

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL INDUSTRIAL WASTE (IW)
AND IW STORMWATER**

Application No. PA0055913
APS ID 1099594
Authorization ID 1459503

Applicant and Facility Information

| | | | |
|---------------------------|--|------------------|--|
| Applicant Name | <u>Corco Chemical Corporation</u> | Facility Name | <u>Corco Chemical Corporation IWTP</u> |
| Applicant Address | <u>299 Cedar Lane</u> <u>Fairless Hills, PA 19030</u> | Facility Address | <u>299 Cedar Lane</u> <u>Fairless Hills, PA 19030</u> |
| Applicant Contact | <u>Charles Kaczorek</u> | Facility Contact | <u>Charles Kaczorek</u> |
| Applicant Phone | <u>(215) 295-5006</u> | Facility Phone | <u>(215) 295-5006</u> |
| Client ID | <u>83314</u> | Site ID | <u>458553</u> |
| SIC Code | <u>2819</u> | Municipality | <u>Falls Township</u> |
| SIC Description | <u>Manufacturing - Industrial Inorganic Chemicals, Nec</u> | County | <u>Bucks</u> |
| Date Application Received | <u>October 2, 2023</u> | EPA Waived? | <u>Yes</u> |
| Date Application Accepted | <u></u> | If No, Reason | <u></u> |
| Purpose of Application | <u>Permit Renewal.</u> | | |

Summary of Review

Permittee requests renewal of an NPDES permit to discharge treated groundwater and non-contact cooling water into Corco Lake Nos. 1 and 2 respectively.

Corco Chemical is a manufacturer of fine chemicals for the analytical and pharmaceutical industries. The site consists of three process buildings and a series of tank farms for the manufacturing of these chemicals.

In 1989, the site visit by Department revealed contaminated soil and groundwater at the facility. Floor drains were found to be sources of groundwater contamination with volatile organic compounds (VOC) in the area. The company was made responsible to clean the groundwater. The groundwater remediation system was initiated in 1992 which consists of an air stripping tower.

The current NPDES permit requires monitoring at two locations:

Outfall 001 discharges 7,200 gpd of treated groundwater into Lake No. 1. (West Lake)

Outfall 002 discharges 115,000 gpd of non-contact cooling water into Lake No. 2. (East Lake)

Based on the available information, these two lakes are land-locked and were formed by previous owner by excavating sand and gravel for commercial sale. The Lake No. 1 covers 29 acres and contains 280 million gallons of water and the Corco Lake No. 2 covers 5 acres and contains 32 million gallons of water.

Outfall 001 consists of treated groundwater. Groundwater is extracted by two extraction wells (MW-4 and RW-5) located by the tank farm east of Building C at a rate of 1200 GPD of average flow to maximum flow of 7200 GPD gallons per day. From here, extracted groundwater is sent to the air stripper located in Building C. There, chlorinated solvents are removed to meet

| Approve | Deny | Signatures | Date |
|---------|------|---|------------|
| X | | <i>Ketan Thaker</i> Ketan Thaker / Project Manager | 12/26/2023 |
| X | | <i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager | 12/26/2023 |

Summary of Review

the discharge standards of the current NPDES permit. The remediated groundwater is then sent to the pump house (Building D) and discharge to Corco Lake No. 1 at a rate of 1200 gpd. This system operates continuously.

Discharge from Outfall 002 consists of non-contact cooling water used for cooling at the plant. Water is withdrawn by the pump house (Building D) from Corco Lake No. 1 at a rate of approximately 75,000 GPD average flow and 115000 GPD maximum flow. This water is then sent through heat exchangers in Buildings A and B and finally discharged into Corco Lake No. 2 through Outfall 002 at a rate of approximately 75,000 gallons per day. This system operates continuously.

