

Phase 3 Watershed Implementation Plan Wastewater Supplement

Revised, December 17, 2019

Section 2 of Pennsylvania's Phase 3 Chesapeake Bay Watershed Implementation Plan (Phase 3 WIP) describes Pennsylvania's strategy for reducing nutrients to the Chesapeake Bay from wastewater facilities. This supplement to the Phase 3 WIP provides an update on Chesapeake Bay TMDL implementation activities for point sources and DEP's current implementation strategy for wastewater. This document is updated periodically to reflect changes due to Department of Environmental Protection's (DEP's) permit actions as well as changes to strategies in managing the wastewater sector's allocated loads under the TMDL. Note that this supplement, now titled, "Phase 3 Watershed Implementation Plan Wastewater Supplement," is the same document referred to as the "Phase 2 Watershed Implementation Plan Wastewater Supplement" in the Phase 3 WIP.

I. Definitions

Several definitions are provided to clarify the terminology in this document.

Annual Net Mass Load (lbs): The Annual Total Mass Load for one year beginning October 1st and ending September 30th, adjusted for Credits sold and applied and Offsets applied. Annual Net Mass Loads are compared to Cap Loads to determine compliance.

Cap Load (lbs): The mass load of a pollutant authorized by an NPDES permit. Cap Loads for Total Nitrogen (TN) and Total Phosphorus (TP) are implemented in NPDES permits by the establishment of Annual Net Mass Load limits. The term "Net" is used to recognize that Credits and Offsets may be used to comply with the limits. The Annual Net Mass Load must be less than or equal to the Cap Load to achieve compliance.

Certification: Written approval by DEP of a proposed pollutant reduction activity to generate credits before the credits are verified and registered to be used to comply with NPDES permit effluent limitations.

Compliance Year: The year-long period starting October 1st and ending September 30th. The Compliance Year will be named for the year in which it ends. For example, the period of October 1, 2015 through September 30, 2016 is Compliance Year 2016.

Credit: The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by DEP which, when certified, verified and registered, may be used to comply with NPDES permit effluent limitations.

Delivery Ratio: A ratio that compensates for the natural attenuation of a pollutant as it travels in water before it reaches a defined compliance point.

Offset: The pollutant load reduction measured in pounds (lbs) that is created by an action, activity or technology which when approved by DEP may be used to comply with NPDES permit effluent limitations, conditions and stipulations under 25 Pa. Code Chapter 92a (relating to NPDES permitting, monitoring and compliance.) The offset may only be used by the NPDES permittee that DEP determines is associated with the load reduction achieved by the action, activity or technology.

Registration: An accounting mechanism used by DEP to track certified and verified credits before they may be used to comply with NPDES permit effluent limitations.

Total Mass Load (lbs):

Monthly Total Mass Load = The sum of the actual daily discharge loads for TN and TP (lbs/day) divided by the number of samples per month, multiplied by the number of days in the month in which there was a

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discharge. The daily discharge load for TN and TP (lbs/day) equals the average daily flow (MGD) on the day of sampling, multiplied by that day's sample concentration for TN and TP (mg/l), multiplied by 8.34.

Annual Total Mass Load = The sum of the actual daily discharge loads for TN and TP (lbs/day) divided by the number of samples per year (beginning October 1st and ending September 30th), multiplied by the number of days in the year in which there was a discharge.

Total Nitrogen: For concentration and load, Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO₂+NO₃-N), where TKN and NO₂+NO₃-N are measured in the same sample.

Truing Period: The time provided following each Compliance Year for a permittee to comply with Cap Loads through the application of Credits and Offsets. The Truing Period will start on October 1st and end on November 28th of the same calendar year, unless DEP extends this period. During this period, compliance for the specified year may be achieved by using registered Credits that were generated during that Compliance Year. For example, Credits that are used to achieve compliance in Compliance Year 2016 must have been generated during Compliance Year 2016. Approved Offsets that have been generated may also be applied during the Truing Period.

Verification: Assurance that the verification plan contained in a certification, permit or other approval issued by DEP has been implemented. Verification is required prior to registration of the credits for use in an NPDES permit to comply with NPDES permit effluent limitations.

Wasteload Allocation (WLA): The portion of a surface water's loading capacity that is allocated to existing and future point source discharges.

II. Implementation Status

Appendix Q of the Chesapeake Bay TMDL segregates Pennsylvania's point sources into four sectors – significant sewage dischargers, significant industrial waste (IW) dischargers, combined sewer overflows (CSOs) and non-significant dischargers (both sewage and IW facilities). All sectors contain a listing of individual facilities with NPDES permits that were believed to be discharging at the time the TMDL was published (2010). All sectors with the exception of the non-significant dischargers have individual wasteload allocations (WLAs) for TN and TP assigned to specific facilities. Non-significant dischargers have a bulk or aggregate allocation for TN and TP based on the facilities in that sector that were believed to be discharging at that time and their estimated nutrient loads.

The Chesapeake Bay TMDL specifies individual WLAs for 183 significant sewage treatment facilities. A sewage facility is considered significant if it has a design flow of at least 0.4 MGD. For rollout of its permitting strategy, DEP classified these facilities into three phases. Thirty IW facilities have individual WLAs in the TMDL. An industrial facility is considered significant if gross effluent discharges that have exceeded 75 lbs/day of TN or 25 lbs/day of TP. WLAs have been established in the TMDL for 39 facilities with CSOs.

Since 2010 there have been numerous on-the-ground changes within these sectors. For example, DEP has issued permits to new and expanded discharges, authorized facility mergers, and terminated permits. This document is the means by which DEP accounts for these changes to ensure that DEP's overall TN and TP loads do not exceed the total WLAs. Where it is determined that a sector is performing better than prescribed by the TMDL, excess load will be placed into a "**Point Source Reserve**." Where it is determined that a sector is not meeting its total WLAs, load from a different sector or the Point Source Reserve may be used to balance the load requirements.

Table 1 is used by DEP for accounting purposes to determine if the wastewater sector is meeting overall TMDL objectives. The performance values are total Cap loads for the Significant Sewage and IW sectors, WLAs for the CSO sector, and estimated performance based on monitoring data for the Non-Significant sector. Performance values do not consider movement of load from one sector to another, which is unnecessary to determine an overall balance for the wastewater sector. Targets are total WLAs for all sectors in the TMDL (edge of segment WLAs, rounded as appropriate). All values have units of lbs/yr.

