Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

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

Application Type	**Renewal**	Application No.	**PA0008231 & WQM Permit No. 5476203-T1**
Facility Type	**Industrial**	APS ID	**1009470**
Major / Minor	**Major**	Authorization ID	**1301993**

Applicant and Facility Information

Applicant Name	**Lear Corporation DBA Lear Corp Pine Grove**	Facility Name	**Lear Dye & Finishing Plant (FKA Guilford Mills FKA Gold Mills FKA Penn Dye & Finishing Plant)**
Applicant Address	1 Penn Dye Street	Facility Address	1 Penn Dye Street
	Pine Grove, PA 17963		Pine Grove, PA 17963
Applicant Contact	Stephen Vasko	Facility Contact	Stephen Vasko
Applicant Phone	(570) 915-3074	Facility Phone	(570) 345-3084
Client ID	354585	Site ID	242947
SIC Code	2258	Municipality	Pine Grove Borough
SIC Description	Manufacturing - Lace And Warp Knit Fabric Mills	County	Schuylkill
Date Published in PA Bulletin	11/9/2019	EPA Waived?	No
Comment Period End Date	1/24/2020 (extended)	If No, Reason	Major Facility, Significant CB Discharge, TMDL
Purpose of Application	Renewal/Transfer of NPDES and WQM Permit Transfer No. 5476203-T1		

Summary of Review

This is a **Redraft Fact Sheet Addendum** for the **Redraft 1.2 MGD Individual IW (Major <250 MGD, with 40 CFR 410 Subpart E ELG) NPDES Permit Renewal & Transfer** for this existing "Fabric dyeing and finishing plant" with a captive Industrial Wastewater Treatment Plant (IWTP) discharging to Outfall No. 001 plus assorted IW stormwater outfalls (Outfall Nos. 002 through 010). The facility discharges treated IW and IW stormwater to Swatara Creek (CWF, MF; Stream# 9361; impaired due to AMD and pathogens) with some site IW stormwater (Outfall No. 007 drainage area) also going to Wideawake Creek (CWF, MF; UNT #10069 to Swatara Creek).

- **Updated NPDES Permit Application Information**: The 6/13/2025 Updated NPDES application information & 6/19/2025 lab sheets can be found under **Public Upload# 324268**. The permittee was notified in November 2024 that the permitting process had restarted and was given opportunity to provide updated NPDES Permit Application information and/or updated public comments for Department consideration and/or pursue a "voluntary Consent Order & Agreement (CO&A) option". The 2025 Application update included response letter; revised GIF; revised NPDES application form; revised figures; Greensands Filter Analytical results (grab sampling of IWTP effluent); revised Module 1 (Stormwater); 2019 – 2024 Annual Stormwater Reports; Revised Module 2, 1/23/2020 Lear public comment on the 2019 Redraft NPDES Transfer/renewal permit; and June 2025 PPC Plan (with SPCC Plans) with the 2014 Draft NPDES Permit Transfer & Amendment attached. 12/22/2014 NOV and compliance-related documentation attached. **EDMR registration was previously updated for Lear Corp Pine Grove**.
- **Reason for Redraft NPDES Permit**: Required due to age of previous 10/22/2019 Draft NPDES Permit Renewal/Transfer (new transfer incorporated into this Redraft NPDES Permit); stale public notice; obsolete or potentially obsolete permit application information (with new 2025 Revised Application information now available including revised ELG production rates; reducing NPDES Permit basis flow from 2.0 MGD to 1.2 MGD per permittee

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	July 11, 2025
X		Edward Dudick, P.E. / Environmental Engineer Manager	July 14, 2025

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request; new influent/effluent sampling & analysis data; etc.); regulatory changes; NPDES permit template changes; updated Reasonable Potential Analysis (including water quality modeling addressing applicant request for reduced NPDES Permit basis flow and other new information); responses to received public comments on the 2019 Draft NPDES Permit; etc.

- Expanded FS Addendum: This Fact Sheet Addendum incorporates additional Fact Sheet Section information to provide context for this permit action
- Long-term Hold: The Department had placed this NPDES permit action on-hold while the permittee pursued several options including: Connection to local POTW; taking over a former local STP facility/location for IW treatment or pretreatment; IWTP upgraded, and a voluntary CO&A option (but nothing materialized except some potential IWTP upgrades noted in the 2025 application update). The facility has been operating under an administratively extended 2011 NPDES permit (originally issued to Gold Mills LLC). **NOTE**: The 2024 PGJTA Chapter 94 Report indicated: Pursuant to a request from the Schuylkill County Conservation District & Schuylkill County Economic Development Corporation as part of the Swatara Creek Floodplain Restoration project, the Authority completed a study in October 2015 to review the feasibility of de-commissioning the Guilford Mills industrial wastewater treatment facility and connection of Guilford's wastewater to the PGJTA municipal system. PGJTA indicated it was continuing to evaluate the study from 2015 to take on additional flow as directed by Guilford Mills. The Updated application does not mention any proposed floodplain project. No information on the sister Lear Knitting Mills wastewater discharges (to PGJTA) was found in the Chapter 94 Report.
- Previous NPDES Permitting: The previous 10/22/2019 Draft NPDES Permit renewal/transfer, Draft WQM permit, and Draft NPDES Permit Fact Sheet plus permitting history can be found under APS# 806927, Auth# 1111333. See previous fact sheet for additional background history/information.

- **Concurrent WQM Permit transfer (No. 5476203-T1 for original IWTP construction/operation)**: A WQM Permit transfer application for the original 1977 IWTP WQM Permit No. 5476203 (IWTP) was included in the previous transfer submittals, and will be issued with the Final NPDES permit renewal/transfer action. A draft WQM permit transfer document will be mailed with the Redraft NPDES Permit to allow for concurrent public comment.
  - Draft WQM Permit Transfer: This will transfer the original 1977 permit (see Treatment Plant section details) without modification except in terms of NPDES permit-superseded effluent limits (Special Conditions A and B) and to allow for modification of the 1977 WQM-permitted groundwater monitoring system by the Department (in writing).
  - NPDES Permit-required WQM Permit Modifications: Separate WQM Permit amendments are or might be required in the future due to site-specific issues:
    - WQM Permit Amendment Application Requirement (NPDES Permit Part C): The WQM permit must be separately updated to address substantial design and operational changes since 1977, including removal of two permitted IWTP Wastewater Treatment Impoundments (without WQM permitting), with resulting uncertainties about as-built/as-operated IWTP hydraulic/organic/solids design capacities, etc. In addition, site groundwater conditions have substantially changed since 1977 (groundwater pumping for water supply, groundwater remediation project, removal of permitted wastewater impoundment lagoons, etc.), requiring updated groundwater/geology information and likely updated groundwater monitoring system with new groundwater monitoring & reporting requirements.
    - Regrading around Octagonal Pit Pump Station to eliminate stormwater inflow (wildlife blamed for high influent fecal coliform sample results): If scope of project expands to include pump station upgrades (above and beyond normal O&M), WQM permitting might be required.
    - Other potential WQM Permitting for proposed IWTP Changes (depending on details): The NPDES Permit Application indicated the following IWTP upgrades are proposed in the next five (5) years to meet NPDES Permit limits:
      - Construction of a disinfection system (hypochlorite/bisulfate). Design is in progress. Permitting and installation proposed in 2026. This would require WQM permitting.
      - Installing ultrasonic level sensors for flow control in the EQ basin and the aeration lagoon
      - New aeration system in the (remaining) aeration lagoon impoundment.
      - New solids management-related (unclear if "replacement-in-kind" (normal O&M) or requiring WQM permitting):
        - New centrifuge
        - New polymer system
        - New sludge pumps.

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NOTE: Additional site upgrades/O&M were identified in a separate previous HRG Inc. IWTP engineering evaluation (see Treatment Plant section below), but it is unclear what has been or will be implemented.

- **Facility Description**: This is a "textile finishing plant" (a.k.a. fabric finishing plant) that engages in the washing, dyeing, finishing (heating involved), and warehousing of knitted synthetic textiles with an Industrial Wastewater Treatment Plant (IWTP) that was permitted in 1977. The facility straddles Swatara Creek (main plant buildings & separate onsite LFG-to-Energy facility on one side of Swatara Creek; IWTP, water supply reservoir receiving remediated groundwater discharges, and electrical substation on other side of Swatara Creek).
  - **Applicable SIC Codes**: The facility is covered under SIC# 2258 (Lace and Warp Knit Fabric Mills (finishing)), subject to 40 CFR 410 Subpart E (Knit Fabric Finishing Subcategory). Applicable SIC ELG (40 CFR 410.52 and 53): The provisions of Subpart E – Knit Fabric Finishing Subcategory are applicable to process wastewater discharges resulting from the following types of textile mills: knit fabric finishers, which may include any or all of the following unit operations: Bleaching, mercerizing, dyeing, printing, resin treatment, water proofing, flame proofing, soil repellency application and a special finish application.
    - The term simple manufacturing operation shall mean all the following unit processes: desizing, fiber preparation and dyeing.
    - The term complex manufacturing operation shall mean "simple" unit processes (desizing, fiber preparation and dyeing) plus any additional manufacturing operations such as printing, water proofing, or applying stain resistance or other functional fabric finishes.
    - Applicable Stormwater Requirements tied to SIC Code# 2258: This Textile Plant's SIC Code is subject to PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products) minimum requirements with additional site-specific considerations. Additional stormwater requirements pertain to the co-located LFG-to-Energy Plant (Outfall No. 007 drainage area) and IWTP (Outfall No. 009 drainage area).
  - **IW Wastewaters (Outfall No. 001)**:
    - Process wastewater with ELG
    - Boiler blowdown water
    - Non-process wastewater from floor drains, etc. Site PPC Plan indicates spills/leaks/releases inside building will be directed to the Octagonal Pit and then to IWTP for treatment. Potential spills/leaks/releases include dyes, fuels, etc.
    - New ~20,000 GPD/313 GPM Greensands Filter Backwash: The facility has installed a new Greensands Filter and hypochlorite system to treat metals in treated contaminated groundwater used as plant process water. The backwash filter flow is directed to IWTP. The Greensands Filter system was described as an oxidation and precipitate system using a sodium hypochlorite chemical feed system and Greensands filter system. The Report noted that greensand is "manganese dioxide coated media". The 12% available chlorine solution is continuously dosed into the water line prior to the filter system. The free chlorine will continuously regenerate the greensand media while inducing oxidation-reduction reactions of Iron and Manganese.
    - Stormwater Associated with Industrial Activities: Site PPC Plan indicates that stormwater is presently directed to the IWTP from the Octagonal Pit area (which would receive any release from Waste Oil Tank #011A per PPC Plan), portions of Loading Docks #6 and #7 (dye and chemical loading docks), plus any precipitation received by IWTP lagoons, clarifier, etc. PPC Plan notes that the building lies within the Swatara Creek floodplain (with flood planning including sand bags and pumps). Part C condition to redirect stormwater away from Octagonal Pit due to facility blaming wildlife contributions as cause for fecal coliforms in IWTP influent. Unclear if it is also in 100-year floodplain.
- **Co-located Groundwater Remediation under 9/30/1992 EPA RCRA Final Administrative Order Docket RCRA-III-052-CA; EPA ID# PAD002377703:** The facility/plant area has been undergoing groundwater remediation (Chlorinated organics under EPA RCRA/DEP Waste Management oversight), Treated groundwater is used as process water in the manufacturing process. Groundwater wells (PW-1, PW-3, PW-4) flow is metered, passed through an aeration nozzle and discharged into the water reservoir to treat VOCs from groundwater. Reservoir water is treated by Greensands filter/Hypochlorite system prior to use as plant process water, with backwash going to IWTP. All groundwater is used in the plant process. No groundwater discharge to Swatara Creek.
  - Per a 4/11/2013 EPA Guilford Mills Internet Document, the main groundwater contaminants at the facility are tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA). The 4/11/2013 EPA Internet document indicates that the facility did a pilot study to determine if aeration treatment can replace

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carbon adsorption for groundwater treatment, but the previous NPDES Permit did not authorize any groundwater/wastewater going directly to the IWTP.
    - DEP Waste Management has been monitoring site groundwater conditions under the Residual Solid Waste Chapter 287.102 (Permit-by-rule) due to RSW aeration lagoons/impoundments at the WWTP, plus groundwater contamination elsewhere onsite. PADEP Waste Management Groundwater Monitoring constituents include: 1,1,1-TCA, 1,1-DCE, 1,2-DCA, Benzene, cis-1,2-DCE, Ethylbenzene, PCE, TCE, Vinyl Chloride, Xylene, dissolved chromium, and dissolved lead. **NOTE**: This also means the permittee should have available additional geological/hydrogeological information and additional groundwater monitoring wells that can be incorporated into the required "clean-up WQM permit application".
- **Co-located industrial activity IW Stormwater Discharge**: The Pine Grove Energy LLC/INGENCO LFG-to-Energy Plant is a co-located industrial activity onsite. Pine Grove Energy, LLC (PGE) leases a portion of land from Lear Corporation located on the Lear Dye and Finishing Plant site for operation of a Landfill Gas to Energy facility (operated by INGENCO). The Pine Grove Facility is a dual-fuel electrical power generating plant powered by Detroit Diesel Series 60 engines designed to operate No. 2 fuel oil (onsite diesel fuel) as well as landfill gas from the Waste Management Pine Grove Landfill, which is located approximately 3 miles north of the Pine Grove Facility.
    - The petroleum storage tanks and piping located at this facility are covered under PGE/INGENCO's SPCC Plan, which is maintained on-site at the INGENCO facility. Figure shows limited area and drainage route to Swatara Creek, but with fuel loading area and fuel tank on Lear plant area which would presumably overflow into Lear stormwater controls directing discharge to Lear IW Stormwater Outfall No. 007 (Wideawake Creek)
    - This co-located industrial activity is within the Lear-defined Stormwater Outfall No. 007 drainage area, but may also contribute sheet flow to Swatara Creek, not Wideawake Creek.
    - The Co-located facility's SPCC Plan does not address PA IW Stormwater requirements such as stormwater BMPs, figures, etc.
    - Stormwater PAG-03 Appendix H (Steam Electric Generating Facilities) minimum requirements pertain to the Outfall No. 007 drainage area (with both outfall to Wideawake Creek and likely sheet flow area to Swatara Creek).
- **Change in Permittee**: The previous 2019 Draft NPDES Permit Renewal/Transfer had been issued to Guilford Mills LLC. During the 2019 Draft NPDES public comment period, the permittee identity changed with submittal of new transfer documentation:
    - New Permittee: Lear Corporation D/B/A Lear Corporation Pine Grove (EIN# 13-3386776; Dun & Bradstreet No. 17-559-2476, Department of State Business Entity No. 6996557).
    - History:
        - 5/31/2012: Lear Corporation originally acquired the "Guilford" group of companies, including the predecessor entity (Guilford Mills LLC, i.e. Renewal/Transfer Application client, EIN# 13-1995928). Guilford Mills LLC was a wholly owned subsidiary.
        - 12/31/2016: Guilford Mills LLC merged with Lear Corporation, effective on 12/31/2016 at 11:59 PM.
        - 1/8/2020: Lear Corporation registered to do business in PA as "Lear Corporation Pine Grove". The staff and personnel associated with the Pine Grove, PA facility had not changed as a result of this merger per application.
        - 2/3/2020: Lear (Pullar) E-mail provided additional information:
            - 5/31/2012: Lear Corporation acquired the stock of parent company GMI Holdings Corporation. At that time, Guilford Mills Inc. was an operating company of GMI Holdings Corporation. Gold Mills LLC was a wholly owned subsidiary of Guilford Mills Inc. at that time.
            - 12/31/2012: Gold Mills LLC merged into Guilford Mills Inc.
            - 7/1/2016: Guilford Mills Inc. was converted to Guilford Mills LLC.
        - Separate (adjacent sister site) NPDES Permit No. PAG032375 (formerly under PAR132201) Transfer Application Information: Lear Corporation (owner) address of 21557 Telegraph Road, Southfield MI, 48033, (248) 447-1500 given in SPCC Plan.
- **Voluntary Consent Order & Agreement (CO&A) Option:** The facility had been pursuing a voluntary CO&A back in 2019, but nothing materialized. The 2025 application update indicated that the permittee will be pursuing a voluntary CO&A option to address how it will come into compliance with existing/future NPDES/WQM permit requirements, but declined to provide any tentative schedule of compliance for consideration in the Redraft NPDES Permit.
    - Lear indicated the 2025 update included a rough outline of the proposed plant modifications proposed by Lear to achieve compliance. Lear indicated further discussions will be needed to address these modifications and develop an implementation schedule. Lear also indicated that the 2025 Application-listed site upgrades are being considered but have not been finalized.

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  - Lear intends to discuss the improvements with the Department during the NPDES permit renewal process. **NOTE**: The Redraft NPDES Permit public notice period/process is not open-ended. Final NPDES Permit actions are not necessarily delayed by concurrent CO&A negotiations.
  - See Compliance Section for compliance-related information.
- **Nearby Sister Facility (Lear Knitting Mill):** This adjacent sister facility does not discharge to the IWTP. It has its own IW Stormwater General Permit Coverage: Lear Knitting Mill (Site# 514381; PAG032375; FKA PAR132201)
- **Public Comments & Responses**: See Public Comment/Response Section and Communications Log Section below for responses to public comments on the 2019 Draft NPDES Permit and additional facility/application history.

Changes to 2019 Draft NPDES Permit:

- **General NPDES Permit Template Updating (including Part A, B, C language)**: Permit updated to incorporate current standard language. In addition, permit regeneration resequenced several Part C Special conditions.
- **NPDES Permit Signature Page**: Updated permittee identification per NPDES Permit transfer. Lear Corporation DBA Lear Corporation Pine Grove has been identified as the present facility owner/operator. The facility/site name has been renamed "Lear Dye and Finishing Plant".
- **Part A General**: Permit limits and monitoring requirements have substantially changed since the 2019 Draft NPDES permit due to reduction in NPDES permit basis flow, changes in production rates (impacting Federal ELG limits), new sampling & analysis data, updated water quality modeling, new PFAS Strategy requirements, etc. See NPDES Permit Part A.I and Fact Sheet Addendum Effluent Limits Section (below) for the proposed limits & monitoring requirements.
- **Part A.I Additional Requirements**: NPDES Permit basis flow reduced to 1.2 MGD per application request.
- **Part C**: See flagged changes below.

Part C Special Conditions: **Changes (other than standard template condition language updating) from 2019 Draft NPDES Permit language bolded.**

- Part C.I: Chesapeake Bay Nutrient Requirements
- Part C.II.A through D: Standard IW permit conditions (Necessary property rights; Residual Management; Relation to WQM permits; ELG/BAT requirements)
- Part C.II.E: Chlorine Minimization condition due to TRC residuals and additional chlorine sources (Greensands Hypochlorite treatment and proposed Chlorine Disinfection system).
- Part C.II.F: O&M Plan requirement due to substantial site changes since prior permitting potentially affecting IWTP organic/hydraulic capacities and operational issues. Continuing pattern of exceedances indicates unresolved O&M problems.
- Part C.II.G: Special condition requiring redirection of stormwater run-on away from Raw Wastewater Pump Station Octagonal Pit (IWTP influent monitor point) to eliminate potential source of fecal coliforms to IWTP influent. The facility previously indicated wildlife contributions were resulting in high fecals in the IWTP.
- Part C.II.H: Responsible Operator notification condition requiring certified operator and notification of responsible IWTP operator due to unpermitted site changes and compliance history. O&M and compliance issues indicate need for better operational control.
- Part C.I.I: Clean-up WQM Permit application requirement condition to address unpermitted changes from 1977 WQM permitting.
- Part C.I.J: Groundwater monitoring report requirement due to lack of previous groundwater monitoring reporting despite the 1/25/1977 WQM Permit No. 5476203 Special Condition F (which required groundwater monitoring during the entire time that unexpired permit is in effect from five groundwater monitoring wells).
- Part C.III: Schedule of Compliance (Dissolved Oxygen (DO) **only**): The cumulative impact of Effluent BOD5 and COD loadings might negatively impact aquatic life in the absence of minimum discharge DO concentrations. The facility appears able to meet revised proposed Ammonia-N limits without a schedule of compliance.
- **Part C.IV: Updated WQBEL for Toxic Pollutants (containing TRE language) to address new WQBELs per updated Reasonable Potential Analysis (Total Antimony and assorted constituents with reported insensitive ND concentrations (not meeting DEP TQLs). Facility will have opportunity to show the ND constituents are not present during the NPDES permit term.**
- Part C.V: Chemical Additives conditions. See Effluent Section for previously approved Chemical Additives and max daily usage rates. The 2025 NPDES Permit Application update did not provide required information to support two mentioned new chemical additives or increased daily max usage for the other additives.

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- **Part C.VI: Updated Stormwater Conditions addressing additional site-specific considerations (Co-located industry IW stormwater requirements, IWTP BMPs, etc.)**.
- Part C.VII: Water Reservoir and IWTP Basin condition due to discharges during any periodic cleaning to remove sediment, etc. The Water Reservoir receives contaminated groundwater (metals in addition to chlorinated organics). See Solids Conditions for additional Wastewater Lagoon Impoundment requirements.
- Part C.VIII: WQBEL Below Quantitative Limits (due to some WQBELs below DEP Target QLs or otherwise insensitive). See Part A.I.B footnote. There is no current Acrylamide TQL, but laboratories have met 10 ug/l levels.
- Part C.IX: Groundwater Remediation and Treated Well Water Reuse as Process Water to clarify NPDES permit requirements relating to groundwater remediation under the US EPA and DEP Waste Management. The condition requires submittal of geology/groundwater data gathered for EPA/DEP Waste Management Program in the absence of an updated hydrogeological work plan in a WQM Permit Application Amendment.
- Part C.X: Solids Management Condition to address management of any solids removed from Water Supply Reservoir (receiving contaminated groundwater) and/or IWTP Impoundments/Lagoons (treatment and equalization). Level of sediment build-up to be monitored. **Scope of condition clarified**.

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001 (IWTP discharge) 002 – 006; 008-010 (stormwater)	Design Flow (MGD)	1.2 (001: wastewater only) Zero (Stormwater only)
	40º 33' 22.30" (001)		-76º 23' 15.16" (001)
	40º 33' 25.81" (002)		-76º 23' 21.97" (002)
	40º 33' 25.81" (003)		-76º 23' 21.97" (003)
	40º 33' 24.96" (004)		-76º 23' 20.78" (004)
	40º 33' 23.55" (005)		-76º 23' 17.17" (005)
	40º 33' 22.31" (006)		-76º 23' 15.18" (006)
	40º 33' 29.01" (008)		-76º 23' 23.78" (008)
	40º 33' 23.45" (009)		-76º 23' 16.81" (009)
Latitude	40º 33' 22.07" (010)	Longitude	-76º 23' 14.79" (010)
Quad Name	Pine Grove	Quad Code	1434 (6.18.3)
Wastewater Description:	001: IW Process Effluent with ELG, Non-process plant floor drainage, Filter backwash, Boiler blowdown 002-006, 008 – 010: Stormwater		

Receiving Waters	Swatara Creek (CWF, MF)	Stream Code	9361
NHD Com ID	56394849	RMI	-
Drainage Area	47.8 square miles (#001) from USGS	Yield (cfs/mi^2)	0.1456
Q_{7-10} Flow (cfs)	6.97 (#001)	Q_{7-10} Basis	See below
Elevation (ft)	~520 Feet (from E-maps)	Slope (ft/ft)	-
Watershed No.	7-D	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PATHOGENS		
Source(s) of Impairment	ACID MINE DRAINAGE, SOURCE UNKNOWN		
TMDL Status	Final	Name	Upper Swatara Creek Watershed (AMD) which also noted TSS and pH issues

Background/Ambient Data		Data Source
pH (SU)	~6.9 field	Monitoring Point ID: 145843, Name: SWAT Ravine; 5 samples results taken in 2013-2015 time-frame to show variability (~0.95 miles upstream). 2019 sample (Sample ID: 2350867) was 6.24 SU (field)
Temperature (°F)	Varied	See above
Hardness (mg/L)	64 - 110	106 mg/l per Application stream sampling. Hardness varied at monitoring point from 64 – 100 in five samples. Water quality modeling will assume 64 mg/l due to variability.
TSS (mg/l)	<5 – 6	Monitoring Point ID: 145843, Name: SWAT Ravine; 5 samples taken in 2013-2015 time-frame to show variability. More data available.
Aluminum (ug/l):	15.3 - 155	See above. 2019 sample was 77.1 ug/l.
Manganese (ug/l)	128 - 534	See above. 1999 TMDL Table 15 (Swatara Creek: Upper Main Stem below Swat-15) indicated 0.81 mg/l. 2019 sample was 178 ug/l.
Iron (ug/l)	111 - 746	See above. 1999 TMDL Table indicated 0.39 mg/l. 2019 sample was 314 ug/l.
Zinc (ug/l)	14.4 - 31.0	See above. 1999 TMDL Table indicated 0.48 mg/l. 2019 sample was 26.1 ug/l.

Nearest Downstream Public Water Supply Intake		LEBANON CITY WATER AUTH ID# 101738-001	
PWS Waters	Swatara Creek	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~19.67 miles

Changes Since Last (2011) Permit Issuance:

- Swatara Creek determined to be Pathogen Impaired (source unknown).
- IWTP has requested decrease in NPDES Permit Basis flow from 2.0 MGD to 1.2 MGD.
- IWTP modified without WQM Permit by closure of WQM-permitted aerated treatment lagoons (reduced overall IWTP capacities due to treatment impoundment lagoon closures).
- Additional two stormwater outfalls (Outfall Nos. 009 and 010) being added to address previously-existing stormwater discharges. See Stormwater Effluent Limitations Section for background information.
- Facility groundwater remediation process has switched to spray nozzle aeration treatment of pumped (volatiles including TCE) contaminated groundwater (from carbon filtration) for use as process water per US EPA approval. The remediated groundwater is being sprayed to the non-potable water supply reservoir which is the primary source of process water onsite. Reservoir water is being treated by new Greensands Filter/Hypochlorite treatment prior to use as plant water.

Other Comments:

General: Facility Outfall No. 001 discharges to Swatara Creek, ~0.18 miles upstream of confluence with Wideawake Creek; ~0.57 miles upstream of the confluence with the Upper Little Swatara Creek; ~1.9 miles upstream of confluence with Lower Little Swatara Creek; and ~2.2 miles upstream of the 1.5 MGD PGJTA POTW WWTP discharge point. There are assorted AMD discharges upstream.

Facility Water Sources:

- Removed Surface Water Intake: Guilford Mills LLC had a permitted IW PWS intake (No. 014083-002) per E-maps on Swatara Creek. However, application indicated it was removed ~25 years ago. Lear does not use surface water in its production process and does not intend to. All process water is supplied by borough public water supply lines, groundwater from three (3) production wells that are part of an EPA-approved pump and treat system (discharging to the onsite water reservoir impoundment), and reclaimed water from the dyeing and finishing process.
- Process & Potable Water Sources: Per application Line Drawing:
    - City Water: 7,164 GPD going to dye machines Nos. 11, 12, 13 (zero at present); Chemical Addition to Process; and domestic use in main plant. NOTE: 2011 Process/Water Balance estimated 46,000 GPD with the majority going to the dye machines.
    - Borough Water: 372,115 GPD flow directly into 0.77 acres reservoir
    - City Pool Well: Zero (0) GPD flow
    - Remediated Groundwater Being Used as Process Water (non-potable) under RCRA remediation: Main contaminants per 4/11/2013 EPA "Penn Dye & Finishing Plant" Internet Document) were tetrachloroethylene (PCE), trichloroethene (TCE), and 1,1,1-trichlorethane (1,1,1-TCA). EPA allowed the use of an "aeration system" to remove volatiles prior to reuse as onsite process wastewater (dropping previous requirement for a carbon adsorption system). The remediated water then is stored in the existing reservoir prior to Greensands Filter/Hypochlorite system, then used as process water within the facility, with IWTP treatment prior to discharge to Swatara Creek.
        - Groundwater Process Water/Remediation Well #1 and #3 (EPA RCRA ID# PAD002377703): 81,978 GPD goes through aerated nozzle (groundwater treatment) prior to entering 0.77 acres Reservoir.
        - Groundwater Process Water/Remediation Well #4 (EPA RCRA ID# PAD002377703): 126,060 GPD goes through aerated nozzle (groundwater treatment) prior to entering 0.77 acres Reservoir
    - Reclaimed water from Process: 22,616 GPD
    - Reservoir: Assumed to lose 5,000 GPD via evaporation and 24,237 GPD "Adj. for Water Balance".

Low Flow: LFY method used, using downstream gage to determine the watershed Low Flow Yield (LFY) and to calculate the Q7-10 low flow.

- The USGS Gage #01572025 (Swatara Creek Near Pine Grove, PA, 116 square mile drainage area), approximately 3 miles downstream (and downstream of the confluence with the Little Swatara Creek), was used. PA Streamstats now includes Q7-10 low flow value of 17 CFS for this 116 square mile drainage area at this USGS gage, which equates to ~0.1456 CFS/square mile (the TMS rounding assumption to 0.146 CFS/square mile) LFY.
    - As there are assorted known AMD discharges upstream of facility and AMD metals found in ambient stream sampling, this LFY is applicable at Outfall No. 001.
    - The facility's previously permitted discharge (2.0 MGD) would be equivalent to 3.094 CFS flow, ~45% of the calculated Swatara Creek low flow at the Outfall #001 location. The reduced 1.2 MGD NPDES permit basis flow would be 1.85 CFS flow, ~26.6% of Swatara Creek low flow.
    - Upstream USGS Gage No. 01571827 (Swatara Creek below Ravine, PA; 46.3 square mile drainage area) only had three years of data (1984-1987) and therefore not enough data to compute Q7-10 low flow.
    - Downstream USGS Gage No. 01571919 (Swatara Creek at HWY Bridge 895 at Pine Grove, PA, 72.6 square mile drainage area, Elevation 500 feet, below confluence with Upper Little Swatara Creek) had only three years of data (1981 – 1984), and therefore not enough data to calculate the Q7-10 low flow.
- USGS PAStreamstats estimated 7.77 CFS (LFY of 0.1625 CFS/square mile) at Outfall #001 location interpolated to stream, but is less accurate than DFLOW when there is a receiving stream gage downstream.

