

Repet-Misc

INDIVIDUAL LOCATION REPORT

WATER

(Strictly Confidential to MCA)

WATER POLLUTION CONTROL IN THE CHEMICAL INDUSTRY

1. Location (city and state) Newark, New Jersey

If manufacturing is carried out at this location, check here and disregard other function categories.

If this is a non-production facility only, indicate its function:

- Research and/or development
- Warehouse and storage
- Packaging, including cylinder filling
- Blending or compounding
- Other (specify) \_\_\_\_\_

With regard to surface waters, this location adjoins:

A. Fresh water - name of river, stream, lake, etc. \_\_\_\_\_

B. Brackish water - name of river estuary Passaic River

C. Salt water - name of ocean or salt lake \_\_\_\_\_

If more than one of the above applies, indicate which receives water and wastewater discharges \_\_\_\_\_

2. Total number of employees (at this location only) 74

3. Normal operating schedule 24 hours/day 7 days/week

4. Number of chemical production processes: (For this purpose, a "process" is arbitrarily defined as a set of unit operations carried out in an integrated group of equipment. It may yield one product, or a number of kindred products, simultaneously or at different times. Disregard sanitary waste handling.)

A. Processes without water-borne waste discharges 4

B. Processes with water-borne waste discharges to a public sewer system 2) One process discharges both to sewer and to river.

C. Processes with water-borne waste discharges to surface waters, either with or without waste treatment. 4) river.

D. Processes with underground disposal of water-borne wastes 0

E. Processes with water-borne wastes otherwise disposed of (specify how): 0

Total number of processes 9

5. Water withdrawals—for all purposes—average gallons per operating day:

A. From public supplies		<u>63,000</u>	gpd
B. From private supplies:		<u>2,160,000</u>	gpd
From wells	<u>860,000</u>		gpd
From surface waters (streams, ponds, etc.)	<u>1,300,000</u>		gpd
Other (specify)	<u>- 0 -</u>		gpd
Total withdrawals (Sum of A and B)		<u>2,223,000</u>	gpd
C. Estimate daily requirement of water if none of it was recirculated or otherwise re-used (to indicate extent of water re-use)		<u>2,223,000</u>	gpd

6. Water and wastewater discharges—average gallons per operating day:

	Discharged to surface waters	Discharged to public sewers	Other disposal (identify)
A. Once-through cooling water	<u>1,960,000</u> gpd	<u>187,000</u> gpd	<u>- 0 -</u> gpd
Discharged separately from other wastewater?	<input checked="" type="checkbox"/> Yes Except <input type="checkbox"/> No for water to public sewer.		
B. Process wastewater effluent:			
(1) Effluent requiring no treatment under existing control requirements	<u>14,500</u> gpd	<u>13,200</u> gpd	<u>- 0 -</u> gpd
(2) Treated effluent meeting all existing control requirements	<u>- 0 -</u> gpd	<u>- 0 -</u> gpd	<u>- 0 -</u> gpd
(3) Treated effluent not meeting all existing control requirements	<u>- 0 -</u> gpd	<u>- 0 -</u> gpd	<u>- 0 -</u> gpd
What percent of this volume is now scheduled for improvement?	<u>N/A</u> %	<u>N/A</u> %	<u>N/A</u> %
(4) Untreated effluent not meeting all existing requirements	<u>12,800</u> gpd	<u>- 0 -</u> gpd	<u>- 0 -</u> gpd
What percent of this volume is now scheduled for improvement?	<u>0</u> %	<u>N/A</u> %	<u>N/A</u> %
Total process wastewater effluent	<u>27,300</u> gpd	<u>13,200</u> gpd	<u>- 0 -</u> gpd
C. Sub-total of once-through cooling water plus process wastewater effluent (sum of A and B), namely total volume of water and wastewater discharges accounted for			<u>2,187,500</u> gpd
D. Water consumed or lost (i.e., volume evaporated, shipped in products or otherwise removed so that it is not released to surface waters to become available for downstream use)			<u>12,500</u> gpd
E. Grand total of water accounted for			<u>2,200,000</u> gpd
If this grand total differs from the water withdrawals total entered under item 5, explain why:			
<u>(1) Condensate not fed to process is sent to river (2) unknown losses.</u>			

7. Sanitary waste is: (Check either A or B, and others as applicable.)

- A.  Combined with plant waste or B.  Kept separate from plant waste  
 C.  Given in-plant treatment  
 D.  Delivered to public sewer system  
 E.  Other (specify) \_\_\_\_\_

8. Type and net quantity of water-borne waste constituents discharged—pounds per day:  
 Note: Deduct amounts of inorganics and organics received in the influent water.  
 Disregard sanitary waste if delivered separately.