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Table 1: Point Source Reserve

Sector	Performance		Targets		Balance	
	TN	TP	TN	TP	TN	TP
Significant Sewage	9,991,990	1,318,613	9,994,689*	1,303,685*	2,699	-14,928
Significant IW	1,319,556	41,422	1,820,139	64,684	500,583	23,262
CSOs	212,920	34,709	212,920	34,709	0	0
Non-Significant	2,957,836	410,598	3,006,667	842,104	48,831	431,506

TOTALS: 555,350 439,840

* **NOTE** – The actual Total TN and TP WLAs in the TMDL for the Significant Sewage sector are 10,635,817 and 1,386,402 lbs/yr, respectively. There were, however, numerous errors with the WLAs in Appendix Q. This document assumes those errors, which are presented in **Attachment A**, will be revised in the TMDL.

A. Changes within Sectors.

Table 2 contains the facilities that are now considered Significant that are not listed in the TMDL. The loads from these facilities have either been transferred from the non-significant sector or from another significant facility that has ceased discharging or reduced their loadings. Details about the changes are listed in **Attachment B**.

Table 2: Significant Facilities Not in the TMDL.

NPDES Permit No.	Facility	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	Sector
PA0021491	Williamstown Borough	7,306	974	Sewage
PA0028592	Bonneauville Borough	9,741	1,218	Sewage
PA0037737	Elizabethville Area Authority	7,306	974	Sewage
PA0038865	Zerbe Township Municipal Authority	7,306	974	Sewage
PA0046221	Newville Borough	7,306	974	Sewage
PA0060518	Hallstead-Great Bend Joint Sewer Authority	9,741	1,218	Sewage
PA0084212	Leacock Township	7,306	974	Sewage
PA0086304	Earl Township STP	7,306	974	Sewage
PA0208922	Woodward Township	10,228	1,364	Sewage
PA0228915	ORD Sewer Authority	9,748	1,218	Sewage
PA0234079	Tiadaghton Valley Municipal Authority	19,178	2,557	Sewage
PA0234117	West Branch Regional Authority	42,508	5,728	Sewage
PA0253812	Glendale Valley M.A.	7,808	1,041	Sewage
PA0261262	North Londonderry Township Authority	25,936	3,458	Sewage
PA0261670	Fredericksburg Water & Sewer Authority	7,306	974	Sewage
PA0266469	Weaverland Valley Authority	13,064	1,531	Sewage
PA0266566	Jackson Township STP	10,958	1,461	Sewage
PA0055328	New Morgan Landfill Co. Inc.	12,500	64	Industrial
PA0080829	Keystone Protein	19,786	381	Industrial

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Table 3 contains facilities that received Cap Loads in the TMDL but are no longer considered Significant. The sewage facilities have either ceased discharging and transferred their load to another facility or have reduced their flow and are considered non-significant. DEP has discovered that the industrial facilities listed in **Table 3** withdraw water from the same stream where the discharge occurs. The WLAs provided to these facilities in the TMDL are gross loads that include background nutrients withdrawn from those streams. When reviewing the *net* contribution from the facilities, it appears that the facilities do not meet the original thresholds used (75 lbs/day TN or 25 lbs/day TP) to determine the Significant IW discharger list, i.e., if their net loads had been considered, they would not have been considered significant. Facilities that are no longer considered significant have had their loads transferred to the non-significant sector.

Table 3: Facilities with Cap Loads in the TMDL No Longer Considered Significant or Have Terminated Permits.

NPDES Permit No.	Facility	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	Sector
PA0020699	Montgomery Borough	15,525	11,776	Sewage
PA0024287	Palmyra Borough	25,936	19,789	Sewage
PA0024325	Muncy Borough Municipal Authority	25,570	19,461	Sewage
PA0026123	Columbia Municipal Authority	36,529	31,171	Sewage
PA0028665	Jersey Shore Borough	19,178	13,740	Sewage
PA0029297	South Mountain Restoration Center	9,136	3,252	Sewage
PA0029432	PA Depart of Public Welfare	10,961	7,647	Sewage
PA0088048	New Morgan STP	9,132	4,189	Sewage
PA0088633	Lower Paxton STP	45,661	38,050	Sewage
PA0008869	PH Glatfelter Company	117,588	6,821	Industrial
PA0009857	USFW – Lamar National Fish Hatchery	60,138	1,919	Industrial
PA0010553	PAFBC – Benner Springs	110,347	2,285	Industrial
PA0010561	PAFBC – Pleasant Gap	55,049	1,591	Industrial
PA0037141	PAFBC – Huntsdale	53,512	2,804	Industrial
PA0038598	Susquehanna Aquaculture Inc.	54,007	3,530	Industrial
PA0040835	PAFBC – Bellefonte	78,988	2,636	Industrial
PA0044032	PAFBC – Upper Spring	7,000	50	Industrial
PA0112127	PAFBC – Tylersville	63,339	2,382	Industrial

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Several facilities have received Cap Loads based on different flows than those expressed in the TMDL. Those facilities are listed in **Table 4** below.

Table 4: Permitted Flows Different Than the TMDL.

NPDES Permit No.	Facility	Cap Load Flow (MGD)	TMDL Flow (MGD)
PA0021539	Williamsburg Borough	0.4	0.5
PA0036269	Stewartstown Borough	0.625	0.74
PA0037966	Moshannon Valley Joint Sanitary Authority	2.037	1.73
PA0043257	New Freedom Borough	2.25	2.3
PA0081591	Eastern York County Sewer Authority	0.5	0.6
PA0020214	Mount Union Borough	1.1	0.95
PA0028576	Abington Regional WW Authority	3.34	2.5

B. Performance.

Significant Sewage Sector

Table 5 presents all NPDES permits for Significant Sewage dischargers with Cap Loads. The NPDES Permit No., phase, facility name, latest permit issuance date, expiration date, Cap Load compliance start date, TN and TP Cap Loads, and TN and TP Delivery Ratios are presented. In addition, if TN Offsets were incorporated into the TN Cap Loads when the permit was issued, the amount is shown; these Offsets will be removed from Cap Loads upon issuance of renewed permits to implement Section IV of this document (i.e., a facility may use Offsets for compliance but may not register them as credits).