Effluent limits for Outfall 001 (treated groundwater to Lake No. 1) are as follows:

| <u>Parameter</u> | <u>Effluent Limits (Mg/L)</u> |
|-------------------------------|-------------------------------|
| Benzene | 0.001 |
| Ethylbenzene | Monitor/Report |
| Toluene | Monitor/Report |
| Xylene, Total | Monitor/Report |
| Total BETX | 0.1 |
| Chloroform | 0.006 |
| 1, 1 – Dichloroethylene | Monitor/Report |
| Tetrachloroethylene | 0.005 |
| 1, 2 - Trans Dichloroethylene | 0.2 |
| Trichloroethylene | 0.005 |
| Vinyl Chloride | 0.002 |
| Iron, Total | Monitor/Report |

These BPT limits are based on 98 percent removal and also provide adequate protection of water quality criteria with dilution in the lake taken into account.

Effluent limits for Outfall 002 (Lake No. 1 intake water for cooling system and then discharge of non-contact cooling water to Lake No. 2) are as follows:

| <u>Parameter</u> | <u>Limits (Mg/L)</u> |
|---------------------|----------------------|
| pH | 6.0–9.0 STU |
| Temperature | 110° F (Inst. Max.) |
| Tetrachloroethylene | Monitor/Report |
| Trichloroethylene | Monitor/Report |
| Iron, Total | Monitor/Report |
| Manganese, Total | Monitor/Report |

Effluent is generally in compliance with the permit limits

Act-14 Notification to Falls Township on September 21, 2023.

Act-14 Notification to Bucks County on September 21, 2023.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP’s discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Compliance History

DMR Data for Outfall 001 (from November 1, 2022 to October 31, 2023)

| Parameter | OCT-23 | SEP-23 | AUG-23 | JUL-23 | JUN-23 | MAY-23 | APR-23 | MAR-23 | FEB-23 | JAN-23 | DEC-22 | NOV-22 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Flow (MGD) Average Monthly | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| pH (S.U.) Instantaneous Minimum | 7.86 | 7.94 | 7.70 | 7.94 | 8.68 | 8.62 | 8.65 | 8.06 | 6.87 | 8.99 | 7.94 | 8.01 |
| pH (S.U.) Instantaneous Maximum | 7.86 | 7.94 | 7.70 | 7.94 | 8.68 | 8.62 | 8.65 | 8.06 | 6.87 | 8.99 | 7.94 | 8.01 |
| Total Iron (mg/L) Average Monthly | 8.5 | 8.3 | < 0.2 | 0.33 | 0.25 | 0.33 | 0.26 | 0.56 | < 0.20 | < 0.20 | 0.002 | < 0.20 |
| Total Iron (mg/L) Daily Maximum | 8.5 | 8.3 | < 0.2 | 0.33 | 0.25 | 0.33 | 0.26 | 0.56 | < 0.20 | < 0.20 | 0.002 | < 0.20 |
| Ethylbenzene (mg/L) Average Monthly | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Ethylbenzene (mg/L) Daily Maximum | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Benzene (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Benzene (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Total BTEX (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Total BTEX (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Chloroform (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Chloroform (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 1,1-Dichloroethylene (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 1,1-Dichloroethylene (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| trans-1,2- Dichloroethylene (mg/L) Average Monthly | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.001 |

| | | | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| trans-1,2-Dichloroethylene (mg/L) Daily Maximum | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.002 | < 0.001 |
| Tetrachloro-ethylene (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Tetrachloro-ethylene (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Toluene (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Toluene (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Trichloroethylene (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Trichloroethylene (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Total Xylenes (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Total Xylenes (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Vinyl Chloride (mg/L) Average Monthly | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| Vinyl Chloride (mg/L) Daily Maximum | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |

DMR Data for Outfall 002 (from November 1, 2022 to October 31, 2023)

| Parameter | OCT-23 | SEP-23 | AUG-23 | JUL-23 | JUN-23 | MAY-23 | APR-23 | MAR-23 | FEB-23 | JAN-23 | DEC-22 | NOV-22 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Flow (MGD) Average Monthly | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 | 75000 |
| pH (S.U.) Instantaneous Minimum | 8.19 | 8.21 | 7.70 | 7.97 | 8.51 | 8.33 | 8.42 | 7.68 | 6.93 | 8.76 | 7.80 | 7.80 |
| pH (S.U.) Instantaneous Maximum | 8.19 | 8.21 | 7.70 | 7.97 | 8.51 | 8.33 | 8.42 | 7.68 | 6.93 | 8.76 | 7.80 | 7.80 |
| Temperature (°F) Instantaneous Maximum | 77 | 65.12 | 84.38 | 81.86 | 68.49 | 62.42 | 62.78 | 54.14 | 67.46 | 44.06 | 45.98 | 47.80 |
| Total Dissolved Solids (mg/L) Average Quarterly | | 250 | | | 164 | | | 270 | | | 250 | |