Chesapeake Bay Requirements: This facility is a IW Significant CB Discharge with existing annual mass limits. They have been purchasing nutrient credits. The April 5, 2015 Phase 2 Watershed Implementation Plan Table 7-5 (Significant IW Facilities That Have Received Final Cap Loads) indicates that the NPDES permit included:

- TN Cap Load: 7,065 lbs/year
- TP Cap Load: 271 lbs/year
- TN Delivery Ratio: 0.961
- TP Delivery Ratio: 0.436

Stream Impairment Considerations:

- Pathogens: The receiving stream is impaired due to pathogens (unknown source). Sewage is not authorized for discharge via IWTP, but fecal coliforms have been consistently found in NPDES Permit Renewal Application sampling data (several permit cycles), source previously unidentified. **The NPDES Permit includes Fecal Coliform limits and E Coli monitoring.**
    - The permittee now indicates Fecal Coliforms are present in the production process water and therefore process wastewater. They are proposing IWTP chlorine disinfection in the future. Since the plant process water comes through a reservoir prior to site usage, that is a likely original source of the fecal contamination.
    - The Greensands Filter and hypochlorite application (prior to use of treated groundwater for process water) has not eliminated the Fecal Coliforms in the site effluent. Reported concentration levels seem to have decreased per NPDES permit application update. Previous Application data (pre-Greensands Hypochlorite pretreatment of plant process water):
        - Influent Concentration: 600,000/100 ml single sample result (280,000/100 ml in 2011); revised application estimated a >100,000/100 ml as the long-term average based on available data.
        - Effluent Max Daily: 3200/100 ml (17,000/100 ml in 2011)
        - Effluent Average Concentration: 2130/100 mL of 3 samples (10,381/100 ml average of 3 samples in 2011).
    - Facility previously conducted internal dye testing and sampling, and has not found cross-connection between sewer lines and wastewater piping going to IWTP.
    - Stormwater outfall fecal results are assumed to originate from wildlife contributions.
- AMD Metals: The 3/1/1999 Upper Swatara Creek TMDL was for AMD metals (aluminum, manganese, iron) with pH and Total Suspended Solids (TSS, without water quality criteria) for the entire Upper Swatara Creek Watershed. No waste load allocations (WLAs) were assigned to this facility. The TMDL focused on AMD discharges. Significant Total Iron and Manganese effluent concentrations have been reported per to special Greensands Filter analysis of site effluent. **Per DEP SOP guidance, the most stringent AMD WQS has been incorporated into the NPDES Permit as the Monthly Average limits, with the standard multiplier for Daily Max/IMAX limits**. **The Existing NPDES Permit has more stringent TSS limits than required by the ELG to address TSS issues.** Potential Sources:

- Application and EDMR data indicate high iron and manganese effluent concentrations requiring permit limits based upon water quality criterion. One obvious source is the treated groundwater used as plant water, but the application was missing a promised Module 2 analysis to determine groundwater constituents.
- The facility uses ferric chloride (no longer alum per 1977 IRR) to chemically treat wastewater. Ferric chloride is used as a coagulant and phosphorus removal in wastewater facilities (which is another site consideration per above) with the IRR noting an original WQM limit for total soluble phosphate and Ammonia-Nitrogen. The IWTP has a coagulation and precipitation stage (a.k.a. "flash mix tank" where ferric chloride/caustic is added per 9/19/2013 NPDES Compliance Report) prior to clarifier and discharge to Swatara Creek. Well water quality varies in terms of AMD metal content per 2017 submittals. The facility also previously blamed some IWTP problems (IWTP using ferric chloride as a wastewater treatment chemical) during one incident (stream turned orange).
- 3/1/1999 Upper Swatara Watershed TMDL (AMD) WQS:

TMDL Parameter	Water Quality Criterion (mg/l)	Duration	Recoverable/Dissolved
Aluminum (Al)	0.75	1 hour	Total Recoverable
Total Iron (Fe)	1.50	1 day average	Total Recoverable
Dissolved Iron (Fe)	0.3	maximum	Dissolved
Manganese (Mn)	1.00	maximum	Total Recoverable
Total Suspended Solids (TSS)*	NA	NA	NA
pH**	6. 0 – 9.0	-	-

* TSS (no existing WQ criteria) stream issues were to be addressed by determining improvement after mining remediation (coal silt considered major source of TSS in the stream). The existing NPDES Permit includes existing TSS limits are more stringent than the ELG-based TBELs.
** The existing NPDES Permit includes existing pH limits

- Toxic WQBELs: The Reasonable Potential Analysis determined assorted constituents had reasonable potential to exceed the water quality standards. **New permit limits and WQBEL for Toxic Pollutant permit conditions have been incorporated into this NPDES Permit.**
- Dissolved Oxygen (DO): Due to ELG-authorized BOD5/COD loadings and elimination of IWTP lagoons where aeration previously occurred (without WQM permitting), there is potential for excessive loadings to negatively impact aquatic life at discharge point. **The NPDES permit will now incorporates a minimum DO limit and Schedule of Compliance to address this potential negative impact.**
- Ammonia-N: Chesapeake Bay monitoring data and Water quality modeling indicates some potential for (variable) Ammonia-N concentrations to affect the receiving stream. **A new limit has been incorporated into the NPDES permit to prevent any potential negative impact.**

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	0 (stormwater only)
Latitude	40º 33' 15.22"	Longitude	-76º 23' 13.34"
Quad Name	Pine Grove	Quad Code	1434 (6.18.3)
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary of Swatara Creek (a.k.a. Wideawake Creek)	Stream Code	10069
NHD Com ID	56394865	RMI	-
Drainage Area	~0.60 square miles	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.06	Q_{7-10} Basis	Statewide default in absence of any AMD outfalls increasing base flow.
Elevation (ft)	~520	Slope (ft/ft)	-
Watershed No.	7-D	Chapter 93 Class.	CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	Final	Name	Upper Swatara Creek Watershed (AMD)

Background/Ambient Data: None available		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	See Outfall No. 001 information.		
PWS Waters	-	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	-

Changes Since Last Permit Issuance: None known.

Other Comments:

- See stormwater effluent limits section for additional information. This drainage area includes the co-located LFG-to-Energy Plant.
- Adjacent sister facility (Lear Knitting Mill on Wideawake Street) is under the IW Stormwater General Permit No. PAG032375) with separate IW stormwater outfalls on this UNT.

Treatment Facility Summary

Treatment Facility Name: Lear Dye & Finishing Plant

WQM Permit No.	Issuance Date	Scope
5476203	1/25/1977	The 1/25/1977 WQM Permit ID# 5476203 IRR (IWTP) indicated that the 2.0 MGD average and 2.5 MGD maximum) IWTP would consist of three existing unlined lagoons which will be modified for in-series flow and to accommodate surface aerators. After aeration, the wastewater was to be chemically treated (alum and caustic) and clarified prior to discharge. WQM application narrative indicated: raw wastewater will be pumped to the aerated lagoon system from a relocated raw waste sump. The aerated lagoons will be provided with sufficient bypasses so that any single lagoon can be temporarily taken out of service. Effluent from the final lagoon will be pumped to a rapid mix tank, where alum and caustic will be added as required. From the rapid mix tank, the wastewater will flow to a clarifier with a flocculation zone in the center. **Overflow from the clarifier will require neutralization with caustic prior to discharge**. Sludge underflow will flow to a sludge holding tank that will serve to equalize flow to centrifuges. A building will be provided to house the centrifuges, chemical feed pumps, and chemical storage tanks, in addition to laboratory and office space. WQM special conditions included: Special Condition D: Requirement for most effective chemical dosages and proper operational cycles. Special Condition E: Requirement for minimum 24-inches of freeboard and water-tight construction of aeration basins/lagoons/impoundments. Special Condition F: Groundwater monitoring requirements
5476203-T1	**TBD**	Transfer of original IWTP permit to current operator will be concurrent with the Final NPDES permit action

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary clarification; biological treatment; chemical metal precipitation & phosphorus reduction; pH adjustment	Aerated activated sludge lagoon; Ferric Chloride metal precipitation, clarification, sodium hydroxide pH adjustment.	No Disinfection at present; but chlorine disinfection proposed.	1.2 (per application request))

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
Undefined. 2.0 MGD (original design) but reduced due to elimination of wastewater lagoons*.	Undefined – original WQM permit missing information on original design assumptions; IWTP has been substantially modified*.	Indeterminate	Centrifuge & sludge filter press	Offsite beneficial use or disposal

*See HRG Design Engineer Report and related comments below. Elimination of treatment lagoons reduced the as-built hydraulic and organic design and solids design capacities to undefined levels.

Changes since previous 2011 NPDES Permitting:

- Two (2) ~1.0 million gallon-capacity aeration basins (Aeration Basin Nos. 2 and 3, formerly between remaining Aeration Basin No. 1 and 90 foot-diameter clarifier) were removed and closed under DEP Waste Management closure plans. No Part II WQM Permit Applications for wastewater lagoon impoundment removal were found.
- Ferric Chloride system added around 2006 per 11/3/2016 meeting. No WQM permit found for it or any other post-1977 IWTP changes.
- 8/14/2017 Greensand Filter Submittal (Design Engineer's Report Greensands Filter Water Treatment Improvements for Guilford Mills, LLC, NPDES Permit No. PA0008231) included Site Plan showing the IWTP with "Former Polymer and Caustic Tanks Overflow Basin (Not In Use)". Unclear what remains in-service or not.
- 2025 NPDES Application Compliance Section indicated.
    - Installation of overflow alarm system (location unspecified)
    - Upgrade of electrical system (location unspecified)
    - Possible obtaining of back-up aerators (anticipated completion was June 2024)
    - Signs were ordered and installed at all plant drains (to IWTP).
- Greensands Filter Backwash (for Groundwater Remediation discharge used as plant process water) per 2025 Application update: The Greensands Filter further treats the remediated pumped groundwater prior to use as plant process water, with backwash pumped to IWTP. The groundwater remediation (chlorinated organics) is performed in accordance with the Environmental Protection Agency (EPA) Corrective Action program under the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act (RCRA). Under a Consent Order with EPA (RCRA-III-052-CA, EPA ID # PAD002377703), the facility pumps water from the on-site production wells (PW-1, PW-3, and PW-4) to prevent offsite migration of these contaminants in excess of the regulatory limits. The Final Remedy (pump and treat system with groundwater monitoring) was approved the US EPA on September 29, 2015. However, the system operated as an Interim Measure since at least the mid-1990s using a carbon filtration system that was later replaced by the greensand filter and aeration. Currently, there is no projected end date for the operation of the groundwater pump and treat system.
    - The groundwater monitoring system consists of eighteen (18) groundwater monitoring wells and three (3) production wells. Groundwater samples are collected annually from CMS-1S, CMS-1D, M11D, PW-1 and PW-4 and analyzed for tetrachloroethene (PCE) and its degradation products. The results are reported to both PADEP and the US EPA.
    - Groundwater is pumped from the three (3) on-site production wells (PW-1, PW-2 and PW-3) to influence the deep, bedrock aquifer and to prevent the off-site migration of chlorinated volatile organic compounds in excess of Maximum Contaminants Levels (MCLs). Pumping of the groundwater is at a rate sufficient to prevent the off-site migration of the contaminants.
    - The pumped water is sent through an aerated nozzle that sprays into the 0.77-acre onsite reservoir to reduce concentrations of chlorinated volatile organic compounds. The reservoir also received reclaimed water. The 0.77-acre reservoir is aerated to enhance mixing and to prevent the formation of algae. The reservoir is also shown to receive Borough (city) water and city pool well water as needed plus reclaimed water from the process as well.
    - The reservoir water is then sent through the Greensands (manganese dioxide coated media) filter/hypochlorite system (to remove iron and manganese) prior to use in the dyeing and finishing process (including boilers) where chemical additives are used. The facility has been directing 15,000 GPD backwash filter flow to the IWTP on alternate days, but an application figure estimated 3000 GPD backwash flows. Sodium hypochlorite is supplied to the greensand filtration system via a chemical feed system during filter regeneration at approximately 31 gallons/day. The greensand filtration system was approved by PADEP on August 21, 2017 and commenced operation soon thereafter. The 2025 NPDES Permit application summarized special effluent sampling results for the Greensands Filter project (including metals, volatiles, and TRC sampling).
    - The Module 2 referenced an attached "2024 RCRA Annual Certification" report for 2024 groundwater analytical data, but it was not found in the submittal. DEP Waste Management groundwater sampling data was limited to some chlorinated organics and dissolved chromium/lead, i.e. no information on AMD metals concentrations in the groundwater or other potential pollutants.

Other comments:

The as-built/as-operated IWTP was described in the 2025 Application update: Process water from the fabric dyeing and finishing process flows to the equalization basin. It is subsequently treated in an aerated activated sludge lagoon followed by metals precipitation in a clarifier. Greensands Filter Backwash is also directed to the IWTP.

- The existing sequential order of treatment was identified as:
  - Octagonal Pit (10,000-gallon capacity, 8-sided in-ground concrete basin by southeastern corner of plant building) sampling point and pump station for overhead piping across Swatara Creek to IWTP. (Waste oil drums are stored in containment area near the octagonal pit.)
  - Equalization (1.5 MG) Lagoon impoundment
  - Aerated Lagoon Impoundment No. 1 (1.5 MG) with former wastewater lagoons Nos. 2 and 3 closed.
  - Rapid Mix Tank with Chemical precipitation/coagulation with Ferric Chloride) and Sodium Hydroxide injection
  - 90-foot diameter clarifier with:
    - Flocculation (Center Well of Clarifier)
    - Sedimentation (Clarifier)
    - Clarifier solids go to thickener with RAS going to Aeration Basin No. 1 and WAS going to centrifuges with polymer addition
  - Neutralization: 2025 Application Figures do not show neutralization at this stage, only defoaming chemical usage. No proposed effluent disinfection (hypochlorite//bisulfite) stage listed in description. Effluent pH levels indicate neutralization required. **NOTE**: The 2009 NPDES Permit Renewal Module 2 described the WWTP as including: **Neutralization via chemical conditioning via polymer addition (Neutralization tank)**.
  - Sampling Point and Outfall No. 001 Stream Discharge
- The 7/21/2022 DEP Compliance Inspection Report noted the following as-built WWTP units/equipment:
  - One (1) Octagonal Sump Pit with three (3) pumps
  - One (1) EQ Lagoon with four (4) mixers
  - One (1) Aerated Lagoon with one (1) mixer and three (3) surface aerators
  - One (1) Bar screen
  - One (1) Lift Station with three (3) pumps
  - One (1) Flash Mix Tank (ferric chloride and caustic addition)
  - One (1) Clarifier
  - One (1) Sludge holding tank
  - Two (2) centrifuges
  - One (1) Plate and Frame Press
  - One (1) Effluent Tank (defoamer used as needed)
  - Time-based proportional composite sampling. **NOTE**: If discharge rates are not constant, time-based proportional sampling is not acceptable to meet flow-proportional composite sampling requirement.
- Identified Wastewater Treatment Chemicals and Chemical Additives: See Outfall No. 001 Effluent Limits section for list. Formula CSC-3570 (Polymer, thickener/dewatering agent) and Formula CSC-7105 (Organic Coagulant (color removal)) were to be addressed by Chemical Notification form to be submitted **6/13/2025, but not found**.

WQM Permit Special Condition F (Groundwater Monitoring Requirements/Information):

- Groundwater reports (Phase II and groundwater monitoring reports) not found.
- The applicant's consultant (ERG Inc.) was uncertain (when asked) which wells constituted the originally approved monitoring points (with various groundwater clean-up monitoring points due to previous EPA/Waste Management requirements).
- DEP Waste Management & RSW Lagoons (removed wastewater treatment impoundments) History:
  - 8/30/1999 DEP Waste Management Letter regarding Chapter 287.102 (Permit-by-rule) for three (3) captive residual waste storage impoundments/lagoons. Specific Monitor wells were to be monitored with reporting requirements.
  - 7/12/2011 DEP Waste Management Letter approving closure plans for Lagoons #2 and #3. The letter noted that closure could begin as the facility would "no longer need these lagoons to satisfy your NPDES requirements"
  - 12/3/2012 DEP Waste Management Letter approving the closure certifications for Lagoons #2 and #3.
  - The (previous) DEP Waste Management Program Geologist (Bharat Bham) was previously contacted and made aware of the 1977 WQM Permit language and transfer application documentation about existing monitored groundwater monitoring points. He indicated that the WWTP area is being monitored for DEP Waste Management Form 14R (RSW Disposal Impoundments Quarterly and Annual Water Quality Analysis) list of analytical parameters (priority pollutants, metals, and general chemistry). **NOTE**:

Comparison with the current Module 19 (Supplemental Geology and Groundwater Information) form shows that the Form 14R addresses the major organic contaminants identified by the EPA, but not all current Module 19 parameters (temperature, MBAS, BOD_5 (but COD is monitored), aluminum, nickel, TKN, Phosphorus omitted & some differing solids parameters would require monitoring). Only BOD_5 was a missing ELG indicator chemical for this industry.

- To date, the facility has not shown it received any DEP Clean Water Program approval for removal of the two wastewater treatment impoundments.

Previous 2019 Fact Sheet Information (slightly edited) regarding IWTP:

Guilford Mills Engineering Report: The DEP M&C previously requested an engineering evaluation of the IWTP for compliance reasons. **The March 31, 2017 "Lear Corporation & Guilford Mills: Guilford Mills Wastewater Treatment Plant Engineering Evaluation, Pine Grove, Schuylkill County, Pennsylvania", prepared by HRG Inc.: HRG (Herbert, Rowland & Grubic) Inc.** was submitted in response to the DEP M&C Request. The WWTP evaluation "to assess its operating capacity and its ability to handle present and future loads". Useful information and preliminary glance-over comments has been summarized below.

- General Comments: This DEP M&C-required Report was looked at, but review ceased when it became clear that the Report was incomplete and contained substantial limitations rendering it useless in predicting future IWTP compliance:
  - No Applicant Commitments Provided: No commitment or tentative schedule for implementing the Report recommendations was provided, only a general Cover Letter comment that Lear Corporation is "committed to making continuous improvements to process and equipment to reduce the environmental impact from its operations".
  - No PA PE Certification: The submitted Engineering Report was not signed and sealed by a PA Professional Engineer.
  - WQM Modules: While some DEP WQM Modules were partly completed (without PA Professional Engineer seal and signature) for informational purposes, additional WQM Modules/Forms/Certifications/Application Fee would be required for a Part II WQM Permit Application. PA Professional Engineer-signed and sealed Engineering design drawings are needed to show as-built/as-operated wastewater facilities and proposed site changes. Copies of the Report-referenced "existing record drawings" are also needed.
  - Inaccurate Engineer Report Conclusion: The Engineering Report statement (that the facility could meet permit limits at 1.0 MGD flow (not the 2.0 MGD NPDES Permit Basis Flow)) was based upon assumption of previous NPDES Permit limits:
    - Potential for Noncompliance with New Limits: Guilford Mills LLC was informed in the 2016 Compliance Meeting that new/revised limits were forthcoming due to production-based ELGs (more stringent BOD5, COD limits), new Water Quality-Based Effluent Limits (including Fecal Coliform limits, TMDL metals limits, etc.). Some pre-draft permit limits were shared after the 2016 Compliance Meeting. Therefore, the Evaluation did not address the requirements of the new NPDES Permit and did not clearly address other limiting factors. Elimination of permitted lagoons substantially reduced previous aeration of the discharge (i.e. combined BOD5/COD loading would have greater potential for negatively impacting the receiving stream's aquatic life).
    - Limiting Hydraulic Component: The Report indicated the Rapid Mix Tank/chemical additive systems would require upgrading to allow for >0.463 MGD facility flows (with recommendation of additional chemical additive for antimony treatment prior to Rapid Mix Tank, additional chemical additive provisions at the Rapid Mix Tank). The report calculated a 23.3-minute Hydraulic Retention Time at 0.463 MGD and 5.4 minutes at 2.0 MGD flow, referencing the DEP DWFM Manual Section 54.21 (Preaeration and Flocculation Coagulation detention time) for 20 minute/30 minute retention time (neglecting the consideration the IW has additional issues than domestic wastewater/sewage).
      - The Report failed to note that the 20-minute minimum residence time was the DWFM minimum recommended residence time for Peak Hourly Flow (higher flow than assumed), with a 30-minute recommendation overall. The Report also did not address the new TMDL AMD iron-based permit limits that might require plant upgrades to achieve compliance.
      - The Report failed to address the Report-identified 0.530 Maximum Monthly Average Flow (technical basis not provided), but only addressed the 2.0 MGD flow as the MMFA Flow (contrary to other Report assumptions, the Maximum Flow of 2.5 MGD was the original

max flow assumption per DEP files), and peak hourly flow. **NOTE:** DEP files indicate an original designed 3 minute retention time for the Rapid Mix Tank (with subsequent clarification where chemical reactions could proceed), but with overall WWTP design including an additional caustic neutralization unit (after the Clarifier), with additional prior aeration capacity/lagoon residence time that would have reduced BOD/COD loadings prior to the clarifier, and apparently supplemental nutrient addition at Octagonal Pump Station to enhance biological treatment upfront.

- The Report indicated that the Intermediate Pump Station (two existing 1,750 GPM pumps) pumping flow to the Rapid Mix Tank) will essentially mean that the Rapid Mix Tank is receiving intermittent short-term flows exceeding the 0.463 MGD (321 GPM) flow that does not meet current DWFM guidance (and helping to explain why high reported iron effluent concentrations & stream color change when the site clarifier was non-functional):
    - Report-assumed Influent flow of 694 GPM (0.999360 MGD)
    - Report-assumed Effluent flow (to Rapid Mix Tank) of 1,389 GPM (2 MGD)
    - Report Identified Pump capacity (one pump operating): 1750 GPM (2.52 MGD), about 2.5 MGD original WQM assumed max flow, ~5 MGD with both pumps.
    - No Module 22 (Pump Station) provided and no minimum pumping capacity was identified. Overall "Minimum Monthly Average Flow" was identified at 0.410 MGD for the WWTP.

- Flow Assumptions: The Report-assumed 0.463 MGD current ADF flow (not substantiated by the Report) does not address the Report-identified 0.53 MGD Maximum Monthly Average Flow or the unidentified max daily flows, peak hourly flows, or peak instantaneous flows experienced at the Rapid Mix Tank:
    - Application NDPES form indicated 0.431 MGD average flow and 1.499 MGD Max Flow (not sure how calculated).
    - Application Line Drawing showed a 0.484758 MGD influent flow to WWTP and 0.478058 MGD effluent flow (lagoon precipitation/evaporation assumed minor net loss).
    - 2.0 MGD NPDES Permit Basis flow.
    - Original WQM Permit assumed 2.0 MGD average flow and 2.5 MGD maximum flow.
    - DMR data shows daily max flows >0.8 MGD

- Missing Process Engineering: The Report did not include basic process engineering for the substantially modified (elimination of two large treatment lagoons impacting overall IWTP capacity and treatment process, plus other apparent changes from original 1970s permitting). The Report was largely limited to saying that the facility was in practice meeting existing NPDES permit limits at current flows (indicating problems would occur at higher flows). **NOTE**: DEP files appear to indicate the original WQM design was for a single 3 million gallon-capacity lagoon with 90 HP aeration capacity (no subdivided unaerated EQ basin section identified as such), plus the two (2) removed in-series aerated lagoons (where both BOD and COD loadings would have been treated).
- Fecal Coliform Issues: The Report did not address ongoing fecal coliform issues/requirements (in a non-sewage IWTP).
- Lagoon Uncertainties: The Report did not adequately evaluate the remaining onsite (unlined pre-1980) lagoons. The actual available operational volume capacity (i.e. when was the last time the basins were cleaned out in terms of lost operational capacity; freeboard requirements) was not identified. The integrity of the remaining lagoons (below the water surface) was not verified by either investigation or groundwater monitoring data analysis. **NOTE**: The facility has been monitoring groundwater conditions in the area under the DEP Waste Management Program/EPA RCRA groundwater remediation and RSW lagoon closure plans.
- Chemical Treatment Issues: The Report did not address previous apparent over-usage of chemical treatment chemicals (Ferric Chloride) with one incident where the receiving stream had a visible color change.
- New Greensands Filter Backwash: The Report did not address potential impacts of proposed new 20,000 GPD Greensands Filter/Sodium Hypochlorite backwash flow (concentrated metals, chlorine residue, and VOCs from well-water prior to ongoing RCRA groundwater remediation) on the Treatment Process.
- Missing Information: There was no apparent evaluation of lagoon BNR capacities. The 12/2/2016 Guilford Mills Compliance Response Attachment A (Lagoon Closure Correspondence) included the February 2009 (Revised April 2011) "Narrative for Lagoon Closure" (prepared by a separate consultant, ERG Inc.) was not included in the Report. Narrative mentioned unidentified modifications to Basin 1 in order to "improve

nitrogen and phosphorus removal and eliminate the need for Lagoons 2 and 3". Listed changes included an 18-inch 420 LF gravity fed pipe between sump pump and clarifier.

- Limited Scope of Engineering Evaluation Review: The Report was explicitly based upon review of "existing record drawings", WWTP operational data provided by Guilford Mills, site visits, communications with Guilford Mills staff, and "other documents" provided by Guilford Mills (not identified). No mention of file review of DEP/EPA files on the site and project.
- The Report's limited objectives were summarized to include:
    - Visual assessment of WWTP major process and mechanical components, equipment and structural features in regard to their suitability for continued operation. **NOTE**: Report did not evaluate lagoon below the visible water surface.
    - Performance of hydraulic/organic design capacities for IWTP units/components
    - Preparation of WQM Application Modules for each major process component to summarize operational capacity.
    - Identification of WWTP improvements that might be required to meet NPDES permit limits and any increases in the expected flows and loadings including:
        - Preliminary investigation of biological treatment alternatives. **NOTE**: the BNR Evaluation (two options) was based on 1.0 MGD flow only. BNR Alternative 1 was a denitrification system. BNR Alternative 2 was to retrofit a SBR.
        - Identification of WWTP improvements that may be desired to increase operational performance, optimize chemical usage and solids dewatering, and improve the overall WWTP effluent quality.
        - Summarizing of WWTP Capacity (with anticipated submittal to support the NPDES Permit Renewal Application).
- Report Section 2.0 (Conclusions and Recommendations):
    - Currently configured IWTP "possesses adequate hydraulic and organic treatment capacity to meet NPDES permit limits at the current Average Daily Flow (ADF) and Maximum Monthly Average Flow (MMAF) conditions" and at near 1.0 MGD flows based upon DMR records. **NOTE**: See above comments.
- Report Referenced Section 5.0 flows and loadings were:
    - ADF: 0.463 MGD
    - MMAF: 0.530 MGD
    - Minimum Monthly Average Flow: 0.410 MGD
    - Organic Loading (BOD5) Influent (1-day sampling): 318 lbs BOD5/day
    - Chemical Oxygen Demand (COD) Influent (1-day sampling): 1,500 mg/l
    - TSS Influent (1-day sampling): 154 mg/l
    - Ammonia-N Influent (1-day sampling): 5.1 mg/l
    - Total Phosphorus Influent (1-day sampling): 4.4 mg/l
    - Total Antimony Influent (1-day sampling): 0.18 mg/l
- Other Report Conclusions:
    - Guilford WWTP is currently capable of meeting its existing NPDES Permit Limits (i.e. new draft permit limits not addressed)
    - The WWTP "does not possess adequate aeration capacity to accommodate a flow of 2.0 MGD based on standard design practice". Mixing equipment installation should be considered for the Equalization Lagoon. **NOTE**: 2.0 MGD is the NPDES permit basis flow.
    - Currently, Guilford Mills does not have the ability to meet TN and TP CB limits (purchasing nutrient credits).
    - "…chemical induction units should be considered to improve application and mixing of ferric chloride and sodium hydroxide at the rapid mix tank". **NOTE**: The stream discoloration incident and NPDES permit application data indicated high iron concentrations being discharged to a AMD TMDL stream without a TMDL Waste Load Allocation.
    - HRG recommended that Guilford Mill staff continue with plans to refine chemical application rates for improved settling and color, plus phosphorus/antimony removal. HRG noted that Guilford Mills had indicated plans to utilize their Hach 3900 Spectrophotometer to complete in-house testing and process control optimization to further refine chemical application rates. Guilford Mill staff was reportedly reviewing additional test procedures which might be performed to optimize chemical application rates.
- Report Sections 5 & 6 recommendations/comment included:
    - Visual Structural Check: Aeration lagoons, concrete tanks, and buildings were visually assessed (lagoons could not be inspected below water line) and appeared in fair condition with no visible "significant" structural deficiencies. (Section 5.1). Guilford Mills was indicated to have inspected the concrete tank when they replaced clarifier equipment.
    - Receiving Stream Condition: No observed color change in stream during HRG site visit.

- Octagonal Pit Pump Station (pumping wastewater across stream to IWTP): Three (3) submersible Flygt pumps in the octagonal wet well.
  - Not enough information available to complete current DEP WQM Module.
  - Appeared to have working volume to handle 2.0 MGD design flow.
  - No existing influent flow meter (one Magnetic 10-inch capacity flow meter recommended for better WWTP operation)
- Equalization Basin (1,102,729-gallon normal operating capacity):
  - No influent/effluent BOD5 data to calculate removal efficiency during HRG site visit, estimated in report.
  - No existing aeration.
  - One (1) automated influent sampler recommended to assess BOD removal parameter efficiency and other parameters
  - Four (4) floating 10 HP mixers recommended.
  - Report Module 5 did not address the Equalization Basin/lagoon's aeration.
  - Influent flow was estimated based on effluent flow and 1.14 MGD multiplier (no influent flow meter).
  - Effluent pump station via three suction lift pumps (one 15 HP, 100 – 1000 GPM capacity pump and two 25 HP 260-1400 GPM pumps with VFDs.
- Aerated lagoon No. 1 (1,286,552-gallon capacity):
  - Overall capacity limited to 1.0 MGD based on literature standards for an aerated lagoon.
  - **Two (2) 25 HP Aqua-Lator aerators** and four (4) floating mixers located in middle of lagoon (hard to maintain) **and noted to likely need replacement in future**.
  - Increased aeration capacity is recommended if influent flows increase beyond current ADF conditions (above 0.5 MGD to 1.0 MGD limit):
  - Two (2) Anti-Erosion Assemblies
- Intermediate Pump Station (receiving flow from Aerated Lagoon):
  - Two (2) submersible pumps (1750 GPM using 14 HP motors)
  - New chemical induction unit (sodium hydroxide) recommended to address conflict with ferric chloride reactions at Rapid Mix Tank.
- Rapid Mix Tank (a.k.a. coagulation basin):
  - 5 HP Chemineer Model 3HTD-5 mixer
  - As flow increases beyond current ADF conditions, the Rapid Mix Tank will not be able to provide the minimum recommended HRT (residence time).
- Recommendations for improvements to the chemical feed and mixing equipment:
  - One (1) Chemical Induction Unit (5 HP, submersible) which is a motor-driven open titanium propeller that rotates at high speed, creating vacuum in the chamber directly behind the propeller to compensate for lack of HRT at higher flows and helps limit negative impact of corrosive chemical additives on piping.
- Flocculation Clarifier (658,357-gallon capacity): Clarifier scraper mechanism recently replaced per Guilford Mills staff.
- Effluent Gravity Discharge Pipe: Constructed out of concrete, not corrugated metal pipe.
- Dewatering Centrifuge and Plate & Frame Evaluation: Operated 5 days per week, 24-hours per day. Estimated 870 lbs/hr (dry) WAS at ADF, and projected 3,750 lbs/hour (dry) at 2.0 MGD. Sludge is beneficially used in land application at Summit Anthracite per Report.
  - Two (2) Centrifuges
  - One (1) Plate & Frame press (PFP)
  - Recommendations: For operational efficiency and O&M costs:
    - Future replacement equipment should aim at 18% dewatered cake solids rather than existing 8 – 10%.
    - Due to age, condition, and current performance, the existing dewater equipment was recommended to be replaced by two (2) centrifuges.
- Chemical Addition Systems (Ferric Chloride and Sodium Hydroxide):
  - Ferric Chloride for enhanced settling and for removal of color, TP, and Antimony:
  - 5.2 mg/l needed per 1 mg/l TP.
  - Alkalinity Supplement (due to loss of alkalinity in Ferric Chloride chemical reactions):
  - Sodium Hydroxide Feedline (Antimony removal and pH control and alkalinity supplement): Recommended to be relocated to the Intermediate Pump Station Tank to isolate two conflicting chemical reactions and increase removal efficiency of both processes. Chemical jar test, followed

by pilot project recommended upfront to determine if additional alkalinity supplementation is needed downstream of Rapid Mix tank for pH control.

- Future BNR Options at 1.0 MGD flows: The Report assumed nutrient trading would be done, but evaluated two BNR options (project and O&M cost data available on request from HRG Inc., but not in report to allow for Department technical feedback):
  - Denitrification Filter System
  - SBR System in retrofitted EQ Basin and Aerated Lagoon No. 1.

Compliance History

DMR Data for Outfall 001 (from May 1, 2024 to April 30, 2025) – exceedances of existing permit limits bolded plus one data anomaly. Ammonia-N bolded to show facility would be in compliance with proposed limits. Some exceedances of future TMDL limits bolded.