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Table 5: Significant Chesapeake Bay Sewage NPDES Permits Issued

NPDES Permit No.	Phase	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TN Offsets Included in Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0020036	3	Blossburg Borough	1/10/2017	1/31/2022	10/1/2012	7,306	-	974	0.474	0.436
PA0020214	3	Mount Union Borough	4/17/2017	4/30/2022	10/1/2013	20,091	-	2,679	0.88	0.436
PA0020249	3	Roaring Spring Borough	9/24/2013	9/30/2018	1/1/2016	12,785	-	1,705	0.88	0.436
PA0020273	2	Milton Regional Sewage Authority	9/25/2017	9/30/2022	10/1/2009	72,217	-	10,049	0.941	0.436
PA0020320	1	Lititz Sewer Authority	7/19/2019	6/30/2023	10/1/2010	70,319	-	9,376	0.891	0.436
PA0020338	3	Kulpmont-Marion Heights Joint Municipal Authority	5/4/2017	5/31/2022	10/1/2011	9,132	-	1,218	0.871	0.436
PA0020486	1	Bellefonte Borough	6/1/2019	5/31/2024	10/1/2010	58,812	-	7,842	0.93	0.436
PA0020508	3	McConnellsburg Borough	11/23/2015	11/30/2020	10/1/2012	10,959	-	1,461	0.749	0.67
PA0020567	3	Northumberland Borough	1/17/2018	9/31/2023	10/1/2012	20,548	-	2,740	0.941	0.436
PA0020583	2	Middleburg Municipal Authority	7/7/2015	7/31/2020	10/1/2012	8,219	-	1,096	0.951	0.436
PA0020621	2	Waynesboro Borough	9/14/2018	9/30/2023	10/1/2013	29,223	-	3,896	0.819	0.67
PA0020664	1	Middletown STP	11/27/2017	3/31/2020	10/1/2011	40,182	-	5,358	0.961	0.436
PA0020800	3	White Deer Township	12/29/2015	12/31/2020	10/1/2011	10,959	-	1,461	0.941	0.436
PA0020818	2	Glen Rock Sewer Authority	10/21/2015	10/31/2020	10/1/2012	10,959	-	1,461	0.961	0.436
PA0020826	1	Dover Township Sewer Authority	6/2/2017	6/30/2022	10/1/2010	146,117	-	19,482	0.961	0.436
PA0020834	2	Franklin County Authority – Greencastle	8/17/2016	8/31/2021	10/1/2012	17,351	-	2,314	0.683	0.67
PA0020885	1	Mechanicsburg Borough Municipal Authority	4/27/2017	4/30/2022	10/1/2012	37,990	-	5,065	0.951	0.436
PA0020893	1	Manheim Borough Authority	1/17/2008	1/31/2013	10/1/2011	21,847	1,025	2,776	0.97	0.436
PA0020915	2	Pine Grove Borough Authority	2/04/2016	2/28/2021	10/1/2012	27,397	-	3,653	0.961	0.436
PA0020923	1	New Oxford Municipal Authority	5/23/2016	5/31/2021	10/1/2011	32,657	-	4,354	0.961	0.436
PA0021067	1	Mount Joy Borough	2/25/2008	2/28/2013	10/1/2010	27,945	-	3,726	0.97	0.436
PA0021229	3	Littlestown Borough	6/1/2012	6/30/2017	10/1/2014	18,265	-	2,435	0.627	0.67

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NPDES Permit No.	Phase	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TN Offsets Included in Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0021237	2	Newport Borough Municipal Authority	12/7/2016	12/31/2021	10/1/2014	7,306	-	974	0.951	0.436
PA0021245	2	Duncannon Borough	6/28/2018	6/31/2023	10/1/2013	13,516	-	1,802	0.951	0.436
PA0021491	3	Williamstown Borough	5/23/2016	5/31/2021	10/1/2010	7,306	-	974	0.951	0.436
PA0021539	3	Williamsburg Borough	6/29/2017	6/30/2022	10/1/2013	7,306	-	974	0.88	0.436
PA0021563	3	Gettysburg Municipal Authority	7/12/2018	7/31/2023	10/1/2012	44,748	-	5,966	0.627	0.67
PA0021571	3	Marysville Municipal Authority	2/23/2012	2/28/2017	10/1/2012	22,831	-	3,044	0.951	0.436
PA0021644	2	Dover Borough	9/14/2015	9/30/2020	10/1/2010	7,306	-	974	0.961	0.436
PA0021687	1	Wellsboro Municipal Authority	1/11/2008	1/31/2013	10/1/2010	46,029	9,500	4,871	0.93	0.436
PA0021717	2	Marietta-Donegal Joint Authority	9/22/2015	9/30/2020	10/1/2012	13,698	-	1,826	0.97	0.436
PA0021806	2	Annvile Township	8/30/2016	8/31/2021	10/1/2012	13,698	-	1,826	0.961	0.436
PA0021814	3	Mansfield Boro Municipal Authority	12/2/2011	12/31/2016	10/1/2012	23,744	-	3,166	0.474	0.436
PA0021865	2	Adamstown Borough Authority	1/5/2010	1/31/2015	10/1/2013	10,959	-	1,461	0.891	0.436
PA0021881	3	Westfield Borough	8/20/2015	8/31/2020	10/1/2010	8,402	-	1,120	0.474	0.436
PA0021890	1	New Holland Borough Authority	2/25/2008	2/28/2013	10/1/2012	24,475	-	3,263	0.891	0.436
PA0022209	1	Bedford Borough Municipal Authority	9/20/2018	7/31/2020	10/1/2010	27,397	-	3,653	0.897	0.436
PA0022535	3	Millersburg Borough Authority	11/27/2017	11/30/2022	10/1/2013	18,265	-	2,435	0.951	0.436
PA0023108	1	Elizabethtown Borough	6/20/2016	6/30/2021	10/1/2010	109,500	-	13,688	0.961	0.436
PA0023141	3	Hastings Area Sewer Authority	5/16/2018	5/16/2023	10/1/2016	10,959	-	1,461	0.836	0.436
PA0023183	3	Mt. Holly Springs Borough Authority	1/27/2017	1/31/2022	10/1/2013	10,959	-	1,461	0.961	0.436
PA0023248	1	Berwick Municipal Authority	12/13/2019	12/31/2024	10/1/2010	66,848	-	8,913	0.871	0.436
PA0023264	2	Twin Boroughs Sanitary Authority	4/20/2016	4/30/2021	10/1/2012	16,438	-	2,192	0.88	0.436
PA0023442	3	Wrightsville Borough Municipal Authority	8/3/2017	8/31/2022	10/1/2011	7,306	-	974	0.97	0.436

