

Application Type Renewal & Transfer
 Facility Type Industrial
 Major / Minor Minor

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

Application No. PA0012394
 APS ID 1005574
 Authorization ID 1295174

Applicant and Facility Information

Applicant Name	<u>Patterson-Kelley LLC (PK)</u>	Facility Name	<u>Patterson-Kelley (PK) FKA Harsco Industrial Patterson Kelley aka Patterson Kelley</u>
Applicant Address	<u>155 Burson Street</u> <u>East Stroudsburg, PA 18301-2251</u>	Facility Address	<u>155 Burson Street</u> <u>East Stroudsburg, PA 18301-2251</u>
Applicant Contact	<u>Emily Hadley (HR manager)</u>	Facility Contact	<u>Emily Hadley</u>
Applicant Phone	<u>(570) 476-7322</u>	Facility Phone	<u>(570) 467-7322</u>
Client ID	<u>353528</u>	Site ID	<u>4403</u>
SIC Code	<u>3433, 3559</u>	Municipality	<u>East Stroudsburg Borough</u>
SIC Description	<u>Manufacturing - Heating Equipment, Except Electric, Manufacturing - Special Industry Machinery, Nec</u>	County	<u>Monroe</u>
Date Application Received	<u>November 7, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 8, 2019</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Renewal and Transfer of NPDES Permit.</u>		

Summary of Review

The 11/7/2019 NPDES Permit Transfer Application has been merged with the pending NPDES Permit Renewal Application per DEP Policy. The new owner/operator took control of facility on 11/12/2019. This APS Application replaced the pending NPDES Permit Renewal Application for previous permittee. No change in flows, pollutant mass loads, or pollutant concentrations are proposed. Previous Renewal Application (APS# 565502, Account# 380460) replaced by this application.

This is an Individual IW (no ELG) NPDES Permit Renewal application for the discharge of 0.0104 MGD annual average daily flow to the East Stroudsburg Storm Sewer System (MS4 No. PAG132318 Outfall 019 (Little Sambo Creek) discharge) to Unnamed Tributary # 4924 to Brodhead Creek (TSF, MF) a.k.a. "Little Sambo Creek", at Latitude 40.995236° and Longitude -75.185386° per application coordinates (converted coordinates).

Permittee Clarification:

- **New Permittee/Operator:** "Patterson-Kelley LLC" (FKA Harsco Patterson-Kelley LLC), EIN# 84-2532784, took over as operator on 11/12/2019 per NPDES Permit Transfer Application. Harsco Patterson-Kelley LLC changed its name to "Patterson-Kelley LLC" on 11/12/2019 or thereabout.
 - Patterson-Kelley LLC conveyed back the property to Harsco Corporation the property (i.e. Patterson-Kelley LLC is now leasing the property from Harsco Corporation, EIN# 23-1483991).
 - The 1/3/2020 Letter Response indicated "The Marley Company LLC" purchased 100% of the membership interests in Patterson-Kelley LLC. The Marley Company LLC was not found on the PA Department of State Corporat

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	May 20, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	5-21-21

Summary of Review

- e website by 1/7/2020 Query.
- **Previous Permittee:** Harsco Industrial Patterson-Kelley, a division of Harsco Corp., EIN# 23-1483991 (Client# 353528). The 3/12/2020 PK Letter Item 1.c indicated that “Harsco Industrial Patterson Kelley” was an unofficial division name of Harsco Corporation, and that it remained the facility owner.
 - Previous 1989 NPDES permit application indicated that Patterson Kelly (Client# 3680) was a division of Harsco Corp. and referenced same EIN#. Harsco Industrial Patterson website, accessed 11/8/2019, indicated Harsco acquired Patterson Kelley in 1974.
 - PA Department of State Corporate Search indicates the “Patterson-Kelley Co. Inc.” business entity (Business Entity #267207, created circa 1933) was a “withdrawn/consolidated inactive” business entity (date not given). Harsco Corporation (Business Entity #155092) was created on 3/25/1956 and has the same mailing address of 350 Poplar Church Rd, Camp Hill PA 17011-2521. For purposes of NPDES Permitting, “Patterson-Kelley” was a fictitious name for the old permittee used as client name. DEP Client Verifiers were notified via 12/7/2017 E-mail.

Facility Description: This is a SIC Code No. 3433 (heating equipment) manufacturing company for commercial heating equipment. The facility assembles boilers (aluminum, copper and stainless steel) and water heaters (copper, copper/nickel) which are hydrostatically tested for leaks. No metal finishing operations (40 CFR 433 ELGs).

