

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0114332
APS ID 988010
Authorization ID 1264231

Applicant and Facility Information

Applicant Name	<u>DII Industries, LLC</u>	Facility Name	<u>Dresser Wellsboro Plant GW Cleanup</u>
Applicant Address	<u>3000 N Sam Houston Parkway E</u> <u>Houston, TX 77032-3219</u>	Facility Address	<u>Dresser Road, Delmar Twp</u> <u>Wellsboro, PA 16901</u>
Applicant Contact	<u>Tramaine Singleton, Sr. Counsel</u>	Facility Contact	<u>Tramaine Singleton</u>
Applicant Phone	<u>(713) 839-3204</u>	Facility Phone	<u>(713) 839-3204</u>
Client ID	<u>234103</u>	Site ID	<u>262984</u>
SIC Code	<u>9999</u>	Municipality	<u>Delmar Township</u>
SIC Description	<u>Nonclassifiable Establishment</u>	County	<u>Tioga</u>
Date Application Received	<u>March 4, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>March 8, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES permit for a discharge of treated ground water</u>		

Summary of Review

The subject facility is a groundwater cleanup for the former Dresser Industries Facility. The discharge originates from onsite monitoring well MW-15 which contains contamination by Trichloroethylene and its degradation products.

Attached is a map of the discharge location.

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.

Approve	Deny	Signatures	Date
✓		Keith C. Allison / Project Manager	November 19, 2019
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.065</u>
Latitude	<u>41° 47' 38.82"</u>	Longitude	<u>-77° 17' 54.27"</u>
Quad Name	<u>Keeneyville, PA</u>	Quad Code	<u>0427</u>
Wastewater Description: <u>Groundwater Cleanup Discharge</u>			
Receiving Waters	<u>Unnamed Tributary to Baldwin Run (HQ-CWF)</u>	Stream Code	<u>21906</u>
NHD Com ID	<u>66534647</u>	RMI	<u>0.782</u>
Drainage Area	<u>2.72 mi²</u>	Yield (cfs/mi ²)	<u>0.0398</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.108</u>	Q ₇₋₁₀ Basis	<u>USGS Gage 01548500, Pine Creek at Cedar Run (1920-2008)</u>
Elevation (ft)	<u>1170</u>	Slope (ft/ft)	<u>0.00218</u>
Watershed No.	<u>9-A</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Nearest Downstream Public Water Supply Intake	<u>Jersey Shore Area Joint Water Authority</u>		
PWS Waters	<u>Pine Creek</u>	Distance from Outfall (mi)	<u>Approx. 63.5</u>

Other Comments: This groundwater cleanup operation has been discharging since 1990 and is expected to continue until a suitable Act 2 cleanup standard has been met. The discharge predates the high-quality designation of the Baldwin Run watershed. The discharge is to a large marshy area known locally as the Muck which ultimately drains to Baldwin Run. For modeling the receiving water has been assumed to flow like a stream.

The discharge is not expected to have any affect at this time on any downstream water supply with the monitoring and limitations proposed.

Treatment is provided by a 3-tray air stripper.

Compliance History	
Summary of DMRs:	A review of the DMRs for the past permit term found no effluent violations. The permittee has recently begun use of the eDMR system.
Summary of Inspections:	The facility has been inspected periodically by the Department over the past permit term, most recently on November 7, 2018 by Thomas McNerney, PG of the Environmental Cleanups and Brownfields program. This inspection identified no violations.
Other Comments:	A query in WMS found no open violations in eFACTS for DII Industries, LLC.

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/quarter	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
cis-1,2-Dichloroethylene	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
trans-1,2-Dichloroethylene	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Trichloroethylene	XXX	XXX	XXX	0.003	0.006	XXX	1/quarter	Grab
Vinyl Chloride	XXX	XXX	XXX	0.00029	0.00045	0.00072	1/quarter	Grab

Compliance Sampling Location: Outfall 001

Development of Effluent Limitations

Outfall No. <u>001</u> Latitude <u>41° 47' 43.08"</u> Wastewater Description: <u>Groundwater Cleanup Discharge</u>	Design Flow (MGD) <u>0.065</u> Longitude <u>-77° 17' 57.11"</u>
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Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	---	95.2(1)

Comments: The existing TCE limitations are technology-based.

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment C) determined that no additional effluent limitations are necessary for the discharge. The discharge has an existing Water Quality-Based Effluent Limit (WQBEL) of 0.00029 mg/L. The current monitoring for Vinyl Chloride meets the Department's Target Quantitation limit of 0.5 µg/L but not the water quality-based limit of 0.29 µg/L. The influent sampling for Vinyl Chloride is also consistently below the detection level of 0.5 µg/L and thus with adequate removal in the air stripper, the effluent concentration should be well under 0.29 µg/L. For comparison, the average levels of trichloroethylene in the influent have been 0.0086 mg/L and in the effluent are <0.0007 mg/L indicating a removal for TCE of at least 92%. Vinyl chloride is more volatile than Trichloroethylene and as such should see even better removal in the air stripper.

The condition in the existing permit requiring that the Target QL of 0.5 µg/L or a better detection level be used to show compliance with the Vinyl Chloride WQBEL will remain. In addition, the limitations in the eDMR system will also be listed as the Target QL for the permittee's demonstration of compliance with the limit.

Best Professional Judgment (BPJ) Limitations

Comments: None needed beyond the technology and water quality-based limits mentioned above.

Chesapeake Bay/Nutrient Requirements

The discharge is from an insignificant IW discharge for Chesapeake Bay discharge permitting pursuant to the Phase II Watershed Implementation Plan (WIP). The discharge is not expected to contribute to the nutrient load of the watershed and therefore, no regular nutrient monitoring will be required at this time.

Anti-Backsliding

No limitations were made less stringent in this proposed draft permit consistent with the anti-backsliding requirements of 40 CFR 122.44(l).

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Qrtly	Report Daily Max	XXX	XXX	XXX	XXX	1/quarter	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
cis-1,2-Dichloroethylene (ug/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
trans-1,2-Dichloroethylene (ug/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Trichloroethylene (ug/L)	XXX	XXX	XXX	3	6	XXX	1/quarter	Grab
Vinyl Chloride (ug/L)	XXX	XXX	XXX	0.29	0.45	0.72	1/quarter	Grab

Compliance Sampling Location: Outfall 001

Other Comments: Prior monitoring in monthly averages have been changed to quarterly averages to correspond to the monitoring frequency. Also, the monitoring for all organic parameters has changed from mg/L to µg/L to better correspond to the reported levels.

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	PENTOXSD for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input checked="" type="checkbox"/>	Toxics Screening Analysis Spreadsheet (see Attachment B)
<input checked="" type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
<input checked="" type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 385-2000-011, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
<input checked="" type="checkbox"/>	Design Stream Flows, 391-2000-023, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: Establishing Effluent Limitations for Individual Industrial Permits, 9/10/13
<input type="checkbox"/>	Other: [redacted]

Attachments:

Discharge Location Map

Reasonable Potential Analysis