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PA0023531	1	Danville Municipal Authority	11/15/2016	7/31/2020	10/1/2011	66,118	-	8,816	0.871	0.436
PA0023558	3	Ashland Borough	4/23/2012	4/30/2017	10/1/2013	23,744	-	3,166	0.951	0.436
PA0023736	3	Tri-Boro Municipal Authority	12/12/2011	12/31/2016	10/1/2013	9,132	-	1,218	0.495	0.436
PA0023744	1	Northeastern York County Sewer Authority	6/2/2017	12/31/2020	10/1/2010	33,485	-	4,627	0.961	0.436
PA0024040	1	Highspire Borough	4/26/2016	4/30/2021	10/1/2010	36,529	-	4,871	0.961	0.436
PA0024139	3	Cumberland Township Municipal Authority (North)	11/13/2019	11/30/2024	10/1/2013	9,132	-	1,218	0.627	0.67
PA0024147	3	Cumberland Township Municipal Authority (South)	11/13/2019	11/30/2024	10/1/2013	11,872	-	1,583	0.627	0.67
PA0024384	2	North Middleton Township Authority	2/16/2017	02/28/2022	10/1/2012	16,895	-	2,253	0.951	0.436
PA0024406	2	Mt. Carmel Municipal Sewage Authority	10/25/2017	10/31/2022	10/1/2010	41,095	-	5,479	0.871	0.436
PA0024431	1	Dillsburg Borough Authority	3/23/2016	3/31/2021	10/1/2011	27,945	-	3,726	0.961	0.436
PA0024708	3	Union Township	8/17/2016	8/31/2021	10/1/2012	11,872	-	1,583	0.88	0.436
PA0024759	3	Curwensville Municipal Authority	5/8/2018	5/31/2023	10/1/2014	13,698	-	1,826	0.836	0.436
PA0024902	3	Upper Allen Township	12/28/2017	10/31/2022	10/1/2012	20,091	-	2,679	0.951	0.436
PA0025381	3	Saxton Borough Municipal Authority	8/17/2017	8/31/2022	10/1/2011	7,306	-	974	0.897	0.436
PA0025933	1	Lock Haven Borough	9/16/2016	9/30/2021	10/1/2011	68,492	-	9,132	0.93	0.436
PA0026051	1	Chambersburg Borough	1/26/2017	1/31/2022	10/1/2012	124,199	-	16,560	0.683	0.67
PA0026077	1	Carlisle Borough	10/13/2017	10/31/2022	10/1/2008	127,852	-	17,047	0.951	0.436
PA0026107	1	Wyoming Valley Sewer Authority	2/4/2008	2/28/2013	10/1/2010	584,467	-	77,929	0.871	0.436
PA0026191	1	Huntingdon Borough	2/16/2017	2/28/2022	10/1/2011	73,058	-	9,741	0.88	0.436
PA0026239	1	University Area Joint Authority	9/11/2019	9/30/2024	10/1/2010	164,381	-	21,918	0.93	0.436
PA0026263	1	York City	8/3/2017	8/31/2022	10/1/2011	474,880	-	63,317	0.961	0.436
PA0026280	1	Lewistown Borough	1/5/2018	1/31/2023	10/1/2013	51,964	-	6,942	0.88	0.436
PA0026310	1	Clearfield Borough	1/11/2008	1/31/2013	10/1/2010	82,191	-	10,959	0.836	0.436

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PA0026361	1	Lower Lackawanna Valley Sewer Authority	6/10/2013	6/30/2018	10/1/2010	109,588	-	14,612	0.733	0.436
PA0026441	1	Lemoyne Borough Municipal Authority	5/10/2017	5/31/2022	10/1/2015	19,433	-	2,429	0.961	0.436
PA0026484	1	Derry Township Municipal Authority	2/23/2016	2/28/2021	10/1/2010	91,668	-	12,225	0.961	0.436
PA0026492	1	PA American Water Company Scranton WWTP	11/29/2019	11/30/2024	10/1/2013	365,292	-	48,706	0.733	0.436
PA0026557	1	Sunbury City Municipal Authority	1/18/2008	1/31/2013	10/1/2010	76,711	-	10,228	0.871	0.436
PA0026620	3	Millersville Borough	12/17/2010	12/31/2015	10/1/2013	33,790	-	4,505	0.891	0.436
PA0026654	2	New Cumberland Borough Authority	3/8/2017	3/31/2022	10/1/2013	22,831	-	3,044	0.951	0.436
PA0026727	1	Tyrone Borough Sewer Authority	12/18/2013	12/31/2018	10/1/2011	164,381	-	21,918	0.88	0.436
PA0026735	1	Swatara Township	8/19/2015	8/31/2020	10/1/2011	118,339	-	15,866	0.961	0.436
PA0026743	1	Lancaster City	6/18/2012	7/31/2015	10/1/2007	620,348	1,300	77,381	0.891	0.436
PA0026808	1	Springettsbury Township	1/26/2016	1/31/2022	10/1/2010	273,969	-	36,529	0.961	0.436
PA0026875	1	Hanover Borough	12/27/2016	12/31/2021	10/1/2012	82,991	-	10,959	0.961	0.436
PA0026921	1	Greater Hazleton Municipal Authority	2/12/2008	2/28/2013	10/1/2011	216,739	-	27,092	0.871	0.436
PA0027014	1	Altoona City Authority – East	1/29/2008	1/31/2013	10/1/2012	146,117	-	19,482	0.88	0.436
PA0027022	1	Altoona City Authority – West	1/29/2008	1/31/2013	10/1/2011	164,381	-	21,918	0.88	0.436
PA0027049	1	Williamsport Sanitary Authority – West	10/25/2017	10/31/2022	10/1/2012	71,597	-	9,546	0.93	0.436
PA0027057	1	Williamsport Sanitary Authority – Central	8/10/2016	8/31/2021	10/1/2012	153,423	-	20,456	0.941	0.436
PA0027065	2	Lackawanna River Basin Sewer Authority	9/23/2015	9/30/2020	10/1/2011	109,587	-	14,612	0.733	0.436
PA0027081	3	Lackawanna River Basin Sewer Authority	11/7/2016	11/30/2021	10/1/2011	12,786	-	1,705	0.733	0.436
PA0027090	1	Lackawanna River Basin Sewer Authority	8/15/2016	8/31/2021	10/1/2011	127,852	-	17,047	0.733	0.436
PA0027171	1	Bloomsburg Municipal Authority	10/25/2017	3/31/2022	10/1/2010	78,355	-	10,447	0.871	0.436