- **Clarification of Discharge point to Waters of Commonwealth:** 2017 NPDES Permit Renewal Application indicated facility discharges to East Stroudsburg MS4 system with ultimate discharge to Little Sambo Creek (not the Sambo Creek, Stream Code #4925 as previously permitted). E-maps shows the East Stroudsburg MS4 GP# PAG132318 Outfall 019 discharge (to the Little Sambo Creek).
- **Site Operations Description:**
 - **Old Harsco Patterson-Kelley website description:** “Manufactures and sells a full-line of condensing and non-condensing boilers. In addition to boilers, we also manufacture and sell instantaneous and semi-instantaneous water heaters. Plus, we offer an array of commercial boiler and water heating products including gas fired, dual fuel and outdoor boilers”.
 - **Application description:** Application identified SIC Code# 3433 as primary SIC Code. “Facility assembles aluminum, copper and stainless steel boilers and copper, copper/nickel water heaters which are tested via hydrostatic testing to see if they hold pressure. Products are filled with water for a certain period of time and then the water is released into floor drains. The boilers are then ran through a “runout” process to calibrate the gas, oxygen and CO levels. The boiler is filled up with water to ensure the engine does not over heat and cause damage. The facility floor drains depending on location will lead straight to the outfall, or the retention pond outside. The pond flows back under the facility to the outfall location. All products are for comfort heat or potable water systems. Company follows the lead free act.”
- **Wastewaters:** Hydrostatic test discharges from boilers/water heaters, Non-Contact Cooling Water, and IW Stormwater flow to common treatment pond (which overflows to discharge) and onsite piping (between pond and Outfall No. 001) prior to discharge via Outfall No. 001.
 - **No ELG wastewater:** Application confirmed that it does not conduct any of the 40 CFR 433 (Metal Finisher) industrial activities subject to ELGs.
 - **NPDES Permit Basis Flow:** 0.0104 MGD (including allowance for stormwater contributions to discharge from roof drains and outside treatment plant overflow)
 - **Application-estimated Production Flows:** Application indicated current IW wastewater production rates at 2 – 3 hours per day, 5-days per week, with 1 – 2 hydrostatic test discharges/day of ~0.004 MGD.
 - 0.0005 MGD average flow during production (normal 8-hour production day)
 - 0.0037 MGD max flow during production (normal 8-hour production day)
 - Theoretical Design Flow: 0.1 MGD (i.e. stormwater flows included)
 - **Stormwater contribution:** IW. IW Stormwater comes from roof drains and outside areas plus offsite non-IW stormwater from the adjacent offsite Stones Throw Development’s retention pond’s overflow. Once mixed with IW wastewater, it is all regulated as IW wastewater. Estimated 711,451 square foot stormwater drainage area, 51% impervious for Outfall No. 001 (plus any overflow from offsite development retention pond). Stormwater BMPs include: Housekeeping, routine inspections, spill/kit materials, proper chemical storage. PK requested that no separate stormwater-only sampling requirements be applied to this outfall in the application.
 - **No Chemical Additives:** Discharges containing chemical additives are directed exclusively to the sanitary sewer system (not through Outfall No. 001). PK indicated all chemical insertion points are either within closed-loop systems or discharged to the sewers. PK indicated that it has taken preventive measures

Summary of Review

eliminating the chance that chemically-treated boiler water from entering the wastewater stream. PK has a sanitary discharge permit with the Borough of East Stroudsburg. The closed loop system chemical additives (not being discharged to the waters of the Commonwealth) included:

- Bacticide 45-B: Biocide used to treat cooling water in closed loop hydrotesting system in Mach Boiler Testing.
 - Chem-Aqua 11000: Cooling Water Treatment chemical used in Mach Boiler Testing Cooling Tower,.
 - MB-38: Biocide used to treat cooling water in closed loop hydrotesting system in Mach Boiler Testing.
 - **No sewage component**: Site-generated sewage is discharged to the East Stroudsburg POTW. They have checked onsite piping. Any pathogens would be coming from wildlife sources.
- **Onsite Treatment (Settlement)**:
 - **Onsite Pond/Impoundment**: The outside ~450,000-gallon treatment Pond receives IW flows (hydrostatic test discharges, NCCW, floor drainage) and onsite IW stormwater plus offsite (Stones Throw Development stormwater pond overflow via pipe) stormwater and discharges via pond overflow to a pipe. The applicant does not believe the 1973 WQM Permit applies to the onsite treatment pond, but that it was for a subsequently removed tank used in a discontinued site operation.
 - **Regulatory classification: It is a wastewater treatment impoundment subject to Chapter 91.35 (Wastewater Impoundments)**. Stormwater mixed with IW is classified as IW, not stormwater. **NOTE**: If the onsite pond had received only Non-Contact Cooling Water (NCCW) and uncontaminated hydrostatic test discharge water, the pond might have been classifiable as a stormwater pond. The nature of the site hydrostatic test discharges does not allow for simple checking for visible signs of contamination (unlike an oil sheen from an oil tank being hydrostatically tested) prior to discharge to the pond in order to verify non-contamination. Floor drainage can include other materials than hydrostatic test discharge water.
 - The onsite unlined pond is described as an approximately 11,000 square foot pond, with an approximate 3-foot depth for the (~2,000 square foot) shallow section and 6-foot depth for deeper (~9,000 square foot) area, with an estimated 450,000-gallon storage capacity. The onsite pond was noted to allow for equalization and settling of stormwater and IW waste streams (hydrotesting waters). The onsite pond discharges via pond overflow pipe to Outfall No. 001.
 - The onsite pond was indicated to currently contain no residues. The applicant does not believe the pond to generate waste sludges and that it does not require cleaning.
 - The weir elevation is at 464 Feet above mean sea level and is located near Outfall No. 001, not the treatment pond itself. It was indicated to be functional.
 - PK does not want to transfer the old WQM Permit No. 4573202 because PK believes it refers to discontinued site processes (involving hydrostatic test discharges, cooling water, and “intermittent small waste flows form a cement lining operation and stone tumbler operation”) and that the WQM permit-application-referenced “circular settling tank” is no longer in-place at the facility.
 - PK indicates the DEP Inspection-referenced “onsite circular tank” (at Inspection report GPS coordinates) is a “discharge retention vault utilized to control discharge flows existing the facility at Outfall #001”. PK indicates “it is not a tank, nor is any water treatment conducted in the vault”. Wastewater discharges from the facility into a rectangular concrete vault with structural baffles. Upon filling to the level of the discharge pipe, wastewater flows into the circular section where Outfall is located. Wastewater discharges off-site upon reaching the level of the outflow.
 - 3/12/2020 Response Letter information: “Based on review of historical aerial photographs and original construction plans, it appears the tank was in place from the late 1970s until the late 1990s/early 2000s. It is no longer visible on the attached 2005 aerial photo”. **NOTE**: The earlier aerial photos did not flag the presumed circular tank.
 - **Piping/Weir/Vault at Outfall No. 001**: The onsite pond discharges to a pipe under the PK building that directs the discharge to a ~5,000-gallon baffled rectangular equalization vault, located just upgradient of Outfall No. 001), which discharges via rectangular weir and 18-inch concrete pipe.
 - This pipe receives additional IW discharges (building internal drains, stormwater catch basins/lift station and roof drains) prior to reaching Outfall No. 001.
 - The Equalization Vault was noted to provide for equalization and settling. Biennial sediment removal via vac truck.
- **Outfall No. 001**: This is the “combined wastewater/stormwater sampling point” on the Southwest side of the property (prior to direction into the MS4 system for ultimate discharge to the Little Sambo Creek).

