(201)321-6686			
B. Response and Prevention Branch	(201)321-6658			
C. Other	_____			
Local Authorities				
A. Health Officer	757-3600	BOB LENTINE		NO
B. Tax Assessor or Town Clerk	757-7017			YES
C. Other (Fire,Police, Public Works,etc..)	_____			
Other Agency	_____			

PALMYRA
MORRIS STA.
PUMPING STA.
FOREST STA.
Fisher Point Dike
MORRISVILLE
FISHHOUSE STA.
PENNSYLVANIA
SANDY BEACH
JORDAN
PORT RICHMOND
PETTY ISLAND
COOPERS POINT
PAVONIA
MERCHANTVILLE STA.
EAST CAMDEN
STOCKTON
BROADWAY
BERRY PARK STA.
GARDEN STATE PARK
S. CAMDEN
SHIPYARD
YORK SHIP
CULLINGSWOOD
CUTHBERT STA.
WESTMONT STA.
WHITMAN PARK
MUNICIPAL STADIUM
MUSTON
FIRFIELD
OAKLYN STA.
OAKDALE STA.
GLOUCESTER
HIGHLAND PARK
WOODLYNNE
HADDONFIELD
GLOUCESTER
NORTHMONT
NAVY YARD
EAGLE PT.
NEWBOLD
RED BANK
WASHINGTON PARK U.S. RESERVATION
BELLMAWR
HADDON HEIGHTS
BARRINGTON
LAWNSIDE
TAVISTOCK
BELLMAWR
BARRINGTON
INTERCHANGE NO. 3
MAGNOLIA
MAGNOLIA STA.
RUNNEMEDE
SOMERDALE
CLEMENTON BRIDGE
CORNER
PUMPING STA.
Scale: 1 Mile to an Inch.
Miles
1 3/4 1/2 1/4 0 1 2 3
Yards
1000 500 0 1000 2000 3000
Meters
1000 500 0 1000 2000 3000
Contour Interval: 10 feet
A. HOEN & CO. BALTIMORE, MD.
SHEET 31
TOPOGRAPHIC SERIE

LEGEND FOR ATLAS SHEET

△ INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE

□ PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE

⊕ UNSUCCESSFULL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊙ UNSUCCESSFULL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊡ NO TEST – NO DATA ON YIELD

——— FAULT (DASHED WHERE INFERRED)

——— CONTACT (DASHED WHERE INFERRED)

PIEDMONT / COASTAL PLAIN — PHYSIOGRAPHIC PROVINCE BOUNDARY

WATER SUPPLY TRANSMISSION LINE

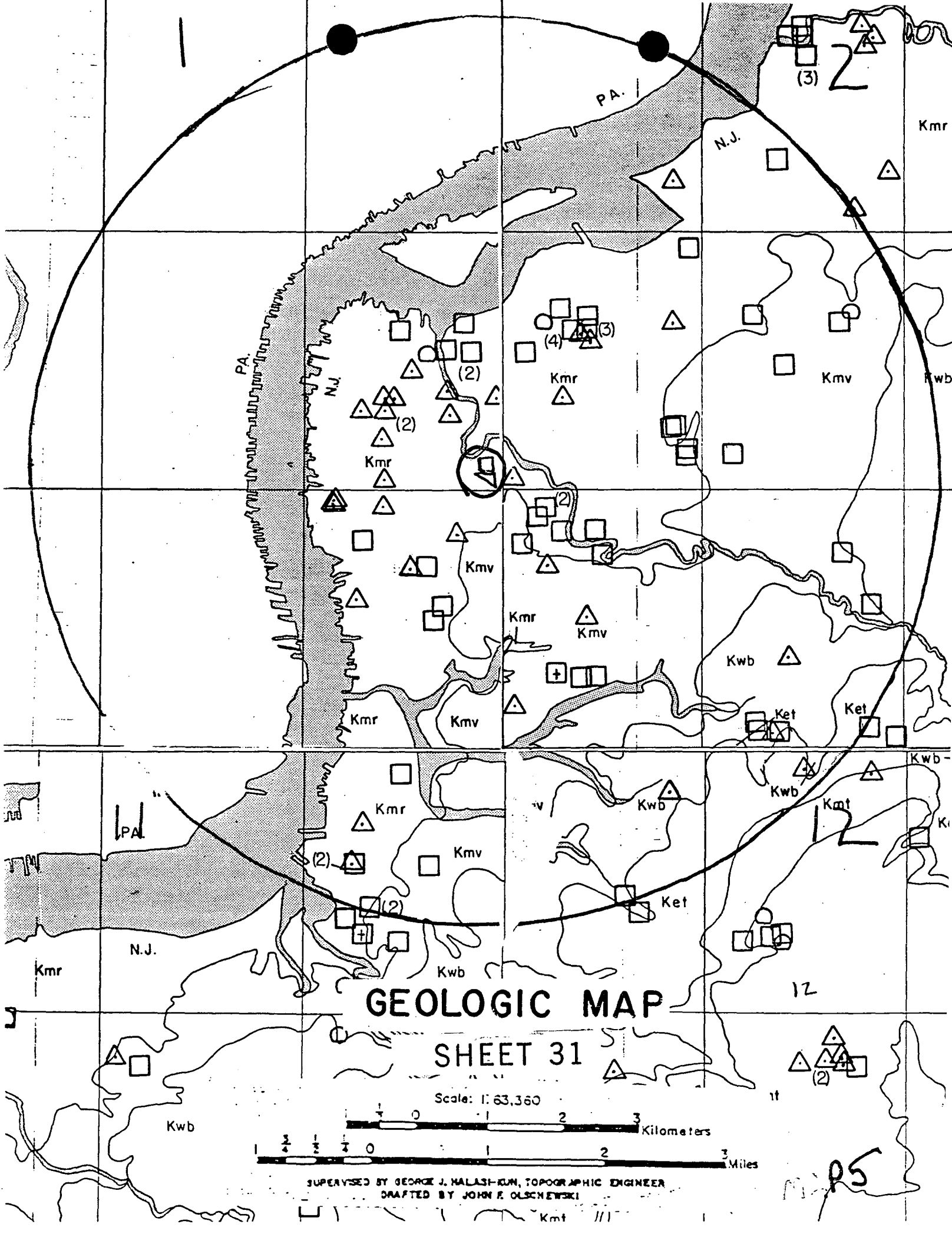
SEDIMENTARY ROCKS

TERTIARY

Tbh	BEACON HILL GRAVEL
Tch	COHANSEY SAND
Tkw	KIRKWOOD SAND
Tmq	MANASQUAN MARL
Tvt	VINCENTOWN SAND
Tht	HORNERSTOWN MARL

CRETACEOUS

Krb	RED BANK
Krbt	RED BANK (TRANSITIONAL UNIT)
Krbg	RED BANK (GLAUCONITE SAND UNIT)
Kns	NAVESINK MARL
Kml	MOUNT LAUREL SAND
Kw	WENONAH SAND
Kmt	MARSHALLTOWN FORMATION
Ket	ENGLISHTOWN SAND
Kwb	WOODBURY CLAY
Kmv	MERCHANTVILLE CLAY
Kmr	MAGOTHY AND RARITAN FORMATIONS
Km	MAGOTHY FORMATION
Kr	RARITAN FORMATION


GEOLOGIC MAP
SHEET 31
Scale: 1:63,360
Kilometers
Miles
SUPERVISED BY GEORGE J. HALASI-KUN, TOPOGRAPHIC ENGINEER
DRAFTED BY JOHN F. OLSCHEWSKI
PA.
N.J.
Kmr
Kmv
Kwb
Ket
Kmt

LEGEND

WATER SUPPLY

- AREA SERVED BY PRIVATE WATER SERVICE COMPANIES
- AREA SERVED BY REGIONALLY OWNED WATER SERVICE COMPANIE
- AREA SERVED BY MUNICIPALLY OWNED WATER SERVICE COMPANIE
- AREA NOT PRESENTLY SERVED BY WATER SERVICE
- PUBLIC SUPPLY WELLS
- WATER MAIN ACROSS HIGHWA FOR FUTURE USE
- SURFACE WATER INTAKE
- —W— MAJOR WATER MAINS

SEWAGE, LANDFILL

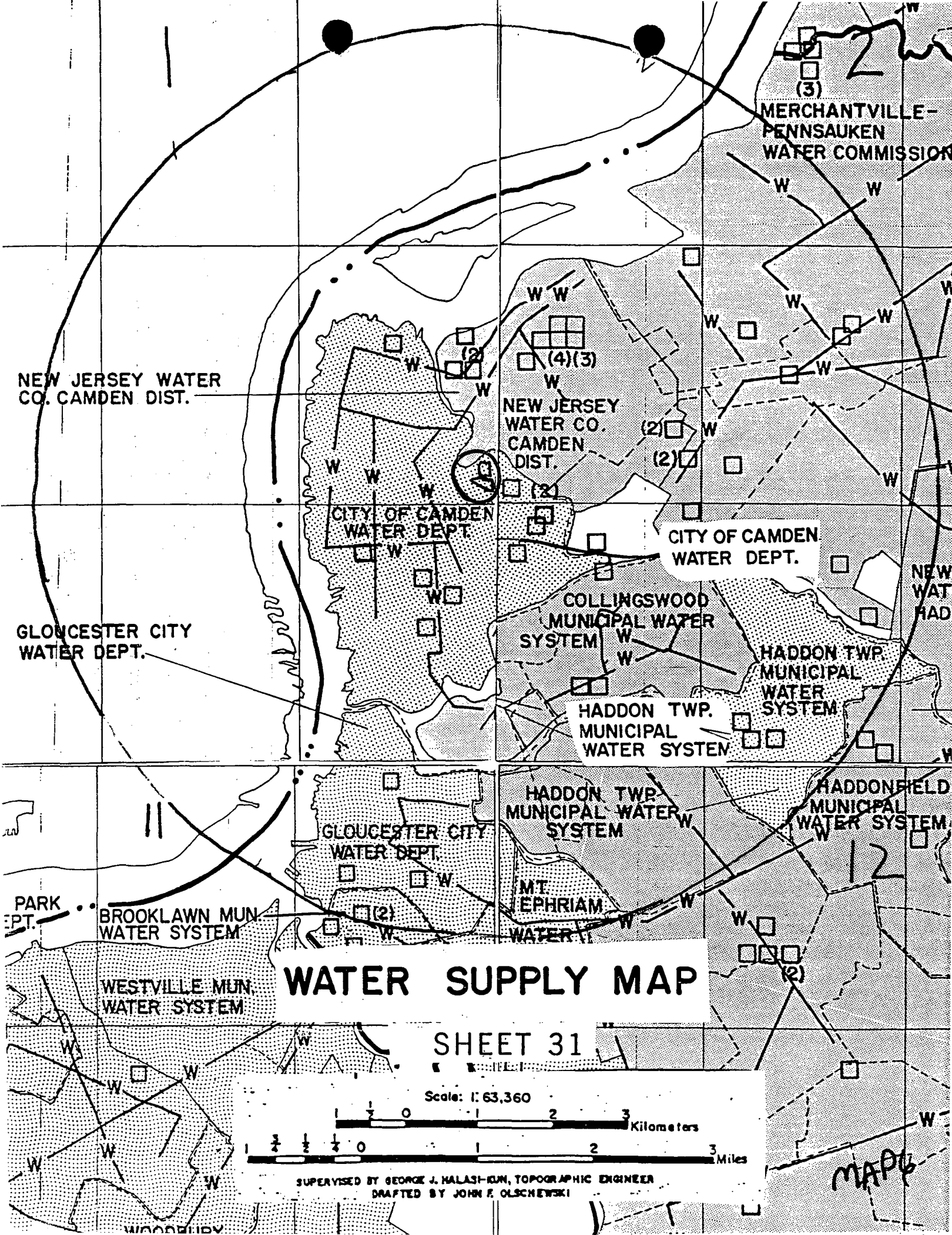
- AREA SERVED BY PUBLIC SEWAGE SERVICE
- AREA NOT PRESENTLY SERVED BY SEWAGE SERVICE
- SANITARY LANDFILLS
- SEWAGE TREATMENT PLANTS (CAPACITY <0.3mgd)
- SEWAGE TREATMENT PLANTS (CAPACITY ≥0.3mgd)
- —S— MAJOR SEWAGE TRANSMISSION LINES

DRAINAGE BASIN

- DRAINAGE BASIN BOUNDARY
- RIVER BASIN BOUNDARY
- HUDSON DRAINAGE BASIN NAME
- STREAMS AND RIVERS
- FLOOD PRONE AREAS

POPULATION

- COUNTY BOUNDARY
- MUNICIPAL BOUNDARY
- ( ) POPULATION DENSITY IN PERSONS PER SQUARE MILE
- [ ] AREA IN SQUARE MILES
- % PERCENT AREA OF MUNICIPALITY ON BLOCK
- MARKET ROADS
- BUILT UP AREAS
- STATE BOUNDARY