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PA0027189	1	Lower Allen Township Authority	5/5/2017	5/31/2022	10/1/2015	114,154		15,221	0.951	0.436
PA0027197	1	Harrisburg Sewerage Authority	12/4/2009	12/31/2014	10/1/2012	688,575	-	91,810	0.951	0.436
PA0027316	1	Lebanon City Authority	12/23/2016	12/31/2021	10/1/2012	146,117	-	19,482	0.961	0.436
PA0027324	1	Shamokin-Coal Township Joint Sanitary Authority	1/25/2008	1/31/2013	10/1/2012	127,852	-	17,047	0.871	0.436
PA0027405	1	Ephrata Borough Authority	1/17/2014	1/31/2019	10/1/2012	79,049	-	9,881	0.891	0.436
PA0027553	2	Pine Creek Municipal Authority	10/22/2015	8/31/2016	10/1/2011	23,744	-	3,166	0.93	0.436
PA0028088	3	Brown Township Municipal Authority	2/11/2016	2/28/2021	10/1/2014	10,959	-	1,461	0.88	0.436
PA0028142	1	Fort Indiantown Gap	11/7/2011	11/30/2016	10/1/2005	24,353	-	3,044	0.961	0.436
PA0028266	3	Troy Borough	10/26/2016	10/31/2021	10/1/2011	7,306	-	974	0.7	0.436
PA0028347	3	Martinsburg Borough	6/29/2017	6/30/2022	10/1/2013	12,785	-	1,705	0.88	0.436
PA0028461	3	Mifflinburg Borough Municipal Authority	8/26/2019	3/31/2022	10/1/2011	25,570	-	3,409	0.941	0.436
PA0028576	1	Abington Regional WW Authority	3/9/2018	3/31/2023	10/1/2014	66,483	-	8,310	0.733	0.436
PA0028592	3	Bonneauville Borough	10/28/2019	10/31/2024	1/1/2009	9,741	-	1,218	0.627	0.67
PA0028631	3	Emporium Borough (Mid-Cameron Authority)	11/30/2012	11/30/2017	10/1/2011	17,100	-	2,140	0.93	0.436
PA0028673	3	Gallitzin Borough	5/22/2013	5/31/2018	10/1/2016	7,306	-	974	0.836	0.436
PA0028681	2	Kelly Township Municipal Authority	10/11/2016	10/31/2021	10/1/2011	68,492	-	9,132	0.941	0.436
PA0028738	2	Ralpho Township Municipal Authority	9/16/2016	9/30/2021	10/1/2011	13,132	-	1,751	0.871	0.436
PA0028886	3	Quarryville Borough Authority	10/11/2012	10/31/2017	10/1/2014	7,306	-	974	0.98	0.436
PA0029106	2	Greenfield Township Municipal Authority	10/19/2016	10/31/2021	10/1/2012	14,612	-	1,948	0.88	0.436
PA0030139	3	Dallas State Correctional Institution	9/10/2019	9/30/2024	10/1/2009	9,741	-	1,218	0.871	0.436
PA0030597	3	Franklin County General Authority	12/27/2016	12/31/2021	10/1/2012	9,132	-	1,218	0.683	0.67

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PA0030643	1	Shippensburg Borough Authority	9/29/2015	1/31/2019	10/1/2010	60,273	-	8,036	0.951	0.436
PA0032051	2	Granville Township	9/14/2017	9/30/2022	10/1/2011	15,196	-	1,899	0.88	0.436
PA0032492	3	DCNR Bald Eagle State Park	6/15/2017	6/30/2022	10/1/2013	8,219	-	1,096	0.93	0.436
PA0032557	3	Logan Township	6/18/2012	6/30/2017	10/1/2008*	15,013	-	1,876	0.88	0.436
PA0032883	2	Duncansville Borough	5/30/2013	5/31/2018	10/1/2011	22,228	-	2,963	0.88	0.436
PA0034576	2	Towanda Municipal Authority	9/14/2015	9/30/2020	10/1/2010	21,187	-	2,825	0.733	0.436
PA0036269	3	Stewartstown Borough	4/20/2016	6/30/2020	10/1/2010	11,415	-	1,522	1	1
PA0036820	3	Galeton Borough Authority	9/29/2011	9/30/2016	10/1/2011	9,132	-	1,218	0.93	0.436
PA0037150	1	Penn Township	6/1/2017	6/30/2022	10/1/2011	76,711	-	10,228	0.961	0.436
PA0037711	3	Everett Boro Municipal Authority	11/28/2012	11/30/2017	10/1/2013	15,890	-	2,119	0.897	0.436
PA0037737	3	Elizabethville Area Authority	12/14/2017	12/31/2022	10/1/2013	7,306	-	974	0.836	0.436
PA0037966	2	Moshannon Valley Joint Sanitary Authority	11/15/2017	12/31/2021	10/1/2012	37,205	-	4,960	0.836	0.436
PA0038385	3	Defense Distribution Depot Susquehanna	5/25/2017	5/31/2022	10/1/2011	9,132	-	1,218	0.961	0.436
PA0038415	1	East Pennsboro Township	12/16/2015	12/30/2020	10/1/2012	72,206	-	9,589	0.951	0.436
PA0038865	3	Zerbe Township Municipal Authority	8/31/2015	8/31/2020	10/1/2015	7,306	-	974	0.951	0.436
PA0038920	3	Burnham Borough	3/23/2016	3/31/2021	10/1/2013	11,689	-	1,559	0.880	0.436
PA0042269	1	Lancaster Area Sewer Authority	9/24/2018	4/30/2021	10/1/2010	310,498	-	41,400	0.970	0.436
PA0042951	3	Tremont Municipal Authority	4/22/2016	4/30/2021	10/1/2013	9,132	-	1,218	0.961	0.436
PA0043257	3	New Freedom Borough	10/22/2015	9/30/2020	10/1/2015	41,095	-	5,479	0.961	0.436
PA0043273	2	Hollidaysburg Regional Sewer Authority	2/10/2017	2/28/2022	10/1/2012	109,588	-	14,612	0.88	0.436
PA0043575	3	Lykens Borough	2/5/2018	2/28/2023	10/1/2012	7,488	-	998	0.951	0.436
PA0043681	3	Valley Joint Sewer Authority	10/18/2017	10/31/2022	10/1/2012	41,095	-	5,479	0.495	0.436
PA0043893	3	Western Clinton County Municipal Authority	7/21/2017	7/31/2022	10/1/2011	16,438	-	2,192	0.93	0.436

