pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0012092**
Facility Type	**Industrial**	APS ID	**597937**
Major / Minor	**Minor**	Authorization ID	**1223908**

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

Applicant and Facility Information

Applicant Name	**Messer LLC (FKA Linde LLC)**	Facility Name	**Messer LLC Bethlehem (FKA Linde LLC Bethlehem FKA BOC)**
Applicant Address	200 Somerset Corporate Boulevard Suite 700	Facility Address	1011 E Market Street
	Bridgewater, NJ 08807		Bethlehem, PA 18017-7017
Applicant Contact	Philipp Sieber	Facility Contact	Todd Reichel
Applicant Phone	(848) 702-8769	Facility Phone	(484) 347-1148
Client ID	202732	Site ID	253275
SIC Code	2813, 4231	Municipality	Bethlehem City
SIC Description	Manufacturing - Industrial Gases,Trans. & Utilities - Trucking Terminal Facilites	County	Northampton
Date Application Received	April 9, 2018	EPA Waived?	Yes
Date Application Accepted	June 11, 2018	If No, Reason	-

Purpose of Application: RENEWAL OF EXISTING NPDES PERMIT.

Summary of Review

Facility converting to Individual IW Stormwater NPDES Permit after connection to local POTW. As of October 24, 2022, pipes conveying cooling tower and filter blowdown wastewater to Outfall No. 001 have been capped at source and piping to Outfall No. 001. These flows are now discharged to the sanitary sewer system. As a result, the only remaining discharges at Messer LLC consists solely of stormwater. **DEP Inspector will visit site to confirm prior to final permit action.**

- **Receiving Streams**: All Outfalls discharge to Bethlehem MS4 NPDES Permit No. PAI132214 (i.e. mixes with other stormwater) storm sewer system which discharges to the historic Lehigh Coal & Navigation Canal (CWF; Stream Code# 3383) and then into the Lehigh River (WWF; Stream Code# 3335). The point of first use (POFU) of aquatic life has changed from the Lehigh River to the UNT (water-containing Canal area).
- **Applicable IW Stormwater requirements for SIC Codes Nos. 2813 (Manufacturing - Industrial Gases) and 4231 (Trans. & Utilities - Trucking Terminal Facilities):** Facility produces industrial gases (oxygen, nitrogen and argon gas) via air separation cryogenic liquid production and distribution and acts as trucking terminal per application. Application identified the following applicable SIC Codes.
  - SIC Code No. 2813: PAG-03 Appendix F (Chemical and Allied Products) constituents: pH, COD, TSS, Nitrate-Nitrite as N, Total Phosphorus, Lead, Zinc, Total Iron, Aluminum
  - SIC Code No. 4231: PAG-03 Appendix L (Land Transportation and Petroleum Stations and Terminals) constituents: TSS and Oil & Grease
- **Outfalls**:
  - IW Outfall No. 001: No longer discharges 0.031 MGD NCCW and other wastewater (including chemical additives). Chemical additives included: antiscalant, corrosion inhibitor, biocide, defoamer, and algicide.
    - Deleted from Draft NPDES Permit.
    - Outfall No. 001 will be administratively reclassified as inactive upon final permit action.

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	November 14, 2022
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	11-21-22

Summary of Review

- Facility does not discharge other IW process wastewater per renewal application and other communications.

- Outfall No. 002 (renamed Outfall No. 101): Formerly received Outfall No. 001 flow (formerly discharging NCCW and chemical additive residues/byproduct) but is monitored for stormwater from 212,280 square foot drainage area (~99% impervious), including Cooling Towers, Electrical substation, Employee Parking, Office. Stormwater sampling in previous NPDES Permit Term.
- Outfall No. 003 (renamed Outfall No. 102): Receives stormwater from 159,331 square foot area (~99% impervious), including Compressor building, production area, product (nitrogen, oxygen, argon) storage, truck loading area, truck fueling area (diesel storage), and office buildings.
- Outfall No. 004 (New): Stormwater sheet flow area to East Market Street (57,900 square foot area, 99% impervious) including Employee parking and garage building. Coordinates from middle of area from E-maps. Monitoring would be done on request (in event of a spill, leak, release).
- Outfall No. 005 (New): Stormwater sheet flow area to Jennings Street (40,039 square foot area. 99% impervious) including vehicle parking and transit areas. Coordinates from middle of area from E-maps. Monitoring would be done on request (in event of a spill, leak, release or Outfall No. 002 overflow). NOTE: Outfall No. 101/002 sampling point is within this sheet flow area.