WATER SUPPLY MAP
SHEET 31
Scale: 1:63,360
Kilometers
Miles
SUPERVISED BY GEORGE J. HALASI-KUN, TOPOGRAPHIC ENGINEER
DRAFTED BY JOHN F. OLSCHEWSKI
MERCHANTVILLE-PENNSAUKEN WATER COMMISSION
NEW JERSEY WATER CO. CAMDEN DIST.
NEW JERSEY WATER CO. CAMDEN DIST.
CITY OF CAMDEN WATER DEPT.
CITY OF CAMDEN WATER DEPT.
COLLINGSWOOD MUNICIPAL WATER SYSTEM
HADDON TWP. MUNICIPAL WATER SYSTEM
HADDON TWP. MUNICIPAL WATER SYSTEM
GLOUCESTER CITY WATER DEPT.
GLOUCESTER CITY WATER DEPT.
HADDON TWP. MUNICIPAL WATER SYSTEM
HADDONFIELD MUNICIPAL WATER SYSTEM
MT. EPHRIAM WATER
BROOKLAWN MUN. WATER SYSTEM
WESTVILLE MUN. WATER SYSTEM
PARK
WOODBURY

BLOCK #31-01

A. Camden, Philadelphia

B. Delaware River-Newton Creek, Coopers Creek

C. 2.

Map No.	Location	Period of Record
449	Cooper River at Camden	1967-
3. 335	Newton Creek, North Branch, Woodlyne	1965

D. Magothy and Raritan Formations (Kmr), Merchantville Clay (Kmv)

E. 1. Physiographic Province: Coastal Plain
Subdivision: Inner Plain
Major Topographic Features: Delaware River, Clay and Marl Region
Elevations (ft. above sea level): hills 45, valleys 0
Relief (ft.): 45

2. a. Normal Year: 43"
Dry Year: 35"
Wet Year: 48"

b. January: 33°F
July: 76°F

c. 250 days. Last killing frost: 4/15; first killing frost: 11/5

G. Corps of Engineers (U.S.Army) - Petty Island

H. Camden:
Walt Whitman House
Benjamin Cooper House
Joseph Cooper House
Pomona Hall
Taylor House
Newton Friends Meeting House
Charles S. Boyer Memorial Hall

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
● 31-01-652	City of Camden, #5	1963	134-169	171	1000	Kmr
● 31-01-655	H. Kohnstamm & Co., Inc.	1954	116-136	136	150	"
● 31-01-656	U.S. Gasket, #1	1953	130-141	153	100	"
● 31-01-657	Savar Amusement Corp.	1950	82-113	113	500*	Kr
● 31-01-657	Stanley Corp. of America	1949	118-138	150	200*	"
● 31-01-662	City of Camden, #15	1954	116-136	155	1000	"
● 31-01-664	Camden Water Dept., #1-A	1953	135-170	175	1000	"
● 31-01-665	City of Camden, Test Well #1	1950	129-150	166	300	"
● 31-01-665	" #14	1953	105-145	164	1000	"
● 31-01-667	Sungil Co.	1947	147-157	157	100	"
● 31-01-669	Paris Produce Co.	1964	150-166	167	100	Kmr
● 31-01-673	Lintonia Pure Food Shop, Inc.	1950	102-123	128	315*	"
● 31-01-681	Savar Amusement Corp., #2	1950	110-130	130	500*	Kr
● 31-01-681	Camden Trust Co.	1949	93-123	127	430*	"
● 31-01-684	Stanley Corp. of America	1949	110-130	152	600*	"
● 31-01-687	Savar Amusement Corp.	1949	114-134	138	600	"
● 31-01-691	Baltimore Markets, #2	1950	138-170	170	1200*	"
● 31-01-912	Public Service Elec.& Gas Co.	1950	120-146	149	600	"
● 31-01-912	"	1954	113-145	145	350	"
● 31-01-916	City of Camden, #2-B	1953	111-136	204	1000	"
● 31-01-921	Stanley Corp. of America	1949	86-150	163	250*	"
● 31-01-928	Samuel Adelson	1952	92-102	102	200	"
● 31-01-929	Camden Water Dept.	1948	111-136	165	1012	"
● 31-01-934	Liberty Theatre #1	1949	112-130	130	150	"
● 31-01-943	MacAndrews & Forbes Co.	1951	82-103	114	350	"
● 31-01-956	Camden Water Dept.,#7	1966	123-163	167	1023	"
● 31-01-961	City of Camden, #11	1942	124-154	166	1005	"

*Indicates use as a recharge well.

J. Geodetic Control Survey monuments described in Index Map 48; Adjacent Index Maps 44,54

● Indicates wells within four mile radius of site

BLOCK #31-02 9/76

A. Camden

B. Delaware River-Baldwin Run, Coopers Run, Newton Creek, Pennsauken

C. 1. Cherry Hill - Non-recording temperature and precipitation gauges

2.

Map No.	Location	Period of Record
194	South Branch Pennsauken Creek at Cherry Hill	1967-
196	Cooper River at Haddonfield	1963-
447	North Branch Cooper River at Marlton	1964-
448	North Branch Cooper River at Ellisburg	1964-
449	Cooper River at Camden	1964-
450	Newton Creek at Collingswood	1964-

3.

196	Cooper River at Haddonfield	1965-.
334	Newton Creek at West Collingswood	
335	North Branch Newton Creek at Woodlyne	

Water Quality Standards: (explained in Atlas Sheet description) FW3, TW2

D. Mount Laurel and Wenonah Sands (Kmw), Marshalltown Formation (Kmt), Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Clay (Kmv), Magothy and Raritan Formations (Kmr)

E. 1. Physiographic Province: Coastal Plain
Subdivision: Inner Plain
Major Topographic Features: Delaware River, Clay and Marl Region
Elevations (ft.above sea level): hills 100, valleys 0
Relief (ft.): 100

2. a. Normal Year: 43"
Dry Year: 36"
Wet Year: 48"

b. January: 33°F
July: 76°F

c. 249 days. Last killing frost: 4/15; first killing frost: 10/30

F. Camden County:
Cooper River Park

G. Corps of Engineers (U.S.Army) - Petty Island

H. Griffin Morgan House, Pennsauken
1743 Samuel Cole House, Cherry Hill

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
31-02-195	Paragon Oil Co., #1	1961	51-61	61	100	Kmr
31-02-225	City of Camden, #4-A	1960	95-130	134	1585	"
31-02-227	" #5-NA	1960	79-114	121	1529	"
31-02-228	" #3	1953	73-107	136	1000	"
31-02-228	" #8	1953	89-124	141	1000	"
31-02-228	" #10	1960	75-115	118	1529	"
31-02-235	Kingston Trap Rock	1955	55-65	68	125	"
31-02-238	" #2	1966	115-123	127	200	"
31-02-238	Atlantic Blue Diamond Corp.	1958	100-110	110	180	"
31-02-281	City of Camden	1975	140-180	190	1200	"
31-02-293	Meadow Brook Swim Club	1963	97-107	107	200	"
31-02-297	H&H Industries	1959	71-81	81	100	"
31-02-331	Riverton-Palmyra Water Co.#16	1965	144-176	192	1034	"
31-02-331	" #13	1963	166-197	206	610	"
31-02-361	Delaware Valley Water Co.,#28	1969	225-260	264	1200	"
31-02-363	" #31	1970	215-261	267	1002	"
31-02-419	New Jersey Water Co.,#50	1958	139-170	176	1000	"
31-02-427	" #25	1961	305-367	399	1050	"
31-02-433	Merchantville-Pennsauken Water Co.	1968	109-139	139	882	"
31-02-442	City of Camden, Test #6	1954	153-175	181	210	Kr
31-02-443	New Jersey Water Co.,#44	1950	154-186	187	1400	Kmr
31-02-443	" #45	1950	141-173	173	955	"
31-02-443	" #46	1950	148-178	179	1400	"
31-02-443	" #48	1954	122-164	171	1412	"
31-02-444	City of Camden, #16	1954	149-179	181	1000	"
31-02-449	Savar Amusement Corp.	1949	169-189	189	450	"
31-02-451	H. Kohnstomm & Co.,Inc.,#5-A	1967	163-184	194	200	"
31-02-451	"	1959	133-158	158	250	"
31-02-451	New Jersey Water Co.,#52	1965	147-198	198	1404	"
31-02-451	" #38	1933	126-162	166	846	"
31-02-451	" #47	1953	159-175	177	1012	"
31-02-462	Parks Dairies	1958	154-170	172	200	"
31-02-477	Camden Co. Park Commission	1950	186-217	217	1200	"
31-02-492	Merchantville-Pennsauken Water Comm., #9	1956	107-137	141	875	"
31-02-492	" #10	1963	223-258	262	1000	"
31-02-496	" #2-A	1965	110-140	143	900	"
31-02-496	" #1-R	1971	132-152	159	875	"
31-02-519	" Test Well	1963	118-138	160	400	"
31-02-537	" Test Well #1	1956	247-268	293	317	"
31-02-554	" #2	1962	245-285	300	1040	"
31-02-561	" #6	1957	242-277	283	1020	"
31-02-575	Camden Co.Board of Ed.	1967	322-401	401	320	"
31-02-621	Merchantville-Pennsauken Water Comm., #7	1958	240-275	330	1000	"
31-02-692	" #8	1960	207-237	240	875	"
31-02-694	New Jersey Water Co.,#22	1960	371-453	497	1067	"
31-02-697	" #24	1961	112-167	186	1051	"
31-02-699	"	1967	376-427	430	1030	"

31-02-712	City of Camden, Test #5	1953	205-225	277	280	Kmr
31-02-712	"	1953	185-225	243	1000	"
31-02-712	" #17	1954	230-265	274	1000	"
31-02-714	"	1953	90-115	123	1000	"
31-02-716	Our Lady of Lourdes Hospital	1963	237-257	261	275	"
31-02-718	A. N. Stoll Werck, Inc.	1950	111-131	136	210	"
31-02-725	Boro.of Collingswood, #3-R	1960	257-287	294	1000	Kr
31-02-728	" #2-B	1960	248-278	308	1000	Kmr
31-02-754	Friendship Dairy, #1	1955	143-164	164	100	"
31-02-773	Boro.of Collingswood,Test #1	1964	307-333	370	-	"
31-02-774	A.M.Ellis Theatres,Inc.,#3	1961	83-103	115	250*	"
31-02-781	Boro.of Collingswood, "B"	1965	224-313	336	1034	"
31-02-782	" "A"	1965	219-312	331	1034	"
31-02-837	New Jersey National Guard	1956	96-111	111	150	"
31-02-857	Morgan Brothers, Inc.	1967	431-451	451	302	"
31-02-865	Joe's Trailer Camp	1955	112-122	122	70	"
31-02-879	Twp. of Haddon, #4	1965	417-448	455	1000	"
31-02-879	" #3	1956	432-469	490	800	"
31-02-887	" Bd.of Ed.,#1	1966	142-162	165	200	"
31-02-887	" New #1	1968	401-479	481	870	"
31-02-898	Boro.of Haddonfield,Test #1	1965	490-510	510	350	"
31-02-899	"	1967	307-372	380	1029	"
31-02-982	New Jersey Water Co.,#23	1960	321-378	405	1001	"
31-02-982	" #13	1953	491-527	527	1200	"
31-02-986	Hunt Tract Swimming Club	1957	232-243	243	90	"

*Indicates use as a recharge well.