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PA0044113	2	South Middleton Township Municipal Authority	4/27/2017	4/30/2022	10/1/2014	27,397	-	3,653	0.961	0.436
PA0044661	1	Lewisburg Area Joint Sanitary Authority	3/12/2019	3/31/2024	10/1/2012	44,200	-	5,893	0.941	0.436
PA0045985	1	Mountaintop Area Sewer Authority	6/1/2019	5/31/2024	10/1/2010	76,318	-	10,185	0.871	0.436
PA0046221	3	Newville Borough	7/21/2015	7/31/2020	10/1/2011	7,306	-	974	0.951	0.436
PA0046272	3	Porter-Tower Joint Municipal Authority	9/21/2017	9/30/2022	10/1/2013	9,922	-	1,321	0.951	0.436
PA0046388	3	Butler Township St. Johns	4/18/2013	4/30/2018	10/1/2009	40,182	-	5,357	0.871	0.436
PA0060046	3	Can-Do Inc	1/4/2012	1/31/2017	10/1/2012	18,265	-	2,435	0.871	0.436
PA0060135	3	Shickshinny Borough Sewer Authority	10/26/2017	10/31/2022	10/1/2013	8,219	-	1,096	0.871	0.436
PA0060518	3	Hallstead-Great Bend Joint Sewer Authority	10/22/2015	10/31/2020	10/1/2012	9,741	-	1,218	0.495	0.436
PA0060801	2	Montrose Municipal Authority	2/25/2011	2/29/2016	10/1/2013	14,977	-	1,997	0.733	0.436
PA0061034	3	Waverly Township	7/1/2011	7/31/2016	10/1/2013	9,132	-	1,218	0.733	0.436
PA0061590	3	Little Washington Wastewater Co.	5/1/2019	4/30/2024	10/1/2013	24,073	-	3,210	0.871	0.436
PA0062201	2	Schuylkill County Municipal Authority	8/19/2016	8/31/2021	10/1/2012	10,959	-	1,461	0.951	0.436
PA0062219	1	Frackville Area Municipal Authority	3/20/2013	3/31/2018	10/1/2010	25,570	-	3,409	0.951	0.436
PA0064025	2	KBM Regional Authority	1/25/2016	1/31/2021	10/1/2009	13,637	-	1,705	0.871	0.436
PA0070041	3	Mahanoy City	6/13/2012	6/30/2017	10/1/2012	25,205	-	3,361	0.951	0.436
PA0070386	3	Shenandoah Municipal Sewer Authority	10/6/2017	10/31/2022	10/1/2011	36,529	-	4,871	0.951	0.436
PA0070424	2	Carnarvon Township	3/23/2018	3/31/2023	10/1/2013	12,785	-	1,705	0.891	0.436
PA0080225	3	Washington Township Municipal Authority	1/12/2018	1/31/2023	10/1/2013	35,433	-	4,724	0.819	0.67
PA0080314	1	Hampden Township Sewer Authority	7/1/2019	6/30/2024	10/1/2014	117,696	-	14,441	0.951	0.436
PA0080438	3	Northern Lancaster County Authority	1/1/2019	12/31/2023	10/1/2013	8,219	-	1,096	0.891	0.436
PA0080519	3	Antrim Township	4/20/2018	4/30/2023	10/1/2011	21,918	-	2,922	0.683	0.67

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PA0080748	2	Northern Lebanon County Authority	1/27/2017	1/31/2022	10/1/2013	7,306	-	974	0.961	0.436
PA0081001	3	St. Thomas Township Municipal Authority	8/8/2017	8/31/2022	10/1/2013	7,306	-	974	0.683	0.67
PA0081574	2	Salisbury Township	12/13/2019	12/31/2024	10/1/2012	13,150	-	1,643	0.98	0.436
PA0081591	2	Eastern York County Sewer Authority	10/26/2015	10/31/2020	10/1/2012	9,132	-	1,218	0.961	0.436
PA0081868	1	Fairview Township	8/17/2016	9/30/2020	10/1/2010	13,333	-	1,778	0.961	0.436
PA0081949	3	West Earl Sewer Authority	12/27/2018	12/31/2023	10/1/2010	8,219	-	1,096	0.891	0.436
PA0082392	2	Derry Township Municipal Authority – Southwest	5/23/2016	5/31/2021	10/1/2012	10,959	-	1,461	0.961	0.436
PA0082589	2	Fairview Township	8/17/2016	8/31/2021	10/1/2012	9,132	-	1,218	0.961	0.436
PA0083011	2	Newberry Township	2/23/2017	2/28/2022	10/1/2012	23,744	-	3,166	0.961	0.436
PA0083593	3	Silver Spring Township	10/6/2015	10/31/2020	10/1/2010	21,918	-	2,922	0.951	0.436
PA0084026	2	Northwestern Lancaster County Authority	11/22/2010	11/30/2015	10/1/2008	14,987	375	1,827	0.97	0.436
PA0084212	3	Leacock Township	11/17/2015	11/30/2020	10/1/2012	7,306	-	974	0.891	0.436
PA0084425	3	Conewago Township Sewer Authority	6/22/2016	6/30/2021	10/1/2011	9,132	-	1,218	0.961	0.436
PA0085511	2	West Hanover	10/12/2016	10/31/2021	10/1/2012	14,246	-	1,900	0.961	0.436
PA0086860	3	Springfield Township Sewer Authority	12/17/2013	12/31/2018	10/1/2012	12,785	-	1,704	0.961	0.436
PA0087181	1	Ephrata Borough Authority (#2)	1/17/2014	1/31/2019	10/1/2008	54,550	-	6,818	0.891	0.436
PA0087661	3	Chestnut Ridge Area Joint Municipal Authority	11/17/2017	11/30/2022	10/1/2013	12,877	-	1,717	0.897	0.436
PA0110361	3	Freedom Township Water & Sewer Authority	11/22/2017	11/30/2022	10/1/2013	10,959	-	1,461	0.88	0.436
PA0110469	3	Patton Borough	11/17/2017	11/30/2022	10/1/2013	9,863	-	1,315	0.836	0.436
PA0110582	1	Eastern Snyder County Regional Authority	7/17/2015	7/31/2020	10/1/2012	51,141	-	6,819	0.951	0.436
PA0110965	2	Mid-Centre County Authority	3/7/2018	3/31/2023	10/1/2011	18,265	-	2,435	0.93	0.436
PA0113298	3	Elkland Municipal Authority	8/1/2019	7/31/2024	10/1/2010	10,277	-	1,285	0.474	0.436