Summary of Review

- **No previous flow meter or automatic sampler.** The facility had been doing time-based composite sampling (contrary to existing NPDES Permit requirements). They have proposed an SOP for estimating discharge flows through the existing weir, and to collect the minimum four (4) flow-based proportional aliquots over an 8-hour sampling period (production day) per NPDES Permit Part A.II composite sampling requirements. **Facility sampling methodology was discussed with DEP inspector.**
- **Flow Proportional Sampling:** PK has committed to a flow-proportional composite sampler (required to comply with existing NPDES Permit conditions). It is required due to 24-hour/day stormwater discharges plus potential for second working shift. This permit assumes that it will be installed prior to PED.

Part C Special Conditions: Changes bolded:

- **Part C.I.A, B, C, D: Updated Standard IW conditions (Necessary property rights; Residual Management condition; Relation to WQM permits; and BAT/ELG requirements)**
- **Part C.I.E:** Existing requirement for monthly monitoring to be at least 12-hours after precipitation event. This requirement retained for monthly monitoring requirements. It does not apply to the required daily or weekly sampling where frequency accounts for any stormwater dilution impacts.
- **Part C.II: New WQBELs for Toxic Pollutants conditions required per Reasonable Potential Analysis for Copper, Thallium, and 3,4-Benzofluoranthene.**
- **Part C.III: New WQBELs below Quantitation Limits conditions required for Thallium, and 3,4-Benzofluoranthene.**
- **Part C.IV: Updated** "Requirements Applicable to Stormwater Influenced Outfall" now reflecting current IW Stormwater-related conditions. Due to onsite mixture of IW stormwater and non-IW stormwater with IW wastewater prior to discharge, there are no separate stormwater sampling requirements.
 - **IW Stormwater General Permit PAG-03 Appendix U (Metal Fabricator) stormwater BMPs incorporated by reference.**
 - **Special Stormwater BMP: Due to acceptance of offsite Stones Throw Development's offsite pond overflow water (via underground pipe), additional language has been included: "In event that offsite stormwater run-on and/or piped offsite stormwater causes visible contamination of the onsite Wastewater Treatment Impoundment, the Department shall be notified within 24-hours with follow-up written report on the removal of the contamination."**
- **Part C.V: New Unlined Wastewater Treatment Impoundment (Pond/Basin) Cleaning Conditions) to address periodic clean-outs as needed.** A

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.	<u>001</u>	Design Flow (MGD)	<u>.0104</u>
Latitude	<u>40° 59' 45.54"</u>	Longitude	<u>-75° 11' 5.13"</u>
Quad Name	<u>East Stroudsburg</u>	Quad Code	<u>1044 (4.23.3)</u>
Wastewater Description:	<u>Hydrostatic testing water, Floor drainage; noncontact cooling water (NCCW), and stormwater associated with industrial activities plus offsite stormwater run-on.</u>		
Receiving Waters	<u>Unnamed Tributary to Brodhead Creek (TSF, MF), a.k.a. Little Sambo Creek</u>	Stream Code	<u>4924</u>
NHD Com ID	<u>26174828</u>	RMI	<u>-</u>
Drainage Area	<u>1.65 square miles (USGS PA Streamstats estimate).</u>	Yield (cfs/mi ²)	<u>0.1057</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.1744</u>	Q ₇₋₁₀ Basis	<u>LFY method using confluence of Brodhead Creek with Little Sambo Creek LFY, via USGS PAStreamstats.</u>
Elevation (ft)	<u>~421 Feet (MS4 outfall on Little Sambo Creek)</u>	Slope (ft/ft)	<u>-</u>
Watershed No.	<u>1-E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>

Background/Ambient Data

Data Source

pH (SU)	<u>7.76</u>	2/15/2018 Sample ID: 2195485 Sequence Number: 263, upstream of where stormwater sewers direct facility discharge to MS4 Outfall on Little Sambo Creek.
Temperature (°C)	<u>8.8</u>	See above.
Hardness (mg/L)	<u>154</u>	See above. Application estimated 60 – 120 mg/l Total Hardness range, based on East Stroudsburg potable water (water source, not stream data).
TSS (mg/l)	<u><5</u>	See above.
TDS (mg/l)	<u>332</u>	See above.
Total Zinc (ug/l):	<u>12.7000</u>	See above.
Total Iron (ug/l)	<u>128.000</u>	See above.
Total Nickel (ug/l)	<u><4.0</u>	See above.
Total Aluminum (ug/l)	<u>51.400</u>	See above.
Total Copper (ug/l)	<u><4</u>	See above.
Total Manganese (ug/l)	<u>15.00</u>	See above.
Total Magnesium (ug/l)	<u>3.462</u>	See above.
Total Mercury (ug/l)	<u><0.2</u>	See above.
Total Cadimium (ug/l)	<u><0.2</u>	See above.
Total Lead (ug/l)	<u><1.0</u>	See above.
Total Silver (ug/l)	<u><0.40</u>	See above.