Parameter	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24
Flow (MGD) Average Monthly	0.342	0.394	0.414	0.369	0.292	0.328	0.340	0.304	0.331	0.303	0.302	0.275
Flow (MGD) Daily Maximum	0.588	0.575	1.001	0.663	0.656	0.740	0.590	**0.0790**	0.91	0.807	0.815	1.075
pH (S.U.) Minimum	6.16	6.27	6.39	6.3	6.0	6.47	6.19	6.43	6.13	6.23	**4.86**	**5.83**
pH (S.U.) Maximum	7.55	8.82	7.88	9.0	8.94	8.91	**9.11**	**9.68**	**9.95**	**11.5**	**11.52**	6.95
BOD5 (lbs/day) Average Monthly	29	123	**414**	**432**	108	39	30.0	37	35.0	22	77	38
BOD5 (lbs/day) Daily Maximum	55	238	**935**	**1044**	219	73	52.0	97	94.0	40	263	117
COD (lbs/day) Average Monthly	408	972	1825	1229	791	720	489.0	410	457.0	287	608	562
COD (lbs/day) Daily Maximum	624	1789	4107	3058	1391	1993	705.0	1028	745.0	449	1385	2394
TSS (lbs/day) Average Monthly	34	111	214	114	106	62	70.0	81	68.0	36	91	22
TSS (lbs/day) Daily Maximum	81	164	568	256	264	177	128.0	237	211.0	69	192	47
Oil and Grease (lbs/day) Average Monthly	15	49	149	97	35	22	21.0	17	21.0	18	38	19
Oil and Grease (lbs/day) Daily Maximum	22	114	392	348	106	43	24.0	23	32.0	28	125	45
Oil and Grease (mg/L) Average Monthly	5.0	15.9	**37.8**	**24.5**	10.7	6.6	5.3	5.3	5.0	5.2	13.0	6.0
Oil and Grease (mg/L) Daily Maximum	5.0	**46.0**	**67.0**	**81.0**	25.0	17.0	7.0	7.0	5.0	7.0	**52.0**	13.0
Nitrate-Nitrite (mg/L) Average Monthly	1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	1.1	1.1	1.1	1.1	1.1	1.1
Nitrate-Nitrite (lbs) Total Monthly	99.7	< 109.1	< 123.7	< 119.9	< 109.1	< 113.8	136.2	109.1	142.8	113.6	131.6	141.3

Total Nitrogen (mg/L) Average Monthly	3.99	< 6.62	< 10.3	< 11.41	< 8.55	< 8.91	< 5.84	12.94	7.35	12.62	15.18	14.63
Total Nitrogen (lbs) Effluent Net Total Monthly	345.7	< 651.2	< 1140.1	< 1280.8	< 797.0	< 888.7	< 732.4	1230.3	881.4	1280.5	1919.7	1920.2
Total Nitrogen (lbs) Total Monthly	345.7	< 651.2	< 1140.1	< 1280.8	< 797.0	< 888.7	< 732.4	1230.3	881.4	1280.5	1919.7	1920.2
Total Nitrogen (lbs) Effluent Net Total Annual								< 5159				
Total Nitrogen (lbs) Total Annual								< 13542				
Ammonia (mg/L) Average Monthly	0.06	< 0.22	0.33	< 1.58	< 1.65	< 0.43	0.18	6.8	2.47	5.04	5.09	5.68
Ammonia (lbs) Total Monthly	4.6	< 19.6	32.5	< 174.6	< 151.9	< 34.1	20.1	630.0	262.8	482.9	725.9	795.9
Ammonia (lbs) Total Annual								< 2053				
TKN (mg/L) Average Monthly	2.89	5.52	9.2	10.31	7.45	7.81	4.74	11.84	6.25	11.52	14.08	13.53
TKN (lbs) Total Monthly	246.0	542.1	1016.4	1160.8	687.9	774.9	596.2	1121.2	738.6	1166.9	1788.1	1778.9
Total Phosphorus (mg/L) Average Monthly	0.28	0.47	0.5	0.60	0.84	0.49	0.25	0.27	0.11	0.19	0.53	0.4
Total Phosphorus (lbs) Effluent Net Total Monthly	24.5	46.5	53.3	69.1	89.1	50.7	31.3	27.7	15.3	22.3	67.2	51
Total Phosphorus (lbs) Total Monthly	24.5	46.5	53.3	69.1	89.1	50.7	31.3	27.7	15.3	22.3	67.2	51
Total Phosphorus (lbs) Effluent Net Total Annual								249				
Total Phosphorus (lbs) Total Annual								746				
Total Aluminum (mg/L) Average Quarterly		< 0.02			0.02			0.07			< 0.02	
Total Antimony (lbs/day) Average Monthly	0.05	0.07	0.10	0.06	0.06	0.05	0.06	0.02	0.02	0.02	0.03	0.03
Total Antimony (lbs/day) Daily Maximum	0.08	0.09	0.03	0.20	0.10	0.08	0.09	0.05	0.04	0.04	0.06	0.07

Total Antimony (mg/L) Average Monthly	0.016	0.021	0.026	0.016	0.16	0.014	0.014	0.0083	0.005	0.005	0.007	0.008
Total Antimony (mg/L) Daily Maximum	0.019	0.029	0.047	0.040	0.22	0.017	0.021	0.017	0.007	0.008	0.014	0.014
Total Chromium (lbs/day) Average Monthly	0.009	0.03	0.0172	0.05	0.03	0.02	0.03	0.01	0.02	0.02	0.04	0.02
Total Chromium (lbs/day) Daily Maximum	0.02	0.05	0.0271	0.10	0.08	0.04	0.04	0.03	0.03	0.03	0.10	0.03
Total Iron (mg/L) Average Quarterly		**4.46**			1.26			**3.34**			**3.56**	
Total Manganese (mg/L) Average Quarterly		0.550			0.408			**1.11**			0.427	
Total Sulfide (lbs/day) Average Monthly	3.02	3.30	4.02	3.48	3.20	3.45	3.99	3.31	4.20	3.41	0.04	3.86
Total Sulfide (lbs/day) Daily Maximum	4.30	4.30	8.30	5.1	5.50	5.2	4.7	4.7	6.4	5.6	0.06	9.0
Total Phenolics (lbs/day) Average Monthly	0.008	0.08	0.126	0.02	0.08	0.02	0.02	0.01	0.01	0.01	0.02	0.01
Total Phenolics (lbs/day) Daily Maximum	0.02	0.30	0.271	0.80	0.20	0.04	0.08	0.02	0.03	0.04	0.06	0.03

DMR Data for Outfall 001 (from October 1, 2023 to April 30, 2024)

Parameter	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
Flow (MGD) Average Monthly	0.382	0.339	0.409	0.383	0.325	0.252	0.299
Flow (MGD) Daily Maximum	1.662	1.131	1.208	0.879	1.147	0.577	0.611
pH (S.U.) Minimum	6.1	6.155	**5.875**	**5.325**	**4.92**	**5.67**	6.355
pH (S.U.) Maximum	7.1	7.325	7.03	7.36	7.87	8.18	7.675
BOD5 (lbs/day) Average Monthly	135	**384**	**716**	< 102	81	15	13
BOD5 (lbs/day) Daily Maximum	441	**1019**	**1960**	654	864	41	37
COD (lbs/day) Average Monthly	**1058**	**1492**	**2386**	450	565	186	189

COD (lbs/day) Daily Maximum	**3701**	**5895**	**7556**	1522	**2956**	412	397
TSS (lbs/day) Average Monthly	99	289	413	58	< 82	< 14	< 10
TSS (lbs/day) Daily Maximum	364	254	**1436**	231	689	82	43
Oil and Grease (lbs/day) Average Monthly	42.0	85	< 112	< 29	< 22	< 11	< 14
Oil and Grease (lbs/day) Daily Maximum	136.0	254	239	104	86	24	< 25
Oil and Grease (mg/L) Average Monthly	8.6	25.5	< 23.4	< 7.3	< 12.0	< 0.9	< 5.0
Oil and Grease (mg/L) Daily Maximum	18.0	**42.0**	**49.0**	26.0	**66.0**	< 0.1	< 0.5
Nitrate-Nitrite (mg/L) Average Monthly	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Nitrate-Nitrite (lbs) Total Monthly	160.5	< 132	153.6	< 121.9	< 109.8	< 72	< 93.1
Total Nitrogen (mg/L) Average Monthly	9.89	< 18	< 18.12	< 7.99	< 5.5	< 7.12	< 4.11
Total Nitrogen (lbs) Effluent Net Total Monthly	1453	< 2081.9	< 2519.2	< 914	< 569.9	< 299.3	< 342.6
Total Nitrogen (lbs) Total Monthly	1453	< 2081.9	< 2519.2	< 914	< 569.9	< 299.3	< 342.6
Ammonia (mg/L) Average Monthly	0.37	< 0.77	1.48	< 0.25	< 0.25	< 0.18	< 0.16
Ammonia (lbs) Total Monthly	80.8	< 121.2	449.1	< 39.2	< 21.4	16.7	< 16.3
TKN (mg/L) Average Monthly	8.79	16.9	17.02	6.89	4.4	3.5	3.01
TKN (lbs) Total Monthly	1292.5	1950	2370.3	792.1	460.2	224.2	249.5
Total Phosphorus (mg/L) Average Monthly	0.56	1.47	1.14	0.25	0.3	0.68	0.49
Total Phosphorus (lbs) Effluent Net Total Monthly	76	158	152.4	27.5	30.6	41.5	40.3
Total Phosphorus (lbs) Total Monthly	76.0	158	152.4	27.5	30.6	41.5	40.3

Total Aluminum (mg/L) Average Quarterly		< 0.02			< 0.02		
Total Antimony (lbs/day) Average Monthly	0.05	0.09	0.10	0.03	< 0.05	< 0.01	0.02
Total Antimony (lbs/day) Daily Maximum	0.10	0.40	0.60	0.20	0.20	0.05	0.10
Total Antimony (mg/L) Average Monthly	0.012	0.037	0.035	0.0072	< 0.014	< 0.009	0.012
Total Antimony (mg/L) Daily Maximum	0.022	**0.23**	0.084	0.027	0.2	0.048	0.1
Total Chromium (lbs/day) Average Monthly	0.07	0.08	0.10	0.02	0.03	< 0.02	0.01
Total Chromium (lbs/day) Daily Maximum	0.40	0.30	0.04	0.09	0.20	0.30	0.04
Total Iron (mg/L) Average Quarterly		0.60			0.84		
Total Manganese (mg/L) Average Quarterly		0.671			0.956		
Total Sulfide (lbs/day) Average Monthly	< 4.85	< 3.52	< 4.89	< 3.67	< 3.22	< 2.27	< 2.73
Total Sulfide (lbs/day) Daily Maximum	< 13.9	< 8.6	< 10.1	< 6.7	9.6	< 4.8	< 5.1
Total Phenolics (lbs/day) Average Monthly	0.04	< 0.30	0.10	< 0.02	< 0.01	< 0.007	< 0.009
Total Phenolics (lbs/day) Daily Maximum	0.20	3.31	0.30	0.10	0.07	0.03	0.03

DMR Data for Outfall 002 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										**GG**		
pH (S.U.) Maximum										**GG**		

BOD5 (mg/L) Daily Maximum										**GG**		
COD (mg/L) Daily Maximum										**GG**		
TSS (mg/L) Daily Maximum										**GG**		
Oil and Grease (mg/L) Daily Maximum										**GG**		
TKN (mg/L) Daily Maximum										**GG**		
Total Chromium (mg/L) Daily Maximum										**GG**		
Total Iron (mg/L) Daily Maximum										**GG**		
Total Sulfide (mg/L) Daily Maximum										**GG**		
Total Phenolics (mg/L) Daily Maximum										**GG**		

DMR Data for Outfall 003 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										**GG**		
pH (S.U.) Maximum										**GG**		
BOD5 (mg/L) Daily Maximum										**GG**		
COD (mg/L) Daily Maximum										**GG**		
TSS (mg/L) Daily Maximum										**GG**		
Oil and Grease (mg/L) Daily Maximum										**GG**		
TKN (mg/L) Daily Maximum										**GG**		
Total Chromium (mg/L) Daily Maximum										**GG**		
Total Iron (mg/L) Daily Maximum										**GG**		
Total Sulfide (mg/L) Daily Maximum										**GG**		

Total Phenolics (mg/L) Daily Maximum										GG		

DMR Data for Outfall 004 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										GG		
pH (S.U.) Maximum										GG		
BOD5 (mg/L) Daily Maximum										GG		
COD (mg/L) Daily Maximum										GG		
TSS (mg/L) Daily Maximum										GG		
Oil and Grease (mg/L) Daily Maximum										GG		
TKN (mg/L) Daily Maximum										GG		
Total Chromium (mg/L) Daily Maximum										GG		
Total Iron (mg/L) Daily Maximum										GG		
Total Sulfide (mg/L) Daily Maximum										GG		
Total Phenolics (mg/L) Daily Maximum										GG		

DMR Data for Outfall 005 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										GG		
pH (S.U.) Maximum										GG		
BOD5 (mg/L) Daily Maximum										GG		
COD (mg/L) Daily Maximum										GG		
TSS (mg/L) Daily Maximum										GG		

Oil and Grease (mg/L) Daily Maximum										GG		
TKN (mg/L) Daily Maximum										GG		
Total Chromium (mg/L) Daily Maximum										GG		
Total Iron (mg/L) Daily Maximum										GG		
Total Sulfide (mg/L) Daily Maximum										GG		
Total Phenolics (mg/L) Daily Maximum										GG		

DMR Data for Outfall 006 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										GG		
pH (S.U.) Maximum										GG		
BOD5 (mg/L) Daily Maximum										GG		
COD (mg/L) Daily Maximum										GG		
TSS (mg/L) Daily Maximum										GG		
Oil and Grease (mg/L) Daily Maximum										GG		
TKN (mg/L) Daily Maximum										GG		
Total Chromium (mg/L) Daily Maximum										GG		
Total Iron (mg/L) Daily Maximum										GG		
Total Sulfide (mg/L) Daily Maximum										GG		
Total Phenolics (mg/L) Daily Maximum										GG		

DMR Data for Outfall 007 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23

pH (S.U.) Minimum										6.60		
pH (S.U.) Maximum										6.60		
BOD5 (mg/L) Daily Maximum										7.8		
COD (mg/L) Daily Maximum										103		
TSS (mg/L) Daily Maximum										8.8		
Oil and Grease (mg/L) Daily Maximum										< 5.0		
TKN (mg/L) Daily Maximum										4.66		
Total Chromium (mg/L) Daily Maximum										< 0.010		
Total Iron (mg/L) Daily Maximum										0.241		
Total Sulfide (mg/L) Daily Maximum										2.0		
Total Phenolics (mg/L) Daily Maximum										< 0.05		

DMR Data for Outfall 008 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
pH (S.U.) Minimum										**GG**		
pH (S.U.) Maximum										**GG**		
BOD5 (mg/L) Daily Maximum										**GG**		
COD (mg/L) Daily Maximum										**GG**		
TSS (mg/L) Daily Maximum										**GG**		
Oil and Grease (mg/L) Daily Maximum										**GG**		
TKN (mg/L) Daily Maximum										**GG**		
Total Chromium (mg/L) Daily Maximum										**GG**		

Total Iron (mg/L) Daily Maximum										**GG**		
Total Sulfide (mg/L) Daily Maximum										**GG**		
Total Phenolics (mg/L) Daily Maximum										**GG**		

Compliance History

Effluent Violations for Outfall 001, from: November 1, 2023 To: April 30, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	11/30/23	Min	5.67	S.U.	6.0	S.U.
pH	12/31/23	Min	4.92	S.U.	6.0	S.U.
pH	01/31/24	Min	5.325	S.U.	6.0	S.U.
pH	02/29/24	Min	5.875	S.U.	6.0	S.U.
pH	05/31/24	Min	5.83	S.U.	6.0	S.U.
pH	06/30/24	Min	4.86	S.U.	6.0	S.U.
pH	06/30/24	Max	11.52	S.U.	9.0	S.U.
pH	07/31/24	Max	11.5	S.U.	9.0	S.U.
pH	08/31/24	Max	9.95	S.U.	9.0	S.U.
pH	09/30/24	Max	9.68	S.U.	9.0	S.U.
pH	10/31/24	Max	9.11	S.U.	9.0	S.U.
BOD5	02/29/24	Avg Mo	716	lbs/day	217	lbs/day
BOD5	03/31/24	Avg Mo	384	lbs/day	217	lbs/day
BOD5	01/31/25	Avg Mo	432	lbs/day	217	lbs/day
BOD5	02/28/25	Avg Mo	414	lbs/day	217	lbs/day
BOD5	12/31/23	Daily Max	864	lbs/day	792	lbs/day
BOD5	02/29/24	Daily Max	1960	lbs/day	792	lbs/day
BOD5	03/31/24	Daily Max	1019	lbs/day	792	lbs/day
BOD5	01/31/25	Daily Max	1044	lbs/day	792	lbs/day

BOD5	02/28/25	Daily Max	935	lbs/day	792	lbs/day
Oil and Grease	02/29/24	Avg Mo	< 23.4	mg/L	15.0	mg/L
Oil and Grease	03/31/24	Avg Mo	25.5	mg/L	15.0	mg/L
Oil and Grease	01/31/25	Avg Mo	24.5	mg/L	15.0	mg/L
Oil and Grease	02/28/25	Avg Mo	37.8	mg/L	15.0	mg/L
Oil and Grease	03/31/25	Avg Mo	15.9	mg/L	15.0	mg/L
Oil and Grease	12/31/23	Daily Max	66.0	mg/L	30.0	mg/L
Oil and Grease	02/29/24	Daily Max	49.0	mg/L	30.0	mg/L
Oil and Grease	03/31/24	Daily Max	42.0	mg/L	30.0	mg/L
Oil and Grease	06/30/24	Daily Max	52.0	mg/L	30.0	mg/L
Oil and Grease	01/31/25	Daily Max	81.0	mg/L	30.0	mg/L
Oil and Grease	02/28/25	Daily Max	67.0	mg/L	30.0	mg/L
Oil and Grease	03/31/25	Daily Max	46.0	mg/L	30.0	mg/L
COD	02/29/24	Daily Max	7556	lbs/day	6930	lbs/day
TSS	02/29/24	Daily Max	1436	lbs/day	834	lbs/day
Total Antimony	02/29/24	Daily Max	0.60	lbs/day	.47	lbs/day

Summary of Inspections:

FACILITY NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS	Report Comment
LEAR DYE & FINISHING PLANT	WPCNP	2509891	05/31/2024	Routine/Partial Inspection	Violation(s) Noted	1	Compliance evaluation

LEAR DYE & FINISHING PLANT	WPCNP	2937016	03/16/2023	Routine/Partial Inspection	No Violations Noted	0	Report noted 2021/2022 CB mass load exceedances and late CB DMR.
LEAR DYE & FINISHING PLANT	WPCNP	2937023	03/01/2023	Routine/Partial Inspection	No Violations Noted	0	200,000-gal overflow in plant due to pump failure. Recommended pump alarm system with autodialer.
LEAR DYE & FINISHING PLANT	WPCNP	2745504	11/29/2022	Routine/Partial Inspection	No Violations Noted	0	Blue dye discharge to Swatara Creek and failure to provide required notification.
LEAR DYE & FINISHING PLANT	WPCNP	2937024	08/17/2022	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2556219	07/21/2022	Routine/Partial Inspection	No Violations Noted	0	Failure to notify DEP to inoperable secondary clarifier due to damaged shear pin rendering rake arm inoperable. 2-day compliance evaluation. Aeration lagoon dredging project damaged cable to surface aerators. Aeration basin was dredged and old sludge was removed and ran through a sludge press prior to storage filter bags on a liner (prior to future removal). UV pilot program on effluent was performed October-November 2021. No CO&A per Report. Four mixers added to basin per Report.
LEAR DYE & FINISHING PLANT	WPCNP	2506950	03/09/2021	Follow-up Inspection	**Repairs or Upgrade Required**	0	Inspection Report noted facility plan to add mixers to EQ basin and planned UV disinfection pilot study.
LEAR DYE & FINISHING PLANT	WPCNP	2556226	11/03/2020	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2762333	09/14/2020	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2556216	11/05/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2469064	09/25/2019	Compliance Evaluation	Violation(s) Noted	2	-
LEAR DYE & FINISHING PLANT	WPCNP	2556215	09/25/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2940298	09/25/2019	Compliance Evaluation	No Violations Noted	0	-

LEAR DYE & FINISHING PLANT	WPCNP	2556210	09/25/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2839349	09/25/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2440394	09/25/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2937013	09/16/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2528837	05/26/2019	Routine/Partial Inspection	Violation(s) Noted	2	-
LEAR DYE & FINISHING PLANT	WPCNP	2937018	03/05/2019	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2501902	02/13/2019	Follow-up Inspection	**Repairs or Upgrade Required**	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2587023	07/24/2018	Compliance Evaluation	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2491527	05/21/2018	Compliance Evaluation	Violation(s) Noted	3	-
LEAR DYE & FINISHING PLANT	WPCNP	2969731	04/24/2017	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2529321	01/30/2017	Routine/Partial Inspection	**Repairs or Upgrade Required**	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2556218	01/30/2017	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2937020	01/30/2017	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2865010	01/30/2017	Administrative/File Review	Violation(s) Noted	1	-
LEAR DYE & FINISHING PLANT	WPCNP	2556214	01/30/2017	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	2891861	01/30/2017	Administrative/File Review	Violation(s) Noted	1	-
LEAR DYE & FINISHING PLANT	WPCNP	3801116	01/30/2017	Compliance Evaluation	Violation(s) Noted	1	-
LEAR DYE & FINISHING PLANT	WPCNP	3514181	10/19/2016	Incident-Response to Accident or Event	Violation(s) Noted	1	-

LEAR DYE & FINISHING PLANT	WPCNP	3103007	07/27/2016	Administrative/File Review	Violation(s) Noted	1	-
LEAR DYE & FINISHING PLANT	WPCNP	3467598	07/14/2016	Complaint Inspection	Violation(s) Noted	3	-
LEAR DYE & FINISHING PLANT	WPCNP	3162610	06/21/2016	Compliance Evaluation	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	3520760	04/27/2016	Chesapeake Bay Cap Load Compliance Eval	Violation(s) Noted	3	-
LEAR DYE & FINISHING PLANT	WPCNP	3408477	01/14/2016	Administrative/File Review	Violation(s) Noted	2	-
LEAR DYE & FINISHING PLANT	WPCNP	3079178	12/22/2015	Routine/Partial Inspection	No Violations Noted	0	-
LEAR DYE & FINISHING PLANT	WPCNP	3396898	02/26/2015	Compliance Evaluation	Violation(s) Noted	1	-

*3/16/2023 Inspection Report noted administrative review found late Chesapeake Bay DMR submittal and Chesapeake Bay mass load limit exceedances.

Other Comments:

- **Notices of Violation (NOVs) and Orders**:
  - **Voluntary CO&A Option**: The permittee indicated it would pursue a “voluntary CO&A option” to address existing/future compliance issues in assorted communications, but nothing has materialized to date.
    - Lear indicated the 2025 Application update included a rough outline of the proposed plant modifications proposed by Lear to achieve compliance. (see Treatment Plant Section). Lear indicated further discussions will be needed to address these modifications and develop an implementation schedule. Lear elsewhere indicated that the 2025-listed site upgrades are being considered but have not been finalized.
    - Lear indicated it intends to discuss the improvements with the Department during the NPDES permit renewal process. **NOTE**: Ample time was previously given for permittee consideration of other options (connection to local POTW; taking over a local STP treatment location for site treatment), and possible IWTP upgrades to meet the 2019 Draft NPDES Permit Limits (some effective upon Permit Effective Date).
  - 6/25/2025 NOV: Issued for exceedances of pH, Oil & Grease, and CBOD5 limits.
  - 5/31/2024 NOV: Issued for exceedances TN and TP annual mass load limit exceedances, Total Antimony, Oil & Grease, pH, BOD5, TSS, COD.
  - 4/7/2023 NOV: Issued for violation due to blue dye incident that caused visible change in stream (NPDES Permit Part A. Additional Requirements) plus Part A.III.C.a & Part A.III.C.3.b.ii notification requirements not met; 200,000-gallon overflow event.
  - 8/17/2022 NOV: Issued for exceedances (pH, BOD5, Oil & Grease); failure to notify Department of issues including damaged surface aerators and an inoperable secondary clarifier that contributed to the exceedances; late DMRs.
  - 12/2/2020 Administrative Order: Issued due to required submittal of Annual fees.
  - 11/3/2020 NOV: Issued for failure to submit required Annual Fees.
  - 3/5/2019 NOV: Issued for noncompliance with Chesapeake Bay annual mass permit limit for Total Nitrogen, without purchasing of nutrient credits. **NOTE**: DEP Files show that Compliance Assistance Letters have been issued (example 2013, 2014, 2015 letters in file) to warn facility that monitoring data indicated potential need for the facility to purchase nutrient credits to comply with the Chesapeake Bay annual mass limits.

- 3/26/2019 NOV: NOV issued due to noncompliance with 8/21/2019 DEP Greensands Filter Approval with Conditions Letter requirements.
- 7/14/2016 NOV: Issued due to inoperable final clarifier (subsurface sludge collection rake and surface skimmer out of service since September 2014; insufficient freeboard in Treatment Lagoon No. 1; orange/brown staining along stream bank at and downstream of outfall; changes in chemical additives without Department notification.
- 12/22/2015 NOV: Issued for release from facility. 1/8/2016 Operator Response.
- 2/26/2015 NOV: Issued for missing annual stormwater inspection and two December 2014 TSS exceedances. Response included Reports, indicated retirement of previous corporate engineer, and indicated TSS was from maintenance activities that involved clarifier emptying/refilling.

- **2025 NPDES Permit Application Form Compliance History update**:
  - Indicated facility was in non-compliance.
  - The 2025 Application update included copies of 2019 – 2024 Annual Stormwater Inspection Reports that indicated several O&M/Compliance issues.
    - The admin-extended NPDES Permit Part A.I.B & C.II allowed for Annual Stormwater Inspections in lieu of annual stormwater sampling for Outfall Nos. 002 through 008, but the Annual Stormwater Inspection Reports indicate the facility was unable to inspect assorted outfalls due to excessive vegetation. The facility has been sampling one of the stormwater outfalls each year, but the Department has never authorized representative outfalls at this site.
    - Several outfalls (006 and 008) were also indicated to need repair, but the Inspection Reports did not note follow-up repairs.
    - Annual Stormwater Inspection Reports also observed problems (excessive sedimentation, red (iron) staining, algae growth) that would indicate pollutants in the stormwater discharges. For example, red iron staining reported for Outfall 004 in 2023 Report along with recommended signage. Algae growth noted at time (possible nutrient issue). Sediment completely covered Outfall 006 per 2023 inspection. Outfall No. 008 was indicated to be buried.
    - "New" (existing) Stormwater Outfalls Nos. 009 and 010 are not yet in EDMR. Outfall No. 009 covers the IWTP, which means that the facility has not been monitoring & reporting IWTP stormwater discharges.
- **Other issues (in addition to above EDMR-identified issues)**:
  - The September 2024 EDMR flow data appears to contain incorrect inputting (daily max flow below monthly average flow).
  - Application Compliance History Certification Section indicated violations of effluent limits on 6/4/2025.
  - December 2018 EDMR Stormwater Sampling Data: Waiting until December to obtain minimum annual stormwater outfall sampling results is not an acceptable stormwater monitoring practice, given both temperature considerations (snow cannot be monitored) and larger/frequent Spring storm events would likely have allowed for obtaining stormwater samples from any "dry outfalls".
- **Non-compliance with WQM Permit Requirements**:
  - The facility previously modified the IWTP's WQM permitted-design and operations (removal and closure of two wastewater treatment lagoon impoundments, etc.) without any WQM permit amendment. No WQM Permit amendment has been received to address these changes to date. At present, the facility's as-built/as-operated hydraulic design capacity, organic design capacity, and solids design capacity is unknown.
  - The January 25, 1977 WQM Permit No. 5476203 (IWTP) conditions included the following conditions with compliance implications:
    - WQM Permit Standard Industrial Conditions:
      - Condition 2: All relevant and non-superseded condition … with the provisions of this permit shall apply to his successors, lessees, heirs and assigns.
      - Condition 3: The responsibility for carrying out of the conditions of this permit shall rest upon the owner, lessee, assignee or other party in responsible managerial control…
      - Condition 11: No radical changes shall be made in the works herein approved without approval of the Department, Revisions that do not increase the rate of flow or change the quality of the effluent, treatment processes or the point of discharge, may be approved by the Regional Sanitary Engineer upon submission of the plans. Other revisions must be approved by a permit. NOTE: Conditions 7, 8, & 15 address situations requiring IWTP upgrade. Condition 21 talks of cessation of discharge to prevent water pollution.

- Condition 14: … Moreover, upon written notice by the Department, the permittee shall maintain one or more skilled operators regularly on duty for such daily periods as the Department may require.
- Condition 18: Various structures and apparatus shall be maintained in proper condition with periodic inspections. NOTE: The HRG Inc. Report did not address existing lagoon conditions below water level. The DEP Waste Management Program lagoon closures would have focused on the closed lagoons, and RCRA groundwater clean-up monitoring on VOC-contaminated groundwater. Therefore, status of existing IWTP lagoons is unknown.
- Condition 19: Condition requires removal of screenings and any settled or floated solids in sedimentation basins (i.e. lagoons). It is unknown to this reviewer when sludge was last removed from the existing lagoons.

▪ Special Condition F: Special Condition F required quarterly and annual samples from the approved monitoring points, with water level information for the entire time this permit is in effect. The available Department Clean Water Program files do not contain the required groundwater monitoring submittals. The DEP Clean Water Program Geologist did not have any groundwater submittals from this facility (asked during original NPDES/WQM permit transfer submittal review). When asked during previous NPDES Permit/WQM transfer discussions, the permittee indicated all groundwater monitoring information was going to the DEP Waste Management Program (involved with the RCRA Groundwater clean-up and separate RSW Lagoon Closures). Nothing was found in the Department Clean Water Files regarding any redirection of WQM-required groundwater submittals.

- **General Facility Compliance Obligation Regarding Contaminated Groundwater at Plant:** The facility is subject to the 9/30/1992 EPA "Final Administrative Order on Consent" Docket No. RCRA-III-052-CA due to previous site contamination issues.
  - The EPA document noted that this site had a WWTP (with NPDES Permit), oil skimmer in drum storage area, contaminated soil from a 1988 release, etc.
  - Corrective action included RCRA groundwater monitoring wells and groundwater pump & treat (identified groundwater contaminants included VOCs, lead, chromium, cadmium, barium and acetone).
- **Fecal Coliforms (pathogens) in IWTP Discharge to Pathogen-impaired stream**: The facility concluded the fecal coliforms are coming from the plant manufacturing process, not unpermitted cross-connection to the IWTP. They conducted limited dye-testing and sampling in the Plant building itself. However, any pathogen loading negatively impacted the receiving pathogen-impaired stream. Based on 2016 sampling, the NPDES Permit Renewal application estimated an influent Geometric Mean of 15,600/100 ml and an effluent Geometric Mean of 1,620/100 ml. The facility's investigatory sampling data indicates Outfall #001 effluent concentrations ranging from 8/100 ml to >6000/100 ml from sampling in the 2/9/2016 – 12/30/2016 time-frame without any installed disinfection system. Other potential sources include:
  - Undiscovered cross-connection of sewage piping to IWTP wastewater piping. They have conducted dye testing and in-plant sampling, but they have not shown that the fecal coliforms are of non-human origin. Therefore, an unapproved cross-connection of sewage flows to non-sewage wastewater flows is still possible.
  - Potential Wildlife sources impacts: Water supply basin for process water supply system (receiving contaminated groundwater); onsite IWTP lagoons/open units; stormwater entering Octagonal Pump Station pit or other cross-connection of stormwater piping to IWTP wastewater piping).
    - They blamed influent fecals on wildlife contributions to the Octagonal Pit Pump Station. Facility internal monitoring and investigation indicate that the Raw Wastewater Pump Station Octagonal Pit (directing flow to the IWTP across Swatara Creek) had intermittent high fecal coliform levels (1,600,000/100 ml on 12/1/2016)
    - They did not evaluate water supply treatment lagoon or IWTP lagoons as potential sources (wildlife contribution).
    - Previous Application Stormwater sampling results found fecal coliform stormwater discharges from Stormwater Outfalls #002 (>6000/100 ml), #003 (>6000/100 ml), #004 (39/100 ml), #006 (8,200/100 ml), #006 (640/100 ml), #007 (3/100 ml), and new #010 (7,800/100 ml) downstream of existing Outfall #006. Outfall #009 has been created to cover the stormwater discharge from the IWTP side of the stream, and no sampling has occurred yet. Existing Outfall #008 had no discharge during storm event.
  - Presence of bacteria colonizing the IWTP treatment units containing textile-related organic materials (ITWP lagoons and treatment units). Not investigated.

- **Possible Excessive Usage of Ferric Chloride WWTP Treatment Chemical:** Aside from the incident involving a color-change in the receiving stream (turning orange), effluent data shows high iron and chloride concentrations to a receiving stream subject to the Swatara Creek watershed TMDL (Acid Mine Drainage) stream (no Waste Load Allocations for this facility).
    - Potential O&M Issue: Overuse of Ferric Chloride (used for several purposes) and inadequate settlement time in the clarifier are potential reasons for excessive concentrations in the effluent. Proper O&M should avoid excessive effluent concentrations of Ferric Chloride.
    - 4/25/2017 Chloride Monitoring Data Report (compliance testing): This testing indicated effluent chloride concentration ranged up to 280 mg/l chlorides during 8/18/2016 - 4/6/2017 with daily variability between 66 – 270 mg/l. This chloride concentration variability might indicate overuse of ferric chloride, especially with documented effluent iron concentrations.