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PA0114821	3	Gregg Township	10/30/2019	10/31/2024	10/1/2008	23,013	-	3,068	0.941	0.436
PA0114961	3	Hughesville-Wolf Township Joint Sewer Authority	1/19/2017	1/31/2022	10/1/2011	12,329	-	1,644	0.941	0.436
PA0205869	2	West Branch Sewer Authority	03/01/2016	03/31/2021	10/1/2012	16,438	-	2,192	0.836	0.436
PA0208922	3	Woodward Township	8/31/2015	8/31/2020	10/1/2013	10,228	-	1,364	0.871	0.436
PA0209228	2	Lycoming County Water & Sewer Authority	9/7/2012	7/31/2015	10/1/2011	34,703	-	4,627	0.941	0.436
PA0228915	3	ORD Sewer Authority	9/16/2015	9/30/2020	10/1/2010	9,748	-	1,218	0.836	0.436
PA0234079	2	Tiadaghton Valley Municipal Authority	7/3/2018	7/31/2023	10/1/2012	19,178	-	2,557	0.93	0.436
PA0234117	1	West Branch Regional Authority	4/2/2018	4/30/2023	10/1/2011	42,508	-	5,728	0.941	0.436
PA0247391	2	North Codorus Township	7/22/2015	1/31/2019	10/1/2006	13,394	-	1,674	0.961	0.436
PA0253812	3	Glendale Valley M.A.	6/1/2018	6/30/2023	10/1/2013	7,808	-	1,041	0.836	0.436
PA0261262	1	North Londonderry Township Authority	12/27/2018	12/31/2023	10/1/2012	25,936	-	3,458	0.961	0.436
PA0261670	3	Fredericksburg Water & Sewer Authority	6/15/2018	6/30/2023	10/1/2014	7,306	-	974	0.961	0.436
PA0266566	3	Jackson Township STP	1/19/2018	1/31/2023	2/1/2018	10,958	-	1,461	0.961	0.436
PA0086304	3	Earl Township STP	8/30/2018	2/28/2021	10/1/2018	7,306	-	974	0.891	0.436
PA0266469	2	Weaverland Valley Authority	5/1/2019	4/30/2024	10/1/2021	13,064	-	1,531	0.891	0.436

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Several facilities had TN Offsets incorporated into their WLAs. Those Offsets were mistakenly included in Cap Loads during the initial round of permitting and were or will be removed upon subsequent renewals. The facilities that have had Offsets removed from their Cap Loads are listed in **Table 6** below.

Table 6: Facilities with Offsets Incorporated into Their Cap Loads in the TMDL.

NPDES Permit No.	Facility	Offsets In WLA (lbs TN)
PA0020273	Milton Regional Sewage Authority	17,575
PA0020885	Mechanicsburg Borough Municipal Authority	575
PA0020893	Manheim Borough Authority	1,025
PA0020923	New Oxford Municipal Authority	2,400
PA0023744	Northeastern York County Sewer Authority	13,050
PA0024384	North Middleton Township Authority	5,225
PA0024431	Dillsburg Borough Authority	3,400
PA0025933	Lock Haven Borough	21,700
PA0026077	Carlisle Borough	6,425
PA0026727	Tyrone Borough Sewer Authority	1,850
PA0026735	Swatara Township	300
PA0026875	Hanover Borough	450
PA0027049	Williamsport Sanitary Authority – West	71,597
PA0037150	Penn Township	5,100
PA0044113	South Middleton Township Municipal Authority	1,925
PA0080314	Hampden Township Sewer Authority	3,125
PA0085511	West Hanover	2,250

At this time, there are 12,200 lbs/yr TN Offsets still incorporated into Cap Loads as listed in **Table 5**.

In addition, DEP estimates that there are 382,186 lbs/yr TN and 1,170 lbs/yr TP Offsets for on-lot and wildcat connections that are recognized by permits as a mechanism to achieve compliance but are not incorporated into Cap Loads (an estimated 15,734 on-lot and wildcat system connections).

Expansions by any Significant Sewage discharger will not result in any increase in Cap Loads. Where non-significant facilities expand to a design flow of 0.4 MGD or greater, the lesser of baseline Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP or existing performance will be used for permits, and the load will be moved from the Non-Significant sector load to the Significant Sewage sector load. If considered necessary for environmental protection, DEP may decide to move load from the Point Source Reserve to the Significant Sewage sector in the future. The minimum monitoring frequency for TN species and TP in new or renewed NPDES permits for Significant Sewage dischargers is 2/week.

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Significant IW Sector

Final NPDES permits with Cap Loads have been issued to all significant IW dischargers as presented in **Table 7**.

Table 7: Significant IW Facilities That Have Received Final Cap Loads.