| | | | | | | | | | | | | |
|--|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|
| Total Dissolved Solids (mg/L) Daily Maximum | | 250 | | | 280 | | | 270 | | | 250 | |
| Total Iron (mg/L) Average Quarterly | | < 0.2 | | | < 0.20 | | | < 0.2 | | | < 0.20 | |
| Total Iron (mg/L) Daily Maximum | | < 0.2 | | | < 0.20 | | | < 0.2 | | | < 0.20 | |
| Total Manganese (mg/L) Average Quarterly | | < 0.010 | | | 0.017 | | | < 0.010 | | | 0.017 | |
| Total Manganese (mg/L) Daily Maximum | | < 0.010 | | | 0.022 | | | < 0.010 | | | 0.017 | |
| Tetrachloro-ethylene (mg/L) Average Monthly | 0.0026 | 0.0026 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0036 | < 0.001 | < 0.001 | 0.0016 | < 0.002 |
| Tetrachloro-ethylene (mg/L) Daily Maximum | 0.0026 | 0.0026 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.0036 | < 0.001 | < 0.001 | 0.0016 | 0.002 |
| Trichloroethylene (mg/L) Average Monthly | 0.0073 | 0.0073 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.01 | 0.0017 | < 0.001 | 0.0064 | 0.006 |
| Trichloroethylene (mg/L) Daily Maximum | 0.0073 | 0.0073 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.01 | 0.0017 | < 0.001 | 0.0064 | 0.006 |

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|----------------------------|-------------------------------------|-------------------|-----------------------|--------------------|------------------|---------------------|--|----------------------------|
| | Mass Units (lbs/day) ⁽¹⁾ | | Concentrations (mg/L) | | | | Minimum ⁽²⁾ Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Minimum | Average Monthly | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | XXX | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/month | Grab |
| Total Iron | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| Ethylbenzene | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| Benzene | XXX | XXX | XXX | 0.001 | 0.002 | 0.0025 | 1/month | Grab |
| Total BTEX | XXX | XXX | XXX | 0.1 | 0.2 | 0.25 | 1/month | Grab |
| Chloroform | XXX | XXX | XXX | 0.006 | 0.12 | 0.015 | 1/month | Grab |
| 1,1-Dichloroethylene | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| trans-1,2-Dichloroethylene | XXX | XXX | XXX | 0.2 | 0.4 | 0.5 | 1/month | Grab |
| Tetrachloro-ethylene | XXX | XXX | XXX | 0.005 | 0.01 | 0.012 | 1/month | Grab |
| Toluene | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| Trichloroethylene | XXX | XXX | XXX | 0.005 | 0.01 | 0.01 | 1/month | Grab |
| Total Xylenes | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| Vinyl Chloride | XXX | XXX | XXX | 0.002 | 0.004 | 0.005 | 1/month | Grab |

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (386-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|------------------------|-------------------------------------|-------------------|-----------------------|---------------------|------------------|---------------------|--|----------------------------|
| | Mass Units (lbs/day) ⁽¹⁾ | | Concentrations (mg/L) | | | | Minimum ⁽²⁾ Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Minimum | Average Monthly | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | XXX | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/month | Grab |
| Temperature (°F) | XXX | XXX | XXX | XXX | XXX | 110 | 1/month | I-S |
| Total Dissolved Solids | XXX | XXX | XXX | Report Avg Qrtly | Report | XXX | 1/quarter | Grab |
| Total Iron | XXX | XXX | XXX | Report Avg Qrtly | Report | XXX | 1/quarter | Grab |
| Total Manganese | XXX | XXX | XXX | Report Avg Qrtly | Report | XXX | 1/quarter | Grab |
| Tetrachloro-ethylene | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |
| Trichloroethylene | XXX | XXX | XXX | Report | Report | XXX | 1/month | Grab |