Background:

- **Name Changes**:
  - Client: 2/28/2019 Minor NPDES Permit Amendment Application received for name change to "Messer LLC" FKA Lindt LLC (as of 3/1/2019), merged into this NPDES Permit Renewal Action. Permittee is operator with financial control, with the facility being a joint venture with Air Products.
  - Facility: Site renamed "Messer LLC Bethlehem" in revised application.
- **NPDES Facility Type Reclassification**:
  - Chapter 92a Fee Reclassification: Previous NPDES Permit was issued as a MIIW2 (IW facility with ELG) but renewal came in as a MIIWI (IW without ELG). Application confirmed only discharge was NCCW plus any chemical additive residue/byproduct and stormwater, with the industry ELG (40 CFR 415 Section AW with ELG constituents of pH and Oil & Grease)) having no NCCW ELG requirements. No form of process wastewater is discharged to the outfalls.
    - The renewal application had been processed as a MIIW1.
    - Facility subsequently chose to connect, converting to only IW Stormwater discharges, i.e. changing to an Individual IW Stormwater NPDES Permit.
    - Upon final NPDES Permit action, the Chapter 92a fee category will be updated to Individual IW Stormwater NPDES Permit.
  - Federal ELG: Facility is subject to 40 CFR 415.490 Subpart AW (Oxygen and Nitrogen production) per application. No industrial category stormwater ELGs.

Part C Special Conditions: Standard IW Stormwater NPDES Permit Conditions:

- **Part C.I**: Stormwater outfalls and authorized non-stormwater discharges
- **Part C.II**: Best Management Practices (BMPs)
- **Part C.III**: Routine Inspections
- **Part C.IV**: Preparedness, Prevention and Contingency (PPC) Plan
- **Part C.V**: Stormwater Monitoring Requirements
- **Part C.VI**: Other Requirements: Necessary property rights and residuals management

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 Nos.	002, 003, 004, 005	Design Flow (MGD)	Zero (stormwater only)
Latitude	40º 37' 19.57" (002) 40º 37' 15.69" (003) 40º 37' 17.59" (004) 40º 37' 15.69" (005)	Longitude	-75º 21' 28.31" (002) -75º 21' 26.07" (003) -75º 21' 27.14" (004) -75º 21' 26.07" (005)
Quad Name	Hellertown	Quad Code	1443 (6.22.2)

Wastewater Description: Outfall Nos. 002, 003, 004, and 005: Stormwater only.

Receiving Waters	Unnamed Tributary to Lehigh River aka (historic) UNT to Lehigh Coal & Navigation Canal (CWF, MF)	Stream Code	03383
NHD Com ID	26296663	RMI	-
Drainage Area	0.89 at Outfall; 0.99 at Market Street/UNT intersection; ~1.15 square miles at confluence with Canal	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	Zero at Outfall; ~0.115 at confluence with Canal	Q_{7-10} Basis	See below
Elevation (ft)	~245 at approximate MS4 discharge location for 001 off East North Street.	Slope (ft/ft)	-
Watershed No.	2-C	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status	None	Name	-

Background/Ambient Data: None available		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	- No hardness data in application due to limited discharge to NCCW and IW Stormwater.
Other:	-	-

Nearest Downstream Public Water Supply Intake	FOREST PARK WTP ID# 101915-001 (Bucks County)		
PWS Waters	Delaware River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	>10 miles

Changes Since Last Permit Issuance:

- **Change in Point of First Use by Aquatic Life**. Per the previous IRR, the Lehigh River was the first point of use. 7/1/2020 DEP Biologist (Tim Daley) POFU Survey Memo determined point of first use is confluence of UNT with historic Lehigh Coal and Navigation Canal (prior to Lehigh River).
    - The UNT was noted to be dry upstream of the discharge Outfall (small trickle observed) and downstream to the Canal except for several standing pools. NOTE: Intermittent Facility previously discharged batched