J. Geodetic Control Survey monuments described in Index Map 48; Adjacent Index Maps 44,49,54,55

BLOCK #31-11

A. Camden, Philadelphia, Runnemede, Woodbury

B. Delaware River-Big Timber Creek, Mantua Creek, Newton Creek, Woodbury Creek

C. 3.

Map No.	Location	Period of Record
333	Woodbury Creek at Woodbury	1965-

Water Quality Standards: (explained in Atlas Sheet description)
FW2, TW1 except where classified FW3

D. Kirkwood Sand (Tkw), Hornerstown Marl (Tht), Navesink Marl (Kns), Mount Laurel and Wenonah Sands (Kmw), Marshalltown Formation (Kmt), Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Clay (Kmv), Magothy and Raritan Formations (Kmr)

E. 1. Physiographic Province: Coastal Plain
Subdivision: Inner Plain
Major Topographic Features: Delaware River, Clay and Marl Region
Elevations (ft. above sea level): hills 100, valleys 0
Relief (ft.): 100

2. a. Normal Year: 44"
Dry Year: 34"
Wet Year: 51"

b. January: 33°F
July: 76°F

c. 250 days. Last killing frost: 4/20; first killing frost: 10/30

H. Red Bank Battlefield, National Park
James Whitall House, National Park
Woodbury Friends Meeting House, Woodbury

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
● 31-11-319	Atlantic Ice Mfg. Co.	1962	205-240	242	200	Kmr
● 31-11-322	City of Gloucester	1965	225-265	270	1034	"
● 31-11-343	"	1961	221-261	280	1000	"
● 31-11-343	New Jersey Zinc Co.	1958	223-253	275	600	"
● 31-11-343	"	1958	249-279	285	600	"
31-11-348	Borough of Brooklawn	1961	307-327	327	400	"
● 31-11-349	"	1927	101-141	152	225	"
31-11-349	"	1927	114-157	165	225	"
● 31-11-353	City of Gloucester	1958	161-185	188	500	"
31-11-373	Borough of Brooklawn	1969	288-321	324	App.300	"
31-11-378	Borough of Westville	1957	286-313	323	1205	Kr
31-11-382	Borough of Bellmawr	1956	334-359	423	800	Kmr
31-11-422	Borough of National Park	1950	-	87	175	Qsd
31-11-422	"	1956	241-282	307	636	Kr
31-11-448	West Deptford Little League	1958	62-72	72	100	Qsd
31-11-497	Polyrez Co.	1959	134-166	166	503	Kmr
31-11-514	Texaco Co.	1973	266-306	329	1001	"
31-11-515	Twp. of West Deptford	1961	307-353	363	752	"
31-11-565	General Engines Co.	1954	38-43	43	100	Ket
31-11-612	Steinberger	1959	-	170	-	Km
31-11-628	Deptford Twp.	1971	282-361	361	752	Kmr
31-11-659	John G. Baleter	1960	-	200	-	Km
31-11-671	Child Care Center	1967	216-236	294	100	Kmr
31-11-678	Woodbury Asso.Market Co.	1966	201-221	221	400	"
31-11-744	Colonial Pipeline Co.	1963	127-137	137	150	Ket
31-11-751	Twp. of West Deptford	1973	388-345	480	1012	Kmr
31-11-754	"	1972	392-412	412	151	"
31-11-759	Greenfield Water Co.	1963	241-288	336	608	"
31-11-818	Lynn Const. Co.	1959	158-169	172	100	"
31-11-822	City of Woodbury	1960	405-457	462	1016	"
31-11-824	John Johanson	1953	-	148	-	"
31-11-857	Deptford Twp.Mun.Util.Auth.	1956	252-273	400	503	"
31-11-913	Albert Boginsky	1958	-	152	-	Ket

J. Geodetic Control Survey monuments described in Index Maps 48,54

BLOCK #31-12

A. Camden, Runnemede

B. Delaware River-Big Timber Creek, Coopers Creek, Newton Creek

C. 1. Audubon - Non-recording temperature and precipitation gauges

2.

Map No.	Location	Period of Record
446	Cooper River at Kirkwood	1964-
447	North Branch Cooper River near Marlton	1964-
451	South Branch Newton Creek at Haddon Heights	1964-
452	South Branch Big Timber Creek at Blackwood	1964-

3.

334	Newton Creek at West Collingswood	1965-
336	South Branch Newton Creek at Mt.Ephriam	1965-
337	Big Timber Creek at Chews Landing	1965-
338	South Branch Big Timber Creek at Blackwood	1965-

Water Quality Standards: (explained in Atlas Sheet description) FW3

D. Kirkwood Sand (Tkw), Vincentown Sand (Tvt), Hornerstown Marl (Tht), Navesink Marl (Kns), Mount Laurel and Wenonah Sands (Kmw), Marshalltown Formation (Kmt), Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Formation (Kmr), Magothy and Raritan Formation (Kmr)

E. 1. Physiographic Province: Coastal Plain
Subdivision: Inner Plain, Outer Plain
Major Topographic Features: Clay and Marl Region, Pine Plains
Elevations (ft.above sea level): hills 140, valleys 0
Relief (ft.): 140

2. a. Normal Year: 44"
Dry Year: 35"
Wet Year: 51"

b. January: 33°F
July: 76°F

c. 249 days. Last killing frost: 4/20; first killing frost: 10/30

H. Whitman-Stafford House, Lindenwold (State owned)
Indian King Tavern, Haddonfield
Haddon Fortnightly, Haddonfield
Benjamin Clark House, Deptford

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
31-12-135	Imperial Gold & Silver Kid Co.	1948	140-170	170	250	Kmr
31-12-156	New Jersey Zinc Co.,#18	1958	144-191	201	708	"
31-12-167	" #33	1967	422-484	500	850	"
31-12-222	Green Valley Farms	1965	195-215	227	151	"
31-12-232	Haddon Ice & Coal Co.	1957	190-221	225	360	"
31-12-249	N. J. Water Co., #14	1954	506-598	606	1018	"
31-12-272	" #34	1967	288-377	390	1050	"
31-12-273	" #30	1965	224-275	279	811	"
31-12-281	" #15	1956	455-597	634	1100	"
31-12-281	" #1	1968	480-490	517	133	"
31-12-317	Borough of Haddonfield,#2	1956	206-246	254	1001	"
31-12-355	Tavistock Country Club	1968	219-246	246	300	"
31-12-414	Borough of Bellmawr	1966	380-557	580	1016	"
31-12-417	Miller International Co.	1963	250-260	263	150	"
31-12-428	Trap Rock Industries	1963	195-221	350	254	Ket
31-12-465	N. J. Water Co., #19	1958	297-339	340	1900	Kmr
31-12-499	RCA	1964	180-190	212	125	Ket
31-12-523	Weyerhauser Corp.	1969	243-273	285	243	Kmr
31-12-525	Owens-Corning Fiberglass Co., #2 Test	1964	563-618	685	900	"
31-12-526	#1 Test	1964	107-137	140	170	Ket
31-12-526	#3 Test	1964	-	515	500	Kmr
31-12-534	#1	1956	285-315	502	1045	"
31-12-534	#2	1946	290-320	344	1000	"
31-12-534	Laurel Springs Water Co.	1964	428-510	524	710	"
31-12-572	N. J. Water Co., #29	1965	612-712	722	1050	Kr
31-12-584	Owens-Corning Fiberglass Co.	1957	-	306	100	Kmr
31-12-646	Tracy Val Inc.	1972	294-303	303	100	"
31-12-652	Abbotts Dairies Inc.	1960	354-375	447	200	"
31-12-658	Laurel Springs Water Co.	1956	398-441	500	709	Kr
31-12-786	Gloucester Twp.Mun.Util.Auth.	1971	334-359	359	75	Kmr
31-12-938	Laurel Springs Water Co.,#13	1954	394-456	555	800	"
31-12-938	" #15	1964	395-473	481	650	"
31-12-974	Garden State Water Co., #1 Test	1970	457-467	514	75	"

J. Geodetic Control Survey monuments described in Index Maps 48,54; adjacent Index Maps 49,55

SUBJECT TO REVISION

WATER WITHDRAWAL POINTS AND NJGS CASE INDEX SITES WITHIN 5.0 MILES OF:

LATITUDE 395620
LONGITUDE 750615

DRAFT

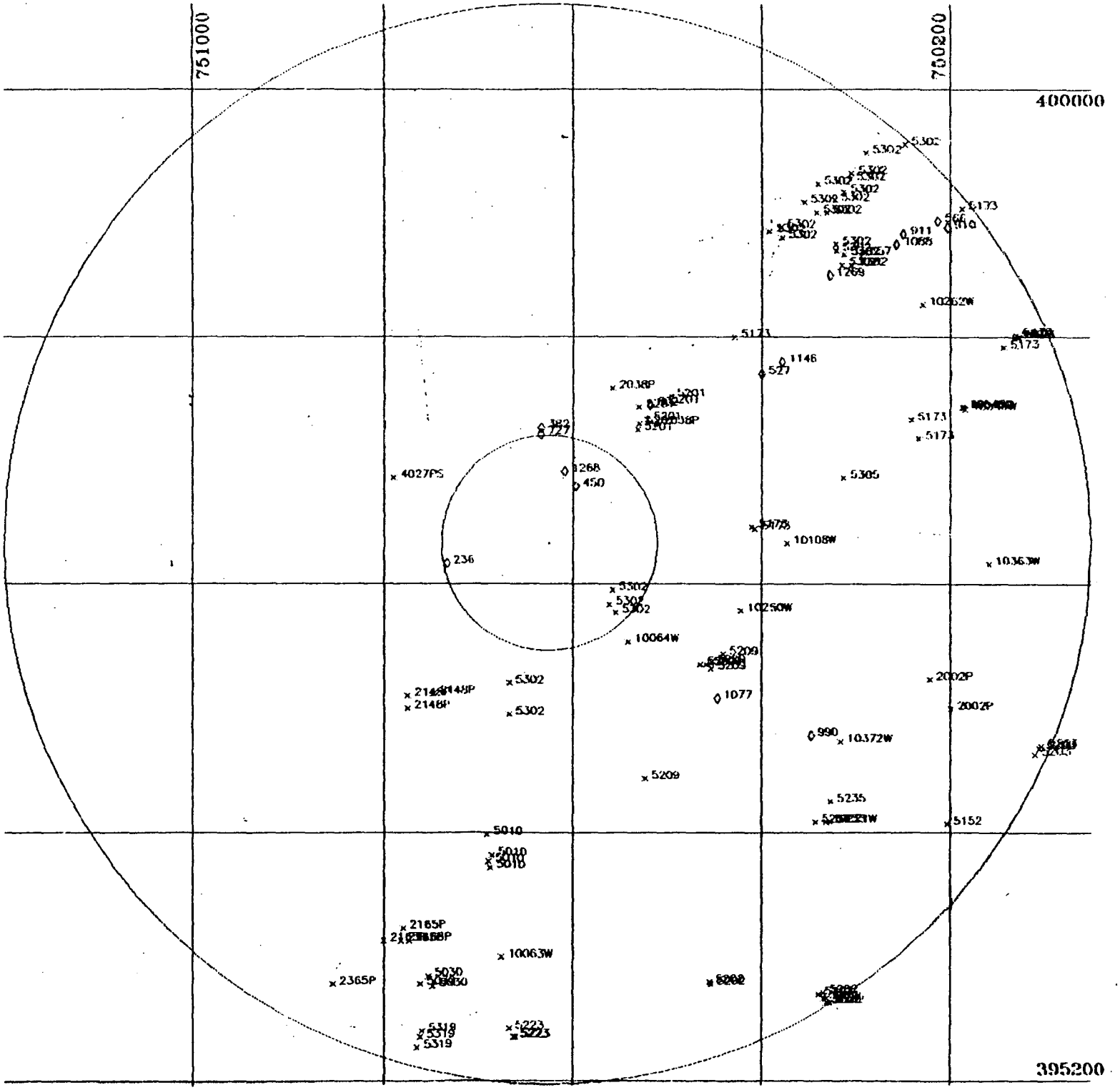
SCALE: 1:63,360
(1 Inch = 1 Mile)

× WATER WITHDRAWAL POINTS
◊ NJGS CASE INDEX SITES
1 MILE AND 5 MILE RADII INDICATED

NJGS CASE INDEX DATA RETRIEVED FROM:
NEW JERSEY GEOLOGICAL SURVEY
ON 12/22/87

PLOT PRODUCED BY:
NJDEP
DIVISION OF WATER RESOURCES
BUREAU OF WATER ALLOCATION
CN-029
TRENTON, NJ 08625

DATE: 10/08/88



SUBJECT TO REVISION

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 395620 LAT. 750615 LON. (IN ORDER BY PERMIT NUMBER) - 10/08/88

JMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
0063W	GLOUCESTER CITY BD. OF ED.	3104482	1	395300	750645	F	3.9	07	14		GWR		
0064W	OUR LADY OF LOURDES MED. CENT.	3104620	1	395532	750525	F	1.2	07	08	257	GWR		250
0108W	CAMDEN CO VOC. & TECH. SCHOOLS	3105139	1	395620	750344	F	2.2	07	15	401	GWR		
0221W	HADDON TOWNSHIP BOARD OF ED.	3104986	1	395405	750318	T	3.7	07	16	165	GWR		100
0250W	BISHOP EUSTACE PREP SCHOOL	3117884	1	395547	750413	T	1.9	07	27	150	GWR		300
0262W	SCHAEVITZ ENGINEERING	3103338	1	395816	750218	T	4.1	07	27		GWR		
	SCHAEVITZ ENGINEERING	3103437	2	395816	750218	T	4.1	07	27		GWR		
	SCHAEVITZ ENGINEERING	3103444	3	395816	750218	T	4.1	07	27		GWR		
0363W	CHERRY HILL INN	UNKNOWN	1	395610	750136	T	4.1	07	16	179	GWR		400
0372W	MORGAN BROTHERS, INC.	3105138	1	395444	750309	F	3.3	07	16	451	GWR		300
0549W	SYCAMORE RIDGE APARTMENTS	3127629	3	395725	750151	T	4.0	07	27		GWR		45
0002P	GARDEN STATE RACE TRACK, INC.	5100094	1	395514	750213	T	3.7	07	09	154	GWR		300
	GARDEN STATE RACE TRACK, INC.	5100095	2	395500	750200	M	4.0	07	09	150	GWR		400
0038P	H. KOHNSTAMM & CO.	3119275	7	395735	750525		1.5	07	08	194	GWR		180
	H. KOHNSTAMM & CO.	3105064	6	395718	750507		1.5	07	08	184	GWR		200
0143P	MACANDREWS & FORBES CO.	3100290	1	395507	750729		1.8	07	08	103	GWR		300
	MACANDREWS & FORBES CO.	5100035	2	395500	750745		2.0	07		99	GWR		350
	MACANDREWS & FORBES CO.	3123580	3	395500	750745	F	2.0	07	08	140	GWR		350
	MACANDREWS & FORBES CO.	DELAWARE RIVER		395506	750745	U	1.9	07	08		SDDEL		
0165P	G & W NATURAL RESOURCES GROUP	3106642	1R	395314	750748	F	3.8	07	14	261	GWR		600
	G & W NATURAL RESOURCES GROUP	3103402	4	395308	750744	F	3.9	07	14	281	GWR		600
	G & W NATURAL RESOURCES GROUP	3104454	5	395308	750749	F	3.9	07	14	274	GWR		620
	G & W NATURAL RESOURCES GROUP	BIG TIMBER CR.		395306	750800	U	4.0	07	14		SDBIG		
0365P	SEE GLOUCESTER COMPANY, L.P.	DELAWARE RIVER	RM 95.2	395247	750832	T	4.5	20	15		SDDEL		
4027PS	GENERAL ELECTRIC AEROSPACE	DELAWARE RIVER		395652	750754	T	1.6	07	08		SDDEL		
5010	GLOUCESTER CITY	3104306	WELL #40	395349	750651		2.9	07	14	262	GWR		1000
	GLOUCESTER CITY	3104903	WELL #41	395359	750654		2.8	07	14	269	GWR		1000
	GLOUCESTER CITY	3105242	WELL #42	395343	750652		3.1	07	14	306	GWR		1000
	GLOUCESTER CITY	3118822	WELL #43	395346	750653		3.0	07	14	260	GWR		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3104325	1	395251	750732	F	4.2	07	07	327	GWR		350
	BROOKLAWN BOROUGH WATER DEPT.	3114471	3	395246	750729	F	4.2	07	07		GWR		350
	BROOKLAWN BOROUGH WATER DEPT.	3119765	4	395247	750737	F	4.2	07	07	293	GWR		350
5152	HADDONFIELD BOROUGH	3105108	6	395404	750202		4.5	07	17	372	GWR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105641	BROWNING1A	395627	750404		1.9	07	24	152	GWR		875
	MERCHANTVILLE-PENNSAUKEN WATER	3101417	DEL GARD 2	395800	750417		2.6	07	27	147	GWR		700
	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	395720	750225		3.5	07	27	279	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	395711	750220		3.6	07	27	262	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104836	BROWNING2A	395628	750406		1.9	07	27	140	GWR		900
	MERCHANTVILLE-PENNSAUKEN WATER	3105110	NATL. HWY 1	395902	750153		4.9	07	27	231	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	395800	750117		4.7	07	27	274	GWR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	395800	750118		4.7	07	27	262	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	395801	750119		4.7	07	27	277	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	395800	750120		4.7	07	27	290	GWR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	395755	750127		4.6	07	27	270	GWR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3103456	50	395726	750518		1.5	07	08	170	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	3104780	51	395720	750513		1.5	07	08	192	GWR		1300
	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395715	750519		1.3	07	08	198	GWR		1050
	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395728	750502		1.7	07	08	194	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395731	750458		1.8	07	08	195	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395718	750518		1.4	07	08	176	GWR		1050
5202	NEW JERSEY-AMERICAN WATER CO.	5100008	HADDON 11	395243	750320		4.9	07	18	272	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	5100009	HADDON 12	395240	750318		4.9	07	18	267	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	3101124	HADDON 14	395242	750323		4.9	07	18	598	GWR		805

MBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
	NEW JERSEY-AMERICAN WATER CO.	3104798	HADDON 30	395238	750318		5.0	07	18	279	GMR		805
	NEW JERSEY-AMERICAN WATER CO.	3103308	EGBERT 18	395248	750433		4.3	07	18	190	GMR		700
	NEW JERSEY-AMERICAN WATER CO.	3105054	EGBERT 35	395247	750432		4.3	07	18	484	GMR		700
203	NEW JERSEY-AMERICAN WATER CO.	3100684	ELLIS 13	395442	750103		4.9	07	09	527	GMR		1000
	NEW JERSEY-AMERICAN WATER CO.	3103305	ENKUS 16	395441	750104		4.9	07	09	220	GMR		1180
	NEW JERSEY-AMERICAN WATER CO.	3104098	ELLIS 23	395438	750107		4.9	07	09	378	GMR		1200
209	COLLINGSWOOD BOROUGH	3104053	2R	395519	750432		1.9	07	12	281	GMR		700
	COLLINGSWOOD BOROUGH	3104054	3R	395522	750432		1.9	07	12	290	GMR		800
	COLLINGSWOOD BOROUGH	5100030	4	395521	750435		1.8	07	12	304	GMR		870
	COLLINGSWOOD BOROUGH	3100079	5	395521	750439		1.8	07	12	311	GMR		650
	COLLINGSWOOD BOROUGH	5100031	6	395526	750424		1.9	07	12	281	GMR		1000
	COLLINGSWOOD BOROUGH	3104799	7	395521	750439		1.8	07	12	312	GMR		1000
	COLLINGSWOOD BOROUGH	3104797	8	395426	750514		2.4	07	12	318	GMR		1000
223	BELLMAWR BOROUGH	5100032	1	395221	750436		4.6	07	04	164	GMR		500
	BELLMAWR BOROUGH	3102687	3	395221	750637		4.6	07	04	359	GMR		800
	BELLMAWR BOROUGH	3119218	6	395225	750640		4.5	07	04	386	GMR		1000
225	HADDON TOWNSHIP WATER DEPT.	3105243	1R	395405	750315		3.7	07	16	481	GMR		870
	HADDON TOWNSHIP WATER DEPT.	3100432	2	395415	750315		3.6	07	16	470	GMR		1300
	HADDON TOWNSHIP WATER DEPT.	3102146	3	395405	750325		3.6	07	16	469	GMR		820
	HADDON TOWNSHIP WATER DEPT.	3104955	4	395405	750325		3.6	07	16	448	GMR		1000
302	CAMDEN CITY, WATER DIVISION	3100945	MORRIS 3	395933	750229		4.9	07	27	107	GMR		1800
	CAMDEN CITY, WATER DIVISION	3104252	MORRIS 4	395929	750253		4.7	07	27	134	GMR		1600
	CAMDEN CITY, WATER DIVISION	5100051	MORRIS 6	395900	750318		4.0	07	27	138	GMR		1700
	CAMDEN CITY, WATER DIVISION	5100052	MORRIS 7	395916	750303		4.4	07	27	125	GMR		1680
	CAMDEN CITY, WATER DIVISION	3100944	MORRIS 8	395910	750307		4.3	07	27	128	GMR		1670
	CAMDEN CITY, WATER DIVISION	3104251	MORRIS 10	395919	750302		4.4	07	27	118	GMR		1400
	CAMDEN CITY, WATER DIVISION	5100076	MORRIS 9	395906	750313		4.1	07	27	148	GMR		1670
	CAMDEN CITY, WATER DIVISION	3116814	MORRIS 12	395914	750324		4.2	07	27	122	GMR		2030
	CAMDEN CITY, WATER DIVISION	3115745	MORRIS 11	395900	750325		3.9	07	27	149	GMR		2030
	CAMDEN CITY, WATER DIVISION	3116813	MORRIS 13	395905	750333		3.9	07	27	135	GMR		2060
	CAMDEN CITY, WATER DIVISION	5100053	DELAIR 1	395848	750347		3.6	07	27	141	GMR		1680
	CAMDEN CITY, WATER DIVISION	5100054	DELAIR 2	395851	750355		3.5	07	27	146	GMR		1830
	CAMDEN CITY, WATER DIVISION	5100055	DELAIR 3	395853	750348		3.6	07	27	135	GMR		1830
	CAMDEN CITY, WATER DIVISION	5100056	PUCHACK 1	395845	750312		3.8	07	27	141	GMR		1500
	CAMDEN CITY, WATER DIVISION	5100057	PUCHACK 2	395842	750312		3.8	07	27	169	GMR		1000
	CAMDEN CITY, WATER DIVISION	5100058	PUCHACK 3	395840	750307		3.8	07	27	176	GMR		1380
	CAMDEN CITY, WATER DIVISION	5100059	PUCHACK 5	395835	750308		3.8	07	27	186	GMR		1324
	CAMDEN CITY, WATER DIVISION	3108526A	PUCHACK 7	395835	750302		3.8	07	27	180	GMR		2260
	CAMDEN CITY, WATER DIVISION	5100060	CITY 7	395457	750640		1.6	07	08	163	GMR		1500
	CAMDEN CITY, WATER DIVISION	5100061	CITY 11	395512	750640		1.4	07	08	159	GMR		1010
	CAMDEN CITY, WATER DIVISION	3100904	CITY 13	395557	750535		0.7	07	08	230	GMR		1200
	CAMDEN CITY, WATER DIVISION	3101250	CITY 17	395546	750533		0.9	07	08	270	GMR		1500
	CAMDEN CITY, WATER DIVISION	3109574	CITY 18	395550	750537		0.8	07	08	185	GMR		1200
	CAMDEN CITY, WATER DIVISION	3104649	CITY 5	395457	750640		1.6	07	08	171	GMR		1100
305	MERCHANTVILLE-PENNSAUKEN	3104642	WOODBINE 1	395652	750307		2.8	07	24	288	GMR		1000
	MERCHANTVILLE-PENNSAUKEN	3114563	WOODBINE 2	395652	750307		2.8	07	24	227	GMR		1000
319	WESTVILLE BOROUGH	3103418	4	395221	750737	F	4.7	15	21	313	GMR		750
	WESTVILLE BOROUGH	3105689	5	395216	750739	F	4.8	15	21		GMR		1000
	WESTVILLE BOROUGH	3117923	6	395224	750736	F	4.7	15	21	317	GMR		1000

umber of Observations: 104

UMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
365P	SEE GLOUCESTER COMPANY, L.P.	DELAWARE RIVER	RM 95.2	395247	750632	T	4.5	30	15		SDDEL		
165P	G & W NATURAL RESOURCES GROUP	BIG TIMBER CR.		395308	750600	U	4.0	07	14		SDBIG		
027FS	GENERAL ELECTRIC AEROSPACE	DELAWARE RIVER		395652	750754	T	1.6	07	08		SDDEL		
165P	G & W NATURAL RESOURCES GROUP	3104454	5	395308	750749	F	3.9	07	14	274	GWR		600
165P	G & W NATURAL RESOURCES GROUP	3106642	1R	395314	750748	F	3.8	07	14	261	GWR		600
148P	MACANDREWS & FORBES CO.	5100035	2	395500	750745		2.0	07		99	GWMR		350
148P	MACANDREWS & FORBES CO.	3123580	3	395500	750745	F	2.0	07	08	140	GWMR		350
148P	MACANDREWS & FORBES CO.	DELAWARE RIVER		395506	750745	U	1.9	07	08		SDDEL		
165P	G & W NATURAL RESOURCES GROUP	3103402	4	395308	750744	F	3.9	07	14	281	GWR		600
5319	WESTVILLE BOROUGH	3105689	5	395216	750739	F	4.8	15	21		GWMR		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3119765	4	395247	750737	F	4.2	07	07	293	GWMR		350
5319	WESTVILLE BOROUGH	3103418	4	395221	750737	F	4.7	15	21	313	GWMR		750
5319	WESTVILLE BOROUGH	3117923	6	395224	750736	F	4.7	15	21	317	GWMR		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3104325	1	395251	750732	F	4.2	07	07	327	GWMR		350
148P	MACANDREWS & FORBES CO.	3100290	1	395507	750729		1.8	07	08	103	GWMR		300
5030	BROOKLAWN BOROUGH WATER DEPT.	3114471	3	395246	750729	F	4.2	07	07		GWMR		350
5010	GLOUCESTER CITY	3104903	WELL #41	395359	750654		2.8	07	14	269	GWMR		1000
5010	GLOUCESTER CITY	3118822	WELL #43	395346	750653		3.0	07	14	260	GWMR		1000
5010	GLOUCESTER CITY	3105242	WELL #42	395343	750652		3.1	07	14	306	GWMR		1000
5010	GLOUCESTER CITY	3104306	WELL #40	395349	750651		2.9	07	14	262	GWMR		1000
10063W	GLOUCESTER CITY BD. OF ED.	3104482	1	395300	750645	F	3.9	07	14		GWMR		
5223	BELLMAWR BOROUGH	3119218	6	395225	750640		4.5	07	04	386	GWMR		1000
5302	CAMDEN CITY, WATER DIVISION	5100060	CITY 7	395457	750640		1.6	07	08	163	GWMR		1500
5302	CAMDEN CITY, WATER DIVISION	5100061	CITY 11	395512	750640		1.4	07	08	159	GWMR		1010
5302	CAMDEN CITY, WATER DIVISION	3104649	CITY 5	395457	750640		1.6	07	08	171	GWMR		1100
5223	BELLMAWR BOROUGH	3102687	3	395221	750637		4.6	07	04	359	GWMR		800
5223	BELLMAWR BOROUGH	5100032	1	395221	750636		4.6	07	04	164	GWMR		500
5302	CAMDEN CITY, WATER DIVISION	3109574	CITY 18	395550	750537		0.8	07	08	185	GWMR		1200
2038P	H. KOHNSTAMM & CO.	3119275	7	395735	750535		1.5	07	08	194	GWR		180
5302	CAMDEN CITY, WATER DIVISION	3100904	CITY 13	395557	750535		0.7	07	08	230	GWMR		1200
5302	CAMDEN CITY, WATER DIVISION	3101250	CITY 17	395546	750533		0.9	07	08	270	GWMR		1500
10064W	OUR LADY OF LOURDES MED. CENT.	3104620	1	395532	750525	F	1.2	07	08	257	GWMR		250
5201	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395715	750519		1.3	07	08	198	GWMR		1050
5201	NEW JERSEY-AMERICAN WATER CO.	3103456	50	395726	750518		1.5	07	08	170	GWMR		700
5201	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395718	750518		1.4	07	08	176	GWMR		1050
5209	COLLINGSWOOD BOROUGH	3104797	8	395426	750514		2.4	07	12	318	GWMR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3104780	51	395720	750513		1.5	07	08	192	GWMR		1300
2038P	H. KOHNSTAMM & CO.	3105054	6	395718	750507		1.5	07	08	184	GWR		200
5201	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395728	750502		1.7	07	08	194	GWMR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395731	750458		1.8	07	08	195	GWMR		1000
5209	COLLINGSWOOD BOROUGH	3100079	5	395521	750439		1.8	07	12	311	GWMR		650
5209	COLLINGSWOOD BOROUGH	3104799	7	395521	750439		1.8	07	12	312	GWMR		1000
5209	COLLINGSWOOD BOROUGH	5100030	4	395521	750435		1.8	07	12	304	GWMR		670
5202	NEW JERSEY-AMERICAN WATER CO.	3103308	EGBERT 18	395248	750433		4.3	07	18	190	GWMR		700
5202	NEW JERSEY-AMERICAN WATER CO.	3105054	EGBERT 35	395247	750432		4.3	07	18	484	GWMR		700
5209	COLLINGSWOOD BOROUGH	3104053	2R	395519	750432		1.9	07	12	281	GWMR		700
5209	COLLINGSWOOD BOROUGH	3104054	3R	395522	750432		1.9	07	12	290	GWMR		800
5209	COLLINGSWOOD BOROUGH	5100031	6	395526	750424		1.9	07	12	281	GWMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3101417	DEL GARD 2	395800	750417		2.6	07	27	147	GWMR		700
10250W	BISHOP EUSTACE PREP SCHOOL	3117884	1	395547	750413	T	1.9	07	27	150	GWMR		200
5173	MERCHANTVILLE-PENNSAUKEN WATER	3104836	BROWNING2A	395628	750406		1.9	07	27	140	GWMR		900
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105641	BROWNING1A	395627	750404		1.9	07	24	152	GWMR		875
5302	CAMDEN CITY, WATER DIVISION	5100054	DELAIR 2	395851	750355		3.5	07	27	146	GWMR		1830
[illegible]	CAMDEN CITY, WATER DIVISION	5100055	DELAIR 3	395853	750348		3.6	07	27	135	GWMR		1830