- **Compliance Check:** Seven (7) open violations per 6/17/2025 WMS query (open violations by client number):

FACILITY	INSP PROGRAM	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION
LEAR DYE & FINISHING PLANT	WPC NPDES	3467598	977509	03/16/2023	92A.41(B)	NPDES - Failure to orally notify DEP within 4 hours of a pollution incident or submit written report within 5 days of incident
LEAR DYE & FINISHING PLANT	WPC NPDES	3467598	977510	03/16/2023	92A.41(B)	NPDES - Failure to orally notify DEP within 4 hours of a pollution incident or submit written report within 5 days of incident
LEAR DYE & FINISHING PLANT	WPC NPDES	3467598	977511	03/16/2023	92A.41(C)	NPDES - Discharge contained floating materials, scum, sheen, foam, oil, grease or substances that produced an observable change or resulted in deposits in receiving waters for NPDES permitted activities
LEAR DYE & FINISHING PLANT	WPC NPDES	3514181	986980	03/01/2023	CSL301	CSL - Unauthorized, unpermitted discharge of industrial wastes to waters of the Commonwealth
LEAR DYE & FINISHING PLANT	WPC NPDES	3520760	988242	11/29/2022	92A.44	NPDES - Violation of effluent limits in Part A of permit
LEAR DYE & FINISHING PLANT	WPC NPDES	3520760	988243	11/29/2022	92A.44	NPDES - Violation of effluent limits in Part A of permit
LEAR DYE & FINISHING PLANT	WPC NPDES	3520760	988244	11/29/2022	92A.41(A)12B	NPDES - Failure to submit monitoring report(s) or properly complete monitoring reports

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 1.2
Latitude 40º 33' 22.00" **Longitude** -76º 23' 18.00"
Wastewater Description: IW Process Effluent with ELG; Non-process plant floor drainage, Filter backwash; Boiler blowdown

Permit Limits and Monitoring: Changes bolded

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
Flow	Report MGD Report MGD	Monthly Average Daily Max	Recent EDMR data: 0.252 – 0.409 MGD monthly average and 1.662 MGD daily max flow.
TBELs (in effect upon PED)	-	-	-
BOD5	**138.7 Lbs/d** **427.0 Lbs/d** Report Report	Monthly Average Daily Max Monthly Average Daily Max	Recalculated ELG limits based on production rates (not ultimate design capacities). Concentration reporting will be required. Previous 2011 NPDES ELG limits were 217 lbs/day Monthly Average and 792 lbs/day Daily Max based on ultimate design capacity. 2025 Application data: 12.3 mg/l (44.6 lb/d) and 7.26 mg/l average (3 samples) 2019 Application data: 27 mg/l (128 lbs/d) max and 21 mg/l (105 lb/d) LTA of 3 samples. 2019 Application DMR data: 180 mg/l (778 lb/d) max and 19 mg/l (77 lb/d) LTA of 107 samples. Recent EDMR: 13 – **716 lb/d** monthly average with **1960** lb/d daily max.
COD	**2220.0 Lbs/d** **6832.0 Lbs/d** Report Report	Monthly Average Daily Max Monthly Average Daily Max	Recalculated ELG limits based on production rates (less than assumed in previous permit cycle). Concentration reporting will be required in this permit condition. 2011 NPDES Permit ELG limits were 3470 lbs/d monthly average and 6930 lbs/day daily max (based on ultimate design capacity). 2025 Application data: 124 mg/l (535.3 lb/d) and 116 mg/l average (3 samples) 2019 Application data: 228 mg/l (1082 lbs/d) and 199 mg/l (994 lb/d) LTA of 3 samples). 2019 Application DMR data: 611 mg/l (2640 lb/d) max and 151 mg/l (613 lb/d) LTA of 107 samples Recent EDMR: 186 – **2386 lb/d** monthly average with **7556** lb/d daily max.
TSS	417.0 Lbs/d 834.0 Lbs/d Report Report	Monthly Average Daily Max Monthly Average Daily Max	Existing Technology limit retained. (40 CFR 410.52 ELG limit was superseded). Antibacksliding prohibition prevents less stringent limit. 2025 Application data: 8 mg/l (36.3 lb/d) and 7.00 mg/l average (3 samples)

			2019 Application data: 47 mg/l (223 lb/d) Max, 43 mg/l (210 lb/day) LTA of 3 samples). 2019 Application DMR data indicated: 59 mg/l (258 lb/d) max and 24 mg/l (97 lb/d) LTA of 107 samples. Recent EDMR: 22 – 413 lb/d monthly average with **1436 lb/d** daily max. NOTE: Daily Max Mass limits are equivalent to 50 mg/l at 2.0 MGD or 232.2 mg/l at 0.431 MGD.
pH	6.0 – 9.0 SU	Inst. Min - IMAX	Existing ELT Technology limit (40 CFR 410.52(a) ELG BPT and Chapter 95.2). **2025 Application data: Not identified on Pollutant Group tables (3 samples), see EDMR data and Compliance Section for pattern of exceedances.** 2019 Application data:: 6.43 – 7.19 SU (3 samples). 2019 Application DMR data indicated: 6.43 – 7.19 SU. Recent EDMR: **4.86 – 11.52 SU**
Sulfide, Total	**5.5 Lbs/d** **17.0 Lbs/d** Report Report -	Monthly Average Daily Max Monthly Average Daily Max	Recalculated ELG limits based on production rates. Concentration reporting will be required in this permit condition. 2011 NPDES Permit ELG limits were 8.67 lbs/day Monthly Average and 17.3 lbs/day Daily Max (based on ultimate design capacity). 2025 Application data: 1 mg/l (4.5 lb/d) and 1 mg/l average (3 samples) 2019 Application data: <1 mg/l (<5 lb/d) max/LTA of 3 samples. 2019 Application data: 2 mg/l (9 lb/d) max and <1.1 mg/l (<4 lb/d) LTA of 107 samples. Recent EDMR: 0.04 – <4.98 lb/d monthly average and **<13.9 lb/d daily max.**
Total Phenolics	**2.7 Lbs/d** **8.5 Lbs/d** Report Report	Monthly Average Daily Max Monthly Average Daily Max	Recalculated ELG limits. Concentration reporting will be required in this permit condition. 2011 NPDES Permit ELG limits were 4.33 lbs/day Monthly Average and 8.67 lb/d Daily Max (based on ultimate design capacity). 2025 Application data: 8 ug/l (not calculated lb/d) and 4 ug/l average (3 samples) 2019 Application data: 53 ug/l max and 34 ug/l average of 3 samples. 2019 Application DMR data i: 0.159 mg/l (0.491 lb/d) max and 0.049 mg/l (0.199 lb/d) LTA of 107 samples. Recent EDMR: <0.007 - <0.30 lb/d monthly average with 0.30 lb/d daily max.
Total Chromium	**2.7 Lbs/d** **8.5 Lbs/d** Report Report	Monthly Average Daily Max Monthly Average Daily Max	Recalculated ELG limits based on production rates. Concentration reporting will be required in this permit condition. 2011 NPDES Permit ELG limits were 4.33 lbs/day Monthly Average and 8.67 lb/d Daily Max (based on ultimate design capacity). 2025 Application data: 3 ug/l (0.0126 lb/d) max and 3 ug/l average (3 samples)

			2019 Application data: 0.012 mg/l (0.06 lb/d) max and 11 ug/l (0.05 lb/d) LTA out of three samples. Recent EDMR: <0.02 – 0.10 lb/d monthly average and 0.40 lb/day daily max
Oil & Grease	**150.1 Lbs/d** **300.2 Lbs/d** 15.0 30.0	Monthly Average Daily Max Monthly Average IMAX	Existing Technology limit (Chapter 95.2). Mass limits recalculated per 1.2 MGD NPDES Permit Basis flow. Daily Max limit being converted to IMAX due to 25 Pa. Code § 92a.47(a)(7), § 95.2(2) and Part A.I Additional Requirements TBEL. 2025 Application data: 5 mg/l (22.6 lb/d) and 5 mg/l average (3 samples) 2019 Application data: 5 mg/l (26 lb/d) max and <5 mg/l (<25 lb/d) LTA of 3 samples. 2019 Application DMR data: 18 mg/l (78 lb/d) max and 6 mg/l (24 lb/d) LTA of 107 samples. Recent EDMR: 5.0 – **25.5 mg/l** monthly average and **65.0 mg/l** daily max. <11 - <112 lb/d monthly average and 66 lb/d daily max.
TMDL-based limits in effect on PED	**-**	**-**	**-**
Total Iron	Report (Lbs/d) Report (Lbs/d) **1.500** **3.000** **3.000**	Monthly Average Daily Max Monthly Average Daily Max IMAX	WQBEL based on existing TMDL water quality criterion. Facility is a Major IWTP discharging significant loadings on the AMD-impaired stream, contributing to stream impairment. 2025 Application data: 1.23 mg/l (4.78 lb/d) max and 1.083 mg/l average (3 samples) 2019 Application data: 12.5 mg/l (63.9 lb/d) max and 9.940 mg/l LTA of 3 samples), exceeding WQBELs. Recent EDMR: 0.60 – **3.56 mg/l quarterly average**
Dissolved Iron	Report (Lbs/d) Report (Lbs/d) **0.300** **0.600** **0.600**	Monthly Average Daily Max Monthly Average Daily Max IMAX	WQBEL based on existing TMDL water quality criterion. See above regarding potential sources. 2025 Application data: 0.110 mg/l (0.4615 lb/d) and 0.060 mg/l average (3 samples) 2019 Application data: 0.980 mg/l (4.65 lb/d) max and 0.860 mg/l (4.30 lb/d) LTA of 3 samples).
Total Manganese	Report (Lbs/d) Report (Lbs/d) **1.000** **2.000** **2.000**	Monthly Average Daily Max Monthly Average Daily Max IMAX	WQBEL based on existing TMDL water quality criterion. Facility is a Major IW discharging significant loadings on the AMD-impaired stream, contributing to stream impairment, apparently from non-WQM permitted reduction is settling capacity (lagoon closure). 2025 Application data: 0.581 mg/l (2.10 lb/d) and 0.469 mg/l average (3 samples) 2019 Application data: 0.449 ug/l (2.30 lb/d) max of 3 samples but is adding a Greensands Filter (using manganese dioxide coated sand and potential permanganate chemical usage)

			Recent EDMR: 0.427 mg/l – 1.11 mg/l quarterly average
Total Aluminum	Report (Lbs/d) Report (Lbs/d) **0.750** **1.500** **1.500**	Monthly Average Daily Max Monthly Average Daily Max IMAX	WQBEL based on existing TMDL water quality criterion. Facility is a Major IW discharging significant loadings on the AMD-impaired stream. This aluminum limit is being added to allow for operational flexibility to switch from iron-based treatment chemicals to aluminum-based treatment chemical. 2025 Application data: 0.10 mg/l (0.0454 lb/d) and 0.009 mg/l average (3 samples) 2019 Application data: 180 ug/l (0.08 lb/d) max. Recent EDMR: <0.02 – 0.07 mg/l quarterly average.
WQBELs effective upon PED	**-**	**-**	**-**
Fecal Coliform (5/1 – 9/30)	**200/100 ml** **1,000/100 ml**	**Geo Mean** **IMAX**	**New Chapter 92a.47/48 limits required due to discharge of fecal coliforms (process water source) to pathogen impaired stream based on Chapter 92a.47 TBEL and Chapter 93.7 Bac[1] Water Quality Criterion. See below for details. No fecal coliforms discharge was previously approved from this IWTP. Facility has proposed Chlorine Disinfection to address pathogens** 2025 Application data: 72/100 m/l max and 27.3 mg/l average (3 samples). Greensands/hypochlorite pretreatment of process water may have reduced influent concentrations. 2019 Application data and subsequent investigation monitoring: 3200/100 ml (max) and 591/100 ml LTA of 12 samples). Application DMR data: No data (not presently monitored for
Fecal Coliform (10/1 – 4/30)	**2,000/100 ml** **10,000 ml/100 ml**	**Geo Mean** **IMAX**	**See above**
E Coli	**Report/100 ml**	**IMAX**	**New standard monitoring requirement per Chapter 93 WQS and size of discharge.**
Total Residual Chlorine (TRC)	**0.47** **1.53**	Average Monthly IMAX	New WQBELs (TRC Spreadsheet incorporating 0.5 mg/l BAT limit) because TRC found in effluent, known potential chloride source (ferric chlorides), Greensands Backwash Filter hypochlorite usage, and proposed chlorine disinfection to address pathogens in effluent. In effect upon PED due to Greensands data indicating current compliance and ability to engineer any chlorine disinfection system to new limits. 2025 Application: No data (no value and no QL identified) except in Greensands monitoring of site effluent. 2019 Application data: None

Ammonia-N (May 1 – October 31)	Report (Lb/d) Report (Lb/d) **8.7** **17.4** **17.4**	Monthly Average Daily Max Monthly Average Daily Max IMAX	WQBELs from WQM Model 7.1.1 and due to CB data indicating potential for exceedances. Additional CB monitoring addressed below. New limits effective immediately as data indicates ongoing compliance. 2025 Application data: 6.63 mg/l max and 2.293 mg/l average (3 samples) 2019 Application data: 2.4 mg/l (6.28 lb/d) max and 0.96 mg/l (2.62 lb/d) LTA of 3 samples). 2019 Application DMR data: 15.7 mg/l (68 lb/d) max and <4.7 mg/l (<19 lb/d) LTA of 107 samples. Recent EDMR: <0.16 mg/l – **6.8 mg/l** monthly average.
Ammonia-N (Nov 1 – April 30)	Report (Lb/d) Report (Lb/d) **26.1** **52.2** **52.2**	Monthly Average Daily Max Monthly Average Daily Max IMAX	See above, with winter multiplier (factor of 3).
New WQBELs	**-**	**-**	**-**
Total Antimony - **Interim** (Years 1 – 3)	0.30 Lbs/d 0.46 Lbs/d Report Report	Monthly Average Daily Max Monthly Average Daily Max	Existing WQBEL load limits from previous permit retained except as Daily Max mass limit was recalculated (previous 0.47 limit). 2025 Application data: 20 ug/l (0.0454 lb/d) and 20 ug/l average (3 samples) 2019 Application data: 0.027 mg/l (0.10 lb/d) max and 0.0213 mg/l (0.07 lb/d) LTA of three samples exceeding new WQBEL (below). 2019 Application DMR data: 0.018 mg/l (0.08 lb/d) max and <0.017 mg/l (<0.03 lb/d) LTA of 107 samples Recent EDMR: <0.01 – 0.10 lb/d monthly average and **0.60 lb/d daily max**
Total Antimony – Final **(Years 4 – 5)**	**0.27 Lbs/d** **0.42 Lbs/d** **0.026** **0.041** **0.066**	Monthly Average Daily Max Monthly Average Daily Max IMAX	Revised WQBELs per Reasonable Potential Analysis.
Total Thallium **(Final, effective in three years)**	**0.011 Lbs/d** **0.018 Lbs/d** **1.14 ug/l** **1.78 ug/l** **2.85 ug/l**	**Monthly Average** **Daily Max** **Monthly Average** **Daily Max** **IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: "Zero". Insensitive ND concentration (not meeting 2.0 ug/l DEP TQL).
Acrylamide **(Final with interim monitoring)**	**0.013 Lbs/d** **0.025 Lbs/d** **1.60 ug/l** **2.49 ug/l** **3.99 ug/l**	**Monthly Average** **Daily Max** **Monthly Average** **Daily Max** **IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** **2025 Application data: None** **2019 Application data: <17 ug/l (<0.065 lb/d) maximum and <8.47 ug/l (<0.03 lb/d) of three samples). No DEP TQL, but 10 ug/l QL has been achieved by other applications.**

4,4-DDD (Final with interim monitoring)	**0.00002 Lbs/d 0.00004 Lbs/d 0.002 ug/l 0.004 ug/l 0.006 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: 0.066 ug/l max and 0.055 ug/l average (3 samples). Insensitive ND concentration (not meeting 0.05 ug/l DEP TQL)
4,4-DDT (Final with interim monitoring)	**0.000007 Lbs/d 0.000010 Lbs/d 0.0007 ug/l 0.0010 ug/l 0.0020 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: 0.36 ug/l max and 0.156 ug/l average (3 samples). Insensitive ND concentration (not meeting 0.05 ug/l DEP TQL)
3,3-Dichlorobenzidine (Final with interim monitoring)	**0.011 Lbs/d 0.018 Lbs/d 1.14 ug/l 1.78 ug/l 2.85 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: 10 ug/l max and 10 ug/l average (3 samples). Insensitive ND concentration (not meeting 5.0 ug/l DEP TQL)
Heptachlor Epoxide (Final with interim monitoring)	**0.000007 Lbs/d 0.000010 Lbs/d 0.0007 ug/l 0.0010 ug/l 0.0020 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: 0.498 ug/l max and 0.412 ug/l average (3 samples). Insensitive ND concentration (not meeting 0.05 ug/l DEP TQL)
Hexachlorobutadiene (Final with interim monitoring)	**0.002 Lbs/d 0.004 Lbs/d 0.23 ug/l 0.36 ug/l 0.57 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: 5.0 ug/l max and 5.0 ug/l average (3 samples). Insensitive ND concentration (not meeting 0.5 ug/l DEP TQL)
Toxaphene (Final with interim monitoring)	**0.00001 Lbs/d 0.0001 Lbs/d 0.0009 ug/l 0.0010 ug/l 0.0020 ug/l**	**Monthly Average Daily Max Monthly Average Daily Max IMAX**	**New WQBEL per updated Reasonable Potential Analysis, effective in 3 years with interim monitoring.** 2025 Application data: Insensitive ND concentration (not meeting DEP TQL)
Monitoring Requirements	-	-	-
Total Copper	**Report (Lbs/d) Report (Lbs/d) Report Report**	**Monthly Average Daily Max Monthly Average Daily Max**	**Monitoring requirement per Reasonable Potential Analysis (see below).** 2025 Application data: 0.006 mg/l max and 0.005 mg/l average (3 samples) 2019 Application data: 0.017 mg/l (0.065 lb/d) maximum and <10.4 ug/l (<0.035 lb/d) LTA of three samples.
Total Silver	**Report (Lbs/d) Report (Lbs/d) Report Report**	**Monthly Average Daily Max Monthly Average Daily Max**	**Monitoring requirement per Reasonable Potential Analysis (see below).** 2025 Application data: "Zero" at 0.001 mg/l QL.
Total Zinc	**Report (Lbs/d) Report (Lbs/d) Report Report**	**Monthly Average Daily Max Monthly Average Daily Max**	**New WQBELs per Reasonable Potential Analysis (see below).** 2025 Application data: 0.024 mg/l (max) and 0.021 mg/l average (3 samples). 2019 Application data: 0.450 mg/l (1.178 lb/d) max and 0.290 mg/l (0.908 lb/d) of 3 samples) exceeding WQBELs.

Alpha-Endosulfan	**Report (Lbs/d) Report (Lbs/d) Report Report**	**Monthly Average Daily Max Monthly Average Daily Max**	New monitoring requirement per Reasonable Potential Analysis (see below). 2025 Application data: 0.084 ug/l max and 0.07 ug/l average (3 samples).
Total Dissolved Solids (TDS)	Report (Lb/d) Report (Lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	Monitoring per Chapter 92a.61. Old IWTP has been substantially modified (reducing lagoon capacity) with ongoing operational issues (including stream discoloration) from unpermitted changes (2006 Ferric Chloride system; closure of permitted lagoons). 2025 Application data: 313 mg/l max and 293.667 mg/l average (3 samples) 2019 Application data: 392 mg/l TDS max
Chesapeake Bay	**-**	**-**	**Existing Chesapeake Bay TMDL requirements for a Significant IW Chesapeake Bay discharger. Facility has been purchasing nutrient credits. Reduction in NPDES permit basis flow does not reduce CB mass load limits except upon permittee request for reduced cap loads.**
Net Total Phosphorus	271.0 (Lbs) Report (Lbs)	Annual Mass Load Monthly Average	See above.
Net Total Nitrogen	7065.0 (Lbs) Report (Lbs)	Annual Mass Load Monthly Average	See above.
Total Phosphorus	Report (Lbs) Report (Lbs) Report Report	Annual Mass Load Monthly Average Monthly Average Daily Max	See above. 2025 Application data: 0.42 mg/l max and 0.297 mg/l average (3 samples) 2019 Application data: 0.76 mg/l max and 0.66 mg/l average (3 samples). Recent EDMR: 0.11 – 1.47 mg/l monthly average.
Total Nitrogen	Report (Lbs) Report (Lbs) Report Report	Annual Mass Load Monthly Average Monthly Average Daily Max	See above. 2025 Application data: TKN: 7.4 mg/l max and 4.2 mg/l average (3 samples) Nitrate-Nitrite: 0.49 mg/l max and 0.270 mg/l average (3 samples) 2019 Application data <10.9 mg/l (TKN plus nitrate-nitrite as N) and 10.66 mg/l average (3 samples). Recent EDMR: <4.11 - <18.12 mg/l monthly average.
Total Kjehldahl Nitrogen	Report Report Report	Monthly Average Monthly Average Daily Max	See above. 2025 Application data: 7.4 mg/l max and 4.2 mg/l average (3 samples) 2019 Application data: 9.8 mg/l max and 9.5 mg/l average (3) samples. Recent EDMR: 3.01 – 16.9 mg/l monthly average
Nitrate-Nitrite as N	Report Report Report	Monthly Average Monthly Average Daily Max	See above. 2025 Application data: 0.49 mg/l max and 0.270 mg/l average (3 samples) 2019 Application data: <1.1 mg/l max and average (3 samples). Recent EDMR: <1.1 – 1.1 mg/l monthly average.
Ammonia-Nitrogen	Report (Lbs) See above	Annual Total See above	See above

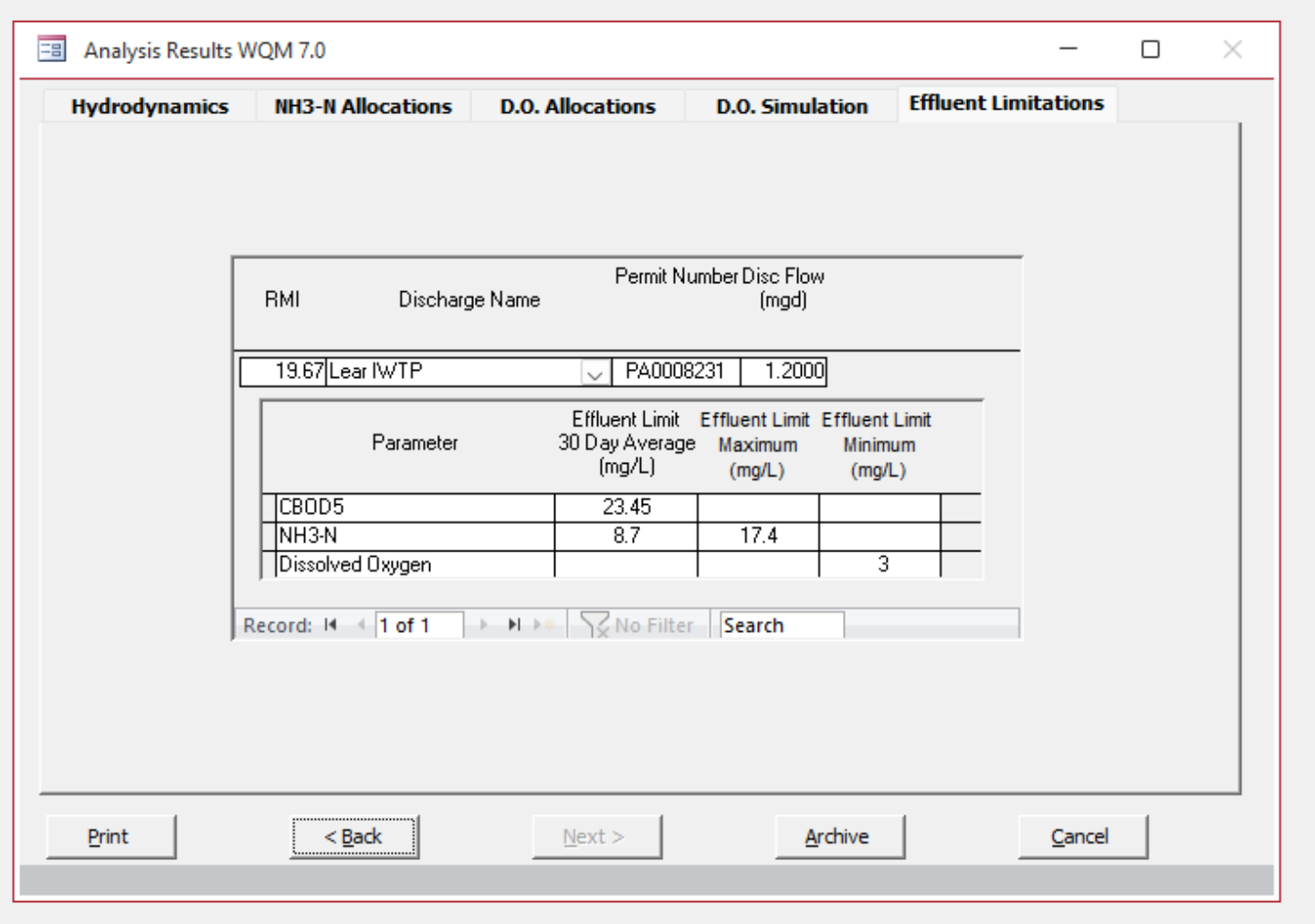
Comments:

Re-evaluated Limits:

Request to change NPDES Permit Basis Flow (AADF): The facility has requested a **1.2 MGD NPDES permit basis flow** (down from 2.0 MGD) with an 0.431 MGD average flow and 1.499 MGD max flow during production identified in the application. See EDMR data below for recent reported average monthly and daily max flows. The IW discharge is continuous, 24 hours/day, 7 days/week.

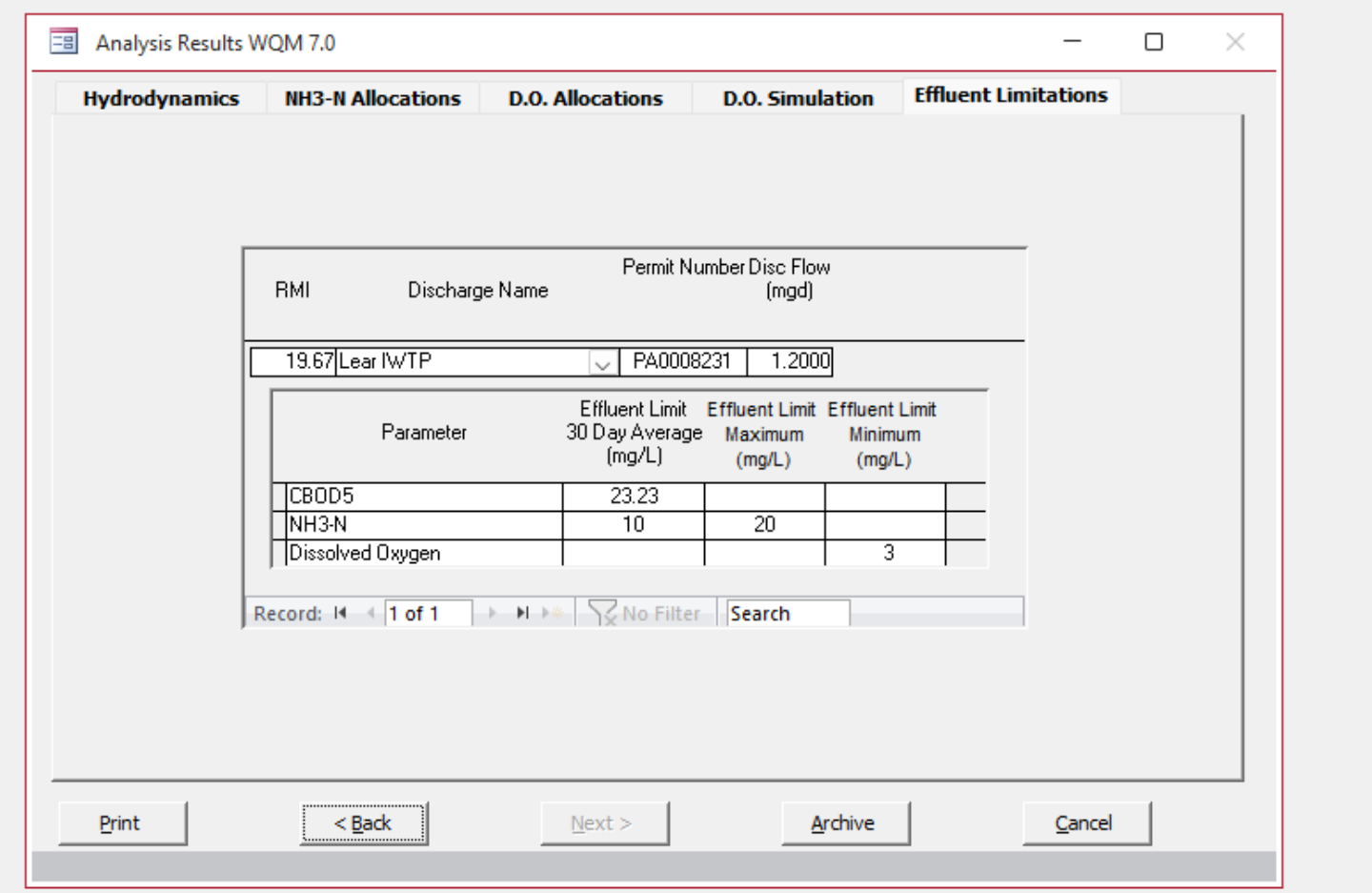
Updated WQM Model 7.1.1:

Assuming 25 mg/l CBOD5, 25 mg/l Ammonia-N, and 3 mg/l DO effluent, the following limits are protective of the environment. There is no defined effluent BOD5/CBOD5 ratio for IWTP discharge, to allow direct conversion to BOD5 limits. The ELG BOD5 mass limits are equivalent to 13.8 mg/l monthly average discharge (@ 1.2 MGD discharge) and are the controlling factor for BOD5. Ammonia-N and DO limits are needed to protect receiving stream.



LeartWQModel.pdf

Assuming 290 mg/l CBOD5 (to addressed combined BOD5 and COD loadings): The below modeling is not accurate because there is no defined COD/CBOD5 or IWTP discharge CBOD5/BOD5 correlation, plus COD includes additional non-organic oxygen demand that might impact stream biology's ability to digest the discharge. However, it shows that an effluent 3 mg/l DO concentration (normal treated sewage default) would likely prevent any negative impact at the downstream PGJTE POTW discharge location. Higher biological loadings would allow the stream biology to handle higher ammonia-N loadings.



Updated TRC Spreadsheet (WQBEL) limits:

TRC EVALUATION			
Input appropriate values in A3:A9 and D3:D9		Lear Dye & Finishing	
6.97	= Q stream (cfs)	0.5	= CV Daily
1.2	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	0.841	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 1.026	1.3.2.iii	WLA cfc = 1.179
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.382	5.1d	LTA_cfc = 0.685

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.471	AFC
		INST MAX LIMIT (mg/l) = 1.539	

Recalculated 40 CFR 410 Subpart E (410.50 – 56) Effluent Limitation Guideline (ELG) Technology-based effluent limits (TBELs) for BOD5, COD, TSS, Sulfide, Total Phenols, Total Chromium, and pH: Per the September 2010 US EPA "NPDES Permit Writers' Manual" Section 5.2.2.4 (page 5-30), Mass-based TBELs from Production-Normalized Effluent Guidelines use a reasonable measure of the permittee's actual long-term daily production, not the design production rate (which was used in the 2011 NPDES Permit calculations). The ELG TBELs were recalculated based upon the projected 5-year annual production rate.