Total Selenium (ug/l)	<7	See above.
Nearest Downstream Public Water Supply Intake	City of Easton	
PWS Waters	Delaware River	Flow at Intake (cfs) -
PWS RMI	-	Distance from Outfall (mi)

Changes Since Last Permit Issuance:

- **Outfall determined to discharge to Little Sambo Creek, not Sambo Creek. Permit updated accordingly.**
- **Little Sambo Creek flows to Brodhead Creek (CWF) which is pathogen impaired.**

Other Comments:

- Site discharge flows to discharge to Little Sambo Creek via East Stroudsburg Borough Monroe Cty MS4 No. PAG132318 Outfall 019 (Little Sambo Creek). The application indicated the Little Sambo Creek discharge point is located at:
 - Latitude: 40°, 59', 42.85"
 - Longitude: -75°, 11', 7.39"
- The IW Stormwater would be classified under existing IW Stormwater General Permit PAG-03 Appendix U (Fabricated Metal Products).
- The IW wastewater discharge will not contribute to Brodhead Creek pathogen impairment.

Treatment Facility Summary				
Treatment Facility Name: Harsco Patterson-Kelley LLC (FKA Harsco Industrial Patterson Kelley)				
WQM Permit No.	Issuance Date	Scope		
4573202	10/10/1973	Settling tank for hydrostatic test discharges, cooling water, and other small intermittent waste water discharges. Boiler blow-down was to go to the Borough Sanitary sewer system.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Settlement in onsite pond and concrete vault	No Disinfection	0.0104
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
Unknown	None	Not Overloaded	NA	NA

Changes Since Last Permit Issuance: Facility is proposing installation of flow measurement device and composite sampler. Weir had been used as flow measurement device.

Other Comments:

WQM Permit-related information: The current permittee believes the WQM Permit refers to a since-removed structure and site process operation (under old permittee) and does not want the WQM permit transferred. The existing WQM permittee is the facility owner, who has the option of seeking WQM permit termination.

- 3/12/2020 Response Letter Item 1: PK does not want to transfer the old WQM Permit No. 4573202 because PK believes it refers to discontinued site processes (involving hydrostatic test discharges, cooling water, and “intermittent small waste flows form a cement lining operation and stone tumbler operation”) and that the WQM permit-application-referenced “circular settling tank” is no longer in-place at the facility. PK indicates the DEP Inspection-referenced “onsite circular tank” (at Inspection report GPS coordinates) is a “discharge retention vault utilized to control discharge flows existing the facility at Outfall #001”. PK indicates “it is not a tank, nor is any water treatment conducted in the vault”.
- 3/12/2020 Response Letter included additional information: “Based on review of historical aerial photographs and original construction plans, it appears the tank was in place from the late 1970s until the late 1990s/early 2000s. It is no longer visible on the attached 2005 aerial photo”. NOTE: The earlier aerial photos did not flag the presumed circular tank.

No Chemical Additives in Effluent:

- 1/3/2020 Response Letter Item 4.d.ii.1 response: “Water softening chemicals are only added to the Mach boiler run-out station. As of December 2019, discharges from this closed system are pumped into a 41-gallon sump prior to discharging to sanitary sewer”.
- 1/3/2020 Response Letter Item 4.d.ii.5.a response and 3/12/2020 Letter Response Item 4.d.5: The “softener unit used to treat water used in testing of aluminum boiler units had a drain line from the salt brine tank and an unknown line going to the floor drain”. The 1/3/2020 Letter noted that the lines had been rerouted to a newly installed 41-gallon holding tank, and discharges are pumped into the sanitary sewer”.

Flow Measurement: Existing NPDES Permit indicates weir is used for flow measurement. DEP Inspection reports indicated a 3-foot weir had been inoperative. The facility indicates it is operational. In addition, a flow-proportional composite sampler is required, which requires an accurate method of flow measurement.

Compliance History

DMR Data for Outfall 001 (from April 1, 2020 to March 31, 2021)

Parameter	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20
Flow (MGD) Average Monthly	0.00051 7	0.00291 0	0.00016 3	0.00050 8	0.00034 4	0.00038 3	0.00060 1	0.00048 4	0.00022 5	0.00073 1	0.00042 6	0.00040 8
Flow (MGD) Daily Maximum	0.00078 4	0.00124 5	0.00034 1	0.00048 5	0.00057 2	0.00109 1	0.00167 3	0.00165	0.00051 9	0.00151 5	0.00062 2	0.00104 8
pH (S.U.) Minimum	7.80	7.3	8.3	7.88	7.3	7.57	7.73	7.38	7.90	7.81	7.93	7.84
pH (S.U.) Maximum	7.8	7.3	8.3	7.88	7.3	7.57	7.73	7.38	7.90	7.81	7.93	7.84
TSS (mg/L) Daily Maximum	< 5.00	< 5.00	< 5.00	< 5.00	< 5.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Oil and Grease (mg/L) Average Monthly	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
Oil and Grease (mg/L) Instantaneous Maximum	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8

DMR Data for Outfall 001 (from October 1, 2018 to September 30, 2019)