NCCW discharges plus stormwater. 3-4 hour Batch discharge (0.0189 MGD average, 0.031 MGD daily max) controlled by cooling tower recycle water conductivity per application.
  - The DEP Biologist Memo concluded the UNT/Canal confluence exhibits year-round flow based on amount of water and presence of aquatic vegetation, and its water quality should be maintained. It is now the Point of First Use by Aquatic Life (POFU) subject to water quality protection.
  - The apparent Canal confluence point (40.61949º; -75.35600º) has ~1.15 square mile drainage UNT drainage area (no significant Canal contribution per PAStreamstats).
  - The previous NPDES permitting and current application Chemical Additives Forms incorrectly assumed a Lehigh River discharge (458 CFS Q7-10 low flow) despite correctly noting receiving stream is UNT.
- **UNT Flow Route Change**: Local flooding/erosion has apparently modified UNT route shown in E-maps. E-maps assumed a direct channel (perpendicular to old Canal) to River. USGS PAStreamstats, DEP Biologist Memo figure, and application figure show the UNT turning, then paralleling old Canal before intersecting the Canal and River. USGS PAStreamstats point used to estimate drainage area of UNT at Canal intersection.
- **Cessation of facility-specific IW discharges:** The facility has ceased discharging NCCW, boiler blowdown, and chemical additives to the UNT.

Other Comments:

- **Lehigh Coal & Navigation Canal (historic) Information:**
  - The old canal was basically parallel to Lehigh River and is part of the overall Lehigh River watershed. Wikipedia: "An 8-mile (13 km) segment of the canal towpath has been converted into a multi-use trail that runs from Freemansburg through Bethlehem to Allentown. The trail runs along the river and active railroad tracks."
  - E-maps shows the historic Canal channel but does not indicate any perennial stream flow within (i.e. dry).
  - USGS PA Streamstats does not show the historic Canal channel as an active water channel (i.e. dry), but USGS-depicted UNT flow channel (paralleling then intersecting Canal and then River) matches the DEP Biologist-indicated flow.
- **Lehigh River**: Lehigh River (WWF; Stream Code# 3335) is impaired for Aquatic life by: URBAN RUNOFF/STORM SEWERS - SILTATION ; COMBINED SEWER OVERFLOWS - TOTAL SUSPENDED SOLIDS (TSS) ; MUNICIPAL POINT SOURCE DISCHARGES - ORGANIC ENRICHMENT). Previous modeling assumed River at 200 Feet Elevation at UNT Confluence.
- **Industrial Stormwater Discharges into MS4 System**: Facility is located within an industrial area. Application indicates Outfalls No. 002 directs flow to City of Bethlehem MS4 System (NPDES Permit No. PAI132210) discharging urban stormwater to UNT downstream of East North Street. Other dischargers in the industrial area include Just Born Inc. (NPDES No. PA0062791) which discharges NCCW at head of UNT, Koller Concrete (PAR212238), etc.
- **Q7-10 Low Flow**: Low Flow indeterminate due to hydromodification, area outside PAStreamstats regression range, area being 100% carbonate rock per USGS PAStreamstats. Dry UNT stream conditions reported by DEP Biologist (from discharge to Canal confluence/intersection).
  - Nearby Monocacy Creek watershed is not representative of this UNT.
  - 0.030 MGD Discharge is equivalent to 0.0461 CFS. This would be 40% of flow if 0.1 CFS/square mile LFY default applied.
  - In the absence of better data, used the statewide default (0.1 CFS/Square Mile) to flag likely negative impacts.
- **Causes of UNT & Lehigh River Impairment**: Stormwater is not expected to contribute to any receiving stream issues. Cessation of IW discharges (NCCW, chemical additives) should benefit receiving streams.
  - **Siltation**: Facility is not a source of siltation.
  - **Organic Enrichment (Lehigh River only)**: NCCW and stormwater were not likely sources of organic enrichment.
  - **CSO (Lehigh River only)**: No sewage contributions. Organic content should be minimal for IW stormwater.
  - **Urban Runoff & Flow Regime Modification**: Bethlehem City MS4 NPDES Permit No. PAI132210 will separately addresses urban runoff issues. Other industrial dischargers are addressed by their own separate NPDES permits.
  - **TRC in UNT**: Downstream 1/29/2018 UNT sample (sampling point downstream of where MS4 discharges site wastewater) had 0.12 mg/l TRC (Sample ID: 2191096; Sequence Number: 23). Cessation of IW discharges (including chlorinated public water supply and/or any chlorides in chemical additives) will reduce any chlorine loadings on the UNT. However, other industrial sources also discharge to the MS4 system/UNT, i.e. other potential TRC sources exist.

- Application data: 0.51 mg/l max, 0.39 mg/l LTA (35 samples)
- EDMR Data: 0.24 - 0.67 mg/l range.