- **General**: The facility has an adjacent sister site operating under an IW Stormwater General Permit where related operations occur, but no discharges to the captive IWTP. Lear Corporation indicated the increased production would not be a "New Source".
- **Production rates**: The ELG limits are based upon mass production rates (Maximum for any 1 day; average of daily values for 30 consecutive days):
  - Current Annual Average Production rate: **18,585,376 lbs/year**
  - Monthly Average at Annual Average Production Rate: **1,548,781 lb/month**
  - 5-year projected Annual Average Production rate**: 19,979,279 lb/year (based on estimate 7.25% annual growth rate).**
  - Monthly Average at 5-year projected Annual Average Production rate: **1,664,940 lbs/month (1,665K)**
  - Total facility Design Production Capacity**: 2,600,000 lbs/month (2,600K)**
  - Average Production days/month**: 24**
  - Max monthly production**: Ranged from 1,618,556 lbs to 2,677,248 lbs (2021 – 2024 data)**
  - Maximum Monthly Production Rate/Annual Rate Ratio:
    - 2020: Max and average production rate information not provided.
    - 2021: 110%
    - 2022: 126.8%
    - 2023: 124.8%
    - 2024: 130.8%
    - **4-year average: 123.1% factor**
  - Estimated Max Monthly Production rate at 5-year projected production rate: **2,049,541 lb (2,050K, within the identified production design capacity of the facility) using 1.231 factor.**
  - Estimated Average Daily production rate (average monthly production divided by 30 days for Monthly Average limit): **55.5K (30-day average)**
  - Estimated Max Daily production rate (max monthly rate divided by 24 operating days) for Daily Max limit: **85.4K**

Parameter and Basis	Average Monthly ELG (Lbs per 1000 Lbs Product or pH SU) for 30-day period (Lb/d)	Average Monthly (30-day) Mass Loading (Lb/d) with equivalent concentration in parentheses	Maximum Daily ELG (Lbs per 1000 Lbs Product or pH SU)	Maximum Daily ELG (Lbs/d) with equivalent concentration in parentheses (Lb/d)
40 CFR 410.52(a) BPT ELG BPT	**-**	**-**	**-**	**-**
BOD5	2.5	**138.7***** (~13.8 mg/l @ 1.2 MGD)	5.0	**427.0***** (~42.6 mg/l @ 1.2 MGD)
TSS* **(superseded)**	10.9	**604.9**** (superseded by existing limits)	21.8	**1861.7**** (superseded by existing limits)
pH	6.0 – 9.0 SU	-	6.0 – 9.0 SU	-
COD **(see below)**	30.0	**1665.0** (~205 mg/l @ 1.2 MGD)	60.0	**5124.0** (~511.9 mg/l @ 1.2 MGD)
Sulfide	0.10	**5.5** (~0.55 mg/l @ 1.2 MGD)	0.20	**17.0** (~1.36 mg/l @ 1.2 MGD)
Total Phenols (a.k.a. Phenolics)	0.05	**2.7** (~0.27 mg/l @ 1.2 MGD)	0.10	**8.5** (~0.68 mg/l @ 1.2 MGD)
Total Chromium	0.05	**2.7** (~0.27 mg/l @ 1.2 MGD)	0.10	**8.5** (~0.68 mg/l @ 1.2 MGD)
40 CFR 410.52(b) ELG BAT	**-**	**-**	**-**	**-**
COD***	10.0 (additional allowance for commission finishing operations)	555.0 (see below)	20.0 (additional allowance for commission finishing operations)	1708.0 (see below)
Total COD allowance	40 (30 + 10)	**2220.0** (~221 mg/l @ 1.2 MGD)	80 (60 + 20)	**6832.0** (~682 mg/l @ 1.2 MGD)

*The 2011 NPDES Permit used the max production design capacities (not actual production rates) to calculate ELG limits.
** Antibacksliding prohibition prohibits a less stringent limit. The 2011 WPC derived a more stringent TSS limit via BPT/BPJ based on an average 25.0 mg/l (417 lb/day) monthly average and 50.0 mg/l (834 lb/day) daily max for a 2.0 MGD flow for a receiving stream with TSS impairments.
**The facility does finishing per previous Application submittals, with allowance included in previous ELG limits. If it ceased to do finishing onsite, this extra allowance would no longer apply.

TMDL-Based Limits supersede the TMS water quality modeling-based WQBELs: The facility is a significant source of Total Iron, Dissolved Iron, and Total Manganese loadings to an AMD-impaired stream under the existing 1999 Swatara Creek Watershed TMDL (AMD), but the facility does not have any existing TMDL Wasteload Allocations (WLAs). Limits are required.

- The DEP SOP recommends setting the monthly average limit to the most stringent water quality criterion where it can be achieved, when there is no existing WLA for an IW facility. This has been done, with standard multiplier factor of 2 for daily max/IMAX.
- The facility switched from a commercial water surface water intake (not used in the last 25 years) to use of treated groundwater (chlorinated organics) and public water supplies. In practical terms, the single influent Total Iron concentration indicates the maximum limits can be achieved. Proper O&M can prevent any excessive usage of Ferric Chloride that would contribute to iron loadings.
- Monitoring is also required for Total Aluminum due to need to quantify loadings and in event the facility chooses to switch to an aluminum-based chemical for TP treatment.

Pathogens: Facility is discharging pathogens to a pathogen-impaired stream. Chapter 92a.47/48 Technology based limits for Fecal Coliform apply. E Coli monitoring are required due to contribution to existing impairment & new Chapter 93 WQS. No sewage is authorized to go to the IWTP.

Updated Reasonable Potential Analysis:

- PFAS: This industry is a known or suspected source of PFAS chemicals per EPA guidance. Monitoring & reporting will be required in accordance with the DEP PFAS Strategy. In terms of 2025 application effluent data (3 samples):

PFBS (ng/l)	PFOS (ng/l)	PFOA (ng/l)	HFPO-DA (ng/l)
<0.27	11	43	<1.4
0.87	7.8	27	<1.4
0.94	12	40	<1.8

- Acrylamide: The facility uses a polyacrylamide-containing chemical, triggering monitoring & reporting requirements in the absence of any 2025 sampling/analysis results
- TMDL Limits: The TMDL limit supersede the TMS Spreadsheet..
- Updated Reasonable Potential Analysis: New influent sample and three effluent samples tables. Lear collected one (1) influent sample and three (3) effluent samples on April 24, 2025 (influent and effluent), May 1, 2025 (effluent) and May 8, 2025 (effluent). Pollutant Group table issues (misreported units, failure to identify J value, inconsistencies with lab sheets for lab QL, ND values not flagged with "<". etc. Some insensitive ND reports (not meeting DEP TQLs). Lab sheet information was used in the updated TMS to address Pollutant Group table issues. Older sampling data used when no new data or insensitive ND new data provided.
    - Influent Highlights (1 sample):
        - PFAS family chemicals detected.
        - The Table did not address temperature, TRC, Hexavalent Chromium, 4,6-Dinitro-o-cresol, P-chloro-m-cresol, acrylamide, Bis(2-Chloro-isopropyl)Ether, Gamma BHC.
    - Effluent highlights (3 samples):
        - Missing temperature, pH, zero TRC (but unidentified QL), several PFAS family chemicals, P-chloro-m-cresol, acrylamide, Bis(2-Chloro-isopropyl)Ether, Gamma BHC. Older sampling data was used when available. Assorted insensitive ND concentrations reported (required to be addressed as the pollutant being present at the insensitive ND concentration level per EPA Sufficiently Sensitive Rule).
        - Pollutant Group 1: Total Hardness ranged from 62.1 to 80.9 mg/l.
        - Pollutant Group 2 (Metals): Significant reduction on max metals concentrations from previous 2019 application sampling data. Detected metals included Aluminum, Boron, Hexavalent Chromium, Copper, Total Cyanide, Molybdenum, Nickel, Total Phenols, (Additional Total Iron and Manganese data from greensands filter sampling available)
        - Detected organics included:1,1-Dichloroethane, Methylene Chloride,
        - Other Toxics Pollutants and Hazardous Substances table left blank.
        - Table of Greensands Backwash-related effluent grab sampling shows spiking Total Iron levels above Chapter 93 WQS, and indicating facility is significant source of Total Iron mass loadings with spiking to the AMD-impaired Swatara Creek. It is also a significant source of Mn loadings, but no spiking above Chapter 93 WQS.
    - Greensands Filter-related effluent monitoring data (grab sampling): Showing Total Iron, Total Manganese, and Total Residual Chlorine (TRC) in the IWTP effluent. Backwash flows vary from zero to 15,000 GPD (alternate days) to the IWTP.

- **Color in Reasonable Potential Analysis:** The facility caused discoloration of the receiving stream in one incident. Color in water may be caused by the presence of minerals such as iron and manganese or by substances of vegetable origin such as algae and weeds. Color tests indicate the efficacy of the water treatment system. The Platinum-Cobalt Scale (Pt/Co scale or Apha-Hazen Scale) is a color scale that was introduced in 1892 by chemist Allen Hazen (1869-1930). The index was developed as a way to evaluate pollution levels in waste water. It has since expanded to a common method of comparison of the intensity of yellow-tinted samples. It is specific to the color yellow and is based on dilutions of a 500 ppm platinum cobalt solution. The ASTM has detailed description and procedures in ASTM Designation D1209, "Standard Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)." (Wikipedia). APHA/Pt-Co/Hazen Color ranges from zero for distilled water to 500 for waste water discolored by undesirable impurities and organic materials. 500 depicted as yellow wastewater. (Wikipedia cited source).
    - Chapter 93.7 indicates a maximum 75 PT-Co WQS, to protect PWS waters with no other colors perceptible to the human eye.
    - **Color Monitoring is being required due to stream discoloration incidents.**

Constituent	PENTOXSD Limit (ug/l)	Application Influent Concentration (Octagonal Pit sampling location) (ug/l)	Application Effluent Concentrations (ug/l)	2011 Application Effluent Concentrations (ug/l)
Color*	NA	50 Pt-Co 200 (2011) 80 (2025)	70 Pt-Co max 55 Pt-Co avg. of 3 (2019) 25 max and 21.667 avg. of 3(2025)	60 Pt-Co max 53 Pt-Co avg. of 3

- **Updated Toxic Management Spreadsheet (TMS)**:

☑ *Recommended WQBELs & Monitoring Requirements*

No. Samples/Month: 4

	Mass Limits		Concentration Limits						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Total Antimony	0.27	0.42	26.6	41.5	66.5	µg/L	26.6	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Copper	Report	Report	Report	Report	Report	µg/L	25.0	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Iron	Report	Report	Report	Report	Report	µg/L	4,327	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Manganese	Report	Report	Report	Report	Report	µg/L	2,747	THH	Discharge Conc > 10% WQBEL (no RP)
Total Silver	Report	Report	Report	Report	Report	µg/L	4.86	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Thallium	0.011	0.018	1.14	1.78	2.85	µg/L	1.14	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Zinc	Report	Report	Report	Report	Report	µg/L	160	AFC	Discharge Conc > 10% WQBEL (no RP)
Acrylamide	0.016	0.025	1.6	2.49	3.99	µg/L	1.6	CRL	Discharge Conc ≥ 50% WQBEL (RP)
3,3-Dichlorobenzidine	0.011	0.018	1.14	1.78	2.85	µg/L	1.14	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Hexachlorobutadiene	0.002	0.004	0.23	0.36	0.57	µg/L	0.23	CRL	Discharge Conc ≥ 50% WQBEL (RP)
4,4-DDT	0.000007	0.00001	0.0007	0.001	0.002	µg/L	0.0007	CRL	Discharge Conc ≥ 50% WQBEL (RP)
4,4-DDD	0.00002	0.00004	0.002	0.004	0.006	µg/L	0.002	CRL	Discharge Conc ≥ 50% WQBEL (RP)
alpha-Endosulfan	Report	Report	Report	Report	Report	µg/L	0.27	CFC	Discharge Conc > 25% WQBEL (no RP)
Heptachlor Epoxide	0.000007	0.00001	0.0007	0.001	0.002	µg/L	0.0007	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Toxaphene	0.00001	0.00001	0.0009	0.001	0.002	µg/L	0.0009	CFC	Discharge Conc ≥ 50% WQBEL (RP)

LearTMS2PDF.pdf

- **Updated Chemical Additive List**: The facility is proposing several new Chemical Additives and/or increased Chemical Additives usage rates, but did not provide the required Chemical Additive request forms to allow for their authorization in the updated Application. The Chemical Additive conditions set forth the process for authorization of new or increased chemical additive loadings (going forward).

Application-identified Chemical Additives: The term "chemical additive" means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater.

- The 11/3/2016 DEP Letter approved a number of chemical additives, with the letter noting the following:
  - The proposed chemical additives are allowable at the maximum rates.
  - Please note that Formula 2340 (GMF2340H) is approved on the basis of the Application information regarding product decay rate (60%) and application assurances that no organic compounds (other than the Pollutant Group Tables 3 through 6) were found as stated within the NPDES Application Form "Pollutant Identification and Analysis" Item 2.a (GC/MS "Five Peaks" Pollutants).
- Previous Approved Chemical Additives and Approved Usage Rates: The 2025 Application indicated several new chemical additives (Formula CSC-3570 and CSC-7105) would be proposed and some higher max usage rates, but no new and/or updated Chemical Notification forms for the new additives or increased usage rates were submitted for Department approval. Proposed Wastewater Treatment Chemicals and previously approved Chemical Additives:

Product	Usage	Max Daily Usage (lbs/day unless indicated otherwise)	Comment
Wastewater treatment chemical per application	**-**	**-**	**-**
Sodium hydroxide	Water conditioning	90 GPD	Injected into chemical coagulation and precipitation stage prior to clarifier.
Ferric Chloride (Kemira PIX-311)	Water conditioning	190 GPD	35 -45% Iron trichloride per MS-DS Injected into chemical coagulation and precipitation stage prior to clarifier.
Celaform Perlite (unexpanded)	filter aid/coagulant	12.2	Sodium potassium aluminum silicate
Perlite (expanded/activated)	filter aid/coagulant	Included with Celaform Perlite above	Amorphous Alumina Silicate
CSC-2343	flocculant	3.5	Not found on Chemical Additive List.
CSC-1858	defoamer	5.2	WQS: 0.70 mg/l
CSC-2742	Flocculant	4.5 gal/day	**Acrylamide-containing** **WQS: 0.00007 mg/l**
Chemical Additive per application	**-**	**-**	**-**
Formula 2211F (sodium hydroxide)	Sulfite treatment for oxygen removal	8	Boiler chemical additive. Notification-calculated WQBEL: 0.373 mg/l WQS: 0.3070 mg/l Injected at Dyeing & Finishing Process (including boiler) via chemical feed pump.
Formula 2188F	pH and alkalinity adjustment for boiler feed water	15	Boiler chemical additive (condensate/Make up tank) Notification-calculated WQBEL: 1.423 mg/l WQS: 1.17 mg/l (chronic) Injected at Dyeing & Finishing Process (including boiler) via chemical feed pump.
Formula 2340 (GMF2340H)	Neutralizing amine for steam condensate	8	Notification-calculated WQBEL: 0.206 mg/l WQS: 0.17 mg/l

			Injected at Dyeing & Finishing Process (including boiler) via chemical feed pump to steam line. Chemical Additive Supporting Calculations provided with notification.
Polyplex 271	Molybdate scale inhibitor for boilers	18	Boiler treatment chemical Notification-calculated WQBEL: 8.745 mg/l WQS: 7.19 mg/l Injected at Dyeing & Finishing Process (including boiler) via chemical feed pump to feed water lines to each boiler.
Formula 3020-F	Defoamer	2.5	Notification-calculated WQBEL: 0.779 mg/l WQS: 0.6410 mg/l Injected at WWTP effluent going to Outfall #001. Diluted 5:1 with water and fed to WWTP 100 feet before it reaches Swatara Creek

Development of Effluent Limitations

Outfall No.	002 - 010	**Design Flow (MGD)**	0 (stormwater only)
	40º 33' 25.81" (002)		-76º 23' 21.97" (002)
	40º 33' 25.81" (003)		-76º 23' 21.97" (003)
	40º 33' 24.96" (004)		-76º 23' 20.78" (004)
	40º 33' 23.55" (005)		-76º 23' 17.17" (005)
	40º 33' 22.31" (006)		-76º 23' 15.18" (006)
	40º 33' 11.00" (007)		-76º 23' 16.00" (007)
	40º 33' 29.01" (008)		-76º 23' 23.78" (008)
	40º 33' 24.55" (009)		-76º 23' 17.61" (009)
Latitude	40º 33' 21.70" (010)	**Longitude**	-76º 23' 15.75" (010)

Wastewater Description: Stormwater

Permit Limits and Monitoring:

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
All Stormwater Outfalls	**-**	**-**	-
pH	Report – **9.0** SU	**Inst. Min - IMAX**	Chapter 95.2 limit for max, but only report for minimum due to potential historic legacy mining impacts in terms of lower pH and acid rain. Retained as General Permit PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products) and ELG parameter.
Chemical Oxygen Demand (COD)	Report	**IMAX**	Retained as General Permit PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products) and ELG parameter. PAG-03 statewide BPJ Benchmark applies.
TSS	Report	**IMAX**	Retained as General Permit PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products) and ELG parameter. PAG-03 statewide BPJ Benchmark applies
Total Nitrogen (TKN and Nitrate-Nitrite as N measured in same sample)	Report	**IMAX**	General Permit PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products)
Total Phosphorus	Report	**IMAX**	General Permit PAG-03 Appendix Q (Textile Mills, Apparel and Other Fabric Products)
Total Iron	Report	**IMAX**	Retained due to TMDL considerations for all stormwater outfalls and is Appendix H parameter.
Additional Outfall No. 007 & 009 parameters	-	**-**	-
Oil & Grease	**30.0**	**IMAX**	Retained because facility has waste oil storage and handling onsite, in addition to truck traffic with leakage potential. Appendix H and J parameter. Chapter 95.2 limit

Comments:

- Stormwater Outfalls/Drainage Areas: See Table below for summary. Outfall coordinates have been updated in this permit. For general reference:

- Stormwater Outfalls Nos. 002 – 006; 008-010 discharge to Swatara Creek. Outfall Nos. 009 and 010 are new to the NPDES Permit.
- Stormwater Outfall No. 007 discharges to Wideawake Creek (UNT to Swatara Creek) and includes a co-located industrial LFG-to-Energy Plant. Sheet flow to Swatara Creek from this area is also likely. The 2025 Module 1 contained 2024 stormwater sampling for this outfall only. The adjacent sister site (Lear Knitting Mill) has its own IW Stormwater General Permit No. PAG032375, and discharges its stormwater to Wideawake Creek (upstream of Outfall No. 007).
- Stormwater Outfall No. 009 discharges to Swatara Creek and includes the captive IWTP and water supply reservoir receiving treated groundwater remediation/clean-up flows. Not previously monitored.
- The application figures are unclear about stormwater drainage on the Railroad side (also Tulpehocken Street/Route 125 side) of the main plant building (other than section that would drain to controls directing flow to Outfall No. 007). Any industrial activity/material handling outside of the Outfall No. 007 drainage area would require an NPDES permit amendment application.

- No representative Outfalls: Monitoring of all outfalls required in this NPDES Permit term. No adequate technical case has been made for representative outfalls. The 2025 NPDES Permit Application did not include stormwater sampling data (other than 2024 Outfall No. 007 data). The 2011 NPDES Permit allowed for annual inspections in lieu of sampling, resulting in little stormwater data available via EDMR (with them sampling one outfall per year in general). See Compliance section regarding their inability to inspect assorted stormwater outfalls due to excess vegetation and/or sediment covering for a number of years (i.e. discharge quality not checkable). Accumulated sediment, staining, and algae are potential pollutant signs. The Department will reconsider the case for representative sampling during the next NDPES permit renewal and/or amendment application.
- Obsolete 2011 NPDES Permit Stormwater parameters (ELG parameters including BOD5, Total Chromium, Total Sulfide, Total Phenols): Determined to unneeded due to use of other indicator constituents and limited available 2017 – 2024 EDMR (generally only one outfall sampled per year) data:
  - BOD5: Generally below PAG-03 benchmark.
  - Total Chromium: <0.01 mg/l
  - Total Sulfide: 0.005 – 3.1 mg/l (Outfall 005) detected. Outfall No. 007 had several high results (1.6, 2, <2). However, the sulfate Chapter 93 WQS is 250 mg/l max (when PWS might be impacted).
  - Total Phenols: 0.014 mg/l – 0.06 mg/l range (Outfall 007) with assorted <0.05 NDs. However, the Chapter 93 WQS is 0.005 max mg/l (when PWS might be impacted). In the absence of a downstream PWS surface water intake within 5 miles, no additional monitoring will be required at this time.
- Annual Stormwater Inspection Report Information: The 2025 NPDES Permit Application included 2019 – 2024 Annual Stormwater Inspection Reports per Department request which noted significant O&M/potential noncompliance issues. The 2011 NPDES Permit allowed inspections in lieu of sampling, but O&M issues did not allow for complete inspections with some noted O&M problems extending over multiple inspection years. Issues reported included:
  - 2019: Outfall 005 was not accessible due to vegetation issues and therefore no visible discharge observation. They included an updated PAG-03 Annual Report, apparently for the adjacent sister site, but it is unclear.
  - 2020: Close inspection of Outfall No. 008 was not possible due to unsafe access. They included an updated PAG-03 Annual Report, apparently for the adjacent sister site, but it is unclear.
  - 2021: No observations of discharges from 002, 003, 004, 005, 006, and 008 blamed on excessive vegetation limiting access. Vegetation needed to be removed prior to next inspection event per Report recommendation. 006 was unable to be located and was last observed covered with soil. The Outfall is in need of repair. Outfall 007 was noted to have excessive vegetation that needed to be removed to provide clear access for future inspections.
  - 2022: Outfall Nos. 002, 003, 004, 005, 006, and 008 had no visible discharge with note that the northeastern portion of the facility could be cleaned up to improve the Site's housekeeping. Outfall 006 was unable to be located and was last observed to be covered with native soil, and needed to be uncovered and repaired to ensure stormwater is draining properly. The Outfall is in need of repair. Outfall 007 was noted to have a cloudy discharge with algae deposits/stains and excessive vegetation. Outfall 008 surrounding area should be cleared of vegetation to allow for safe access for future inspections. Outfall 008 was not inspected due to excessive vegetation.
  - 2023: Outfall Nos. 002, 003, 006, and 008 had no visible discharge. It was recommended that Outfall 002, 003 area be cleared of vegetation and new signage installed. 004 had excessive vegetation with red (iron) staining noted. 005 had excessive vegetation with algae growth noted, with new signage recommended. Sediment was observed to have completely covered the outfall 006 structure, with the outfall in need of repair. Outfall 007 was noted to have "suds" and algae, with vegetation removal needed for clear access and new signage should be added. Outfall 008 was not located and noted to be covered

by native soils. Repairs are needed to uncover the outfall and ensure it is functioning properly. New signage should be installed.

- 2024: Assorted outfalls were not accessible for inspection due to excessive vegetation growth, including 002, 003, 004, 005, 006, 008. Outfall 007 was noted to have excessive vegetation with algae deposits/stains and need for new signage.
- Report-identified Significant material exposed to precipitation in last 3 years:
  - Drums of waste oil stored in the containment area beside the octagonal pit (up to 50 drums);
  - Dyes and chemicals stored in totes temporarily located in the dye and chemical loading dock Nos. 6 & 7 containment area during the unloading process;
  - Empty totes, drums and containers located in the Nos. 6 & 7 dye and chemical loading dock area;
  - Machinery and other equipment stored outside the plant. The equipment and machinery stored outside is clean and essentially free of contaminants;
  - Fuel oil, during delivery to one (1) 250-gallon fuel oil aboveground storage tank (AST) located inside of the wastewater treatment plant and (1) 500-gallon fuel oil AST located outside the plant adjacent to the water tank pump house; and
  - Wastewater during collection and conveyance across Swatara Creek and in outdoor WWTP units (i.e. open octagonal pit and WWTP units)
  - External 20,000-gallon No. 2 fuel oil AS is owned/operated by PGE/INGENCO and is located in front of the plant building (Railroad street side).
  - Waste containers: Residual waste generated by Lear is placed in waste containers located throughout the property. The majority of the plant trash is placed in a compactor that feeds a 40 cubic yard container, both located in Dock #7 on the eastern side of the plant building. Stormwater from this area is conveyed to the WWTP. Roll-off containers of up to 40 cubic yards are used for storage of fabric that may be reprocessed or returned to the customer. These containers are used as needed and located on the eastern side of the plant building.
  - Fuel Oil Unloading Area for Tank 014A (500-gallon No. 2 fuel oil) flows into stormwater lines that flow to Wideawake Creek.
- General Stormwater BMPs (PPC Plan Section 6.1):
  - Traditional stormwater management practices at the plant include catch basins, the stormwater piping system, and culverts in some areas of the site. The catch basins are cleaned on a regular basis to ensure that they do not become clogged with dirt and debris.
  - Most of the area surrounding the plant is covered with asphalt. The asphalt area is designed to channel stormwater to catch basins or to Swatara Creek via permitted outfalls (Outfall Nos. 001 through 008, and Outfall No. 010).
  - Stormwater on the WWTP side of the facility is either directed into the wastewater treatment process or is discharged to Swatara creek via sheet flow or permitted Outfall No. 009.

- Stormwater PPC Plan/ICP issues:
  - 2025 PPC Plan needs 2025 non-stormwater certification and current signatures. Attached 2020 SPCC Plan may need updates (changes in site personnel, updated 2025 signatures, etc.).
  - April 2018 PGE/INGENCO Integrated Contingency Plan (ICP): Need to update to address IW stormwater requirements if not addressed under the Lear PPC Plan/ICP. Also need to update for changes in personnel, up-to-date signatures/certifications, etc. Not prepared by a PA PE, but a Virginia PE. Name change or new client (Riverview Power-INGENCO versus PGE).

Updated 2025 Stormwater Outfall Information*

Outfall #	Drainage Area	% Paved	Description from Module 1 and Stormwater Annual Inspections
002	**74,758** SF (previous permitting assumed 30,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 30,000 SF drainage area. Outfall not accessible for inspection due to excessive vegetation growth. Removal recommended.

			2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant): Fuel oil tank, parts, old equipment, scrap metals and waste containers. On Tulpehocken Street side of plant building. Revised Site Drawing: On Tulpehocken Street side 2014 Annual Stormwater Inspection: Paved driveway and loading dock area off front of manufacturing building facing Tulpehocken Street (Route 125) drains through pipe under building. 2013 Annual Stormwater Inspection Report: Noted only surplus machinery and material handling equipment without potential for stormwater contamination will be stored outdoors and will be covered whenever practical 2011 Annual Stormwater Inspection: Indicated Docks 3 & 4 plus portion of asphalt-paved employee parking within this drainage area drains via 15-inch corrugated plastic pipe. Previous Module 1 Sampling data included: 106 mg/l COD; 0.089 mg/l Al; 0.17 mg/l Total Iron; 0.014 mg/l Total Phenols, and 6000/100 ml Fecal Coliforms.
003	**61,692** SF (previous permitting assumed 30,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 30,000 SF drainage area. Outfall not accessible for inspection due to excessive vegetation growth. Removal recommended. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Parts, old equipment, scrap metals and waste containers. Includes Warehouse area, propane tank, propane rack, porta-john, and roll-off dumpster Revised Site Drawing: Includes Warehouse area, propane tank, propane rack, porta-john, roll-off dumpster. 2014 Annual Stormwater Inspection: Roof drains noted. 2013 Inspection noted outfall pipe was partially submerged during the inspection. 2011 Annual Stormwater Inspection: Indicated 18-inch corrugated metal pipe discharge. Previous Module 1 Sampling data included: 0.12 mg/l Aluminum; 0.36 mg/l Total Iron; 0.019 mg/l Manganese; 0.019 Total Phenols; >6000/100 ml Fecal Coliforms.
004	**114,397** SF (previous permitting assumed 50,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 50,000 SF drainage area. Outfall not accessible for inspection due to excessive vegetation growth. Removal recommended. 2019 Report indicated any debris around this Outfall should be removed. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Fuel oil tank, parts, old equipment, scrap metals and waste containers. Includes Finishing Plant area, HVAC (with cyclones and baghouse), and roll-off dumpster. Revised Site Drawings: Includes Finishing Plant area, HVAC (with cyclones and baghouse), and roll-off dumpster for in the collection system.

			2014 Annual Stormwater Inspection: Roof drains noted. 2011 Annual Stormwater Inspection: Indicated 40-inch diameter manhole from Warehouse plus roof drains drains to 24-inch corrugated metal pipe. Previous Module 1 Sampling data included: 0.03 mg/l Aluminum; 0.18 mg/l Total Iron; and 39/100 ml Fecal Coliform.
005	**111,762** SF (previous permitting assumed 50,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 50,000 SF drainage area. Outfall not accessible for inspection due to excessive vegetation growth. Removal recommended. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Fuel oil tank, parts, old equipment, scrap metals and waste containers. Including dye house. Revised Site Drawing: Including dyehouse 2014 Annual Stormwater Inspection: Paved driveway and loading dock area off front of manufacturing building facing Tulpehocken Street (Route 125) drains through pipe under building. 2011 Annual Stormwater Inspection: Indicates 24-inch wide by 24-inch long manhole in the grass outside the building wall adjacent to Finished Goods Loading Dock drains to this outfall. This manhole collects drainage from several roof areas and directs flow to 18-inch corrugated plastic pipe. Previous Module 1 Sampling data included: 0.03 mg/l Aluminum; 0.10 mg/l Total Iron; 0.006 mg/l Manganese; and 8,200/100 ml Fecal Coliform.
006	**112,632** SF (previous permitting assumed 100,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 112,600 SF drainage area. Outfall not accessible for inspection due to excessive vegetation growth. Removal recommended. 2021 Inspection noted outfall needed repair and was covered by soil. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Fuel oil tank, parts, old equipment, scrap metals and waste containers. Includes dye/chemical storage Revised Site Drawing: Includes dye/chemical storage and apparently dye/chemical unloading area (if not discharging to Outfall #010). 2014 Annual Stormwater Inspection: Roof areas 2011 Annual Stormwater Inspection: Discharge to 16-inch corrugated metal pipe. Previous Module 1 Sampling data included: 0.06 mg/l Aluminum; 0.13 mg/l Total Iron; 0.016 mg/l Manganese; and 640/100 ml Fecal Coliform.
007	282,755 SF (previous permitting assumed 120,000 SF)	100%	**New Mod 1 description**: Paved roadway and buildings. Drainage area includes Octagonal Pit, runoff from SW side of property, and oil storage/unloading area. Drain covers are used in this area during unloading operations Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. **New Module BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the

			facility to the outfall. Storage tanks, if present, have secondary containment **New 2024 Annual IW Stormwater Inspection Report**: Estimated 120,000 SF drainage area. No evidence suggesting possible discharge pollutant visible at outfall. Recommended removal of vegetation surrounding Outfall 007 to provide clear access for future inspections. New signage should be added. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Fuel oil tank, parts, old equipment, scrap metals and waste containers. Receives LFG-to-Energy Facility runoff and includes raw wastewater pump station octagonal pit. Same as above. **NOTE: Outfall to Wideawake Creek, but some potential for discharge to Swatara Creek that will be addressed via NPDES Permit Application-defined new outfall #010 (alternately identified as Outfall #009 or #007I in NPDES Permit Application).** Plus a fuel oil unloading area. Drain covers are used in this area during unloading operations. Revised Site Drawings: Includes Tulpehocken Street side drainage, warehouse, roof run-off, fuel oil unloading area, fuel oil tank, wastewater pump Station (**a.k.a. Octagonal Pit was noted to be within the Swatara floodplain and location of high fecal coliform concentrations**), Waste oil storage and loading area, and receiving run-on from Ingenco Landfill Gas-to-Energy (LFG) Facility within property boundaries discharging either to Outfall #007 (Wideawake Creek). 2014 Annual Stormwater Inspection: Paved driveway in along front of the building (parallel to Tulpehocken Street) and unloading areas for fuel oil. Outfall pipe extends beyond perimeter fence to discharge to Wideawake Creek. The end of the 43-inch diameter pipe is guarded with bars to prevent unauthorized access to the property. Catch basins drain to main pipe. 2013 Inspection noted concrete headwall. 2011 Annual Stormwater Inspection: Discharge to 10-inch corrugated metal pipe. Previous Module 1 Sampling Data included: <5 SU pH (sample out of hold time); 0.02 mg/l Total Iron; 0.018 mg/l Total Phenols; 3/100 ml Fecal Coliforms. New Module 1 (2024 sampling data): 6.53 SU pH; 3.3 mg/l BOD5; <5.0 mg/l O&G; <4.0 mg/l TSS; 1.67 mg/l TN; no TP data; <0.010 mg/l Chromium; 0.062 mg/l Iron; <2.0 mg/l Total Sulfide; and <0.05 mg/l Total Phenolics.
008	**38,958** SF (previous permitting assumed 35,000 SF)	100%	**New Mod 1 description**: Paved roadway, buildings, grass-lined swale. Old Module 1 Description: Discharge from grass lined swale, with no activity/material storage area within drainage area. **New Mod 1 BMPs**: Grass-lined swale that is inspected regularly. There is no storage of potential pollutants within the drainage area of this outfall. **New 2024 Annual IW Stormwater Inspection Report**: Estimated 35,000 SF drainage area. No evidence that would suggest the possible discharge of any pollutant was visible near the outfall. Excessive vegetation surrounding this outfall should be removed to permit access and future inspections. 2019 Inspection noted outfall was not accessible. 2020 inspection indicated close inspection not possible due to unsafe access. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Propane tank, grass-lined swale Revised Site Drawing: Propane tank extends into this drainage area.