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 395620 LAT. 750615 LON. (IN ORDER BY DECREASING LONGITUDE) - 10/08/88

UMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
5302	CAMDEN CITY, WATER DIVISION	3116813	MORRIS 13	395905	750333		3.9	07	27	135	GMR		2060
5235	HADDON TOWNSHIP WATER DEPT.	3102146	3	395405	750325		3.6	07	16	469	GMR		800
5235	HADDON TOWNSHIP WATER DEPT.	3104855	4	395405	750325		3.6	07	16	448	GMR		1000
5302	CAMDEN CITY, WATER DIVISION	3115745	MORRIS 11	395900	750325		3.9	07	27	149	GMR		2030
5302	CAMDEN CITY, WATER DIVISION	3116814	MORRIS 12	395914	750324		4.2	07	27	122	GMR		2030
5202	NEW JERSEY-AMERICAN WATER CO.	3101124	HADDON 14	395242	750323		4.9	07	18	598	GMR		805
5202	NEW JERSEY-AMERICAN WATER CO.	5100009	HADDON 11	395243	750320		4.9	07	18	272	GMR		700
5202	NEW JERSEY-AMERICAN WATER CO.	3103375	HADDON 20	395240	750320		4.9	07	18	267	GMR		100
10221W	HADDON TOWNSHIP BOARD OF ED.	3104986	1	395405	750318	T	3.7	07	16	165	GMR		100
5202	NEW JERSEY-AMERICAN WATER CO.	5100009	HADDON 12	395240	750318		4.9	07	18	267	GMR		700
5202	NEW JERSEY-AMERICAN WATER CO.	3104798	HADDON 30	395238	750318		5.0	07	18	279	GMR		805
5302	CAMDEN CITY, WATER DIVISION	5100051	MORRIS 6	395900	750318		4.0	07	27	138	GMR		1700
5202	NEW JERSEY-AMERICAN WATER CO.	3102434	HADDON 15	395238	750316		5.0	07	18	597	GMR		805
5235	HADDON TOWNSHIP WATER DEPT.	3105243	1R	395405	750315		3.7	07	16	431	GMR		870
5235	HADDON TOWNSHIP WATER DEPT.	3100432	2	395415	750315		3.6	07	16	470	GMR		1300
5302	CAMDEN CITY, WATER DIVISION	5100076	MORRIS 9	395906	750313		4.1	07	27	148	GMR		1670
5302	CAMDEN CITY, WATER DIVISION	5100056	PUCHACK 1	395845	750312		3.8	07	27	141	GMR		1500
5302	CAMDEN CITY, WATER DIVISION	5100057	PUCHACK 2	395842	750312		3.8	07	27	169	GMR		1070
10372W	MORGAN BROTHERS, INC.	3105138	1	395444	750309	F	3.3	07	16	451	GMR		300
5302	CAMDEN CITY, WATER DIVISION	5100059	PUCHACK 5	395835	750308		3.8	07	27	186	GMR		1324
5302	CAMDEN CITY, WATER DIVISION	3100944	MORRIS 8	395910	750307		4.3	07	27	128	GMR		1670
5302	CAMDEN CITY, WATER DIVISION	5100058	PUCHACK 3	395840	750307		3.8	07	27	176	GMR		1250
5305	MERCHANTVILLE-PENNSAUKEN	3104642	WOODBINE 1	395652	750307		2.8	07	24	288	GMR		1000
5305	MERCHANTVILLE-PENNSAUKEN	3114563	WOODBINE 2	395652	750307		2.8	07	24	227	GMR		1000
5302	CAMDEN CITY, WATER DIVISION	5100052	MORRIS 7	395916	750303		4.4	07	27	125	GMR		1680
5302	CAMDEN CITY, WATER DIVISION	3104251	MORRIS 10	395919	750302		4.4	07	27	118	GMR		1400
5302	CAMDEN CITY, WATER DIVISION	3108526A	PUCHACK 7	395835	750302		3.8	07	27	180	GMR		2260
5302	CAMDEN CITY, WATER DIVISION	3104252	MORRIS 4	395929	750253		4.7	07	27	134	GMR		1600
5302	CAMDEN CITY, WATER DIVISION	3100945	MORRIS 3	395933	750229		4.9	07	27	107	GMR		1800
5173	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	395720	750225		3.5	07	27	279	GMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	395711	750220		3.6	07	27	262	GMR		1000
10262W	SCHAEVITZ ENGINEERING	3103338	1	395816	750218	T	4.1	07	27		GMR		
10262W	SCHAEVITZ ENGINEERING	3103437	2	395816	750218	T	4.1	07	27		GMR		
10262W	SCHAEVITZ ENGINEERING	3103444	3	395816	750218	T	4.1	07	27		GMR		
2002P	GARDEN STATE RACE TRACK, INC.	5100094	1	395514	750213	T	3.7	07	09	154	GMR		300
5152	HADDONFIELD BOROUGH	3105108	6	395404	750202		4.5	07	17	372	GMR		1000
2002P	GARDEN STATE RACE TRACK, INC.	5100095	2	395500	750200	M	4.0	07	09	150	GMR		400
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105110	NATL HWY 1	395902	750153		4.9	07	27	231	GMR		1000
10549W	SYCAMORE RIDGE APARTMENTS	3127629	3	395725	750151	T	4.0	07	27		GMR		45
10363W	CHERRY HILL INN	UNKNOWN	1	395610	750136	T	4.1	07	16	179	GMR		400
5173	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	395755	750127		4.6	07	27	270	GMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	395800	750120		4.7	07	27	290	GMR		1005
5173	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	395801	750119		4.7	07	27	277	GMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	395800	750118		4.7	07	27	262	GMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	395800	750117		4.7	07	27	274	GMR		1005
5203	NEW JERSEY-AMERICAN WATER CO.	3104098	ELLIS 23	395438	750107		4.9	07	09	378	GMR		1200
5203	NEW JERSEY-AMERICAN WATER CO.	3103305	ELLIS 16	395441	750104		4.9	07	09	220	GMR		1180
5203	NEW JERSEY-AMERICAN WATER CO.	3100684	ELLIS 13	395442	750103		4.9	07	09	527	GMR		1000

Number of Observations: 104

 NJGS CASE INDEX SITES WITHIN 5.0 MILES OF 395620 LAT. 750615 LON. AS OF 12/22/87 (IN ORDER BY SITE NUMBER) - 10/08/88

ITENUM	NAME	LAT	LON	DISTANCE	CONTAM	FMCODE1	FMCODE2	STATUS1	STATUS2
236	MONK'S AMOCO, CAMDEN CO.	395610	750720	1.0	51	103	2080	5	
382	CAMDEN MUNICIPAL WELLS, CAMDEN CITY, CAMDEN CO.	395716	750620	1.1	00	0102	2080	1	
450	CONRAIL, PAVONIA YARD, CAMDEN, CAMDEN CO.	395648	750558	0.6	53	103	160	1	
527	SGL MODERN HARD CHROME SERVICE, PENNSAUKEN, CAMDEN CO.	395742	750400	2.5	39	2080	0	9	
566	SWOPE OIL AND CHEMICAL, PENNSAUKEN, CAMDEN CO.	395856	750208	4.7	00	2080	0	1	E
657	CAMDEN'S PUCHACK WELL FIELD, CAMDEN CO.	395840	750255	4.0	39	2080	0	1	
727	HARRISON AVE. LANDFILL, CAMDEN, CAMDEN CO.	395713	750620	1.0	0	2080	0	9	
802	LANGSTON DIV-MOLINS MACHINE CO., CAMDEN, CAMDEN CO.	395727	750511	1.6	00	2080		1	B
910	MERCHANTVILLE/PENNSAUKEN WATER COMMISION, PENNSAUKEN, CAMDEN CO.	395853	750202	4.7	00	0102	2080	1	C
911	PENLAR ANODIZING, PENNSAUKEN, CAMDEN CO.	395850	750230	4.4	00	2080	0	1	C
990	WESTMONT MOBIL, WESTMONT, CAMDEN CO.	395447	750328	3.0	0	0	0	3	
077	BOB'S EXTRA STATION, COLLINGSWOOD, CAMDEN CO	395505	750428	2.1	51	2080	0	F	
1088	GARDEN STATE MOTORS, PENNSAUKEN, CAMDEN CO.	395845	750234	4.3	53	2080	0	1	B
1148	SHELL SERVICE STATION, RT 130 & BORWING RD, PENNSAUKEN, CAMDEN CO.	395748	750347	2.7	51			3	
1268	ADVANCED CHEMICAL TECHNOLOGY, CAMDEN CITY, CAMDEN CO.	395655	750605	0.7	68	0102	2080	1	B
1269	ADVANCED PROCESS SUPPLY, PENNSAUKEN, CAMDEN CO.	395830	750316	3.6	00	2090		1	B

Number of Observations: 16

SITENUM	NAME	LAT	LON	DISTANCE	CONTAM	FMCODE1	FMCODE2	STATUS1	STATUS2
236	MONK'S AMOCO, CAMDEN CO.	395610	750720	1.0	51	103	2080	5	
382	CAMDEN MUNICIPAL WELLS, CAMDEN CITY, CAMDEN CO.	395716	750620	1.1	00	0102	2080	1	
727	HARRISON AVE. LANDFILL, CAMDEN, CAMDEN CO.	395713	750620	1.0	0	2080	0	9	
1268	ADVANCED CHEMICAL TECHNOLOGY, CAMDEN CITY, CAMDEN CO.	395655	750605	0.7	68	0102	2080	1	B
450	CONRAIL, PAVONIA YARD, CAMDEN, CAMDEN CO.	395648	750558	0.6	53	103	160	1	
802	LANGSTON DIV-MOLINS MACHINE CO., CAMDEN, CAMDEN CO.	395727	750511	1.6	00	2080		1	B
1077	BOB'S EXTRA STATION, COLLINGSWOOD, CAMDEN CO	395505	750428	2.1	51	2080	0	F	
527	SGL MODERN HARD CHROME SERVICE, PENNSAUKEN, CAMDEN CO.	395742	750400	2.5	39	2080	0	9	
1148	SHELL SERVICE STATION, RT 130 & BORWING RD, PENNSAUKEN, CAMDEN CO.	395748	750347	2.7	51			3	
990	WESTMONT MOBIL, WESTMONT, CAMDEN CO.	395447	750328	3.0	0	0	0	3	
1269	ADVANCED PROCESS SUPPLY, PENNSAUKEN, CAMDEN CO.	395830	750316	3.6	00	2090		1	B
657	CAMDEN'S PUCHACK WELL FIELD, CAMDEN CO.	395840	750255	4.0	39	2080	0	1	
1068	GARDEN STATE MOTORS, PENNSAUKEN, CAMDEN CO.	395845	750234	4.3	53	2060	0	1	B
911	PENLAR ANODIZING, PENNSAUKEN, CAMDEN CO.	395850	750230	4.4	00	2080	0	1	C
566	SWOPE OIL AND CHEMICAL, PENNSAUKEN, CAMDEN CO.	395856	750208	4.7	00	2080	0	1	E
910	MERCHANTVILLE/PENNSAUKEN WATER COMMISION, PENNSAUKEN, CAMDEN CO.	395853	750202	4.7	00	0102	2080	1	C

Number of Observations: 16

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOLID WASTE ADMINISTRATION

TRENTON, 08625

BEATRICE S. TYLUTKI

DIRECTOR

May 19, 1978

Mr. John T. Nolan
Production Supervisor
Monsanto Industrial Chemical Co.
1500 Pine Street
Camden, New Jersey 08103

Re: Disposal of Lampblack

Dear Mr. Nolan:

Pursuant to your request I have reviewed submitted data concerning physiological effects of carbonblack (similar to Lampblack). Although certain polycyclic aromatic hydrocarbons may be adsorbed on Lampblack, the data of Nau et al clearly suggests that prolonged exposure to carbon black (C3H mice; monkeys) through ingestion, dermal application and inhalation produced no significant physiological effects. Further said material appeard to be substantially wetted, would probably not create dust problems, and would be quickly covered in a landfill site. Therefore, Lampblack residues are not considered special waste and do not require a Manifest.