- **Other Potential Impairment Causes**: Previous 2011 NPDES Permit application was for an IW with ELG. The applicant indicated belief that the zinc and copper source "is the interaction of the NCCW with the cooling tower internals", with the source water from the City of Bethlehem public water supply. Stormwater will be monitored for metals in this NPDES permit term (after elimination of IW wastewater sources). Application effluent data:
  - Copper: 34 ug/l
  - Dissolved Iron: 196 ug/l
  - Zinc: 672 ug/l
- **Temperature**: The elimination of heated NCCW discharges will benefit the (CWF) UNT. Application data:
  - 87.4 F (Summer), 79.5 LTA (17 readings)
  - 75 F (Winter), 65.6 F LTA (17 readings)

Compliance History

DMR Data for Outfall 001 (from October 1, 2021 to September 30, 2022)

Parameter	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21
Flow (MGD) Average Monthly	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Flow (MGD) Daily Maximum	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
pH (S.U.) Minimum	8.79	8.8	8.74	8.61	8.41	8.48	8.48	8.34	8.29	8.47
pH (S.U.) Maximum	8.86	8.9	8.78	8.68	8.61	8.58	8.56	8.62	8.46	8.62
TRC (mg/L) Average Monthly	0.39	0.38	0.32	0.41	0.35	0.28	0.25	0.23	0.17	0.19
TRC (mg/L) Instantaneous Maximum	0.46	0.43	0.42	0.43	0.47	0.34	0.32	0.32	0.21	0.26
Temperature (ºF) Maximum	73.6	83	89	82.2	77	69.1	72.5	77	70.7	67.6
Total Dissolved Solids (mg/L) Average Monthly	700	665	627	643	597	627	634	640	649	645
Total Dissolved Solids (mg/L) Weekly Average	700	665	627	643	597	627	634	640	649	645

DMR Data for Outfall 001 (from May 1, 2020 to April 30, 2021)

Parameter	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20
Flow (MGD) Average Monthly	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Flow (MGD) Daily Maximum	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
pH (S.U.) Minimum	8.11	8.08	7.8	7.39	7.76	7.75	8.37	8.47	8.33	8.33	8.34	8.18
pH (S.U.) Maximum	8.32	8.26	7.92	8.16	8.02	8.36	8.52	8.59	8.49	8.49	8.52	8.46

TRC (mg/L) Average Monthly	0.29	0.22	0.21	0.26	0.2	0.21	0.22	0.36	0.35	0.35	0.21	0.36
TRC (mg/L) Instantaneous Maximum	0.41	0.43	0.15	0.28	0.23	0.28	0.26	0.43	0.4	0.40	0.24	0.49
Temperature (ºF) Maximum	84.2	76.4	62.6	69.26	62.1	78.4	73	82.04	83.3	83	79.34	80.6
Total Dissolved Solids (mg/L) Average Monthly	595	571	657	577	554	603	647	665	682	656	704	673
Total Dissolved Solids (mg/L) Weekly Average	595	571	657	577	554	603	647	665	682	656	704	673

DMR Data for Outfall 101 (from October 1, 2021 to September 30, 2022) – this outfall is now renamed Outfall No. 002

Parameter	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21
pH (S.U.) Daily Maximum										7.83	
CBOD5 (mg/L) Daily Maximum										< 3	
COD (mg/L) Daily Maximum										< 50	
TSS (mg/L) Daily Maximum										7.22	
Oil and Grease (mg/L) Daily Maximum										< 5.56	
TKN (mg/L) Daily Maximum										0.557	
Total Phosphorus (mg/L) Daily Maximum										1.36	
Dissolved Iron (mg/L) Daily Maximum										< 0.2	

DMR Data for Outfall 101 (from May 1, 2020 to April 30, 2021) – this outfall is now renamed Outfall No. 002

Parameter	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20
pH (S.U.) Daily Maximum					7.3							

CBOD5 (mg/L) Daily Maximum					< 4							
COD (mg/L) Daily Maximum					14.9							
TSS (mg/L) Daily Maximum					8.5							
Oil and Grease (mg/L) Daily Maximum					< 5							
TKN (mg/L) Daily Maximum					< 1.25							
Total Phosphorus (mg/L) Daily Maximum					0.114							
Dissolved Iron (mg/L) Daily Maximum					3.86							

Compliance History

Inspection History:

CLIENT	FACILITY NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS
MESSER LLC	LINDE LLC	WPCNP	2413912	11/19/2020	Compliance Evaluation	No Violations Noted	0
MESSER LLC	LINDE LLC	WPCNP	3118446	08/20/2018	Routine/Partial Inspection	No Violations Noted	0
MESSER LLC	LINDE LLC	WPCNP	2776898	01/29/2018	Administrative/File Review	Violation(s) Noted	1
MESSER LLC	LINDE LLC	WPCNP	2704314	08/24/2015	Compliance Evaluation	No Violations Noted	0

Comments:

8/20/2018 NOV for late application. Administrative extension letter issued.