	To surface waters	To public sewer system	Other disposal (identify)
<b>A. Inorganics (dry weight):</b>			
(a) Dissolved	<u>8,700</u> lb/day	<u>17,090</u> lb/day	<u>- 0 -</u> lb/day
(b) Undissolved	<u>- 0 -</u> "	<u>- 0 -</u> "	<u>- 0 -</u> "
Total	<u>8,700</u> "	<u>17,090</u> "	<u>- 0 -</u> "
<b>B. Organics (dry weight):</b>			
(a) Dissolved	<u>1,780</u> lb/day	<u>2,800</u> lb/day	<u>- 0 -</u> lb/day
(b) Undissolved	<u>- 0 -</u> "	<u>340</u> "	<u>- 0 -</u> "
Total	<u>1,780</u> "	<u>3,140</u> "	<u>- 0 -</u> "
<b>C. Oxygen demand of organics waste discharged—pounds oxygen per day</b>			
COD (Chemical Oxygen Demand)	<u>Unknown</u> lb/day	<u>Unknown</u> lb/day	<u>Unknown</u> lb/day
BOD (5-day Biochemical Oxygen Demand)	<u>Unknown</u> "	<u>Unknown</u> "	<u>Unknown</u> "

9. Waste treatment methods employed:

- Lagooning
- Settling
- Neutralization
- Incineration
- Flotation
- Subsurface disposal (deep well)
- Biological oxidation
- Anaerobic treatment
- Chemical oxidation or reduction
- Treatment in public (e.g., Sanitary Commission ~~municipal~~ facilities)
- Other (specify) \_\_\_\_\_

A. Estimate of dry weight basis of water-borne waste constituents that would be discharged if waste treatment were not employed (pounds per day):

Inorganics 25,790 lb/day                      Organics 4,920 lb/day

10. Capital investment in facilities in present use for water pollution control, including both waste treatment and reduction of waste volume by modification of operating processes and equipment. Also include capital cost of sewers, lagoons, or settling basins and waste beds necessary thereto, facilities for subsurface disposal, incineration (liquid wastes only), etc. (at this location only):

A. Total to end of 1966 \$ 23,000

B. Five-year sub-total for 1962-1966, inclusive \$ 1,000

C. Additional projected for next five years, 1967-1971, inclusive \$ 2,250

11. Annual operating and maintenance cost (current rate) of water pollution control facilities, including applicable salaries and overheads for plant, laboratory, engineering, and supervisory personnel; materials and utilities; and other direct costs (at this location only): \$ 4,400 per year

12. Annual manpower requirements in man-days for water pollution control (at this location only):

A. Technical, including supervision	80	man-days
B. Operating and maintenance	30	man-days
C. Laboratory, excluding research and development	- 0 -	man-days
D. Other (specify) (e.g., contracted)	- 0 -	man-days
Total	110	man-days

13. Economic incentives:

- A. Is statutory tax relief available for water pollution abatement facilities with respect to:
- |  |                            |                              |  |  |
|--|----------------------------|------------------------------|--|--|
|  | State taxes?               | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |  |
|  | County and/or local taxes? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |  |
- B. Have you benefited from tax exemption?  Yes  No
- C. Would you favor such exemption(s)?  Yes  No

If so, specify which type(s) would exert the greatest incentive:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date March 24, 1967 Company DIAMOND ALKALI COMPANY

NEWARK, NEW JERSEY

By *F. Gordon Steward*  
(F. GORDON STEWARD)

Please append any clarification or supplementary information you would like taken into account in connection with the information given.

THANK YOU FOR YOUR COOPERATION