			2014 Annual Stormwater Inspection: Outfall #008 is grassy swale that drains a small portion between the north end of the building and the fence at the property line. **Will only be monitored upon request.** 2011 Annual Stormwater Inspection: Indicated 8-inch PVC pipe discharge, said to be adjacent to #007 outfall pipe. Module 1 Sampling Data: Not available – no discharge during single sampling event.
009 (NEW)	**~559,340 SF**	**100%**	**New Mod 1 description**: Wastewater treatment plant, driveway, and flood diversion Old Module 1 Description: Not addressed in Module 1. Revised Site Plan drawing indicates sheet flow to Swatara Creek (with no identified stormwater outfall). This area (on the opposite side of Swatara Creek from main plant) contains industrial activities/material handling areas including: Electrical substation, Facility water reservoir/pumphouse (with reservoir receiving treated groundwater per EPA corrective action involving groundwater remediation), IWTP including existing lagoons, chemical treatment, clarifiers. Stormwater run-off would drain to Swatara Creek. NOTE: Application indicates no stormwater discharge from IWTP Outfall #001. **New Mod 1 BMPs**: Dedicated stormwater discharge swale that is inspected regularly. There is no storage of potential pollutants within this drainage area that are exposed to stormwater. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: WWTP, water reservoir, electrical substation on opposite side of Swatara Creek from main plant area. **Revised Site Drawing: Includes WWTP fuel tank, Ferric Chloride tank, Sodium hydroxide tank,** **Annual Stormwater Inspection: DEP files are unclear whether they specifically inspected this area as it was not identified as a stormwater drainage area in previous permitting.** **Module 1 Sampling Data: Not available – no sampling was done.**
010 (NEW)	**18,676 SF**	**100%**	**New Mod 1 description**: Paved roadway and buildings. Old Module 1 Description: Fuel Oil tanks (in containment area), parts, old equipment, scrap metals, and waste containers. January 20, 2017 NPDES Application Letter indicated that the outfall consisted of a 4-inch PVC pipe receiving roof drainage. NOTE: NPDES Renewal Application identified this outfall as #007P or #009, but redesignated #010 due to previously created Outfall #009 for ITWP side of Swatara Creek. For purposes of this permit, the Outfall #010 is assumed to be representative of any Outfall #007 drainage area flow that goes to Swatara Creek (as opposed to Wideawake Creek). **New Mod 1 BMPs**: SPPC Plan, housekeeping, inspections and prevention. Dedicated storm drains convey stormwater flow from the facility to the outfall. Storage tanks, if present, have secondary containment. **2025 PPC Plan Description Table 2 (Stormwater Outfalls at the Lear Dye and Finishing Plant)**: Fuel oil tank, parts, old equipment, scrap metals and waste containers. **Revised Site Drawing:** Annual Stormwater Inspection: DEP files are unclear whether they specifically inspected this area as it was not identified as a stormwater drainage area in previous permiting. Previous Module 1 Sampling Data Included: 0.112 mg/l Aluminum, 0.03 mg/l Total Iron, 0.015 mg/l Manganese, and 7,800/100 ml Fecal Coliforms.

*2025 Module 1 indicated 38.6 acre (1,679,199 SF) total site, 32.3 acre (1,405,050 SF) industrial area, 45.7% impervious. Total Lined Area per identified IW Stormwater Outfall Nos. 002 through 010 is 1,374,970 SF.

Development of Effluent Limitations

Outfall No. 101 **Design Flow (MGD)** 0.020 MGD to IWTP only.
Latitude 40º 33' 26.09" **Longitude** -76º 23' 17.80"
Wastewater Description: Internal Monitor Point flow (Greensands Filter Backwash Flow from treatment of VOC-contaminated groundwater for removal of metals) being directed to the IWTP lagoons.

Permit Limits and/or monitoring requirements:

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
Flow	Report (MGD) Report (MGD)	Monthly Average Daily Max	Flow reporting is required to estimate loadings.
Filter Backwash Discharges/day	Report (occur/month Report (occur/month	Minimum Monthly Average Average Monthly	Reporting requirement to address number of backwash filter flow occurrences.
TSS	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	Reporting upon request to determine loadings on IWTP.
TDS	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
pH	Report	Inst. Min - IMAX	See above
TRC	Report Report	Monthly Average IMAX	See above
Aluminum	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Antimony	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Arsenic	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Chromium, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Copper, Total	Report (lb/d) Report lb/d) Report	Monthly Average Daily Max Monthly Average	See above

	Report	Daily Max	
Iron, Dissolved	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Iron, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Lead, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Manganese, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Nickel, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Selenium, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Zinc, Total	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
1,1,1-Trichloroethane	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
1,1-Dichlorethane	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Cis-1, 2-Dichloroethylene	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Tetrachloroethylene	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above
Trichloroethylene	Report (lb/d) Report lb/d) Report Report	Monthly Average Daily Max Monthly Average Daily Max	See above

Comments:

This is an internal monitor point for Greensands Filter Backwash (groundwater remediation) flows going to the IWTP. Monitoring is needed to determine impacts on IWTP and failure of permittee to supply previously requested information (8/21/2017 Greensands Filter Approval with Conditions Letter). Constituent monitoring will be upon request (weekly at first).

- Flow and Backwash Filter Discharges per Month: Needed to track loadings on IWTP.
- TSS and TDS: Monitored to determine loadings on the IWTP.
- Metals: The groundwater monitoring does indicate detected metals (arsenic, barium, total chromium, copper, zinc) with insensitive non-detect levels for other priority pollutant metals. However, most of the groundwater metals loadings have already been directed to the IWTP, except for settlement within the Water Supply Reservoir. Therefore, metal loadings is not likely to change except in terms of concentration at the IWTP itself (possibly impacting IWTP lagoon biology near influent point). The NPDES Permit Application-identified metals with Reasonable Potential will be monitored upon request. Lead will also be monitored upon request to determine if concentrated plugs might have potential for pass-through (groundwater ND level of 10 ug/l is too insensitive to determine if lead might be an issue).
- Organics: The groundwater monitoring does indicate non-detect concentrations for assorted organics in various site wells. The organics identified in the NPDES Permit Application update (Greensands Filter) will be monitored upon request (as the RCRA Treatment System would remove the VOCs prior to process wastewater reaching plant) in the absence of updated influent sampling data (all Pollutant Groups) to determine if the Greensand Filter Backwash has elevated VOC levels.
- Total Residual Chlorine: Will be monitored due to Greensands Filter Hypochlorite usage and detected TRC in plant effluent (without any IWTP disinfection stage). Other chlorine byproducts will be monitored in the No. 001 effluent only.

Public Comments on 2019 Draft NPDES Permit: The public comments were summarized for brevity. DEP responses are bolded.

11/14/2019 US EPA Public Comment E-mail: EPA performed a limited review of the draft permit based on the Chesapeake Bay Total Maximum Daily Load (TMDL) requirements. Previous non-site-specific objection letter issues were addressed through the subsequent changes to Part A of the revised draft permit, by increasing the monitoring frequency of the Total Nitrogen species and Total Phosphorus to twice per week, and to Part C of the revised draft permit by modifying the Chesapeake Bay boiler plate language requirement that authorizes the use of offsets, credits, and trading; "therefore, EPA hereby lifts the specific objection to the Guilford Mills, Inc. Penn Dye and Finishing Plant NPDES permit". **Noted**.

1/17/2020 Lear Corporation (Thomas Pullar, ERG) "Response to Proposed Consent Order and Agreement dated 10/31/19": This separate letter regarding the concurrent CO&A negotiations submittal was found to contain several overlapping comments/information addressed below. Several issues overlapped in terms of potential CO&A changes:

- **Lear Letter CO&A Item 3.a, h (Coordination with Permits)**: Lear "requests coordination of the requested applications between the NPDES and COA documents". **No voluntary CO&A has materialized to allow for coordination.**
- **Lear Letter CO&A Item 3.e (Relief from new Fecal Coliform limits)**: Lear requested interim relief "from the imposition of fecal coliform limits required by the October 22, 2019 draft NPDES permit for the facility until the disinfection system is designed, permitted, and constructed. Installation of interim disinfection facilities will serve limited use and result in a waste of resources for little benefit. This relief should be included in the terms of the CO&A.
    - **Phasing in the new fecal coliform limits could not be granted because the PA water quality criteria for fecal coliform had been adopted prior to July 1, 1977. The current criteria for fecal coliform were in place prior to July 1, 1977. This facility is discharging to a pathogen-impaired stream, i.e. the facility has been contributing to ongoing stream impairment.**
    - **No voluntary CO&A has materialized to allow for coordination. The 10/22/2019 Draft NPDES Permit Letter noted the voluntary CO&A option was available for fecal coliform.**

1/23/2020 Lear Corporation (Thomas Pullar, ERG) Letter Public Comments on Draft NPDES Permit, Cover Letter, and Fact Sheet: Missing Attachments requested by 1/27/2020 DEP (Berger) E-mail. The Public Comments were keyed to the October 22, 2019 Draft NPDES Permit Cover Letter Items. For brevity, "no comment" responses are omitted below. Responses are bolded.

Item 1 (NPDES versus WQM Permits/New limits & Monitoring Requirements on PED): Lear Corporation believes that DEP Cover letter language indicating the existing as-built/as-operated Industrial Wastewater Treatment Plant (IWTP) design "predates current technical guidance" is inconsistent with the NPDES permit being based on US EPA Effluent Limitation Guidelines and applicable PA DEP regulations. **The public comment is mistaken. In Pennsylvania, there are both Part I NPDES Permits (discharge) and Part II Water Quality Management (WQM) Permits (see 25 Pa. Code Chapter 91) for the construction, operation & maintenance, and modification of industrial wastewater treatment plants (IWTPs) based upon PA statutes, regulations, and policies including treatment plant design guidance.**

- **The NPDES Permit includes standard language that NPDES Permits do not authorize construction or modifications to meet NPDES Permit limits (see related comment below).**
- **The ~1976 WQM Permitted IWTP design was not originally designed to meet current (2025) DEP technical design guidance or regulatory requirements and/or industry state-of-the-art (including liner system design). Nor was it specifically designed to handle subsequent changes in NPDES permit limits (such as the existing Chesapeake Bay limits). For a simple analogy, a 1970s-era car design simply does not meet current Federal emissions standards and safety standards without significant upgrading. Please note that "Replacement-in-kind" does not apply in event of:**
    - **Changes in treatment unit technology**
    - **Removal (without replacement) from service of permitted WWTP treatment impoundments.**
    - **Previously unapproved units/technology installed after original 1977 WQM permitting**
    - **Substantial changes in applicable technology standards (including impoundment liner system design standards) when old technology standards simply do not meet current industry standards, EPA/DEP technical guidance, and possibly present regulatory requirements.**
    - **Changes in previously approved design capacities/loadings**
    - **Changes in overall permitted IWTP treatment process**

Item 1 & 1.c.iii (Unpermitted Lagoon Closures) and Item 1.c.iv (AMD metals/Chemical Treatment System): Lear Corporation indicated its belief that the IWTP "lagoon closures" were "approved by PA DEP since the lagoons were no longer used and adversely impacted water quality (i.e., Total Nitrogen increased through the lagoons". "Lear believes the lagoon closure did not adversely impact IWTP capacity. Lear Corporation also indicated that the existing as-built/as-modified IWTP hydraulic, organic and solids capacity will require further evaluation as provided for in the NPDES permit/CO&A. Lear pointed to PADEP Waste Management Program RSW lagoon closure. Lear noted that it had found the closed lagoons served no purpose (including solids settlement). Lear indicated: "Evaluation of the IWTP will be performed to determine the plant's hydraulic, organic, and solids capacity, and once determined and agreed to by PA DEP, any necessary changes required to meet the NPDES limits will be designed, permitted, constructed and operated". Lear indicates it would evaluate the IWTP Chemical Treatment system using the PA Domestic Wastewater Facilities Manual (DWFM) and other applicable design criteria.

The 1/17/2020 Lear Corporation Draft CO&A Letter lagoon closure chronology referenced 4/29/2011 NPDES Permit renewal application revisions. The Letter stated that Earthres (its technical consultant) contacted Mr. Michael Brunamonti (then DEP Clean Water Program Chief) on same date "regarding the information needed for Water Quality Program approval of the closure plan". The Letter indicates that the response was to update the (pending) NPDES permit application which was being updated that day per the chronology. The letter also noted there were subsequent DEP Inspections. **The Department does not concur. Many projects require permits from multiple DEP programs before implementation. The DEP Waste Management Program approval did not substitute for WQM permitting requirements.**

- **Lear-identified Contacts: Lear Corporation has provided no written documentation that the DEP Clean Water Program authorized any such IWTP modification in accordance with existing NPDES/WQM permits/regulatory requirements. The Department has no record of any such 4/29/2011 Telephone Contact decision-making or communication. Lear is free to contact the identified DEP contact person (the retired Michael Brunamonti now in private practice) to obtain an affidavit supporting its belief that the 4/29/2011 telephone discussion included WQM permitting requirements (not just the ongoing NPDES permit renewal application review and same day submitted NPDES permit application updates). The statement that DEP inspectors inspected the facility is irrelevant as DEP inspectors do not have the authority to waive WQM permitting requirements.**
- **WQM Permitting: It is the obligation of the permittee to obtain all required permits/authorizations and to submit permit applications when needed. WQM permitting relies on treatment plants being built and operated in accordance with the WQM permit and approved WQM permit application. See the PA Clean Streams Law and PA regulations (especially PA Chapters 91) for the statutory/regulatory framework for WQM permitting. See the DEP SOP No. BPNPSM-PMT-024 (Water Quality Management Permits for Industrial Waste Treatment Facilities) regarding applicable technical guidance documents and overall permitting process. Please note the Department is in the process of substantially updating the PA Domestic Wastewater Facilities Manual (DWFM).**
- **NPDES Permit Limitations: The subsequently renewed 2011 NPDES Permit did not supersede the existing WQM Permit or WQM permitting requirements. NPDES Permits often reference proposed site changes (plant upgrades/expansions; conversion to UV disinfection; etc.) that require later WQM permitting. Per standard NPDES Permit language:**
  - **NPDES Signature Page Item 4: "This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit."**
  - **NPDES Permit Part A.III.C.1 (Planned Changes in Physical Facilities): "The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes."**
  - **NPDES Permit Part C.II.C: This new standard IW condition only applies to effluent discharge limits.**
- **IWTP Design Capacities (Hydraulic, Organic, and Solids):**
  - **Reduced IWTP Capacities: Removal of permitted treatment units (two lagoons) and other changes in the IWTP treatment process necessarily impacted total IWTP capacities. The as-built/as-modified/as-operated IWTP treatment capacities have been changed to an unquantified degree from that set forth in original WQM permitting.**
  - **Future WQM Permitting (Rerating of Design Capacities): Lear has committed to submitting an updated hydraulic/organic/solids capacity evaluation & rerating of the as-built/as-operated IWTP. You have also committed to submitting a Part II WQM Permit Application to rerate the IWTP as needed, to address any previous IWTP facility changes from original permitting, to address any**

IWTP modifications as set forth in the separate CO&A, and to address any other needed/desired IWTP modifications. While the Department has granted the requested change in NPDES Permit Basis flow (from 2.0 MGD to 1.2 MGD), this does not change the WQM permit.

- **Needed Future Capacities: Lear should also determine what capacities are needed in the future 5-year NPDES Permit Term and within the applicable long-term planning time-frame. The Department generally recommends a minimum 20-year time-frame but notes site-specific considerations can include additional site-specific considerations.**
- **Design Standards: The Department notes Lear's commitment to meet current technology standards as part of any future WQM permit amendment application.**

Item 1.a (New Limits effective on PED: Federal ELG Limits (BOD5, COD, TSS, Sulfide, Total Phenolics, and Total Chromium))): Lear Corporation indicated the production data in the NPDES permit renewal application was outdated. The Letter noted new information would be found in Attachment A for use in calculating 40 CFR Effluent Limitation Guideline (ELG) permit limits. The new projections include "anticipated average production values" "based on 7% annual growth from Calendar Year 2019 over the next five (5) years". No changes to the existing facility was identified in the revised application pages which also indicated no "new source" was proposed. At a 11/14/2019 PGJTA Meeting regarding potential Lear connection to the PGJTA POTW (summarized below), there was mention of potential consolidation of corporate production at this facility, but no written follow-up was provided. In terms of updated Application data: **The Department has updated the Draft NPDES Permit to address the Lear-identified 2025 NPDES Permit Application update production rates, which addressed Lear-anticipated production rates for the next five (5) years. In event of unexpected future production growth, Lear can submit a Major NPDES Permit Amendment Application to allow for recalculated production-based limits (40 CFR 410).**

Item 1.b (New Limits effective on PED: Fecal Coliform Limits): Lear indicated that any NPDES Permit limits should be based upon industrial facility regulations and not those of Chapter 92a.47. Lear indicated that it will evaluate disinfection alternatives to meet the fecal coliform limits (both emergency disinfection method and permanent method via WQM permitting). The use of UV disinfection might not be applicable as this is a dye with color in the stream adversely impacting UV transmissivity. **The Lear comments are moot.**

- **Lear has indicated that it will propose chlorine disinfection going forward, based on its own completed evaluations (not provided to the Department).**
- **Lear is discharging to a pathogen-impaired stream, which requires protection due to documented fecal coliform issues at the plant. Industrial discharges are subject to Chapter 92a NPDES regulations and Chapter 93 Water Quality Standards. The Chapter 92a.47(a.4, 5) fecal coliform secondary treatment standards represent a statewide Best Professional Judgment (BPJ) regarding achievable disinfection that coincides with the applicable Chapter 93.7 Bacteria Water Quality Standards (Fecal coliforms/100 ml) for this major discharge to the pathogen-impaired receiving stream:**
  - **During the swimming season (May 1 through September 30), the maximum fecal coliform level shall be a geometric mean of 200 per 100 milliliters (ml) based on a minimum of five consecutive samples each sample collected on different days during a 30-day period. No more than 10% of the total samples taken during a 30-day period may exceed 400 per 100 ml.**
  - **For the remainder of the year, the maximum fecal coliform level shall be a geometric mean of 2,000 per 100 milliliters (ml) based on a minimum of five consecutive samples collected on different days during a 30-day period.**
  - **New E Coli monitoring & reporting requirements have been incorporated due to new Chapter 93 Water Quality Standards and DEP requirements (check IW Effluent SOP).**

Item 1.b.iv (New Limits Effective on PED: Notification Requirements relating to Potential Fecal Coliform Exposure): Lear Corporation inquired regarding the regulatory basis for notification requirements to the PA DEP Safe Drinking Water Program, OSHA and PA Department of Labor & Industry. Lear Corporation noted that it was under PA Department of Labor & Industry requirements and Federal OSHA. **As stated in the Draft NPDES Permit cover letter: "The Department's mandate includes the protection of the public (including site workers and visitors). Within thirty (30) days of this letter provide proof of contact with the following agencies regarding the potential exposure of site workers and visitors to pathogens in the process water system and wastewater management facilities": PA Department of Labor & Industry, OSHA and DEP Safe Drinking Water Program.**

- **The Department has general regulatory authorities to protect the public (including site workers and visitors).**
- **Lear Corporation has identified one source of pathogens (the plant process water) with worker exposure. Lear Corporation has not provided documentation ruling out potential sources in the process wastewater sources with potential public exposure. PA DEP Safe Drinking Water Program might have applicable**

permitting/regulatory requirements if the problem originates in the water supply. OSHA and the PA Department of Labor & Industry would have interest in any potential worker exposure.

- **If Lear Corporation does not intend to inform those agencies, please notify the Department immediately in which case the Department will directly contact the applicable agencies to ensure any required follow-up. The Department remains concerned that the entry point of pathogens into the process water/wastewater system remains unknown, with potential health and safety impacts.**

Item 1.c (New Limits Effective on PED: TMDL-based permit limits for AMD metals – Aluminum, Manganese, and Total Iron): Lear requested deletion of the new NPDES permit limits with substitution of a TMDL Waste Load Allocation (WLA) instead. Lear indicated its belief the wastewater had not changed significantly over the years other than the Greensands Filter loadings. Lear stated the lack of coverage under the applicable TMDL (Upper Swatara Creek Watershed TMDL – AMD) was not its fault and that it should not be punished. Lear withdraws groundwater from the site in accordance with EPA approval (presumably referencing the existing RCRA Clean-up for Volatile Organic Chemical remediation). The AMD metals are present in the groundwater and not attributable to Lear. Lear notes that the portion of groundwater metal loadings that go to land reclamation might be a benefit to the overall watershed. Aluminum limits are premature as Lear is not presently proposing use of aluminum-based chemicals at its facility. Lear requested a TMDL WLA be added to the NPDES permit instead rather than having to meet stream standards. **The Department cannot grant this request**:

- **Protection of the waters of the Commonwealth is not "punishing" any applicant or permittee. This Major IW facility is directly contributing to metal loadings in the Swatara Creek watershed, which is subject to the Upper Swatara Creek Watershed TMDL (AMD issues including Total Aluminum, Total Manganese, Total Iron, Dissolved Iron, TSS, and pH). The Lear comment acknowledged AMD metals are in the groundwater, and Lear-provided Greensands Filter-related IWTP effluent sampling data has indicated substantial AMD metal loadings on the receiving Swatara Creek watershed. In addition, your facility is currently using an iron-based wastewater treatment chemical (Ferric Chloride) with over-usage being a potential source of iron, with aluminum-based alternate chemical products available for the same usage.**
- **The referenced EPA approval is for the RCRA Cleanup project (organics in groundwater), but EPA has issued no NPDES Permit for the IWTP facility's discharge and did not address AMD-constituents in the RCRA groundwater remediation project (which focused on chlorinated organic pollutants). To date, Lear has not identified the AMD concentrations in the site groundwater or ruled out other sources of AMD metals in the site effluent, with potential over-usage of the Ferric Chloride wastewater treatment chemical being a potential source.**
- **In the future, the Department may revise/update the 3/1/1999 Upper Swatara Creek Watershed TMDL (AMD) to set forth facility-specific Waste Load Allocations (WLAs) mass limits based on an overall re-evaluation of the stream and documented facility discharges, but that is outside the scope of this NPDES Permit. The TMDL development process is separate from NPDES Permitting, with separate provisions for public comment/involvement. To clarify terminology:**
  - **TMDL—Total maximum daily load: The sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures. (Chapter 96.1)**
  - **WLA—Wasteload allocation: The portion of a surface water's loading capacity that is allocated to existing and future point source discharges. (Chapter 96.1). Please note that TMDL WLAs can be in the form of concentration limits, mass loading limits, or both.**
  - **TMDL Process: See Chapter 96, especially Chapter 96.4 (TMDLs and WQBELs) and 96.7 (Public participation)**
  - **Water Quality Criteria for AMD Metals: See Chapter 93 and the Upper Swatara Creek TMDL for the applicable water quality criteria.**

Item 1.d (New Limits Effective on PED: Total Residual Chlorine (TRC) Monitoring) and Item 5.b (TRC Monitoring): Lear requested that the TRC monitoring be required only if chlorine is used for disinfection (not daily). Lear noted it did not supply any TRC data in the NPDES Permit Renewal application on the basis that the IWTP did not use chlorine. Lear noted that chlorine is not used at the facility, and that Greensands Filter (with Hypochlorite system)-related monitoring showed TRC levels below 0.1 mg/l. **This public comment is moot because the permittee indicates that it will be pursuing a chlorine disinfection system to address fecal coliforms in the site effluent and 2025 Application Update Attachment D acknowledged presence of chlorine in the discharge (triggering standard Part C Chlorine Minimization reporting requirements).**

Item 1.e (New Limits Effective on PED: TSS Concentration Limits): Lear requested that the TSS Limit omit concentration limits. Lear noted that the TSS limits are based on Federal ELG limits (mass loadings). Lear also stated that it did not believe removal of existing lagoons resulted in any additional loading on the receiving stream. **The Department**

has eliminated the proposed TSS concentration limits due to existing mass loading limits (not based on the Federal ELG production rate but more stringent due to site-specific considerations during previous NPDES Permitting). Please note that Lear is being separately required to rerate the IWTP in terms of hydraulic, organic and solids design capacity via WQM permit requirements. In practical terms, your facility has reduced capacity to allow for settlement and/or other removal of solids from the wastewater stream due to removal of the two (2) previously permitted wastewater treatment lagoon impoundments.

Item 1.g - j (New Monitoring Effective on PED: TDS, Bromide, Chlorides, and Color): Lear requested monitoring for these constituents be dropped. No rationale was given. **The Department could only grant this request in part:**

- **Total Dissolved Solids (TDS): The Department does not believe monthly monitoring is unreasonable for a Major IW facility.**
- **Bromide and Chlorides: The updated Reasonable Potential Analysis allowed for dropping of these monitoring requirements.**
- **Color: Requiring monitoring of effluent color from a textile facility using dyes is not unreasonable, when there are documented cases of color changes in the receiving stream (dye or iron-related), i.e. major releases when lesser releases might have gone unnoticed. See also the narrative Technology-Based Effluent Limit found in NPDES Permit Part A.I Additional Requirements Item 4 prohibition: "Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))".**

Item 2.a (Phased-In WQBELs with 3-Year Schedule of Compliance: Ammonia-N Limits): Lear objected to ammonia-N concentration limits. Lear stated: "Using the criteria that the modified IWTP process "might" result in local stream impairment is not an acceptable basis for limits determination". **The Department interprets the comment as a request for deletion of the WQBEL. The Department cannot grant this request.**

- **Revised Ammonia-N limits: The Department Water Quality Modeling developed the WQBEL to ensure compliance with the Chapter 93 Water Quality Standard in the receiving Swatara Creek. In practical terms, Ammonia-N limits are required to protect the waters of the Commonwealth, but that the facility appears able to meet them upfront (i.e. no schedule of compliance is needed). In practical terms, the 1977 WQM permit indicated the IWTP was originally designed to meet more stringent Ammonia-N limits.**
- **The Lear objection is incorrect: DEP permitting procedures include scientifically-based procedures to protect the public health, safety, welfare and environment (including waters of the Commonwealth) during critical design conditions (NPDES permit base flow discharge rates; Q7-10 low flow conditions) per regulations. Permit limits/monitoring development does include consideration whether negative impacts to the waters of the Commonwealth "might" occur (i.e. probabilistic estimation due to limited available monitoring data and potential effluent variability impacting the receiving waters) using EPA-approved statistical methodologies. In practical terms, the facility has historically exceeded the new proposed concentration limits, but appears to be able to meet them going forward per recent EDMR data.**

Item 2.a.ii (Phased-In WQBELs with 3-Year Schedule of Compliance: Request for Deletion of DO Limit): Lear objected to DO limits. Lear stated: "Using the criteria that the modified IWTP process "might" result in local stream impairment is not an acceptable basis for limits determination". **See response above. In addition:**

- **The Department Water Quality Modeling developed the WQBEL to ensure compliance with the Chapter 93 Water Quality Standard for Dissolved Oxygen (DO) in the receiving Swatara Creek. Aquatic life dies when there is insufficient oxygen in the stream.**
- **Your facility is a Major IW Discharger discharging to a stream with limited ability to handle the combined Biochemical Oxygen Demand (BOD5) and Chemical Oxygen Demand (COD) effluent mass loadings. The Three-year compliance schedule will allow Lear to design and install post-aeration as needed, with interim monitoring to establish the existing DO effluent concentration base-line in case your IWTP can meet the limit without post-aeration.**

Item 2.b (Phased-In WQBELs with 3-Year Schedule of Compliance: Request for Deletion of Total Phenolics Water Quality-Based Effluent Limit): Lear did not think that a toxics limit below the ELG is warranted. Lear noted that laboratory analysis for Total Phenolics averaged 34 ug/l for the three additional samples with a maximum of 53 ug/l. **The updated Reasonable Potential Analysis allowed deletion of the proposed WQBEL.**

Item 2.b (Request for deletion New Monitoring Requirement: Toxics 2, 3, 7, 8-TCCD): Lear noted the lab report reported the results as less than 5 picograms/liter (pg/l), which is less than 5 x 10^{-6} ug/l. No DEP Target QL for TCCD was listed on the NPDES Permit Application instructions. No TCDD is managed onsite according to Lear personnel and it should not be present in the discharge. A copy of the lab report for TCC in influent and effluent samples is attached with revised NPDES form for Pollutant Group 6, page 2 of 2 (influent and effluent). Based on this clarification, Lear requested the TCDD monitoring requirement be dropped. **This change has been granted on the basis of revised application information clarifying that the non-detect level was 5 picograms/liter (pg/l), not 5 ug/l. The EPA Sufficiently Sensitive Rule requirements have been addressed.**

Item 3 (Greensands Filter Backwash Waste Stream: IMP No. 101 Monitoring Requirements): Lear requested that the proposed IMP No. 101 monitoring frequency be reduced to monitoring upon request only. Lear noted the Greensands Filter treats groundwater under the 1982 US EPA "Final Administrative Order on Consent" and 2015 "Statement of Basis" to remove Volatile Organic Chemicals (VOCs). The contaminated groundwater is pumped from three production wells to contamination migrating from the site. The contaminated groundwater is pumped and treated (originally carbon filtration and currently aeration) and discharged into the water reservoir in accordance with EPA requirements. The water reservoir is the source of site process water. Process water quality and quantity is critical to Lear Dye and Finishing Plant operation. The water reservoir water is mixed with Borough water supply water. Lear noted that water quality (hardness, iron, manganese) in the groundwater production wells "was impacting the process and greensands filters were installed to improve water quality". Greensands filter Backwash flows average approximately 20,000 GPD versus an IWTP flow of approximately 800,000 GPD. Monitoring the backwash water quality shows water quality comparable to that observed in the production wells for VOCs and higher iron and manganese which is to be expected. The discharge is part of an approved pumping system that is monitored by the US EPA and PA DEP. Additional monitoring and reporting is redundant and burdensome with no real benefit. **The Department will require flow monitoring (volume and # backwashes/day) but has otherwise changed to monitoring upon request for this internal monitoring point due to previously collected effluent sampling data (Greensands Filter project related) that clarified metals and chlorinated organic concentrations in the IWTP effluent (Outfall No. 001).**

Item 4 (Updated IW Stormwater Requirements: Parts A.I.D, A.I.E, A.I.F; Part C.VII): Lear indicated it found the stormwater-related requirements hard to understand. Lear noted that the majority of the area draining to the outfalls are from roofs and parking. Lear has no objection of monitoring for areas with the greater chances for contamination, but objects to monitoring all the runoff from all of the site where there is little to no chance of contamination. Lear requests and clarification included:

- Statement that the Stormwater Requirements are "hard to understand"**: The public comment did not explain what NPDES application requirement and/or regulatory requirement was hard to understand, i.e. no specific question that could be answered directly.**
    - **See the Redraft NPDES Permit language and Fact Sheet Addendum Sections (Compliance and Effluent Limits for Stormwater) for what is being required, and what information was available to the Department in its decision-making.**
    - **See the DEP/EPA websites for general information about stormwater permitting requirements. Other internet stormwater-related resources are also available.**
- Request for relief from monitoring requirements: **See revised Stormwater requirements set forth in the Redraft NPDES Permit and Fact Sheet Addendum sections above. No further relief can be granted at this time due to Application informational deficiencies (including lack of stormwater outfall sampling data), assorted stormwater outfall issues noted in the 2019 – 2024 Annual Stormwater Inspection Reports, etc. The Department will re-evaluate stormwater monitoring requirements in the next NPDES Permit renewal.**
- Request for reduction to PA General Permit PAG-03 parameters of pH, oil & grease**: Individual IW NPDES permits can include more stringent requirements than the (minimum) statewide IW Stormwater General Permit PAG-03. Chapter 95.2 TBELs are applied as appropriate.**
- Request for one representative outfall to address all other site stormwater outfalls, with monitoring for areas if benchmarks are exceeded, monitoring can be expanded**:**
    - **Lear Corporation has not made an adequate technical case that one outfall is representative of all other stormwater outfalls and/or a specified subset of outfalls/stormwater sheet flow drainage areas. Please also note that when there are potential sources in multiple areas, monitoring one area would not catch a spill, leak or release in another stormwater drainage area.**
    - **See Redraft NPDES Permit conditions applicable in event of benchmark exceedances. In event of permit limit exceedances, the burden would fall on the permittee to investigate and otherwise take corrective action as needed.**
- Lear requested the right to request reduction of the monitoring requirements in the future based on no indication of contamination in the samples: **All permittees have the option of pursuing NPDES permit amendments in**

the future, if they can make an adequate technical case. Please note the IW Stormwater General Permit PAG-03 represents the minimum monitoring & reporting requirements per statewide DEP BPJ.