Should you have any additional questions regarding this matter, please contact me directly.

Very truly yours,

Ronald J. Buchanan, Ph.D.
Chief
Bureau of Hazardous & Chemical Wastes

RJB:hjg

ATT. B

EPA

L[illegible]L HAZARDOUS WASTE SITE SITE INSPECTION REPORT

[illegible] od by HQ) Rich

GENERAL INSTRUCTIONS. Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency, Site Tracking System, Hazardous Waste Enforcement Task Force (EN-335), 401 M St., SW, Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET (or other identifier)		
Monsanto (plant ID# 50012	1500 Pine Street		
C. CITY	D. STATE	E. ZIP CODE	F. COUNTY NAME
Camden	N.J.	08013	Camden

G. SITE OPERATOR INFORMATION

1. NAME		2. TELEPHONE NUMBER	
D.C. Dieterich Plane Manager		(609) 963-0243	
3. STREET	4. CITY	5. STATE	6. ZIP CODE
1500 Pine Street	Camden	N.J.	08103

H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME	2. TELEPHONE NUMBER	
3. CITY	4. STATE	5. ZIP CODE

I. SITE DESCRIPTION

25 Acre, Industrial Chemical

J. TYPE OF OWNERSHIP

[ ] 1. FEDERAL [ ] 2. STATE [ ] 3. COUNTY [ ] 4. MUNICIPAL [X] 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last) N/A

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
	[ ] 1. HIGH [ ] 2. MEDIUM [ ] 3. LOW [ ] 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Wayne Howitz Thomas Brady	(609)292-9368	3/7/80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Wayne Howitz Thomas Brady	Env. Spec. & Principal Tech.	
3. ORGANIZATION		4. TELEPHONE NO. (area code & no.)
N.J. DEP Toxic & Hazardous Substances		(609)292-9368

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, resident(s))

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
D.C. Dieterich	Plant Manager	1500 Pine Street, Camden, N.J.

ATT. E

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

E. PHOTOS

1. TYPE OF PHOTOS: None

[ ] a. GROUND [X] b. AERIAL

2. PHOTOS IN CUSTODY OF:

F. SITE MAPPED?

[ ] YES, SPECIFY LOCATION OF MAPS: No

G. COORDINATES

1. LATITUDE (deg.-min.-sec.): 40°56' 13" (UTM 490.8)

2. LONGITUDE (deg.-min.-sec.): 75°06' 31" (UTM 442.0)

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive waste.)

[ ] 3. OTHER (specify) (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 2816

C. AREA OF SITE (in acres): 75 Acres

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES (specify): Monsanto's Plant Operations

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
2. SHIP		2. SURFACE IMPOUNDMENT	X	2. INCINERATION	X	2. LANDFARM
3. BARGE		3. DRUM		3. VOLUME REDUCTION		3. OPEN DUMP
4. TRUCK	X	4. TANK ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
5. PIPELINE		5. TANK BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
6. OTHER (specify)		6. OTHER (specify)		6. BIOLOGICAL TREATMENT		6. INCINERATION
				7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
				8. SOLVENT RECOVERY		8. OTHER (specify): Scrub Settling pond.
				9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this form.

[ ] 1. STORAGE [ ] 2. INCINERATION [X] 3. LANDFILL [X] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[ ] 1. LIQUID [X] 2. SOLID [ ] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[ ] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE

[X] 9. OTHER (specify)

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes, N.J. SWA's Manifest

2. Estimate the amount (specify unit) of waste by category, mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT 1,3380	AMOUNT 167,740	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Pounds	UNIT OF MEASURE Pounds	UNIT OF MEASURE	UNIT OF MEASURE
(1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify)	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		X (3) OTHER (specify)	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
(5) OTHER (specify)			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	X (5) OTHER (specify) Lamp Black
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			X (11) OTHER (specify) Amines Lacramators Imines		

1. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

[ ] A. HUMAN HEALTH HAZARDS

No.

Continue On Page 5

C

[ ] B. NON-WORKER INJURY/EXPOSURE

None

[ ] C. WORKER INJURY/EXPOSURE

None

[ ] D. CONTAMINATION OF WATER SUPPLY

[X] E. CONTAMINATION OF FOOD CHAIN

Very likely, the plant is adjacent to the Cooper River.

[X] F. CONTAMINATION OF GROUND WATER

[X] G. CONTAMINATION OF SURFACE WATER

Monsanto's scrub settling pond is adjacent to the Cooper River.

C

[ ] H. DAMAGE TO FLORA/FAUNA

N/A

[ ] I. FISH KILL

None reported to date.

[ ] J. CONTAMINATION OF AIR

N/A

[ ] K. NOTICEABLE ODORS

[x] L. CONTAMINATION OF SOIL

Scrub settling pond is not lined

[ ] M. PROPERTY DAMAGE

None

Continue On Page 7

C

N. FIRE OR EXPLOSION

No

O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

No

P. SEWER, STORM DRAIN PROBLEMS

No

Q. EROSION PROBLEMS

No

R. INADEQUATE SECURITY

No

S. INCOMPATIBLE WASTES

No

VIII. HAZARD DESCRIPTION (continued)

I. MIDNIGHT DUMPING

II. OTHER (specify)

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. RESIDENTIAL AREAS	Less than 100	Less than 100	Housing development is 2 blocks away	
2. COMMERCIAL OR INDUSTRIAL AREAS				
3. PUBLICLY TRAVELLED AREAS				
4. PUBLIC USE AREAS (parks, schools, etc.)	Junior High is Adjacent to Plant			

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
6'	S.W.	
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**

G. TYPE OF DRINKING WATER SUPPLY

[ ] 1. NON-COMMUNITY (15 CONNECTIONS) [ ] 2. COMMUNITY (specify town) (>15 CONNECTIONS) Camden City

[ ] 3. SURFACE WATER [ ] 4. WELL

Continue On Page 9

C

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')

I. RECEIVING WATER

1. NAME
Cooper River

[ ] 2. SEWERS [X] 3. STREAMS/RIVERS

[ ] 4. LAKES/RESERVOIRS [ ] 5. OTHER (specify)

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

TidalWater II (According to the DEP surface water quality standards.

XI. SOIL AND VEGETATION DATA

LOCATION OF SITE IS IN

[ ] A. KNOWN FAULT ZONE [ ] B. KARST ZONE [ ] C. 100 YEAR FLOOD PLAIN [X] D. WETLAND

[ ] E. A REGULATED FLOODWAY [ ] F. CRITICAL HABITAT [ ] G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

	A. OVERBURDEN	X	B. BEDROCK (specify below)	X	C. OTHER (specify below)
X	1. SAND				
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

[ ] A. UNKNOWN [ ] B. VERY HIGH (100,000 to 1000 cm/sec.) [ ] C. HIGH (1000 to 10 cm/sec.)

X D. MODERATE (10 to .1 cm/sec.) [ ] E. LOW (.1 to .001 cm/sec.) [ ] F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

[ ] 1. YES [ ] 2. NO 3. COMMENTS

H. DISCHARGE AREA

[ ] 1. YES [ ] 2. NO 3. COMMENTS

I. SLOPE

1. ESTIMATE % OF SLOPE
10%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

Continue On Reverse

XIV. PERMIT INFORMATION

List all applicable permits held by [illegible] and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

[ ] NONE [ ] YES (summarize in this space)

[SOIL] Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

C

EPA Notification of Hazardous Waste Sites

United States Environmental Protection Agency Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and must be mailed by June 9, 1981.

10 JUN 1981

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

810605

NJS 000 001 034

A Person Required to Notify:
Enter the name and address of the person or organization required to notify.

Name: Monsanto Company
Street: 1500 Pine Street
City: Camden State: NJ Zip Code: 08103

B Site Location:
Enter the common name (if known) and actual location of the site.

Name of Site: MONSANTO CO. - Camden Plant
Street: 1500 Pine Street
City: Camden County: Camden State: NJ Zip Code: 08103

NJD001700830

C Person to Contact:
Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): Dieterich, David Plant Manager
Phone: 609-963-0243

D Dates of Waste Handling:
Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1900 To (Year): 1972

E Waste Type: Choose the option you prefer to complete

Option I: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☒ Organics
2. ☒ Inorganics
3. ☐ Solvents
4. ☒ Pesticides
5. ☐ Heavy metals
6. ☒ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☒ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

Form Approved
OMB No. 2000-0138
EPA Form 8900-1

AW. D

Notification of Hazardous Wa

Side Two

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☒ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet 1140 C

gallons

Total Facility Area

square feet 42,250 S

acres

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☐ None

Don't Know

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

(Attached)

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name D. C. Dieterich

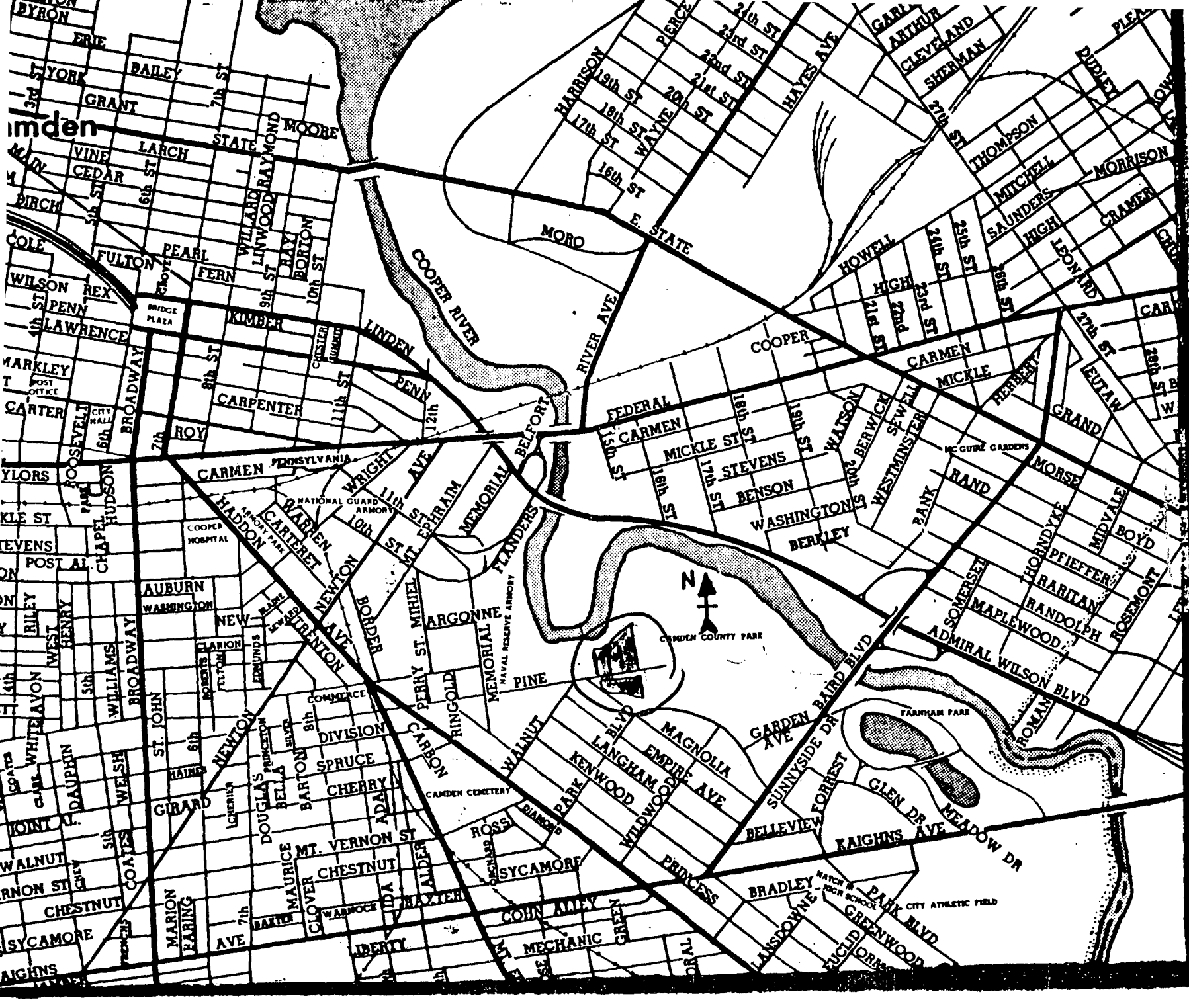
Street 1500 Pine Street

City Camden State NJ Zip Code 08103

Signature D. C. Dieterich Date 6/5/81

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☒ Operator, Present
☐ Operator, Past
☐ Other