Parameter	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18
Flow (MGD) Average Monthly	0.00049 5	0.00092 6	0.00022 6	0.00099 5	0.00074 9	0.00059 7	0.00079 1	0.00014 5	0.00022 6	0.00027 6	0.00025 2	0.00062 9
Flow (MGD) Daily Maximum	0.00081 0	0.00284 6	0.00092 0	0.00361 9	0.00289 7	0.00199 9	0.00300 0	0.00038 4	0.00052 0	0.00075 8	0.00298 3	0.00298 3
pH (S.U.) Minimum	7.49	7.2	7.61	7.61	8.01	8.17	8.23	8.0	8.05	8.2	7.79	7.51
pH (S.U.) Maximum	7.49	7.2	7.61	7.61	8.01	8.17	8.23	8.0	8.05	8.2	7.79	7.51
TSS (mg/L) Daily Maximum	< 5	< 5	< 5.0	< 5.0	< 5.0	11.2	< 5.0	14.8	< 5.0	< 5.0	< 5.0	< 5.0
Oil and Grease (mg/L) Average Monthly	< 4.8	< 4.8	< 5.0	< 4.8	< 4.8	< 4.8	< 4.8	< 5.0	< 4.8	< 4.8	< 4.8	< 4.8

**NPDES Permit Fact Sheet
Patterson-Kelley LLC**

NPDES Permit No. PA0012394

Oil and Grease (mg/L) Instantaneous Maximum	< 4.8	< 4.8	< 5.0	< 4.8	< 4.8	< 4.8	< 4.8	< 5.0	< 4.8	< 4.8	< 4.8	< 4.8
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Compliance History

Inspection History:

SITE NAME	INSP PROGRAM	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	INSPECTOR ID	INSPECTOR	# OF VIOLATIONS
HARSCO PATTERSON-KELLEY	WPCNP	01/03/2019**	Compliance Evaluation	No Violations Noted	00615077	ACKERS, DANIEL	<u>0</u>
HARSCO PATTERSON-KELLEY	WPCNP	01/12/2018	Compliance Evaluation	No Violations Noted	00615077	ACKERS, DANIEL	<u>0</u>
HARSCO PATTERSON-KELLEY	WPCNP	01/09/2018	Administrative/File Review	Violation(s) Noted	00615077	ACKERS, DANIEL	<u>1</u>
HARSCO PATTERSON-KELLEY	WPCNP	11/15/2017	Administrative/File Review	Violation(s) Noted	00615077	ACKERS, DANIEL	<u>3</u>
HARSCO PATTERSON-KELLEY	WPCNP	12/19/2016*	Compliance Evaluation	No Violations Noted	00615077	ACKERS, DANIEL	<u>0</u>
HARSCO PATTERSON-KELLEY	WPCNP	08/06/2014	Routine/Partial Inspection	Violation(s) Noted	00462913	INSALACO, SANDRA	<u>1</u>
HARSCO PATTERSON-KELLEY	WPCNP	03/29/2012	Administrative/File Review	Violation(s) Noted	00462913	INSALACO, SANDRA	<u>1</u>

*12/19/2016 Inspection Report noted that other flow from retention pond (receiving parking lot and other overland runoff) can feed into floor drains and enter into settling basin if flow is high enough. Flows were estimated from public water meters that would not account for stormwater contribution. Previous inspection reports had noted an inoperative 3-foot weir at the outlet of the settling basin, which remained inoperative. Grab sample had 5.71 SU pH at circular tank. Facility planning on expansion in future.

**1/3/2019 Inspection Report indicated facility had expanded. The 3-foot weir at the outlet of the settling basin still appeared inoperative. Inspection report indicated problem with outfall coordinates. Onsite personnel noted settling pond rarely discharges. Bulk of pond flow appeared to come from offsite (from Stone Gate Development). Pond water is no longer being used for water cooled air compressors. Department asked for PPC Plan meeting all permit requirements. It was unclear where a softener unit drain line was discharging to. Two exceedances noted in last two years. Need for flow metering to allow for flow proportional composite sampling was noted.

Comments:

- Facility was previously using time-composite samples, not flow-proportional composite testing per existing NPDES Permit. This requirement was communicated to the facility during the permit review process. They proposed an interim sampling methodology and committed to installing a composite sampler. The facility also reports the weir (see below) was operative.
- No open violations per 5/202021 WMS Query (Open violations by client number):

Permit: PA0012394

Client ID: 353528
Client: All

Open Violations: 0

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

Due to new owner/operator (newly created entity in same corporate family as previous owner/operator), the new permittee will have no previous compliance history.

Due to corporate reshuffling within the same corporate family, the old owner/operator compliance history remains relevant:

- 8/13/2018: Consent Assessment of Civil Penalty addressing late DMRs, late renewal application, missing stormwater Annual Inspection Reports, pH exceedances, and NOVs.
- 1/9/2018: NOV regarding missing annual Stormwater Inspection Forms (2013 – 2017)
- 11/15/2017: Second NOV regarding later NPDES Permit Renewal application, late DMRs, and pH exceedance. Compliance meeting scheduled. NOTE: The operator did not come to the scheduled 1/3/2018 Compliance Meeting per DEP M&C.
- 8/23/2017: NOV regarding late renewal application, late DMRs, and pH exceedance.
- Flow Measurement: Existing NPDES Permit indicates weir is used for flow measurement, with water metering used to estimate wastewater flows. DEP Inspection reports indicated the settling basin's 3-foot weir has been inoperative for years.