- Lear requested that Outfall No. 007 be eliminated as it appears to be for the Ingenco facility. Lear does not own the Ingenco facility and they are responsible for their own spill plans and NPDES Permit**: This request cannot be granted. This existing Stormwater Outfall No. 007 is on the Lear Dye & Finishing Plant and receives Lear Dye & Finishing plant stormwater discharges. As it is an existing Lear Dye & Finishing Plant Outfall, Lear is responsible for addressing all pollutants being discharged from it. Lear also did not identify any existing separate IW Stormwater NPDES permit for the Ingenco facility.**
- Lear clarified that Guilford Mills document-referenced Stormwater Outfalls No. 011, 012, 015, 016, and 017 applied to the Lear Knitting Mill (under separate NPDES Permit)**: Noted.**
- NPDES Permit Part VII.E (PPC Plan) Commitment**:** The Item 8 Lear response included a commitment to prepare an updated site PPC Plan. **The 2025 PPC Plan/ICP was received. See the NPDES Permit for applicable minimum PPC Plan requirements.**

Item 5 (General Monitoring Requirements: Requests for Reduction in Monitoring Requirements): Lear requested the following changes to the NPDES Permit monitoring requirements:

- Item 5.b (TRC monitoring only if chlorine is used for disinfection)**: See above response.**
- Item 5.c (Reduction of Toxics Monitoring to once per month)**: The standard minimum toxics monitoring frequency is weekly monitoring when there is a permit limit. Monthly monitoring is being required for interim monitoring (prior to new permit limit effective date) and/or when only monitoring is required per the Reasonable Potential Analysis.**
- Item 5.e (Reduction of Chesapeake Bay monitoring to once per month) & Item 6 (Lear commitment to purchasing nutrient credits)**: This request cannot be granted because the Chesapeake Bay TMDL (nutrients) and Chesapeake Bay nutrient trading requirements do not allow for monthly monitoring for this major IW & Significant Chesapeake Bay facility. See the Chesapeake Bay TMDL Watershed Implementation Plan (WIP) and Chapter 92a.12.**
- Item 5.f (Request for not having to meet DEP Target Quantitation Limits (QLs))**: The Department is not mandating that all sampling analyses meets DEP Target QLs, but the EPA Sufficiently Sensitive Rule requires the Department to treat any insensitive ND (non-detect) concentration as that constituent being present at the insensitive ND concentration.**
    - **Not meeting DEP TQLs can result in unnecessary permit limits/monitoring requirements and even potential compliance action (if the insensitive ND level is higher than the permit limit). Please note that the DEP PAG-03 now specifies that stormwater analysis meet DEP TQLs for assorted constituents.**
    - **The "J" option applies when a lab MDL is more sensitive than the lab QL, with the Lab able to identify a "J" value in the lab sheet that meets or is more sensitive than the DEP TQL.**
    - **Lear did not make a technical case that any DEP Target QL cannot be met due to site-specific reasons (such as matrix interference).**

Item 8 (NPDES Part C.II.F (O&M Plan) within 1 year of PED): Lear agreed to prepare an Operation & Maintenance (O&M) Plan. **Noted.**

Item 9 (NPDES Permit Part C.II.H (Responsible IWTP Operator named within 60 days of PED): Lear disagrees with the need for a certified operator at the site on the basis that Chapter 302.103 exempts NPDES permitted IWTPs from that Chapter's requirements. Lear stated: "The plant will be operated following applicable permit and regulatory requirements". The cited Chapter 302.103 exception included: "An industrial wastewater treatment system that is an NPDES permitted point source discharge"**. The Department cannot concur. The Department has authority to issue site-specific permit conditions (Chapter 92a.46) as needed on a case-by-case basis, to ensure protection of the waters of the Commonwealth. The Department is imposing a site-specific permit condition to require designation of a Responsible Certified Operator due to:**

- **The long-term pattern of noncompliance and/or O&M issues documented in the Compliance Section and previous 2019 Fact Sheet.**
- **The permittee's failure to maintain and operate the IWTP in compliance with existing WQM permitting. Removal of two wastewater treatment units (wastewater treatment impoundments) has changed the IWTP treatment process. Consequently, the substantially modified IWTP treatment process must be operated by a skilled responsible person fully understanding the (modified) treatment process and PA regulatory/permit requirements. A certified operator has documented training and experience (i.e. skills), and regulatory responsibilities in terms of Chapter 302 Section L (System Operation) requirements.**

Item 10 (IWTP WQM Part II "Clean up" Application (addressing all IWTP changes since original WQM permitting) due within 90 days of PED): Lear agreed to the requested Part II WQM Permit Application, signed by a PA Professional Engineer, within the proposed schedule. The design basis would follow the PA Domestic Wastewater Facilities Manual (DWFM) and PA Public Water Supply Manual as applicable. Lear noted lagoon closure followed PADEP DEP Waste Management Program-approved plans. Lear indicated a desire to further discuss the future Part II WQM Permit application requirements. **Noted. The Department is available for a pre-application meeting, but would need tentative date(s) of availability, proposed list of participants, detailed meeting agenda, and description of proposed IWTP/other changes to allow for scheduling of a productive meeting. See the PACT meeting option on the DEP website if you want to meet with multiple DEP programs at the same time.**

Item 11 (Request for deletion of NPDES Permit Part C.I.J (Groundwater Monitoring Report regarding existing groundwater conditions), 14 (Part C.VIII Groundwater Remediation and Treated Well Water Reuse), 15.e (WQM Transfer Special Conditions): Lear stated its belief that the imposition of the proposed monitoring and reporting requirements as part of the NPDES permit is duplicative, burdensome, unnecessary and unwarranted. Lear stated its belief that the lagoons are covered and bonded by a Chapter 287 permit-by-rule (PBR) under the PADEP Waste Management Program. Lear noted that its consultant (EarthRes) has performed the quarterly groundwater monitoring and reported as required. Lear agreed to send a copy of the (PADEP Waste Management Program) required groundwater reports to the DEP Clean Water Program. Lear agrees to submit the "installation reports" (due to relocation of groundwater monitoring wells due to a flood diversion project) that are signed and sealed by a PA-licensed professional geologist to the DEP Clean Water Program. **The Department acknowledges the new Lear commitments but cannot delete these requirements.**

- **Existing WQM-Permitted IWTP Groundwater Monitoring System: The 1977 DEP Clean Water Program WQM Permit No. 5476203 (now being transferred) included groundwater monitoring system and reporting requirements that the facility has not been meeting.**
    - **The US EPA RCRA Order-related VOC groundwater remediation and the PADEP Waste Management Program (closed impoundment) Chapter 287 PBR-related monitoring requirements did not supersede or modify the existing WQM Permit requirements.**
    - **Your PA Professional Geologist has not provided an LPG-certified professional judgment that the existing US EPA RCRA Order-related VOC groundwater remediation monitoring and the PADEP Waste Management Program PBR-related monitoring addresses all WQM IWTP permit requirements. The US EPA and different DEP Programs can have substantially different requirements.**
    - **If your PA Professional Geologist has been preparing a plan to relocate existing permitted groundwater wells (per public comment), then he/she should be able to provide a report on existing groundwater conditions and monitoring system conditions.**
- **Additional WQM Permitting Requirements: Lear's public comments indicated a plan to modify the WQM-permitted IWTP groundwater monitoring system requiring a Part II WQM permit application with all supporting documentation and technical justification. This includes completed PA Professional Geologist-signed and sealed Modules 19 (Supplementary Geology and Groundwater Information) and Module 20 (Impoundments) and all other relevant information.**

Item 13 (Requested deletion of Water reservoir-related condition Part C.VIII (Water Supply Basin) and X (Solids Management)): Lear requested deletion of this condition because the water reservoir is not a PA DEP-regulated unit. **The Department cannot grant this request. This water reservoir is receiving contaminated groundwater from the RCRA groundwater remediation project. Contamination must be assumed to be present and must be addressed by periodic reservoir cleaning and potentially groundwater monitoring (requirements to be determined).**

- **The Part C.VIII condition pertains to any emptying and cleaning of the water reservoir that results in point discharges to the waters of the Commonwealth subject to NPDES permitting. The condition is based on similar conditions for water treatment plant reservoir cleaning that would also discharge through the permitted outfalls or elsewhere. In addition, the Department notes that this reservoir has been receiving AMD-contaminated groundwater, resulting in likely build up of AMD-contaminated sediments. There is potential for direct impact to the AMD-impaired receiving stream whenever the reservoir is cleaned out. Direction of Water Reservoir flows to the IWTP/outfall would require prior Department written approval.**
- **The Part C.X (Solids Management) conditions are the standard conditions for an impoundment-based treatment system except as modified to account for potential water reservoir cleaning.**

Item 14 (Request for deletion of Condition Part C.IX (Groundwater Cleanup & Reuse (Process Water) – Volatile Organic Chemicals): Lear requested deletion of this condition because the groundwater clean-up is regulated by the US EPA. **The Department cannot grant this request. The Part C.IX condition (Groundwater Remediation and Treated Well Water Reuse as Process Water) is also now applicable because groundwater remediation wastewater**

(Greensands Filter Backwash) is now being directed to the IWTP (subject now to both NPDES/WQM permits and regulations). This condition is based on the standard Part C groundwater remediation conditions except as modified to address site-specific circumstances/history.

New Comment (Potential Future PGJTA connection): Lear request that PA DEP consider this discharge option as part of the NPDES permit review. Lear noted that it intends to pursue wastewater discharge to the Pine Grove Joint Treatment Authority (PGJTA) sewage treatment plant, and that such connection would eliminate the need for IWTP upgrades. Lear noted that there have been meetings. Lear noted that "with your assistance, we can implement the changes required to make this a reality within a comparable timeline requested in the draft NPDES Permit, which will be to the benefit of Lear, Pine Grove, PA DEP and the Swatara Creek Watershed". **This public comment is obsolete because Lear indicated this option is not being pursued.**

New Comment (Request to discuss Public Comments and Other Issues): The 1/24/2020 Lear (Thomas Pullar) E-mail indicated Lear would like to discuss the NPDES Permit and undefined other issues with the Department as soon as possible. **This Redraft NPDES Permit public comment period allows for additional Lear public comment, but is not an open-ended process, in addition to the previous long-term permitting hold period. See also Communications Log for application history and the 1/23/2025 Meeting notes (above).**

The 10/22/2019 Guilford Mills LLC (ERG consultant) E-mail included two initial public comments (on the 10/22/2019 e-mailed copy of the 10/22/2019 Draft NPDES Permit documents):

- **Change in client/site contact**: The client and site contact is now Stephen Vasko, not Mr. Hoskote (no longer the plant manager). Updated contact information submitted in separate 10/23/2019 E-mail (Vasko). **The 2025 NPDES Permit Application update information has been incorporated into the NPDES Permit.**
- **Request to not publish the PA Bulletin Notice for the Draft NPDES Permit**: This was requested to allow for time for the Guilford Mills review and potential modification of Issued Draft NPDES Permit. **The Department could not comply. The Department must comply with all statutory, regulatory and SOPs for public notice requirements including the PA Bulletin Notice. The public comment period includes time for applicant review (minimum 30-day period not starting until PA Bulletin Notice publication; additional 15 days automatically granted upon request; Department discretion to allow for public comment period extension for good cause). One of the purposes of the PA Bulletin Notice is to allow for public comments that might indicate a need for redrafting the permit. This Redraft NPDES Permit has a new public comment time-frame allowing for permittee review and comment.**

11/14/2019 Meeting Scheduled per PGJTA Request: The 11/14/2019 Meeting was scheduled with Guilford Mills, Pine Grove Joint Treatment Authority (PGJTA), and Schuylkill County Conservation District (SCCD) per 9/24/2019 PGJTA (KPI Consultant) E-mail request to discuss: Decommissioning the Guilford Mills Treatment Plant and sending the flow to the Pine Grove JTA plant, with pilot project to introduce the Guilford Waste stream to the Pine Grove JTA plant under controlled conditions with both influent and effluent sampling to verify the treatability of the wastewater. **The meeting discussion comments are moot because the permittee indicates connection to PGJTA is not being pursued**. **The 2025 NPDES Permit Update did not identify any floodplain project completed or proposed within the five (5) year NPDES permit term and/or any change in groundwater monitoring well locations. See communications log for further information on the referenced meeting discussion.**

11/20/2019: Guilford Mills LLC (Tom Pullar, ERG) E-mail(s), with 11/19/2019 Letters attached, requesting additional sixty days extension to the NPDES Permit public comment period and (separate) Draft CO&A response (due November 27, 2019). Letter also stated that Guilford Mills LLC had merged with Lear Corporation (and is no longer a legal entity), with request that all future communications go to Lear Corporation at the existing Guilford Mills LLC address. Permit Transfer Application documents would be submitted under separate cover. Date of submittal of the NPDES/WQM Permit Transfer Form was not provided.

- **The request for more public comment period time was granted, with a subsequent NPDES permitting long-term hold while the permittee chose to explore options such as connection to PGJTA. The Redraft NPDES Permit incorporates the new permittee.**
- **See Communications Log below for subsequent permitting communications.**

Communications Log & Site History:

2011: The previous NPDES Permit (administratively extended) issuance.
3/2/2016: NPDES Permit Renewal Application received.
3/9/2016: Completeness Call to Consultant (Tom Pullar, ERG Inc. as application contact): Discussed missing information (including unfilled out form items/table columns) and some conflicts. He indicated missing information would be provided and conflicts clarified. Highlights:

- Applicant: The GIF was completed for previous operator (Gold Mills LLC) rather than new transfer application operator (Guilford Mills Inc.) which has a different EIN#. HE IS SURE IT IS THE NEW PERMITTEE. APPLICATION AND CHECK WILL BE PROCESSED AS SUCH.
- PPC Plan: Need PPC Plan for review to verify compliance with PPC Plan Guidelines Section A and Stormwater Addendum Section A requirements either. HE WILL PROVIDE
- Process Flown (Groundwater Remediation Flows/Sewage Flows): Conflicting information on what happens to flow. HE WILL CHECK WITH PLANT TO MAKE SURE ALL REMEDIATED GW IS GOING INTO PLANT FOR USE AS PROCESS WATER (NOT TO WWTP) AND THAT THERE IS NO CROSS-CONNECTION OF SEWAGE INTO WWTP. ? HE HAS NOT YET TRACKED DOWN SOURCE OF FECALS, BUT DOES NOT THINK THAT THERE IS A CROSS-CONNECTION.
- Chemical Additives: Where are the referenced Chemical Additive Notification forms? No forms at present. HE WILL DOUBLE-CHECK WILL CLIENT, BUT NO FORMS PART OF CURRENT APPLICATION.
- E-maps shows a Guilford Mills surface water intake: HE WAS UNAWARE OF SURFACE WATER INTAKE AND WILL CHECK WITH CLIENT.
- Module 1 (Stormwater):
    - Item 2 (page 1): Do not leave column blank. What % impervious? WILL FILL OUT.
    - Item 3 (page 2): No representative outfalls? Will default to sampling all stormwater outfalls if nothing is shown to be representative of others. No treatment or point source controls? WILL CHECK WITH CLIENT ON REPRESENTATIVE OUTFALLS.
    - Stormwater Sampling Results (pages 4 – 5): Provide stormwater sampling data for each permitted stormwater outfall, including ELG and TMDL constituents per application), along with storm data for sampling event. WILL PROVIDE. MIGHT PROVIDE SCHEDULE FOR SUBMITTAL OF STORMWATER RESULTS AND THEN FOLLOW-UP WITH ACTUAL SUBMITTAL TO CLEAR COMPLETENESS STAGE.
    - Any Chesapeake Bay nutrient credits or offsets? If possible, provide Chesapeake Bay data in table form: THEY SAID THEY HAVE NUTRIENT CREDITS/OFFSETS, AND WILL PROVIDE INFORMATION. MAY ALSO PROVIDE SUMMARY OF CB DATA.

3/24/2016: Supplemental application information received. ("Revision 1" application pages in yellow)
3/25/2016: DEP (Berger) E-mail: Allowed for submittal of supplemental application information by 5/31/2016 (chemical additive forms; updated PPC Plan; Fecal Coliform clarification (due to high influent/effluent concentrations) plus additional stormwater sampling data when available within the next month or two. Provided some feedback on these issues for their consideration.
4/27/2016: NPDES Compliance Inspection Report (Inspector Jared Sabitsky) identifying noncompliance (inoperable final clarifier; insufficient lagoon freeboard; noticeable change in receiving stream color)
5/31/2016 (dated 5/27/2016): Supplemental Information received (narrative response to 3/9/2016 telephone conversation with this reviewer), including chemical notification forms and NPDES application chemical additive page (not colored). PPC Plan noted to be under separate cover.
7/14/2016: NOV issued (insufficient freeboard in lagoon; discoloration of receiving waters; out-of-service final clarifier subsurface sludge collection rake & surface skimmer since September 2014); use of unapproved chemical additives).
7/29/2016: DEP Letter regarding Chemical Additive notification requirements (based on deficient application information pertaining to chemical additives).
8/10/2016: DEP Technical Deficiency Letter
8/29/2016: Chemical Additive Notifications received.
9/9/2016: Response to 8/10/2016 DEP Letter received. Revised ("Revision 2") application pages in green.
10/28/2016: Supplemental application information received via e-mail. Supplemental information was incorporated into November 14, 2016 Submittal**.**
11/3/2016: DEP letter approving specific chemical additives
11/3/2016: Meeting Notes:

- Attendees: See sign-in sheet. New permittee personnel (plant and corporate) introduced at meeting.
- Chemical Additives: Authorization letter issued (copies given). Original will be mailed. The Department noted that the approval of the GMF2340H (a.k.a. Formula 2340) was based partly on NPDES Permit Renewal application that indicated no organic peaks in the GC/MS (other than identified pollutant group table constituents) for an additive already in use. Otherwise, the Department would have required additional information on the Chemical Additive Notification Form's manufacturer statements regarding a 60% decay rate (to explain how it applies – whether on day of usage, or otherwise).

- Possible Limits: The Department had evaluated the updated 10/28/2016 sampling and analysis data (with previously supplied application information) and let the permittee know that assorted new limits were coming: New ELG limits based on application-defined production rates, Reasonable Potential analysis for toxics, WQM Model 7.0 limits for DO/Ammonia-N, and fecal coliforms (present in three different permit renewal applications with pathogen-impaired receiving stream) & TRC (showed up in new analytical data even if not being used actively for disinfection). Bromides will be monitored.
- Within a week of the meeting, the new Permittee will submit for NPDES permit:
    - Four copies of 10/28/2016 NPDES Permit Application Update (including updated Pollutant Group tables)
    - Revised GIF Client section for name change to Guilford Mills LLC (and new applicant contact information), with verified EIN# and PA Department of State Entity number. The permittee noted that Lear had acquired the facility around 2012. If EIN# changes, possible permit transfer or permit transfer application withdrawal situation.
    - Expanded Well map showing the individual wells within ¼ mile of the facility (icon on figure could represent multiple wells or other features). The permittee believes that all wells were taken into account in terms of the EPA-authorized groundwater remediation project.
    - DEP M&C-required additional effluent chlorides sampling data (updating pollutant group table as needed). The permittee indicated that the sampling occurred but it had not been e-mailed or otherwise supplied per DEP M&C request.
    - SIC Code for Ingenco Landfill Gas-to-energy Facility SIC Code (facility within facility permit area and subject to stormwater requirements).
- Within 30 days of Meeting, the Permittee will provide their plan and schedule submittal date to otherwise update the NPDES application as desired by the Permittee: Otherwise, the Department would issue the Draft NPDES Permit based upon available information. They may pursue assorted options:
    - In-stream hardness sampling & analysis (at least one sample upstream of Outfall #001, under normal or near normal stream conditions)
    - Effluent Acrylamide sampling & analysis meeting Target QL
    - Justification for revised maximum monthly production peaking factor (1.16 estimated from current application) used to develop Federal ELG limits.
    - Other options with water quality-based limits (reducing NPDES permit basis from 2.0 MGD, additional site-specific stream data for inclusion in water quality modeling, etc.) including iron, copper, zinc, ammonia-N, DO, total phenolics, and several detected organics. The facility discharge has averaged ~0.5 MGD with daily max of ~0.8 MGD per recent DMRs (as opposed to 2.0 MGD NPDES permit basis flow).
    - Updated stormwater information to justify representative outfalls (individual outfall sampling & analysis data, details on what is in the drainage areas, etc.) or show that the outfall drainage area does not contain industrial activities or material handling areas (like parking lots, complete enclosure) along the lines of the new PAG-03 “no exposure area”. New Outfall #009 (IWTP and that side of stream) will be in permit in case that they want to define the area better or establish no-exposure areas. The Department noted that sampling was time-critical due to approaching cold weather (i.e. the Department will not wait until next Spring for stormwater sampling data). The Department also noted that representative sampling might not be acceptable if there are exposed pollutant sources (i.e. if there are tanks in several drainage areas, then monitoring might be required for both on the simple basis that there can always be a leak/release in one drainage area but not the other). Outfall #008 will only be monitored upon request as not industrial activitiy/material handling was indicated within the drainage area. Appendix Q applies to site. Additional appendix for onsite LFG-to-energy plant. Possibly additional constituents to IWTP area (no PAG-03 Appendix) like iron, but not yet determined. There will be additional stormwater BMPs for IWTP plant area in the Part C conditions.
    - An IWTP Engineering Evaluation to determine the as-built/as-modified IWTP’s hydraulic and organic loading capacities. The 1970s WQM Permit Application information is outdated and there is a concern that the facility might hit an unexpected capacity limitation as production increases or because of post-1970s permit limits not considered in original site design. The plant was designed, permitted and built in the 1970s (not designed to meet Chesapeake Bay limits or probable future permit limits), and has had clarifier problems, etc. Plant has increased production rate (25% increase in 2015 over previous years) and might run into capacity limitations at some point. Does the facility have adequate redundancy to comply with permit limits in event of equipment/unit downtimes (including preventive maintenance)? Sometimes original permitting design differs from the as-built/as-modified treatment plant. No WQM Part II Permit was issued for closure of IWTP lagoons or any post-1970s changes. Any Part II WQM Permit (such as for a disinfection system) would require determination of actual as-built/as-operated capacities. The Department generally recommends a 20-year planning horizons for STP upgrades, but a IWTP should be looking at potential production rates, permit limits, and need to either rehabilitate/upgrade or

replace an old aging IWTP that was not designed for current/future limits. NOTE: Plant personnel thought that the iron chloride system was added to address antimony issues circa 2006 or so.

- Future Draft NPDES Permit: Will include compliance schedule/TRE schedule for new permit limits (3-years standard time-frame) except as problems need to be corrected upfront. For example, the 2011 NPDES Permit does not allow for observable changes in stream (with expanded language in updated NPDES permit Part A template), so a discolored stream needs correction immediately. Likewise, a new or increased loading can trigger the need for immediate action (like very high chlorides/iron concentrations in effluent).
- DEP M&C is expecting some "deliverables" prior to final permit action (within 90 – 180 days): DEP M&C discussed compliance history (3 NOVs, clarifier not operating correctly during 3 inspections, observed change in stream color during previous inspections, etc.). previously requested information, etc. Preliminary penalty cost estimation was discussed. The following is needed to allow for resolution of compliance problems for permit action to allow for permit action, penalty estimate calculation, and address status of noncompliance:
    - When the new individual chemical additive usage started onsite.
    - Compliance Plan (for how to operate the old and potentially overloaded IWTP) to remain in compliance with thoughts given to preventive maintenance plan (including lagoon clean-out/inspection schedule), operating scenarios if equipment or units are not operating, etc. For example, do they have redundancy if the single site clarifier or other equipment/unit is not operating (due to problems, maintenance, etc.).
    - Previously requested effluent chloride sampling results. Plant personnel indicated that the sampling occurred and that the information could be provided.
    - Engineering Evaluation to see if IWTP needs to be upgraded/replaced to remain in compliance under permit basis flows and increased production loadings (hydraulic, organic, otherwise) in the future. It was noted that this evaluation could be done in a future NPDES permit compliance schedule/TRE conditions. DEP M&C noted its understanding that one of the remaining lagoons was originally designed and operated in conjunction with the two closed/removed lagoons, not the other remaining lagoon.
    - Any documentation of any DEP Clean Water Program approval of IWTP modifications (closure of IWTP lagoons). The Department noted that the IWTP was subject to a 1970s Part II WQM Permit for construction and operation in addition to NPDES permit. The available files do not contain a later WQM permit amendment or any Department correspondence allowing the modification(s) without a WQM Permit.
- Miscellaneous:
    - Tim Williams (previous site contact) is no longer at facility.
    - M&C noted that any evidence that the plant had spent money to solve the problem would be helpful for penalty calculation purposes (for the Permittee's benefit).
    - Permittee indicated that it was not doing any disinfection, but TRC was detected in the 10/28/2016 E-mailed analytical data. NOTE: Only sources would be pre-treatment of process water from reservoir (residual chlorine) or from usage of Ferric Chloride (wastewater treatment chemical) or other chlorine-containing products onsite.
    - Steve Pletchan (WQ Specialist Supervisor) is the DEP M&C contact for compliance issues.

11/14/2016 (dated 11/9/2014): Supplemental application information received ("Revision 3" with revised pages in yellow).
12/5/2016 (dated 12/2/2016): Guilford Mills Compliance Response received (information relating to NPDES Permit Renewal)
12/19/2016: DEP (Bellanca) E-mail to applicant containing sample draft Part A limits per applicant request (source being unissued draft NPDES Permit prepared for internal discussion prior to November meeting. NOTE: Assorted new limits had been noted at the November meeting, but draft document was not shared.
1/12/2017 (dated 1/10/2017): Supplemental application information received (fecal coliform and chlorides data).
1/23/2017 (dated 1/20/2017): Supplemental NPDES application information ("Revision 4") received. Revised pages were not colored.
2/10/2017: DEP E-mail to consultant asking for information missing from 1/23/2017 Supplement (i.e. stream hardness).
2/13/2017 (dated 2/10/2017): Stream hardness data received.
3/17/2017 (dated 3/16/2017): Continued Chloride/Fecal Coliform Monitoring data. An update on the status of the fecal coliform investigation was to be provided to the Department under separate cover per concluding paragraph.
4/4/2017 (dated 3/31/2017): Guilford Mills, Pine Grove Wastewater Treatment Plant Engineering Evaluation received (previously requested by DEP M&C to address concerns about modified Treatment plant hydraulic/organic loading capacities, etc.).
4/25/2017 (dated 4/23/2017): Guilford Mills Continued Chloride Monitoring Data submittal
5/3/2017 (dated 5/2/2017): "Greensand Filter" Notification of Water Treatment Improvements Submittal (groundwater well-water treatment system). The facility uses groundwater (including remediated groundwater under a RCRA CO&A) mixed with Pine Grove Borough PWS water as process water at the plant, with mixture treated through multimedia filters prior to usage. Reservoir water is also aerated to enhance mixing and prevent algae formation per submittal.

- The 313 GPM "Greensand filter" using "greensand" i.e. manganese dioxide-coated media) will treat groundwater (designed to remove iron and manganese from groundwater) prior to discharge to onsite reservoir (via the aeration nozzles which is the existing groundwater remediation system).
- The system will include a "four (4) quad auto backwashing system installed in a building adjacent to production well PW-4. Existing onsite tanks (previously used as sand filters and softening tanks might be reused for the greensand.
- The filter will operate in a continuous regeneration mode, wherein a predetermined amount of sodium hypochlorite will be supplied directly to feedwater prior to passing through the greensand filter media. The treated groundwater will be discharged to the onsite reservoir.
- Greensand filters require backwash to remove accumulated solids from the filter bed. Guilford Mill proposes to use water from the production wells to backwash the media filter, and expects to discharge 20,000 GPD backwash to the wastewater treatment system. Guilford Mills does not expect WWTP effluent quality to change.

5/11/2017: The Pine Grove Joint Treatment Authority (1.5 MGD POTW) requested a pre-application meeting regarding a proposed connection (and related requirements) of Guilford Mills effluent discharge. Pre-application meeting was subsequently scheduled. Date Unknown to this reviewer.
6/9/2017: DEP Letter requiring amending NPDES Permit Renewal Application for the proposed Greensand Filter Backwash flow. The Letter noted DEP written approval is required before directing such flows to the IWTP, and directed them to directly contact DEP Waste Management and US EPA about proposal (due to ongoing groundwater RCRA remediation under EPA order).
8/11/2017: Guilford Mill LLC submittal regarding Greensand Filter backwash flow, including HRG Inc. Report.
8/21/2017: DEP Approval with Conditions letter regarding Greensand Filter backwash flow, requiring updated application information (Influent and Effluent Pollutant Group Tables) and interim daily start-up monitoring.
3/6/2018: Guilford Mills-requested meeting to discuss sampling requirements (no other prior agenda). See sign-in sheet for meeting participants.

- New facility EHS Contact/Client Contact (Ms. Kelly Kester): She introduced herself. The onsite EHS position is new. EHS was previously handled by a corporate person based offsite. She has been onsite as of December. She did not yet have business cards.
  - She was still trying to get up to speed in terms of all EHS issues, having problems in accessing company files scattered in other offices. She indicated she was unaware of outstanding compliance issues.
  - Other Guilford Mills Personnel (attendees of 2016 Compliance Meeting):
    - Robert Kitchen (Facility Engineer and previous client/site contact) is gone. Norman Johnson is gone. Their departure was indicated as the main reason that Guilford Mills had not already followed-up regarding the Greensands Filter issues.
    - Sunil Hoskote is still the plant manager. Avtar Mavi is still with Guilford Mills.
  - The Department noted the new client contact information should be included in the NPDES Application GIF, and separate letter should be sent in for the near-by separate Guilford Mills facility covered by a PAG-03. The Department noted she could contact DEP Records Management to schedule a file review for available facility files.
- HRG Involvement: HRG (Mendinsky) noted that it had been called in on assorted site issues by Guilford Mills (IWTP Engineering Evaluation, Greensands Filter project), but was not involved in most of the NPDES permit renewal application and/or other plant issues. He had not been present in the 2016 Compliance Meeting.
- 8/21/2017 DEP "Greensands Filter" Letter Sampling Requirements: The Greensands filter would be treating VOC-contaminated groundwater, with unknown concentrations of VOCs ending up in the 20,000 GPD of backwash going to the old 1970s IWTP (not designed for these constituents, not previously receiving contaminated groundwater, and modified by elimination of lagoons, etc.). HRG indicated it found no information on how the greensands filter would handle the VOCs. The Greensands filter has been installed onsite, but previously involved company personnel left.
  - The basis for the sampling requirements were explained: daily monitoring & 30-day reporting during shakedown period till further notice, and new NPDES Application influent/effluent sampling data within 60 days (unless more time is needed for steady-state operations) to determine whether any new permit limits/monitoring requirements are required due to new waste-stream and its impact on IWTP operation. Iron and Manganese are AMD metals for a discharge to AMD-impacted stream. TRC was already detected in site effluent (not sure if coming from process water treatment or ferric chloride in IWTP), and listed VOCs were at detectable concentrations in the raw untreated groundwater (being remediated under EPA RCRA Order). The Draft NPDES Permit would contain any future permit limits/monitoring requirements (after an updated Reasonable Potential Analysis including water quality modeling, with the need for limits/monitoring determined per IW Effluent Limitation SOP).
  - Options included:

- Not starting up the Greensands Filter (including sodium hypochlorite chemical addition for the precipitation/filtration process). It would require a major NPDES Permit amendment (subject to public notice requirements) if not addressed in the NPDES permit renewal.
- Relocating the Greensands water treatment to some location after the ongoing VOC remediation (spray nozzle discharge at site reservoir under US EPA/DEP Waste Management Order) to reduce VOC monitoring frequency requirements (some data will still be needed). If the reservoir is a source of the fecal coliform issues, then this might also help address that issue due to sodium hypochlorite usage.
- Hauling offsite the Greensands Filter backwash for disposal until the system achieved steady-state, i.e. without typical start-up issues (some data will still be needed).
- If they did not like the effluent concentrations for metals/organics (after steady state is achieved), then they could take ten (10) weekly samples to allow for calculation of Long-Term Average Monthly Effluent Concentrations via the DEP TOXCONC Spreadsheet that uses EPA-approved statistical methodology.

