SINGMASTER & BREYER, INC.
235 EAST 42 STREET · NEW YORK, N.Y. 10017
TELEPHONE TN 7-4200 CABLE ADDRESS "BREYSING"

January 29, 1971

Mr. Jerome T. Wagner
Building Inspector
City Hall
Kearny, New Jersey

Dear Mr. Wagner:

In accordance with the discussions held in the Drew Chemical Corporation offices on January 4, 1971, I am summarizing for your review a general description of the type of construction and processing operations to be conducted at the plant and the major raw materials that Drew plans to use in the manufacturing process.

In regard to the construction operations, no new buildings are currently being planned for erection on the site. Drew plans to continue to use the existing main process building for their own processing function and to also use offices, warehouse, machine shop for the same functions as previously existed. The process building (#713) which was used for manufacturing by Sun Chemical will now be utilized as a drumming building for products manufactured in the main process building.

Some internal building modification work is planned in both buildings, namely refinishing of the concrete floors in the main process building (#720), removal of unusable equipment, installation of new vessels and the possible addition of a new elevator at a later date. Some structural work involving building steel is required during the removal of tanks on the 3rd floor in building 720, however, we do not consider this to be a major structural revision to the building. In building 713 present plans call for refinishing of the ground floor and modifications to the existing structural steel to accommodate new equipment required for the Drew drumming installation.

New vessels will also be installed outside the building in the tank farm area and a new pipe rack will be erected between the tank farm area and the main process building.

The majority of the processing operations conducted at the plant will consist of simple blending and mixing operations in which solid or liquid raw material is fed into an agitated tank and dissolved or dispersed in a solvent or carrier. The solvents are usually water or alcohol or petroleum based liquids and the operations with few exceptions are conducted at atmospheric pressure at low to medium temperatures (ambient to 350°F).

During the blending and mixing operations, very few vapors are released, however, the blend tanks will be piped to vent condensers or a scrubber in order to effectively neutralize any gaseous discharge from the mixing.

The plant effluent into the sewer system will consist primarily of floor wash downs with water, and once through cooling water through vessel jackets. None of the chemicals used directly in the blending and mixing operations are transferred directly to the sewer and no by-products find their way into the sewers. In the manufacturing process most of the products use similar raw materials and in many cases no wash down is required, thus eliminating large quantities of plant effluent. In addition, in many cases the wash down is collected and recycled through the process for economic reasons.

The scrubber system will also be connected to hoods over the blending and mixing tanks so that dust particles from the loading of solvents into vessels will also be scrubbed and no solids emission is expected from the plant.

A list of raw materials to be used in the manufacture of Drew products is attached to this letter. We will be pleased to clarify any questions you may have at your convenience.

Very truly yours,

SINGMASTER & BREYER

W.J. Moore
Project Manager

WJM:amt
Enc.
cc: E.A. Savinelli
D. Kawczynski
M. Piergrossi
E. Goldberg
File

MAJOR RAW MATERIALS USED IN
DREW MANUFACTURING PROCESSES

1. Demineralized Water
2. Mineral Oil
3. Mineral Oil
4. Mixed Isomers of C_{10} - C_{18} Oxo Alcohols
5. Mineral Seal Oil
6. Phosphoric Acid 75% to 85%
7. Hexamethylene Triamine
8. DMF
9. Isopropanol
10. Stearic Acid
11. Stearyl Alcohol
12. Scale Wax

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

Date: July 28, 1972

Plant Ref. No. LAH0909

WASTE EFFLUENT SURVEY

(For Industries Served by the Passaic Valley Sewerage Commissioners)

Plant Name: Drew Chemical Corporation

Address: 1106 Harrison Avenue, Kearny, New Jersey Zip 07032

Person and Title to whom any further inquiries should be directed:

D. C. Kawczynski, Project Engineer

Phone No.: 201-887-9300

Number of Employees: 45

Number of Working Days Per Week: 5

Number of Shifts Per Day: 2

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

Type of Industry and 4 digit U. S. Standard Industrial Classification No.:

Finished Product(s): Industrial Water Treatment Chemicals

Average Production: 2,500,000 lb./mo.