Compliance History: No open violations per 11/14/2022 WMS query (Open violations by client number):

Permit: PA0012092
Client ID: 202732
Client: All

Open Violations: 0

No data was found using the criteria entered. Please revise your choices and try again.

Development of Effluent Limitations

Outfall No. 002, 003, 004, 005 **Design Flow (MGD)** 0 (stormwater only)

Latitude 40º 37' 20.00" (002); 40º 37' 18.00" (003); 40º 37' 19.30" (004); 40º 37' 18.00" (005) **Longitude** -75º 21' 24.00" (002); -75º 21' 20.00" (003); -75º 21' 24.05" (004); -75º 21' 20.00" (005)

Wastewater Description: Stormwater only

Permit Limits/Monitoring:

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
pH	**6.0 – 9.0 SU**	**Inst. Min - IMAX**	**Chapter 95.2 basis for permit limits.** Application data (002): 8.22 SU Application data (003): 7.59 SU
Chemical Oxygen Demand (COD)	**Report**	**IMAX**	**Based on statewide PAG-03 Appendix F BPJ for this industrial category. Benchmark value (120.0 mg/l) in Part C.** Application data (002): 27.3 mg/l Application data (003): 82.3 mg/l
TSS	**Report**	**IMAX**	**Based on statewide PAG-03 Appendix F BPJ for this industrial category. Benchmark value (100.0 mg/l) in Part C.** Application data (002): 6 mg/l Application data (003): 26.7 mg/l
Oil & Grease	**30.0**	**IMAX**	**Chapter 95.2 basis for permit limits.** Application data (002): <5.56 mg/l (2 samples) Application data (003): <5.6 mg/l
Nitrite-Nitrate as N	**Report**	**IMAX**	**Based on statewide PAG-03 Appendix F BPJ for this industrial category. Replaces TKN monitoring.** Application data (002): <1.00 TN and 1.25 mg/l Max (2 samples) Application data (003): 1.3 mg/l TN and 1.32 mg/l TKN.
Total Phosphorus	**Report**	**IMAX**	**See above.** Application data (002): 1.23 mg/l Application data (003): 0.0784 mg/l
Total Lead	**Report**	**IMAX**	**See above** Application data (002): None Application data (003): None
Total Aluminum	**Report**	**IMAX**	**See above** Application data (002): None Application data (003): None
Total Iron	**Report**	**IMAX**	**See above. Replaces Dissolved Iron monitoring.** Application data (002): None (0.172 mg/l max (5 samples) dissolved iron) Application data (003): None (0.0572 mg/l dissolved iron)
Total Zinc	**Report**	**IMAX**	**See above** Application data (002): None Application data (003): None

Comments:

- Outfall No. 002 FKA No. 101 is a stormwater catch basin. Formerly received Outfall No. 001 discharges (NCCW and boiler blowdown with chemical additives).
- Outfall No. 003 FKA No. 102 is a stormwater catch basin.
- Outfalls Nos. 004 & 005 (stormwater sheet flow areas) sampled only upon request (in case of accidental spill, leak or other release).

Outfall	Drainage area (sq. ft.)	% Impervious	Description
002	212,280*	~99*	NCCW from Outfall No. 001, Cooling Towers, Electrical Substation, employee parking, office building drainage
003	159,331	~99	Compressor building, production area, product (nitrogen, oxygen, argon) storage, truck loading area, truck fueling area (diesel storage), and office buildings drainage
004	40,039	~99	Employee parking, garage building sheet flow drainage discharging to East Market Street
005	57.900	~99	Vehicle parking, transit area sheet flow drainage discharging to Jennings Street.

*2016 Annual Stormwater inspection indicated 341,000 square foot drainage area, 50% impervious (gravel in plant production area).