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) .0104
 Latitude 41° 0' 30.00" Longitude -75° 10' 50.00"
 Wastewater Description: IW Non-Process Effluent without ELG

Permit Limits and/or Monitoring: Changes bolded

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
Flow	Report (MGD) Report (MGD)	Monthly Average Daily Max	Existing standard requirement and needed for flow-proportional composite sampling.
TSS	Report Lbs/d Report Lbs/d Report 100.0 200.0	Monthly Average Daily Max Monthly Average Daily Max IMAX	Existing permit limits retained. Significant digit added. Application data: 9.2 mg/l max and 4.0 mg/l average (4 samples)
pH	6.0 – 9.0 SU	Inst. Min - IMAX	Existing Technology limit (Chapter 95.2). Significant digit added. Application data: 7.5 – 8.01 SU (4 samples)
Oil & Grease	15.0 30.0	Monthly Average IMAX	Existing Technology limit (Chapter 95.2). Significant digit added. Application data: 7.1 mg/l max and 5.4 mg/l average (4 samples)
Total Copper Interim (3-years) Final (4 th year)	0.025 Lbs/d 0.038 Lbs/d 28.3 ug/l 44.1 ug/l 70.7 ug/l	Monthly Average Daily Max Monthly Average Daily Max IMAX	New WQBEL requirement per Reasonable Potential Analysis. Interim monitoring, with new limits effective in 4th year. Application data: 18.0 ug/l max and 11.4 ug/l average (4 samples)
Total Thallium Interim (3-years) Final (4 th year)	0.0004 Lbs/d 0.0007 Lbs/d 0.50 ug/l 0.78 ug/l 1.25 ug/l	Monthly Average Daily Max Monthly Average Daily Max IMAX	New WQBEL requirement per Reasonable Potential Analysis. Interim monitoring, with new limits effective in 4th year. Application data: 0.4 ug/l max and 0.4 ug/l average (4 samples) at 0.4 ug/l QL. DEP QL at 2 ug/l. Three ND samples. WQBEL below Quantitation Limit condition applies.
3,4-Benzofluoranthene Interim (3-years) Final (4 th year)	0.00001 0.00001 0.011 0.017 0.028	Monthly Average Daily Max Monthly Average Daily Max IMAX	New WQBEL per Reasonable Potential Analysis. Interim monitoring, with new limits effective in 4th year. Application data: 0.98 ug/l max and 0.97 ug/l average (4 samples) at 0.97 ug/l QL. DEP QL at 2.5 ug/l. WQBEL below Quantitation Limit condition applies.
Antimony, Total	Report Lbs/d Report Lbs/d Report ug/l Report ug/l	Monthly Average Daily Max Monthly Average Daily Max	Monitoring requirement per Reasonable Potential Analysis. Application data: 2.1 ug/l max and 1.40 ug/l average (4 samples). 0.4 ug/l Lab QL. DEP Target QL at 2 ug/l.

Dissolved Iron	Report Lbs/d Report Lbs/d Report ug/l Report ug/l	Monthly Average Daily Max Monthly Average Daily Max	Monitoring requirement per Reasonable Potential Analysis. <u>Application data:</u> 140.0 ug/l max and 82.25 ug/l average (4 samples). 0.8 ug/l Lab QL.
Zinc, Total	Report Lbs/d Report Lbs/d Report ug/l Report ug/l	Monthly Average Daily Max Monthly Average Daily Max	Monitoring requirement per Reasonable Potential Analysis. IW Stormwater General Permit PAG-03 Appendix U (applicable to the facility's SIC Code) <u>Application data:</u> 25.0 ug/l max and 16.25 ug/l average (4 samples). 2.0 ug/l Lab QL.
Nitrate-Nitrite as N	Report Lbs/d Report Lbs/d Report Report	Semi-annual Avg Daily Max Semi-annual Avg Daily Max	IW Stormwater General Permit PAG-03 Appendix U (applicable to the facility's SIC Code) statewide BPJ monitoring requirement being added due to stormwater contribution to discharge <u>Application data:</u> 0.03 mg/l max and 0.03 mg/l average (4 samples)
Total Aluminum	Report Lbs/d Report Lbs/d Report Report	Semi-annual Avg Daily Max Semi-annual Avg Daily Max	IW Stormwater General Permit PAG-03 Appendix U (applicable to the facility's SIC Code) statewide BPJ monitoring requirement being added due to stormwater contribution to discharge. <u>Application data:</u> 70.0 ug/l max and 50 ug/l LTA (4 samples).
Total Iron	Report Lbs/d Report Lbs/d Report Report	Semi-annual Avg Daily Max Semi-annual Avg Daily Max	IW Stormwater General Permit PAG-03 Appendix U (applicable to the facility's SIC Code) statewide BPJ monitoring requirement being added due to stormwater contribution to discharge. <u>Application data:</u> 225.0 ug/l max and 132.75 ug/l LTA (4 samples).
Total Residual Chlorine (TRC)	-	Not needed	In the absence of disinfection at the plant itself, the only source would be from the public water supply, with no spiking expected. The TRC Spreadsheet indicated TBELs (0.50 mg/l monthly average and 1.63 mg/l IMAX) would be the applicable limits if needed in the future. <u>Application data:</u> 0.1 mg/l max and 0.1 mg/l average (4 samples)

Comments:

- Monitoring updated per current EDMR requirements.
- Flow proportional 24-hour composite sampling is required because of IW Stormwater component which could result in IW discharge during off-hours and/or in event of more than one 8-hour production shift/day.
- Additional Mass loading reporting (no additional sampling required).
- Monitoring frequencies based on standard IW monitoring requirements and IW Stormwater monitoring requirements.
- Pathogen monitoring (fecal coliforms; E Coli) not required. Wildlife stormwater contribution accounts for any detected fecal coliforms (78/100 mil max and 21.25/100 ml average of 4 samples).
- BOD5 monitoring not required as no sanitary wastewater is treated. Wildlife stormwater contributions accounts for detected 5.4 mg/l BOD5 maximum and 3.0 mg/l average of 4 samples.
- TRC: In the absence of any disinfection or disinfection requirements, the only source of chlorine would be the public water supply. Four non-detects at 0.1 mg/l lab quantitation limit indicates no significant TRC level in

effluent. Per TRC Spreadsheet, the Chapter 92a.48 TRC TBELs apply in event of future chlorine disinfection of wastewater. No additional monitoring required at this time.