D


Camden
DYRON
ERIE
YORK
BAILEY
GRANT
STATE
MOORE
LARCH
VINE
CEDAR
MAIN
BIRCH
COLE
FULTON
PEARL
FERN
WILLARD
LINWOOD
RAYMOND
BORTON
WILSON
REX
PENN
LAWRENCE
KIMBER
LINDEN
MARKLEY
POST OFFICE
CARTER
CITY HALL
BRIDGE PLAZA
BROADWAY
ROOSEVELT
CARPENTER
ROY
PENN
CARMEN
PENNSYLVANIA
WRIGHT AVE
NATIONAL GUARD ARMORY
COOPER HOSPITAL
HADDON
WARREN
CARTERET
NEWTON
MT. EPHRAIM
MEMORIAL
FLANDERS
BELFORT
COOPER RIVER
RIVER AVE
MORO
E. STATE
HARRISON
PIERCE
WAYNE
HAYES AVE
ARTHUR
CLEVELAND
SHERMAN
DUDLEY
THOMPSON
MITCHELL
MORRISON
SAUNDERS
HIGH
CRAMER
LEONARD
HOWELL
COOPER
CARMEN
MICKLE
HERBERT
EUTAW
GRAND
FEDERAL
MICKLE ST
STEVENS
BENSON
WASHINGTON
BERKLEY
WATSON
BERWICK
SEWELL
WESTMINSTER
PARK
RAND
MC GUIRE GARDENS
MORSE
MIDVALE
BOYD
THORNDYKE
PFIEFFER
RARITAN
RANDOLPH
ROSEMONT
MAPLEWOOD
SOMERSET
ROMAN
ADMIRAL WILSON BLVD
FARNHAM PARK
GARDEN BAIRD BLVD
SUNNYSIDE DR
N
CAMDEN COUNTY PARK
AUBURN
WASHINGTON
NEW
CLARION
SEWARD
EDMUNDS
ROBERTS
TELTON
TRENTON AVE
BORDER
PERRY ST. MIHIEL
ARGONNE
RINGOLD
MEMORIAL
NAVAL RESERVE ARMORY
PINE
COMMERCE
DIVISION
SPRUCE
CHERRY
CARBON
WALNUT
CAMDEN CEMETERY
BLVD
LANGHAM
KENWOOD
WILDWOOD
PARK
MAGNOLIA
EMPIRE AVE
BELLEVIEW
FORREST
GLEN DR
MEADOW DR
KAIGHNS AVE
PRINCESS
BRADLEY
LANSDOWNE
PARK BLVD
CITY ATHLETIC FIELD
GREENWOOD
EUCLID
ORNE
ROSS
DIAMOND
SYCAMORE
MT. VERNON ST
CHESTNUT
MAURICE
CLOVER
ADA
ALDER
BAXTER
WARNOCK
COHN ALLEY
MECHANIC
GREEN
LIBERTY
ORAL
MARION
FARING
AVE
WHITEHAVON
WEST
HENRY
RILEY
WILLIAMS
BROADWAY
ST. JOHN
DAUPHIN
WELSH
COATES
JOINT
WALNUT
CHESTNUT
SYCAMORE
GIRARD
NEWTON
HAINES
LOCUST
DOUGLAS
BELLA
BARTON
PRINCETON
LEWIS
8th
6th
5th
4th
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27th

EPA

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION: II

SITE NUMBER (to be assigned by HQ): NJ0000010093

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II *(Preliminary Assessment)*. File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: MONSANTO

B. STREET *(or other identifier)*: 1500 Pine Street

C. CITY: CAMDEN

D. STATE: NJ

E. ZIP CODE: 08013

F. COUNTY NAME: CAMDEN

G. OWNER/OPERATOR *(if known)*

1. NAME: D.C. Dieterich

2. TELEPHONE NUMBER: (609)-963-0243

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION

25 acre Industrial Chemical complex

J. HOW IDENTIFIED *(i.e., citizen's complaints, OSHA citations, etc.)*: NJDEP SITE VISIT

K. DATE IDENTIFIED *(mo., day, & yr.)*: 3-7-80

L. PRINCIPAL STATE CONTACT

1. NAME: Thomas Brady / Bob Reed

2. TELEPHONE NUMBER: (609)-292-9120

II. PRELIMINARY ASSESSMENT *(complete this section last)*

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☒ 3. LOW ☐ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED *(no hazard)*

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 4. SITE INSPECTION NEEDED *(low priority)*

C. PREPARER INFORMATION

1. NAME: Richard RAMON

2. TELEPHONE NUMBER: (212)-264-1573

3. DATE *(mo., day, & yr.)*: 6-12-80

III. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*

☐ 2. INACTIVE *(Those sites which no longer receive wastes.)*

☐ 3. OTHER *(specify)*: *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES *(specify generator's four-digit SIC Code)*: 2816

C. AREA OF SITE *(in acres)*: 25

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE *(deg.—min.—sec.)*: 40°56'13"

2. LONGITUDE *(deg.—min.—sec.)*: 75°06'31"

E. ARE THERE BUILDINGS ON THE SITE?

...d From Front

IV. CHARACTERIZATION OF SITE ACTIV...

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT	X	2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
X	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY	X	8. OTHER (specify): Scrub Settling Pond
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☒ 2. LIQUID ☒ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5 HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8 INERT ☐ 9. FLAMMABLE

☐ 10. OTHER (specify): _____

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
'X' (1) PAINT, PIGMENTS	'X' (1) OILY WASTES	'X' (1) HALOGENATED SOLVENTS	'X' (1) ACIDS	'X' (1) FLYASH	'X' (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

 Continue On Page 3

D

Continued From Page 2

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

Lampblack

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER	X			SCRUB settling plant is adjacent to the Cooper River
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL	X			Scrub settling pond is not lined
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

Continue On Reverse

D

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- [ ] 1. NPDES PERMIT
- [ ] 2. SPCC PLAN
- [ ] 3. STATE PERMIT *(specify)*: _____
- [ ] 4. AIR PERMITS
- [ ] 5. LOCAL PERMIT
- [ ] 6. RCRA TRANSPORTER
- [ ] 7. RCRA STORER
- [ ] 8. RCRA TREATER
- [ ] 9. RCRA DISPOSER
- [ ] 10. OTHER *(specify)*: _____

B. IN COMPLIANCE?

- [ ] 1. YES
- [ ] 2. NO
- [ ] 3. UNKNOWN
- 4. WITH RESPECT TO *(list regulation name & number)*: _____

VIII. PAST REGULATORY ACTIONS

- [ ] A. NONE
- [ ] B. YES *(summarize below)*

IX. INSPECTION ACTIVITY *(past or on-going)*

- [ ] A. NONE
- [x] B. YES *(complete items 1,2,3, & 4 below)*

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
SITE VISIT	3-7-80	State	

X. REMEDIAL ACTIVITY *(past or on-going)*

- [ ] A. NONE
- [ ] B. YES *(complete items 1, 2, 3, & 4 below)*

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment *(Section II)* information on the first page of this form.

D

ATTACHMENTS

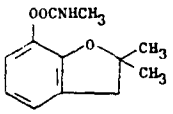
MAPS

1. USGS QUADRANGLE MAP
2. SITE MAP
3. TAX MAP
4. N.J. ATLAS BASE MAP
5. GEOLOGIC OVERLAY
6. WATER SUPPLY OVERLAY
7. WATER WITHDRAWAL MAP

ATTACHMENTS

A. STACK LOG LISTING
B. LETTER RE: CLASSIFICATION OF LAMPBLACK
C. EPA SITE INSPECTION REPORT
D. EPA PRELIMINARY ASSESSMENT
E. MERCK INDEX DESCRIPTION OF LAMPBLACK
F. SAX DESCRIPTION OF LAMPBLACK
G. CHEMICAL SAMPLES & ANALYTICAL SVCS CO. ANALYTICAL DATA

N 6.33%, O 21.69%. Prepn and use as insecticide: Orwoll, Sharpf, U.S. pats. **3,356,690**; **3,474,170-1** (1967, 1969, to FMC); Heiss *et al.*, U.S. pat. **3,470,299** (1969 to Bayer).



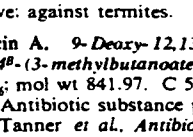
White crystalline solid, mp 150-153°. Soly in water at 25°: 700 ppm. Unstable in alk. LD_{50} orally in rats: 8 mg/kg, *Toxic Substances List*, H. E. Christensen, Ed. (1974) p 180.

USE: Systemic insecticide, acaricide, nematocide. *Caution:* Cholinesterase inhibitor.

1809. Carbohydrazide. *Carbonic dihydrazide;* 1,3-diaminourea. CH_6N_4O; mol wt 90.09. C 13.33%, H 6.71%, N 62.20%, O 17.76%. $NH_2NHCONHNH_2$. Prepd by refluxing diethyl carbonate with hydrazine hydrate: Mohr *et al.*, *Inorg. Syn.* **4**, 32 (1953).

Crystals from water + ethanol, dec 153-154°. Freely sol in water. pH of 1% aq soln about 7.4. Practically insol in alcohol, ether, chloroform, benzene. Forms salts with acids. With nitrous acid it forms the highly explosive carbonyl azide $CO(N_3)_2$.

1810. γ-Carboline. *5H-Pyrido[4,3-b]indole; 2H-pyrid-[4,3-b]indole;* 5-carboline. $C_{11}H_8N_2$; mol wt 168.19. C 78.55%, H 4.79%, N 16.66%. Prepn: Robinson, Thornley, *J. Chem. Soc.* **125**, 2169 (1924). Prepn of derivs: Hörlein, *Ber.* **87**, 463 (1954).



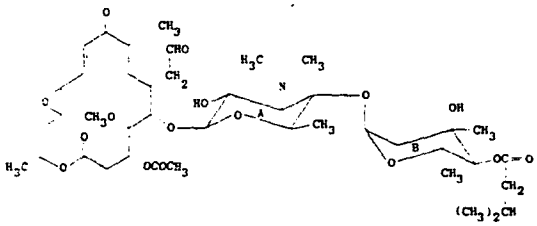
Monoclinic needles from water, mp 225°. d 1.352. Can be distilled at atmospheric pressure without dec. Strong base. Freely sol in methanol; somewhat less sol in ethanol. Slightly sol in benzene, water.

Picrate, yellow needles, mp 250°.

1811. Carbolineum®. A brand of chlorinated anthracene oil (coal tar fraction).

USE: To spray hen houses in the control of chicken mites; as wood preservative; against termites.

1812. Carbomycin A. *9-Deoxy-12,13-epoxy-9-oxoleucomycin V 3-acetate 4B-(3-methylbutanoate);* M-4209; Magnamycin. $C_{42}H_{67}NO_{16}$; mol wt 841.97. C 59.91%, H 8.02%, N 1.66%, O 30.40%. Antibiotic substance produced by *Streptomyces halstedii:* Tanner *et al.*, *Antibiot. & Chemother.* **2**, 441 (1952). Isoln: Friedman *et al.*, U.S. pat. **2,960,438** (1960 to Pfizer). Carbomycin A is a 16-membered lactone linked to a disaccharide, mycaminose *(q.v.)* and mycarose *(q.v.)*. The lactone and mycaminose form *carimbose*. Structure: Kuehne, Benson, *J. Am. Chem. Soc.* **87**, 4660 (1965); Woodward *et al.*, *ibid.* 4662. Absolute configuration: Celmer, *ibid.* **88**, 5028 (1966). *Reviews:* Vazquez, in *Antibiotics* Vol. 1, D. Gottlieb, P. D. Shaw, Eds. (Springer-Verlag, New York, 1967) pp 366-377; Keller-Schierlein in *Fortschr. Chem. Org. Naturst.* **30**, 314-460 (1973).