- NPDES Permit Renewal Status: The permit renewal process is not open-ended. Over the last 2 years, the Department has met with Guilford Mills on and offsite, and with both Guilford Mills & the Pine Grove WWTP Authority regarding potential Regionalization (connection to existing Pine Grove WWTP), plus giving time to allow Guilford Mills to investigate Fecal Coliform issues, Engineering evaluation of the existing IWTP, etc. As discussed in previous meetings, the future Draft NPDES Permit will include new/revised limits (more stringent ELG production-based limits, Fecal Coliform, Ammonia-N limits, new WQBELs for new constituents including VOCs) and non-ELG-based limit Schedule of Compliance/TRE conditions based on preliminary modeling. Some draft potential NPDES permit limits were shared in a 2016 Compliance Meeting. The Department needs clarification on Guilford Mill's plans (Greensands Filter-related; Regionalization) before issuing a Draft NPDES Permit for public comment.
  - Plan of Action Submittal Within 90 days (i.e. by circa 6/6/2018): Guilford Mills will update the Department with its proposed plan of action within 90 days. Firm dates are needed for items under Guilford Mills control. The Department will take the Plan of action into account in its Draft NPDES Permit development. At minimum, Guilford Mills must indicate what it plans to do with the Greensands filter and whether Regionalization is a feasible option within the new 5-year permit term. (If not feasible, then Guilford Mills will have to take other measures to come into compliance with new NPDES Permit limits & requirements by the future compliance dates).
  - Related Compliance Requirements: The compliance issues must be settled to allow for final NPDES permit action. DEP M&C will be evaluating whether a Consent Order & Agreement or Civil Penalty Assessment/Consent Decree is appropriate after reviewing the plan (due in 90 days). Guilford Mills will be shown the draft documents either way, and they will spell out DEP compliance findings. The Department noted that it had received a 12/2/2016 Guilford Mills "Compliance Response" document to address the ten (10) areas of concern. DEP personnel noted they had seen a tree growing out of a treatment unit during a site visit.
  - Updated NPDES Application: Blank GIF and IW NPDES Permit Application forms given to Guilford Mills with some sections yellow-tabbed to help them find relevant requirements. Noted IW NPDES Permit Application Instructions had DEP Target QLs and guidance on how to refine DEP water quality modeling with site-specific information.
  - EPA: EPA will be copied on the Draft NPDES Permit due to IW NPDES Permit basis flow (2.0 MGD), Significant Chesapeake Bay discharge, discharge to TMDL stream, etc. EPA will comment on any Draft NPDES Permit. They have already asked about the NPDES permit due to Chesapeake Bay-related requirements.
- Fecal Coliform Issues: The Department has not been updated on Fecal Coliform investigation (high numbers in non-sewage treated IW discharge in assorted NPDES Permit Renewal Applications and subsequent site investigation; some fecals in stormwater) since March/April 2017. The Department noted that any DMR fecal coliform data was not going to the DEP permitting section, with last "report" received circa March/April 2017.
  - The source has not yet been located per Guilford Mills. They have not run a test to determine if the fecals are from humans or wildlife yet.
  - The NPDES Permit will include fecal coliform limits (consistent with regulatory STP requirements) and Schedule of Compliance due to pathogen-impaired receiving stream. Chapter 92a.51 will require the problem be addressed as soon as practicable. This might require installation of a disinfection system for the site effluent.
  - Stormwater outfalls will have to be monitored for fecal coliform, with Guilford Mills having to track down source to verify that it is not coming from the plant. (Animal fecals are expected.) Stormwater monitoring will also include some other permit limits based on PAG-03 Benchmark Numbers, etc.

- DEP is also concerned about potential health impacts as the site workers might be exposed to pathogen-containing process water.
- If Guilford Mills wanted to treat sewage, it would be a major NPDES Permit amendment with new requirements as appropriate (such as a certified operator requirement). Any source of human sewage must be disconnected from the IWTP, if found otherwise. If they found the fecals were non-human, that would mean an outside (non-plant) source and entry point.

- Regionalization Options: The Department has met with both Guilford Mills and Pine Grove Authority about potential direction of Guilford Mills effluent to the existing Pine Grove WWTP, but did not know the status. Guilford Mills indicated that it was unsure of what the status/schedule might be, but thought some progress had been made.
  - If Regionalization is a feasible chosen option within the new 5-year NPDES Permit Term (starting on the effective date of a final NPDES Permit), then that would have implications in terms of the schedule of compliance for assorted constituents (ammonia-N, etc.).
  - If Regionalization is not feasible within the permit term, then Guilford Mills will have to do something else within the permit term to address schedules of compliance/TRE requirements for assorted constituents. Generally, the Department gives 3 years for the schedule for new permit limits. The first year is to do a feasibility study to find options. Second year is for pursuing chosen feasible options (engineering, permitting), and third year to do any related construction and to come into compliance. The Schedule cannot exceed the 5-year permit terms except when a Court of Competent Jurisdiction issues a Consent Decree (not CO&A). It is easy to move interim compliance milestones, but difficult to move final compliance dates (requires permit modification with public notice).
  - The Authority has not yet submitted Planning for the major WWTP expansion required for this connection, and a Major NPDES Permit Amendment (Pine Grove WWTP) will be required. The Authority WWTP will have to have a Pretreatment Program to account for the Guilford Mills waste-stream. There will be indirect discharger Pretreatment requirements for Guilford Mills per Federal ELG and Authority Pre-treatment Plan.
- Other Site Changes: The Department noted Guilford Mills and its consultant (HRG) had evaluated the existing IWTP in regard to its ability to meet existing NPDES permit limits (not the future permit limits), and HRG had made some recommendations about IWTP modifications.
  - The existing NPDES Permit has Part A.III.C.1 (Planned Changes to Physical Plant) notification requirements for any plant changes, including anything that changes the effluent quality. If Guilford Mills wanted to make site changes, it can notify the Department which would decide if permitting is required. For example, if Guilford Mills decided on an effluent disinfection system, Part II WQM permitting would be required but the Department has sometimes allowed someone to install something upfront to correct an existing operational issue, with follow-up WQM permitting.
  - After reviewing the future Draft NPDES Permit, Guilford Mills will be better able to evaluate its feasible options under the NPDES permit schedule of compliance/TRE schedule and options.

6/25/2018: Applicant Consultant E-mail regarding Greensands Filter change to uses plant process water for backwash.
6/25/2018: DEP (Berger) E-mail response noting no change to previous 8/21/2017 Approval with Conditions Letter requirements (Greensands Filter start-up) applied to proposal. E-mail also noted lack of fecal coliform investigation update since March/April 2017.
7/3/2018: Guilford Mills (ERG Consultant) indicated they had lost the compliance "to do" list (verbal discussion with ERG who were in the Regional Office for a meeting regarding separate client/application).
10/12/2018: New Guilford Mills LLC EHS person telephone about Greensands Filter. His name is Steve Vasko (svasko@gfd.com, does not have a phone yet).
10/24/2018: Guildford Mills consultant (ERG) e-mail indicating ERG has been hired for "compliance response and greensand filter installation" and requesting conference call.
11/8/2018: Conference Call with Guilford Mills and its consultant (ERG) Scheduled per Applicant Request:

- DEP was represented by: Amy Bellanca, Pat Musinski, and James Berger
- Guilford Mills was represented by: "Attar", Sunil, Steve Vasko, and Tom Pullar (ERG)
- Greensands Filter:
  - They plan to start it up in the next week or so (after making arrangements with the lab).
  - The 8/21/2017 Greensands Letter Item 1 daily monitoring requirements are for start-up and characterization of wastestream once the flow is consistent/steady-state for normal operations, and to allow for inclusion in the Draft NPDES Permit.
    - After 30 days, they can see if the discharge is consistent and characterized and request modification of the sampling requirements. They do not have to sample during Greensands Filter downtimes, but that might drag out the time-frame before they reach "steady state conditions". Their engineering consultant can include his judgement whether the greensands filter discharge has been adequately defined in the 30-day Report.

- In 60 days, they need to update the NPDES Permit Application with the updated sampling & analysis information. The Department would update the Reasonable Potential Analysis and NPDES Permit prior to issuing a Draft NPDES Permit for public comment.
- If they do not start it up soon, the Department will issue a Draft NPDES Permit without including the Greensands Filter discharge to the IWTP. They would then have to submit a Major NPDES Permit Amendment to allow for Greensand filter discharges to go to the IWTP.
- They will send a meeting follow-up e-mail about Greensand filter start-up date.

- Other NPDES Permit Application Updating: They will update GIF Client/Site contact information in a meeting follow-up e-mail. They will also need to update the NPDES Permit Application (due 60 days after Greensands Filter start-up to include updated GIF and new influent/effluent sampling data meeting DEP Target QLs) and other information updating as needed, otherwise the Department will issue the permit based on available information. For example, the Draft NPDES Permit will be based on previously provided production information, chemical additive information, etc. if the NPDES permit application information is not updated. Changes after permit issuance might require NPDES permit amendment application, chemical additive notification, etc.
- Fecal Coliform Source in Effluent: The Department asked them if the source had been found. They responded that the testing was continuing. The Department asked them to update the Department regarding the fecal coliform issues.

11/29/2018: Berger E-mail asking for status of 11/8/2018 Meeting requested information (Greensands start-up schedule; updated Guilford Mills client/site contact information; Fecal Coliform investigation update).

10/22/2019: **Draft NPDES Permit and Fact Sheet issued**.

- Previous 10/22/2019 Draft NPDES Permit, Draft WQM permit, and Draft NPDES Permit Fact Sheet plus permitting history can be found under APS# 806927, Auth# 1111333.
- See Communications Log (below) for subsequent permit-related communications. See Public Comment Section (below) for responses to received public comments.
- Substantial changes included in the previous 2019 Draft NPDES Permit:
  - Substantial IWTP process changes (including lagoon closures) that impact existing IWTP design capacities, with additional existing process limitations set forth in an applicant-submitted HRG Inc. Engineering Report. See Treatment Section for details.
  - New Greensands Filter Backwash (groundwater remediation) wastestream now being sent to the IWTP for treatment and disposal.
  - Additional stormwater outfalls are being incorporated into this NPDES Permit (Outfalls Nos. 009 and 010).
  - The Renewal Application indicated recent annual average wastewater flows/discharges in the range of 0.350 MGD – 0.480 MGD range (2011 – 2015; 0.431 MGD "average flow" during production and 1.499 MGD Max flow during production (24 hours per day, 7 days per week)

11/14/2019: The 11/14/2019 Meeting was scheduled with Guilford Mills, Pine Grove Joint Treatment Authority (PGJTA), and Schuylkill County Conservation District (SCCD) per 9/24/2019 PGJTA (KPI Consultant) E-mail request to discuss: Decommissioning the Guilford Mills Treatment Plant and sending the flow to the Pine Grove JTA plant, with pilot project to introduce the Guilford Waste stream to the Pine Grove JTA plant (PA0020915) under controlled conditions with both influent and effluent sampling to verify the treatability of the wastewater:

- **Attendees**:
  - PGTA: Diane Tobin, John Stahl
  - PGTA Consultant KPI: Craig Zack, Dan Perva
  - Guilford Mills LLC: Sunil Hoskote, Avtar Mani, Stephen Vasko, Rickey Searcy
  - SCCD: Bill Reichert, Wayne Lehman
  - State Representative: Mike Tobash
  - DEP: Amy Bellanca, Pat Musinski, T. Rustu, John Williams, Kelsey Glavich, Stephen Pletchan (via telephone), James Berger
- **Introduction by PGJTA**:
  - There had been two prior meetings (2015 and 2017) on the possible connection of the 2.0 MGD Guilford Mills (NPDES permitted IWTP discharge) to the 1.5 MGD PGJTA POTW. They received preliminary effluent limits in 2015 for 2.25 MGD and 3.0 MGD flows.
  - Both facilities are in the 0.5 – 0.6 MGD discharge operating range (so would be 50 sewage:50 IW flow ratio) at the POTW at present rates. Guilford Mills flows might change in future (plant expansion).
  - Guilford Mills IWTP is in the middle of a floodplain project, where it is like an island. Floodplain work is needed due to past flooding and to encourage development in otherwise flood-prone areas by alleviating flood potential.
  - They think PGJTA POTW can take the flows and loadings based on their preliminary lookover (including Guilford Mills analytical data). They might be able handle the Guilford Mill loadings without increasing POTW capacities above 1.5 MGD. The Pilot Project would help determine if they can handle the Guilford Mill flows/loadings.

- The existing Interceptor (goes through Guilford Mills parking lot) might require upgrading to handle peak wet weather flows. They think that the Interceptor can take the 1.5 MGD load, but not so sure of peak wet weather capacities (rain). Any Interceptor upgrading would reduce I&I in the upgraded area.
- Previous EPA feedback was that no IPP would be automatically triggered by this proposal, but EPA would look at this again and discuss with DEP at that time.
- They were unclear if they would be asking for an increase in PGJTA POTW flows above 1.5 MGD NPDES permit basis flow at this time. Guilford Mills is within their service area.
- The meeting was requested to clarify what would be needed to pursue this connection, including a proposed pilot study (directing Guilford Mills raw wastewater from existing pump station wet well to interceptor for flow to PGJTA).

- **Planning**: Previous meetings indicated Act 537 Plan Update needed for this option, not the simplified "3M" Planning Module, but PGJTA was not sure if this remained correct. PGJTA noted that there was an expressed concern about back-ups into residential homes (of IW wastewater) raised in earlier meetings. PGJTA has not modeled system for back-up potential. PGJTA indicated sewer collection/conveyance system has no CSOs or known SSOs. The PGJTA has large equalization tanks at the old plant location (now a pump station). They do not know of anyone else that needs to be connected to the PGJTA system. Guilford Mills indicated it was planning to increase production at the plant (but that the increased production was covered by the existing NPDES Permit Renewal Application so production-based ELG limits would not have to change).
  - **Planning Section needs Guilford Mills and PGJTA pilot project proposal and future pilot project/connection flow numbers proposal to determine what Planning (Act 537 update or simpler 3M submittal) is required. Planning would be looking up Chapter 94 data, capacities, etc. to make that determination then. They would need to know capacity of limiting component between Guilford Mills and POTW.**
  - **Planning approval is needed for NPDES permit mod to increase NPDES permitted flows to >1.5 MGD and for WWTP WQM rerating to >1.5 MGD. They could break up POTW increases into several Planning stages.**
- **Part I PGJTA NPDES Permit:** What is needed:
  - **PGJTA NPDES Permit Renewal Application: They do not have to include any expansion into the NPDES permit renewal application due in September 2020. They can do a later Major Amendment (with EPA involvement) for such a change. Transferring Guilford Mills Mass Cap loadings to PGJTA will require updating the Chesapeake Bay Watershed Implementation Plan (WIP).**
  - **NPDES Part A.III.C.1 (Planned changes to Physical Facilities): Need to know if POTW (including collection system, pump station, etc.) would be modified to take the new flow/loadings.**
  - **NPDES Permit Part A.III.C.2 (Planned changes in waste stream) and Part B.I.D (General Pretreatment Requirements): Need to define proposed loadings to address any Guilford Mills contribution with concerns for pass-through (discharging to stream) and/or interference (impacting treatment biology). The pilot program would help get the required information.**
    - **A copy of the Part A.III.C.2 condition-referenced form was provided to PGJTA.**
    - **PGJTA will have to determine if the Guilford Mills wastewater will require pretreatment, with any pretreatment limits to be shared with the Department.**
  - **New PGTA PELs: The Department can generate new Preliminary Effluent Limits (PELs) if desirable in future.**
- **Part II PGJTA WQM Permitting**: What is needed? They think the plant will need upgrading such as increasing the number of basins (going from 2 to 4), possibly additional SBR units, new digesters, etc. They think they need to upgrade the Interceptor. PGJTA indicated they might need new pump stations (not project related) as well.
  - **NPDES Part A.III.C.1 Notification/Request for Determination of Permitting requirements**: **They can send in a description of what POTW changes (including offsite pump stations, etc.) and other changes they want to make to determine what needs permitting versus what only requires prior notification per the condition.**
  - **Interceptor Upgrading: Will require WQM permitting.**
  - **Revised Domestic Wastewater Facilities Manual (DWFM) technical guidance (sewer systems and treatment works): The Department will be issuing a revised DWFM in 2020 for public comment.**
  - **Guilford Mills WQM Permitting (groundwater monitoring wells):** Guilford Mills indicated that it was planning to relocate existing permitted groundwater monitoring wells due to floodplain work. Guilford Mills stated it has been in contact with the DEP Geologist (John Hannigan) about the proposed relocation. Guilford Mills has been in contact with EPA due to RCRA remediation wells onsite as well. **Relocating the WQM-permitted wells will require a Part II WQM permit. Guilford Mills should keep in contact with Mr. Hannigan. There will be a mandatory public comment period involved. NOTE: This is separate from pilot project and connection proposal. As of 11/15/2019, the DEP Geologist has not received anything in writing regarding this proposal (such as site plan, groundwater data, etc.).**

- **PGJTA Pilot Project**: They are thinking of a 3-6 months pilot project. The Guilford Mills pump station wet well flow (by submersible pump) would be pumped to the Interceptor. They would start off at low flows (50,000 GPD) and ramp up to ~0.5 MGD (50:50 flow) in increments to see impact on treatment plant (while keeping enough flow to Guilford Mills IWTP to keep bugs alive). They would monitor raw influent flows, commingled flows at WWTP influent, and WWTP effluent. They would have someone daily monitoring and controlling Guilford Mills flows who can reduce the flows if needed. At this time, PGJTA estimated that it would need 60 days to develop a draft Pilot Project Plan to submit to the Department (taking into consideration the meeting discussions). **In addition to above Pilot Project-related discussions:**
    - **The Department will need a proposal in writing to allow for approval or approval with conditions. The Department would prioritize any pilot project proposal review. The Department would be available via e-mails, telephone calls, etc. to discuss requirements further. A meeting can be scheduled if needed.**
    - **They would have to monitor for all Application Pollutant Group Table constituents during Pilot Project, with more frequent monitoring for constituents of special interest (such as in the Draft NPDES permit for Guilford Mills). Pollutant Group Tables I and Table II metals are also of special interest (many plants have problems with treating metals).**
    - **There is no set policy for such pilot studies, with Department flexibility. The biggest project constraints will be existing PGJTA POTW permit limitations:**
        - **Chapter 94 Hydraulic or Organic Overloading: Any overloading would be an issue due to Chapter 94 requirements. They will need to keep eye on BOD5 (Organic overloading).**
        - **Chesapeake Bay Nutrients: They might have to do nutrient trading and/or additional phosphorus treatment to meet existing Chesapeake Bay mass loading caps. Only after permit termination would the Department be able to transfer existing Guilford Mills NPDES permit mass cap loadings to PGJTA.** Guilford Mills does not have any nutrient credits to trade per Guilford Mills.
        - **PGJTA POTW Permit Limit Exceedances, Pass-through or Interference: The new loadings might result in exceedances of existing PGJTA permit limits, with additional concerns due to potential pass-through/interference of Guilford Mills' constituents. For example, Swatara Creek has an AMD TMDL with Guilford Mills' Draft NPDES permit having new Aluminum, Iron, and Manganese limits. Sewage does not typically have high AMD metal contents.**
        - **Wet weather flows/High Flow Management Plan (HFMP): PGJTA should update its HFMP due to new flows for pilot project and any future connection. PGJTA might also have to look at I&I reductions in the collection/conveyance system. PGJTA should keep weather in mind when scheduling the Pilot Project. (Spring tends to be much wetter with greater wet weather flows with Fall/Winter typically drier).**
        - **Reporting: Some sampling data would have to be included in EDMR reporting (permit requirement), but much information would have to be reported via EDMR reporting attachments. The PGJTA NPDES Permit EDMR requirements will not be updated until the next NPDES permit action. Hard copies of reporting will also be needed.**
        - **Need Schedule for Report submittal and future connection process steps: The Pilot Project proposal would have to address Final Report submittal date to the Department. The Final Report would have to identify proposed next steps in process (Planning, permitting and any PENNVEST funding). PENNVEST funding requires an applicant to have all required Planning and permits in hand prior to applying. It is sometimes better to work backward from a proposed PENNVEST application target dates to develop a schedule for submittals to avoid time crunches.**
- **Guilford Mills Public Notice Period Extension Request**: Guilford Mills asked if they could have more time for public comment on the Guilford Mills LLC Draft NPDES Permit Renewal/transfer. **The Department noted that the minimum 30-day Draft NPDES Permit public notice period began after PA Bulletin Notice publication (~2 weeks after draft issuance), ending on 12/9/2019. The Department previously granted a 15-day extension per telephone request. Guilford Mills will have had 60 days to develop/submit any public comments (by 12/24/2019).**
    - **They will have to send in the request in writing.**
    - **The letter should explain what Guilford Mills would do with any extra time and what would be submitted at the end of the requested public comment period extension.**
    - **The Department noted that the final permit action would await the Consent Decree/Consent Order & Agreement.**
    - **Any other party can also provide public comments on the Draft NPDES Permit.**
- **Draft CO&A-related:** Guilford Mills indicated that it might ask for more time to respond to the draft CO&A:

- **DEP M&C Feedback: The Draft CO&A was previously sent to Guilford Mills, with the Guilford Mills response due in November. DEP M&C noted this CO&A has been worked on for 3 years, with statutory time-frames involved, involving past violations and the resolution of the past violations. The Department would need to know what this extra time would be used for, and what would then be submitted. The Guilford Mills attorney should contact the DEP Office of Chief Counsel (Lance Zeyher) to discuss this.**

11/20/2019: Guilford Mills LLC (Tom Pullar, ERG) E-mail(s), with 11/19/2019 Letters attached, requesting additional sixty days extension to the NPDES Permit public comment period and (separate) Draft CO&A response (due November 27, 2019). Letter also stated that Guilford Mills LLC had merged with Lear Corporation (and is no longer a legal entity), with request that all future communications go to Lear Corporation at the existing Guilford Mills LLC address. Permit Transfer Application documents would be submitted under separate cover. Date of submittal of the NPDES/WQM Permit Transfer Form was not provided.
11/21/2019: DEP (Pat Musinski) E-mail indicating the Department would take the request for more time under consideration, with response forthcoming. **In addition:**
11/21/2019: DEP (Berger) E-mail required submittal of the NPDES Permit Transfer Application (with fee and all required application information by 12/2/2019. Additional copies were requested for direct submittal to DEP OCC/M&C due to Draft CO&A. The 11/21/2019 DEP (Berger) E-mail granted a public comment period extension to 1/24/2020 (30-days). The E-mail also specified an update and any public comment-related meeting request (with detailed agenda and list of participants) be submitted by 12/24/2019 to allow scheduling of meeting within public comment period.
12/31/2019 (revised 1/10/2020): NPDES/WQM Permit Transfer Applications received and merged into pending NPDES Permit renewal per DEP SOP.

- Prior NPDES/WQM Permit Transfer Application (to Guilford Mills LLC (new permittee) from Guilford Mills Inc. (previous permittee): Was merged with into renewal (APS# 806927; Client# 28200; Site# 242947; Auth# 968197; Account# 749373).
- Transfer-related information:
  - Permittee: Lear Corporation D/B/A Lear Corporation Pine Grove (EIN# 13-3386776; Dun & Bradstreet No. 17-559-2476, Department of State Business Entity No. 6996557).
  - 5/31/2012: Lear Corporation originally acquired the "Guilford" group of companies, including the predecessor entity (Guilford Mills LLC, i.e. Renewal/Transfer Application client, EIN# 13-1995928). Guilford Mills LLC was a wholly owned subsidiary.
  - 12/31/2016: Guilford Mills LLC merged with Lear Corporation, effective on 12/31/2016 at 11:59 PM.
  - 1/8/2020: Lear Corporation registered to do business in PA as "Lear Corporation Pine Grove". The staff and personnel associated with the Pine Grove, PA facility has not changed as a result of this merger per application.
  - 2/3/2020: Lear (Pullar) E-mail provided additional information:
    - 5/31/2012: Lear Corporation acquired the stock of parent company GMI Holdings Corporation. At that time, Guilford Mills Inc. was an operating company of GMI Holdings Corporation. Gold Mills LLC was a wholly owned subsidiary of Guilford Mills Inc. at that time.
    - 12/31/2012: Gold Mills LLC merged into Guilford Mills Inc.
    - 7/1/2016: Guilford Mills Inc. was converted to Guilford Mills LLC.
  - Separate NPDES Permit No. PAR132201 Transfer Application Information: Lear Corporation (owner) address of 21557 Telegraph Road, Southfield MI, 48033, (248) 447-1500 given in SPCC Plan.

2020-2024: The Department provided opportunity for the permittee (per request) to pursue several major site options (potential connection to POTW; possible acquisition of offsite inactive POTW STP for further treatment/discharge; voluntary negotiations for a "voluntary CO&A" to address assorted compliance issues) but nothing materialized.
11/13/2024: DEP (Berger) E-mail notifying Lear that the NPDES Permit renewal permitting had restarted. The Department called the permittee's attention to its option of updating any obsolete NPDES Permit application information and/or providing new/modified public comments. The current Individual IW NPDES Permit Application forms and instructions requirements were referenced along with some potential updating options. The E-mail required any NPDES permit application updating/public comments by December 15, 2024.
11/21/2024: Lear (Tom Pullar) E-mail asking for extension of time and meeting.
12/6/2024: DEP (Berger) E-mail asking for meeting agenda/participants for proposed meeting to allow for scheduling. Additional feedback on NPDES permit application updating options included.
12/18/2024: Second DEP (Berger) E-mail asking for meeting agenda/participants for proposed meeting to allow for scheduling. Previous feedback on NPDES permit application updating options included in e-mail chain.
12/20/2024: Lear (Jennifer Taylor, ERG) E-mail with letter request for a meeting, with meeting agenda items and list of participants. Requested extension of public comment period to March 12, 2025 (to allow application updating/public comments).

12/31/2024: DEP (Berger) E-mail scheduling Lear-requested meeting (1/23/2025) and extending public comment period to 3/12/2025 per Lear Request (to allow for new sampling & analysis data, etc.). The E-mail noted the EPA Sufficiently Sensitive Rule due to Meeting Agenda item regarding DEP TQLs impact on the application review.
1/23/2025: The permittee requested a technical meeting (with meeting agenda and list of participants) to discuss the NPDES Permit status and updating requirements. Changed to video-conference due to weather.

- Participants:
  - DEP: Amy Bellanca, Pat Musinski, and James Berger
  - Lear: Stephen Vasko (EHS), Mike Wagner (Engr. Mgr.), C Gnade (Plant Mgr.), C Kauffman (EHS), and S Deibert
  - ERG: Tom Pullar and Jennifer Taylor
- Intro: Lear and its consultants had received the DEP (Berger) E-mails providing opportunity to update the application information prior to Redrafting the NPDES Permit. They had some questions.
- Permit Status: 2011 NPDES permit admin extended. New permit will replace it.
- WWTP Analysis: They will do one influent and three effluent samples for Pollutant Groups 1 through 6, plus last 2 years of monitoring data. They would need 10 data points for LTAMEC. TQLs must be met due to EPA Sufficiently Sensitive Rule possibly triggering permit limits/monitoring requirements for any insensitive ND reported. J option available. Lear is concerned over interference preventing them from meeting TQLs, See NPDES form and instructions.
- Stormwater Outfalls: They have been confirming outfall locations. They need drawing showing stormwater outfall drainage areas and what is in them, plus (NPDES Stormwater) Module 1 description. IW stormwater monitoring addresses industrial activities and material handling areas. Stormwater sampling data can make a case for representative outfalls. Module 1 instruction has listed requirements (BOD5, 40 CFR 410 ELG constituents, PAG-03 Appendix Q, concerns of stream impairments for metals like Total Iron and pathogens. Iron is present in the site water system. The IW Stormwater GP PAG-03 would require Pollutant Group 2 metals and fecal coliform/E Coli due to stream impairments. Lear indicated that they have sampling data from a number of outfalls. See stormwater Module 1 for instructions. DEP might require monitoring if they do not make a case for representative outfalls. See NPDES form and instructions.
- WWTP: No substantial change in last 5 years or so.
  - They are looking at the following changes (not all funded at present):
    - Jet aeration system (funded)
    - Dewatering System (centrifuges) and polymer pump changes
    - Chlorine contact tank for disinfection (Awaiting PE Stamp). Fecals are inherent to the Textile process per their investigation
    - SCADA upgrades and flow controls planned.
  - They will update NPDES Permit Application for WWTP changes proposed in next 5 years. They can look at other plant upgrades per NPDES Permit schedule of compliance. They can submit a WQM Permit Amendment for any proposed changes and to address as-built/as-operated plant changes (and to show numbers work out) since original 1977 WQM permitting per NPDES Permit Part C condition. The WQM Permit Application Module 1 was flagged to Lear's attention. The WQM Permit application does not have to come in prior to NPDES Permitting.
  - They had looked at some options (like UV disinfection which proved infeasible due to dyes). No connection to Pine Grove POTW (determined not feasible per Lear).
- NPDES Application Updates: They will update the process flow/water balance, Production rates (last 5 years and flagging if change in production rates therein), WWTP modifications proposed over next 5 years, updated PPC Plan, Module 2 (GW Remediation).
- Public comments on 2019 Draft NPDES Permit: They can resubmit or include new public comments in the submittal for Department consideration in Redrafting the NPDES Permit (subject to its own public comment period).
- Voluntary CO&A: Pat noted old ~2019 discussions/language outdated. The voluntary CO&A option had been requested by Lear back then and is still their decision now. DEP would look at NPDES permit submittal to before deciding if a voluntary CO&A or CACP is needed now. There are seven (7) open violations and EDMR indicated exceedances in the last 12 months. Older (resolved) noncompliance does not have to be addressed in the NPDES permit application compliance history section.
- Target Date for submittal: March 15. They will be contacting their labs about the sampling and analysis requirements. They can ask for more time if they give target date and explanation in writing.

3/7/2025: Lear (Thomas Pullar) Letter asking for extension to June 13, 2025 for updated NPDES permit application (and public comments).
4/3/2025: DEP (Berger) E-mail asking for rationale for the requested extension to June 13, 2025 for an updated NPDES Permit Application in terms of Sampling schedule, voluntary CO&A option, and any additional public comments on previous Draft NPDES Permit.

4/9/2025: Lear (Thomas Pullar) E-mail with response letter to 4/3/2025 DEP E-mail questions (letter misdated) received.
4/14/2025: DEP (Berger) E-mail granting requested extension to June 13, 2025 and directing them to contact NE Monitoring & Compliance about any voluntary CO&A option discussions.
6/13/2025: **Public Upload# 324268 (revised NPDES permit application information)**
6/17/2025: The facility's technical consultant (Tom Pullar, ERG) left a voice-mail on the NE Monitoring & Compliance Section (Pat Musinski) telephone. Per Outlook transcript: This is very preliminary, but I just wanted to touch base with you about with this application and where we stand regarding past violations, future schedules and everything else related to this.
6/19/2025: Public Upload# 324268 (lab sheets for revised influent/effluent application sampling) received.
6/20/2025: DEP (Pat Musinski, NE M&C), E-mail to Tom Pullar (Lear Consultant) noting there was an outstanding 6/4/2025 NOV, with a response requested by 6/19/2025. The e-mail noted that if Lear Corporation Pine Grove has any requests it would like the Department to consider in relation to compliance, that request can be made as part of said response.