Raw Materials Used: Varied

Brief Description of Operations: Major portion of products are straight blends done in agitated kettles. Some reactor work such as esterifications and soponifications are done. These comprise about 5 percent of production.

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

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

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

a) pH: 6.6 b) Turbidity: In Jackson Unit 2.4

c) Temperature: 33°C d) Radioactive? Yes ..... No x

e) Solids Concentration:

1) Total Solids 90 mg/l Volatile 10 mg/l Mineral 80 mg/l

2) Suspended Solids 12 mg/l Volatile 9 mg/l Mineral 3 mg/l

f) Oil and Grease Concentration:

1) Floatable Oils 0 mg/l

2) Emulsified Oils 2.4 mg/l

g) Chlorides 9.0 mg/l

h) Chemical Oxygen Demand (C.O.D.): 57 mg/l

i) 5-day Bio-chemical Oxygen Demand (B.O.D.): 16 mg/l

j) Total organic carbon (T.O.C.): 12.5 mg/l

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

Chromium as Cr 0 mg/l; Calcium as Ca 10.8 mg/l; magnesium as mg 1.9 mg/l; Iron as Fe 0.33 mg/l; Copper as Cu 0 mg/l

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

m) Solvents—Name and concentration: N/A

n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): N/A

o) Date and time span of sample 6 July 1972 @ 3:15 p.m.

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

Continuous 16 hrs./day; no defined peaks. Approximately 20 gallons/day

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

Purchased water in 1971 from: Town of Kearny

1st Quarter 4071 cu. ft.

2nd Quarter 3851 cu. ft.

3rd Quarter 4988 cu. ft.

4th Quarter 5023 cu. ft.

Total Purchased 1971: 17, 933 cu. ft.

Well Water

1st Quarter N/A

2nd Quarter

3rd Quarter

4th Quarter

Total well water received in 1971:

River Water

1st Quarter N/A

2nd Quarter

3rd Quarter

4th Quarter

Total river water taken in in 1971:

TOTAL OF ALL WATER RECEIVED IN 1971:

Water Use in 1971:

Water to Product (include evaporated and lost water): 10,759 cu. ft.

Water to Sanitary Sewer: 7,174 cu. ft.

Water to Storm Sewer, River or Ditch: N/A

TOTAL WATER USE IN 1971: 17,933 cu. ft.

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

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

a) **pH:** _____ b) **Turbidity:** .....

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

e) Solids Concentration:

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

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

f) **Oil and Grease Concentration:**

1) **Floatable Oils** .....

2) **Emulsified Oils** .....

g) **Chlorides** .....

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

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

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

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

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

.....

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

.....

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

.....

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

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

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

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

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Signature and title of person preparing report

380-7032 Hudson County

Drew Chemical Corporation One Drew Chemical Plaza, Boonton, N.J. 07005/(201) 263-7600/Cable Drewchems BOON

ADDRESS REPLY TO: 1106 Harrison Avenue, Kearny, NJ 07032/(201) 997-0800

November 15,1982

Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, N.J. 07105

Attention: Mr. John Bray

Subject: Wastewater PH Control

Please be advised that Drew Chemical Corporations Kearny Plant has initiated a program of Wastwater Neutralization as of the week of November 10. This program includes the retention of washdown water in the reactor vessel, pH testing and neutralization prior to putting the water to sewerage. These steps are being taken to eliminate the pH excursions from the norm being found in wastewater analysis.

It is hoped that this meets with your satisfaction. Should you have any questions or comments, please do not hesitate to contact me.

Very truly yours,

DREW CHEMICAL CORPORATION

John Orlowski
PLANT ENGINEER

JO/rb

cc: K. Weiss
M. Billow
Chron