Blunt needles from ethanol, mp 214°. $[\alpha]_D^{25}$ −58.6° (chloroform). uv max (abs ethanol): 238, 327 nm ($E^{1\%}_{1cm}$ 185, 0.9). Carbomycin standard is the free base having a potency of 1080 units/mg. For stability of soln data *see Antibiot. & Chemother.* **3**, 865 (1953). Weak base, pKb 7.2. Solubilities determined by Weiss *et al.*, *Antibiot. & Chemother.* **7**, 37[illegible] (1957) in mg/ml at about 28°: Water 0.295; methanol > 20; ethanol > 20. LD_{50} i.v. in mice: 550 mg/kg.

THERAP CAT: Antibiotic.

THERAP CAT (VET): Antimicrobial.

1813. Carbon. C; at. wt 12.01115; at. no. 6; valence 4. Stable isotopes: 12 (98.892%); 13 (1.108%); radioactive isotopes: 9-11; 14-16. Abundance in earth's crust: approx 0.027%. Cosmic abundance: 6 atoms/atom Si. Occurs in [illegible] forms: (1) Diamond *(q.v.)*; (2) Graphite *(q.v.)* or black lead; (3) Amorphous carbon such as coal, lampblack, and the various forms of artificial carbon. Comprehensive reviews: P. L. Walker, *Am. Scientist* **50**, 259-293 (June 1962); Holliday *et al.* in *Comprehensive Inorganic Chemistry* vol. 1, J. C. Bailar, Jr. *et al.*, Eds. (Pergamon Press, Oxford, 1973) pp 1173-1294.

^{14}C isotope, continuously formed in the earth's atm by the bombardment of nitrogen with cosmic neutrons according to the reaction $^{14}_{7}N + ^{1}_{0}n \rightarrow ^{14}_{6}C + ^{1}_{1}H$. The ^{14}C is rapidly oxidized to CO_2, in this form it penetrates into animals and plants by photosynthesis and metabolism. The ^{14}C content of living matter is estimated at 15.3 disintegrations per minute and per gram of carbon, corresponding to the equilibrium reached between formation of ^{14}C and its exchange with ^{12}C. This equilibrium stops when the plant or animal dies, and the ^{14}C content begins to decrease, because the ^{14}C decays with a half-life of 5760 years. This fact can be used to date organic matter (not more than 40,000 years old) by comparison with the standard 15.3 disintegrations per min per gram: M. Haissinsky, J. P. Adloff, *Radiochemical Survey of the Elements* (Elsevier, New York, 1965) pp 30-32.

1814. Carbon, Amorphous. Carbon black; carbon, activated; carbon, decolorizing. A quasi-graphitic form of carbon of small particle size. By the term "carbon black" several forms of artificially prepared carbon or charcoal are designated, *e.g.*: (1) *Animal charcoal*, obtained by charring bones, meat, blood, etc.; (2) *Gas black; furnace black; channel black:* obtained by incomplete combustion of natural gas; (3) *Lamp black*, obtained by burning various fats, oils, resins, etc., under suitable conditions; (4) *Activated charcoal*, *e.g. Carboraffin, Norit, Opocarbyl, Ultracarbon*, prepd from wood and vegetables. Monograph: H. W. Davidson *et al.*, *Manufactured Carbon* (Pergamon Press, New York, 1968). *Reviews:* Cohan in *Science of Petroleum* vol. V, Pt 2, B. T. Brooks, A. E. Dunstan, Eds. (Oxford Univ. Press, 1953), pp 79-89; Smisek, Cerny, *Active Carbon* (Elsevier Publishing Co., Amsterdam, 1970).

USE: Number (4), *e.g.* Norit, Carboraffin, is used chiefly for clarifying, deodorizing, decolorizing and filtering. The others are used as a pigment for rubber tires; for printing, stenciling and drawing inks; for leather; stove polish, phonograph records, electrical insulating apparatus. Activated charcoal (from the destructive distillation of various organic materials) is used in medicine, *e.g.*, Opocarbyl; Norit; Ultra carbon.

THERAP CAT: Activated charcoal as antidote; adsorptive.

THERAP CAT (VET): Internally as an adsorptive in diarrhea; externally in foul wounds.

1815. Carbon Dioxide. Carbonic acid gas; carbonic anhydride. CO_2; mol wt 44.01. C 27.29%, O 72.71%. Occurs in the atms of many planets. In our solar system, e.g., on Venus, the optical layer thickness due to CO_2 is 100,000 cm/atm, but only 220 cm/atm on Earth. Analyses of air in the temperate zones of the Earth show 0.027 to 0.036% (v/v) of CO_2: G. P. Kuiper, *The Atmospheres of the Earth and Planets* (Univ. of Chicago Press, 1949); Landolt-Bornstein *Zahlenwerte* vol. III (Springer-Verlag, 6th ed., 1952) pp [illegible] and 585. Constituent of carbonate type of minerals and products of animal metabolism. Necessary for the respiration cycle of plants and animals. Obtained industrially as a by-product in the manuf of lime during the "burning" of limestone ($CaCO_3$). Also produced by burning coke or other carbonaceous material. In the U.S.A. large amounts are produced by fermentation (Backus process and Reid process). When glucose is fermented by yeast, the chief products are ethyl alcohol and CO_2. Prepd in the laboratory by dropping acid on a carbonate: E. H. Archibald,

ATT. E

THR: HIGH scu. MOD ivn and ims.
Disaster Hazard: When heated to decomp it emits tox fumes of NO_x.

CARBON

CAS RN: 7440440 NIOSH #: FF 5250000
mf: C; mw: 12.01

Black crystals, powder or diamond form. mp: 3652°-3697° (subl), bp: approx 4200°, d(amorphous): 1.8-2.1, d(graphite): 2.25, d(diamond): 3.51, vap. press: 1 mm @ 3586°.

SYNS:

BLACK PEARLS	CHARCOAL BLACK
COLUMBIAN CARBON	C.I. 77266
CARBONE (ITALIAN)	PURIFIED CHARCOAL

TOXICITY DATA: 3-2	CODEN:
scu-rat TDLo:167 mg/kg (8D preg)	TJADAB 4,327,71
ivn-mus LD50:440 mg/kg	TXAPA9 24,497,73

TLV: Air: 3.5 mg/m3 DTLVS* 4,68,80.
OSHA Standard: Air: TWA 3500 ug/m3 (SCP-R) FEREAC 39,23540,74. Occupational Exposure to Carbon Black recm std: Air: TWA 3.5 mg/m3 NTIS**. "NIOSH Manual of Analytical Methods" VOL 3 S262. Reported in EPA TSCA Inventory, 1980.
THR: MOD ivn. Powder elemental C is mainly a nuisance dust and slightly irr in the form of graphite (one of the common forms of carbon), it can cause a dust irritation, particularly to the eyes. Carbon also occurs in the form of soot, carbon black. It can also cause conjunctivitis epithelial hyperplasia of cornea, as well as eczematous inflammation of eyelids. Some forms of carbon dust can cause irr of eyes and mu mem. See also carbon black, soot.
Fire Hazard: Slight, when exposed to heat.
Explosion Hazard: In the form of dust when exposed to heat or flame or (NH_4NO_3 + heat), (NH_4ClO_4 @ 240°), bromates, $Ca(OCl)_2$, chlorates, Cl_2, (Cl_2 + $Cr(OCl)_2$), ClO, F_2, iodates, IO_5, ($Pb(NO_3)_2$, $HgNO_3$, HNO_3, (oils + air), (K + air), Na_2S, $Zn(NO_3)_2$.
Incomp: air; metals; oxidants; unsaturated oils.

CARBON BLACK

A generic term applied to a family of high-purity colloidal carbons commercially produced by carefully controlled pyrolysis of gaseous or liquid hydrocarbons. Carbon blacks, including commercial colloidal carbons such as furnace blacks, lamp blacks and acetylene blacks, usually contain less than several tenths percent of extractible organic matter and less than one percent ash.

SYNS:

LAMP BLACK	FURNACE BLACK
ACETYLENE BLACK	

THR: LOW skn, ihl, orl. See also carbon. According to studies on laboratory test animals, as well as retrospective studies of employees in the carbon black industry, there are no physiologic effects from contact, inhalation or ingestion of carbon black. The only untoward effect of carbon black upon the environment is that in high concentrations it becomes a nuisance dust. While it is true that the tiny particulates of carbon black contain some molecules of carcinogenic materials, the carcinogens are apparently held tightly and are not eluted by hot or cold water, gastric juices or blood plasma.
Refs: Nau, C. A., Taylor, G. T., Lawrence, C. H., Properties and Physiological Effects of Thermal Carbon Black. *Journal of Occupational Medicine.* Nov. 1976, Vol 18, No. 11, pp. 732-734.
Nau, C. A., Neal, J., Stembridge, V. A., A Study of the Physiological Effects of Carbon Black. *Archives of Environmental Health,* Dec. 1960, Vol. 1, pp. 512-533, American Medical Association.

CARBONCHLORIDIC ACID PHENYL ESTER

CAS RN: 1885149 NIOSH #: FG 3850000
mf: $C_7H_5ClO_2$; mw: 156.57

SYNS:

FENYLESTER KYSELINY CHLORMRAVENCI (CZECH)	PHENYL CHLOROFORMATE

TOXICITY DATA: 3-2	CODEN:
skn-rbt 500 mg/24H MOD	28ZPAK -,163,72
eye-rbt 50 ug/24H SEV	28ZPAK -,163,72
orl-rat LD50:1410 mg/kg	AIHAAP 30,470,69
ihl-rat LCLo:44 ppm/4H	AIHAAP 30,470,69
skn-rbt LD50:3970 mg/kg	AIHAAP 30,470,69

Reported in EPA TSCA Inventory, 1980.
THR: HIGH ihl. MOD orl, skn. A skn, eye irr. See also esters.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

CARBON DIOXIDE

CAS RN: 124389 NIOSH #: FF 6400000
mf: CO_2; mw: 44.01

Colorless, odorless gas. mp: subl @ −78.5°, (−56.6° @ 5.2 atm), vap. d: 1.53.

SYNS:

ANHYDRIDE CARBONIQUE (FRENCH)	CARBONIC ANHYDRIDE
CARBONIC ACID GAS	DRY ICE
	KOHLENSAURE (GERMAN)

TOXICITY DATA: 3	CODEN:
ihl-rat TCLo:6 pph/24H (10D preg)	CIRUAL 8,1218,60
ihl-rbt TCLo:10 pph/(7-12D preg) TFX:TER	ZMOAAN 56,165,65
ihl-rbt TCLo:13 pph/4H (9-12D preg)	ZMOAAN 56,165,65
ihl-rat TCLo:6 pph/24H/(10D preg):TER	CIRUAL 8,1218,60
ihl-rbt TCLo:10 pph/(7-12D preg):TER	ZMOAAN 56,165,65
ihl-hmn LCLo:100000 ppm/1M	AOHYA3 17,159,74
ihl-rat LCLo:657190 ppm/15M	MRLR** No. 23,50
ihl-mam LCLo:90000 ppm/5M	AEPPAE 138,65,28

TLV: Air: 5000 ppm DTLVS* 4,69,80. *Toxicology Review:* EVHPAZ 11,163,75. OSHA Standard: Air: TWA 5000 ppm (SCP-R) FEREAC 39,23540,74. Occupa-

ATT. F

CHEMICAL SAMPLES & ANALYTICAL SVCS CO

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PHONE (609) 848-7227
FAX # 1-609-848-9591

LABORATORY ANALYSIS REPORT #710120591

October 26, 1987

Monsanto Company
Attn.: R. Forsythe
1500 Pine Street
Camden, NJ 08103

Sample Date: 10/12/87
P.O. #K-1847-F
CSAS Job #710120591

Sample Designation:
#7101201 - Water/Well #2
#7101202 -Water/Well #4
#7101203 - Water/Well #6
#7101204 - Water/Well #13
#7101205 - Water/Well #14

Parameter	7101201	7101202	7101203
Polynuclear Arom. Hydrocarbons (Meth. 610):			
Naphthalene, ppb	<25	<25	<25
Acenaphthene, ppb	<26	<26	<26
Anthracene, ppb	<8.2	<8.2	<5.8
Phenanthrene, ppb	<17	<17	<12
pH	6.90	6.40	6.40
Depth (TopWell-Top Water/TopWell-Bot. Well)	33.1/ 38.3	24.8/ 58	23.2/ 45.4

	7101204	7101205
Polynuclear Arom.Hydrocarbons (Meth 610):		
Naphthalene, ppb	<25	<32
Acenaphthene, ppb	<26	<34
Anthracene, ppb	<7.2	<10.6
Phenanthrene, ppb	<15	<23
pH	7.0	6.90
Depth (TopWell-TopWater/ TopWell-Bot.Well)	39.5/ 85.6	39.7/ 81.7

Date: Oct 24 1987

Signed: [signature]
Laboratory Director/Manager

ATT G

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CAMDEN, NEW JERSEY
CAMDEN COUNTY
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LONG. 75° 06' 15"

SCALE 1:24 000

1 ½ 0
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS

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MAR 1