Reasonable Potential Analysis: See Toxic Management Spreadsheet output below. The application sampling was time-weighted composite sampling but PK believes the sampling results to be representative of site discharges.

- 1/3/2020 Response Letter Pre-draft Survey: The toxics pollutants were attributed to the hydrostatic testing of boilers and water heaters in the Pre-draft Survey.
- WQBELs from Water Quality Modeling:

☑ Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits			Units	Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX				
Total Antimony	Report	Report	Report	Report	Report	µg/L	11.7	THH	Discharge Conc > 10% WQBEL (no RP)
Total Copper	0.025	0.038	28.3	44.1	70.7	µg/L	28.3	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Dissolved Iron	Report	Report	Report	Report	Report	µg/L	625	THH	Discharge Conc > 10% WQBEL (no RP)
Total Thallium	0.0004	0.0007	0.5	0.78	1.25	µg/L	0.5	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Zinc	Report	Report	Report	Report	Report	µg/L	223	AFC	Discharge Conc > 10% WQBEL (no RP)
3,4-Benzofluoranthene	0.00001	0.00001	0.011	0.017	0.028	µg/L	0.011	CRL	Discharge Conc ≥ 50% WQBEL (RP)

- Additional IW Stormwater GP PAG-03 Appendix U parameters (Nitrate-Nitrite as N, Total Aluminum, Total Iron, and Total Zinc) monitoring, applicable to the facility's SIC Code, due to IW stormwater contributions.
- No chemical additives being discharged to the waters of the Commonwealth. Chemical Additive conditions not needed at this time.

TRC EVALUATION					
Input appropriate values in A3:A9 and D3:D9			Patterson-Kelley LLC		
0.1744	= Q stream (cfs)		0.5	= CV Daily	
0.0104	= Q discharge (MGD)		0.5	= CV Hourly	
30	= no. samples		1	= 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 = 3.477		1.3.2.iii	WLA_cfc = 3.382
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373		5.1c	LTAMULT_cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 1.296		5.1d	LTA_cfc = 1.966
Source	Effluent Limit Calculations				
PENTOXSD TRG	5.1f	AML MULT = 1.231			
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ	
		INST MAX LIMIT (mg/l) = 1.635			

Communications Log:

12/1/2016: Standard DEP Reminder Letter for NPDES Permit Renewal Application

6/22/2017: NPDES Permit renewal application received (APS# 565502, Account# 380460).

6/29/2017: Application Incompleteness Letter

7/20/2017: Renewal Application Incompleteness Letter

9/5/2017: Follow-up phone call regarding lack of response to the Incompleteness Letter. Ms. Meghan Shambach indicated she was working on the revised application and would be getting into the Department within a week or so. She indicated she understood what was being asked for.

9/18/2017: Ms. Meghan called for clarification on requirements.

- The site SIC code is subject to 40 CFR 433 (metal finishing), so she should determine if the site is doing any of the operations subjecting it to metal finishing requirements and otherwise explain why the hydrostatic discharge is not likely to have any constituent not addressed by application analytical data. She said that they only did the Pollutant Group 1 and 2 tables, but I pointed out that NPDES Permit instructions require additional pollutant group tables for metal finishers. She thought that everything was mostly manufactured offsite with onsite activities not including the 40 CFR 433-listed activities. I asked that the narrative response to the Application Incompleteness letter explain why nothing (not already tested for) would be found in the hydrostatic discharge water. The question whether the discharge water should be classified as hydrostatic discharge or process wastewater was secondary to making sure that the application data addressed potential pollutants. Noted TTO should be calculated if they fall under metal finisher requirements.
- Explained to her that discharged boiler water chemical additives would be covered by Chemical Additive conditions and so the chemical additive sections of the application must be completed. Pointed her to the DEP Chemical Additive webpage for list of approved chemical additives, Chemical Additive Request/Notification forms, and further explanation about what is or is not a chemical additive.

11/7/2017: Administrative Extension Letter issued

11/17/2017: Telephone Call indicated they might not have sampled for one constituent. Told them to submit what they had by 12/1/2017 (deadline noted in Admin Ext Letter), with date for submittal of remaining analytical data so we could process application for completeness (still missing GIF and other important data as of 11/17).

12/1/2017: Revised NPDES Permit Renewal Application received.

8/20/2019: Applicant letter to Central Office with NPDES Permit Amendment Form (pages 1 – 2) for name change. It indicated Harsco Patterson-Kelley LLC is a wholly owned subsidiary of the prior entity, and there would be “no change to operations as a result of the corporate reorganization and name change”.

10/28/2019: DEP (Berger) E-mail requiring NPDES/WQM Permit Transfer because of change in EIN# (i.e. not simply a name change).

11/7/2019: NPDES Permit Transfer Application received.

11/7/2019: DEP (Berger) E-mail identifying the old operator EIN# from previous NPDES Permit Renewal Application, and summarizing several points from a 11/7/2017 Telephone Conversation with their attorney:

- Need to clarify application will be facility operator (NPDES permitting requirement)
- Need for new operator EIN#
- Noting existence of old WQM permit (settling tank)
- EDMR registration might have to be updated.

11/7/2019: Applicant (attorney) E-mail indicating Harsco Patterson-Kelley will be the operator under the NPDES Permit, and that they would look at WQM permit and EDMR issues. Request for confirmation that administrative review can commence was requested.

11/8/2019: DEP (Berger) E-mail confirming administrative process had commenced per request. The transfer application was merged into pending NPDES Permit Renewal Application per SOP.

11/13/2019: Technical Deficiency Letter issued.

11/14/2019: DEP (Berger) E-mail of courtesy copy of Tech Def letter.