Communication Log:

4/3/2018: Application due date.
4/13/2018: Application Incompleteness Letter
4/17/2018: Application fee received. (Follow-up e-mail/phone-call from Linde to confirm receipt of application check)
5/23/2018: New Linde Contact (Charles Pace, 410-329-5119) called on 5/23/2018 about 4/13/2018 Application Incompleteness Letter. He was hired on day they received the Application Incompleteness Letter, i.e. had not prepared the application, and had some questions. He noted that the original application was prepared based on previous NPDES permit applications, but understood from letter and NPDES permit application instructions that more information was needed. He has been to the site.

- **ELGs**: They will identify applicable category/subcategory ELGs and are sure they have sampled for the indicator ELG constituents.
- **Pollutant Group 2 Table**: They did not analyze for Pollutant Table 2 constituents (except for a metal) and will clarify the response. They do not have to do Table 2 for NCCW/stormwater.
- **Chemical Additives**: They had chemical additives listed in the previous NPDES permit application, and will provide the information in the response. He found 4 of the 5 used chemical additives on the DEP List. He has been in contact with the supplier to fill out the Chemical Request form for the missing additive. Mentioned potential for alternate chemical additive if the additive is not on the list prior to issuance of draft NPDES Permit action.
- **Fecal Coliforms in NCCW**: The NCCW is sampled at point of discharge, and he did not see a cross-connection source for the NCCW. Recommended they look into source (source water, potential animal access to NCCW, etc.), as there were potential requirements (further investigation, disinfection) if number remains high.
- **Administrative Extension**: Told him that they can ask for extension after submittal of complete application.

5/30/2018: Consultant asked for conference call, indicating Linde had found something in its internal file review, but would not provide details.
6/1/2018: Scheduled Conference call with Linde. Chuck Pace (EA) and Philip Seeber(?) (Linde Environmental Compliance). Received DEP comments and working on response. Resubmitting complete revised NPDES Permit application to address issues. EA looked at previous permit and found out errors/omissions in previous application. EA did site visit and Linde has taken look at permitting history to check for errors. Potential two additional outfalls (2002 Permit had NCCW and two stormwater outfalls; later applications dropped one of the outfalls). There might also be a sheet flow area and very small drainage area (box culvert) as well. All discharge to MS4 and same receiving water (Lehigh Canal). They plan to submit available information (updated application week of June 4th, with sampling data for new outfalls within a few weeks (by end of June). They need to update the application to contain all required information for all outfalls/sheet flow drainage areas. The Department does not grant Admin Ext letters until there is a complete application, with any such letter being coordinated with DEP M&C.
6/11/2018: Revised application received. New stormwater results for "new" stormwater outfall will be provided when available. Confirmation of submittal to DRBC will also be provided.
6/21/2018 & 8/17/2018: Applicant requested Administrative Extension letter.
9/14/2018: Administrative Extension Letter issued
2/28/2019: Name Change Permit Amendment form received.
3/10/2020: Technical Deficiency Letter issued. Courtesy E-mails copy sent to client/site contact failed to go through. Sent hard copy to consultant who helped prepare the application (EA Engineering, Science and Technology, Inc., 225 Schilling Circle, Suite 400, Hunt Valley MD 21031).
3/20/2020: Extension Request received via E-mail.
3/31/2020: DEP granted extension to 6/10/2020.
6/11/2020: E-mail from applicant indicating delivery could not be made. (COVID office shutdown to most mail traffic)
6/18/2020: Response to Technical Deficiency Letter received.
6/29/2021: DEP Technical Deficiency Letter issued.
7/14/2021: Applicant E-mail requesting clarifications on Technical Deficiency Letter issues.
7/14/2021: DEP E-mail response to 7/14/2021 Applicant E-mail (clarifications)
10/25/2021: Response to Technical Deficiency Letter received. Response indicated facility would redirect all IW to POTW.
10/27/2021: DEP (Berger) E-mail placing application onhold, pending connection of facility to POTW circa October 2022.
9/16/2022: Messer (Patrick Carrube) E-mail indicating connection expected in October, and asking on how to proceed.
9/19/2022: DEP (Berger) E-mail requesting NPDES Permit amendment form submittal.
9/19/2022: Messer (Patrick Carrube) asking for additional process clarification.
9/20/2022: DEP (Berger) E-mail response to 9/19/2022 Messer E-mail.
11/1/2022: Messer E-mail notifying Department of their connection to the POTW.
11/3/2022: Messer On-Base No. 74897 submittal (NPDES permit amendment form).
11/4/2022: Messer E-mail asking about DMR reporting requirements due to cessation of IW discharge.
11/4/2022: DEP (Berger) E-mail response clarifying DMR reporting requirements.