11/15/2019: Ms. Emily Hadley and David W. called. They are working on the response to the Technical Deficiency letter. They asked for some minor clarifications and will call to set up a more detailed discussion of letter requirements. In terms of clarifications:

- 1/3/2019 Inspection Report was referenced in letter (report typo led to confusion on year). Other inspection reports should be reviewed in preparing the response, especially the 2016 Report.
- The Letter asked for clarification on several Inspection Report items that pertained to NPDES permitting issues, with not all previous facility responses to Inspection Reports in the available files.
- If they decide to get help from a technical consultant (certified operator, engineer, etc.), they should fill out GIF section to clarify who is authorized to speak for them.

- Given small wastewater flows, they might want to look at seeing whether local Treatment Plant can handle the flows and if that would be cheaper in the long run. In that case, the NPDES permit might be convertible to an IW Stormwater NPDES permit. They said sewage is going into the municipality sewage sewer system.

1/3/2020: Applicant request for more time to prepare adequate application.

1/7/2020: DEP (Berger) E-mail granting requested extension to March 15.

3/10/2020: Consultant called to indicated application revision will be late by several days. No substantial changes to application to her knowledge.

3/27/2020: Revised Application documents received.

5/15/2020: Second Technical Deficiency Letter issued.

5/21/2020: Applicant (Walter Galacki, SPX) E-mail requesting conference call to discuss Technical Deficiency Letter issues (unspecified).

5/22/2020: Applicant-requested conference call on Second Technical Deficiency Letter: Highlights:

- Participants:**
 - DEP: James Berger
 - PK: Walter Galacki (SPX)
- Mr. Galacki wanted to introduce himself. They will be addressing the letter issues. He said that they were also contacting or planning to contact the DEP site Inspector to make sure Department concerns are addressed.
- SPX is the operator, not owner of the facility, and has experienced delays in getting some information on internal plumbing from the owner (Harsco) to verify where all the plumbing goes, and some information is 40-years old.
 - They think the chemical additives are not going to the pond, but to the sanitary sewer system. I noted that if they think the information is trustworthy, they can use it in the response. If they find out otherwise in the future, the NPDES permit has notification requirements when a permittee finds it has submitted incorrect information.
 - He noted that they might have some difficulty in changing site plumbing as they are not the building owner.
 - They did a due diligence evaluation of the site when they took it over.
- The facility only discharges batched flows (very low flows, down to hundreds of gallons per day). They are unsure on where and how to do flow-proportional composite sampling. I noted they could explain if their time-based batch discharge sampling equated to flow-proportional sampling and they could talk to the DEP Inspector as well. I told them any proposal would also have to satisfy the DEP inspector.
- The pond does receive flow from offsite residential area (with its own pond) but seldom overflows. He said that there was no build-up of sludge in the pond.
- Pond is a primary treatment unit (settlement for stormwater and any IW component). It matters if other IW waste streams are present in addition to the NCCW and hydrostatic test discharges. Chemical Additives might end up in Little Sambo Creek and impact it.
- Previous application original Pollutant Group Tables must be resubmitted, unless PK wants to redo all the sampling. The Department review will take sampling issues into account.
- There will be permit metals limits and monitoring (GP for Stormwater metals for the SIC Code; previous application sampling data indicated metals to be present). Old data might indicate spiking events.
- They may ask for more time to respond via e-mail, with target date and reason for delays. They can also e-mail questions.
- Hard copies of response needed. US Mail is being accepted at present. Electronic copies will speed the review.
- The Department would be preparing a Draft NPDES Permit after receiving a complete response.

7/31/2020: Telephone conference call requested by Applicant consultant (Shannon Lonergan):

- Participants:**
 - DEP: James Berger
 - PK:
 - Shannon Lonergan (consultant for PK)
 - Emily Hadley
 - Tad McFarlane
- Plumbing pipe tracing evaluations completed. Awaiting for contractor report.
- Updated figures with new line drawings and stormwater drainage areas. Identified catch basins.
- Pond: Confirmed primarily stormwater and NCCW from R&D labs. Heated water is in closed loop, but drainage does happen. Only chemical insertion areas are closed loop. Drain to sanitary sewer line. No chemicals in drainage to pond. IW mixes with stormwater under building. If line drawing shows only stormwater and NCCW (without chemical additives or other IW), then the pond can be regarded as a stormwater control (not treatment pond). NCCW can be discharged to stormwater controls.

- Pollutant group tables: Do not use bad or nonrepresentative data. Still need to complete entire tables with all columns.
- Looking at options to direct NCCW to Outfall No. 001 (bypassing pond). Single outfall at concrete vault with baffles to slow down discharge rate, with sampling point in round area. Offsite stormwater pond overflows into PK site.
- They will do response to letter items. Include copies of Act 14 letters with updated application.
- Composite sampling (8-hour composite sampling) is in the existing permit. Read out the Part A.II condition and noted need for accurate and representative data. They had been doing time-based composite sampling. They can try to show that they are meeting the current requirements. Any proposed methodology will need okay from DEP Inspector. They will address in the revised application and talk to the DEP inspector about sampling requirements. Lab brings sampler and can likely be programmed for 24-hour composite sampling.
- Module 1 stormwater sampling is being worked on.
- Not sure if I will have time to look over previous draft submittals prior to revised response. Still need line drawing and identified stormwater drainage areas.
- If I have questions on submittal, can send e-mails to get clarification. Goal is to issue Draft NPDES Permit out for public comments if possible.
- E-mailed questions can be sent in and preferred. (DEP voice-to-text voice-mail can garble voice-mail).

8/25/2020: Revised NPDES permit application documents received.

8/27/2020: Revised Figures submitted.