NPDES Permit No.	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0007498	Wise Foods Inc.	4/12/18	4/30/23	10/1/13	19,957	898	0.836	0.436
PA0007552	Empire Kosher Poultry	1/23/17	1/31/22	10/1/15	21,928	740	0.88	0.436
PA0007919	Cascades Tissue Group	12/24/13	10/31/18	11/1/13	40,569	1,941	0.733	0.436
PA0008231	Guilford Mills Inc.	8/3/11	8/31/16	10/1/11	7,065	271	0.961	0.436
PA0008265	Appvion Inc.	2/23/17	2/28/22	10/1/17	61,666	7,367	0.88	0.436
PA0008419	Cherokee Pharmaceutical	9/8/16	9/30/21	10/1/16	64,884	11,748	0.876	0.436
PA0008591	NGC Industries LLC	10/11/17	10/31/22	10/1/12	2,758	132	0.941	0.436
PA0008885	Proctor & Gamble Paper Products	8/25/17	8/31/22	10/1/11	100,360	5,441	0.733	0.436
PA0009024	Global Tungsten (Osram)	9/18/17	9/30/22	10/1/12	600,515	1,577	0.7	0.436
PA0009229	Norfolk Southern Railway Co,	9/26/19	9/30/24	10/1/13	2,539	93	0.951	0.436
PA0009270	Del Monte Corp.	4/24/14	9/30/17	10/1/14	33,196	1,492	0.836	0.436
PA0009326	Motts Inc.	9/2/15	9/30/20	10/1/15	18,645	729	0.72	0.669
PA0009911	Papetti's Acquisition Inc.	12/29/16	12/31/21	10/1/13	8,104	532	0.961	0.436
PA0055328	New Morgan Landfill Co. Inc.	11/22/16	7/31/20	10/1/15	12,500	64	0.891	0.436
PA0080829*	Keystone Protein	9/22/14	3/31/17	10/1/16	19,786	381	0.961	0.436
PA0024228	Hain Pure Protein	7/19/18	7/31/23	10/1/14	18,982	766	0.961	0.436
PA0035092	Tyson Foods	8/15/11	8/31/16	10/1/14	54,794	559	0.891	0.436
PA0035157	Farmer's Pride Inc.	1/23/12	1/31/17	10/1/15	16,438	1,370	0.961	0.436
PA0044741	Hanover Foods Corp.	9/22/15	9/30/20	10/1/17	26,385	979	0.961	0.436
PA0046680	Republic Services of PA LLC	4/21/17	1/31/22	10/1/17	50,803	300	0.961	0.436
PA0110540	Furman Foods	3/19/18	3/31/23	10/1/12	45,450	1,624	0.876	0.436
PA0111759	Cargill Meat Solutions	12/3/18	12/31/23	10/1/13	19,483	1,218	0.733	0.436
PA0008443	PPL Montour LLC	8/15/18	8/31/23	10/1/18	72,749	1,200	0.941	0.436

TOTALS: 1,319,556 41,422

* Upon completion of the new facility the load from PA0080829 will be transferred to PA0266345.

Expansions by any Significant IW discharger will not result in any increase in Cap Loads. New Significant IW dischargers will be given Cap Loads of 0 lbs/yr TN & TP. The minimum monitoring frequency for TN species and TP in new or renewed NPDES permits for Significant Industrial dischargers is 2/week.

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Non-Significant Sector

Non-significant dischargers include sewage facilities (Phase 4 facilities: ≥ 0.2 MGD and < 0.4 MGD and Phase 5 facilities: > 0.002 MGD and < 0.2 MGD), small flow/single residence sewage treatment facilities (≤ 0.002 MGD), and non-significant IW facilities, all of which may be covered by statewide General Permits or may have individual NPDES permits.

At this time, there are approximately 850 Phase 4 and 5 sewage facilities, approximately 715 small flow sewage treatment facilities covered by a statewide General Permit, and approximately 300 non-significant IW facilities.

For Significant Sewage and IW sectors, DEP's Cap Loads represent the performance standards by which comparisons can be made to WLAs in the TMDL. Since Cap Loads are not typically established in non-significant facility permits, DEP uses estimates of actual performance through a facility-specific evaluation of 1) Discharge Monitoring Report (DMR) data and 2) DEP inspection sampling results. Where neither of these two sources of performance data exist, DEP uses default data generally used by the Chesapeake Bay Program.

The aggregate WLAs in the TMDL for all non-significant sewage and industrial waste dischargers are as follows:

- 3,006,667 lbs/yr TN
- 842,104 lbs/yr TP

At this time, the following total loads have been estimated for the Non-Significant sector:

- 2,957,836 lbs/yr TN
- 410,598 lbs/yr TP

A list of non-significant sewage and industrial waste dischargers with Cap Loads in NPDES permits is presented in **Attachment C**.

CSO Sector

The aggregate WLAs are as follows:

- 212,920 lbs/yr TN
- 34,709 lbs/yr TP

DEP intends to continue addressing CSOs through its CSO Policy (DEP ID No. 385-2000-011), including the Nine Minimum Controls (NMCs), Long-Term Control Plans (LTCPs) and Post-Construction Monitoring. DEP does not intend to impose monitoring or Cap Loads in NPDES permits for CSOs.

III. Additional Implementation Measures

A. Cap Loads

Cap Loads will be established in permits as Net Annual TN and TP loads (lbs/yr) that apply during the period of October 1 – September 30. For facilities that have received Cap Loads in any other form, the Cap Loads will be modified accordingly when the permits are renewed.

Offsets have been incorporated into Cap Loads in several permits issued to date. From this point forward, permits will be issued with the WLAs as Cap Loads and will identify Offsets separately to facilitate nutrient trading activities and compliance with the TMDL.

In general, the Cap Loads specified in NPDES permits may be modified only if one or more of the following occur:

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- Consolidation of NPDES-permitted discharges, in which the lesser of existing annual loads or the Cap Loads from the treatment facility that will no longer discharge will be added to the Cap Loads in the permit for the treatment facility that will continue discharging.
- DEP or EPA determines that modified Cap Loads are necessary to achieve water quality standards for the protection of the Chesapeake Bay.

B. Offsets

Offsets may be approved for the following nutrient load reduction activities upon receipt of written approval from DEP:

- Connection of on-lot septic systems to the public sewer system, if such on-lot systems were in existence prior to January 1, 2003 and where the facility has the existing hydraulic and organic Capacity to allow such connections. An offset of 25 lbs/yr of TN per dwelling connected may be approved. Such Offsets are cumulative and may be applied annually to meet compliance with Cap Loads.
- Connection of dwellings served by wildcat sewers to the public sewer system. Offsets of 25 lbs/yr of TN and 3 lbs/yr TP may be approved. Such Offsets are cumulative and may be applied annually to meet compliance.
- Receipt of hauled-in septage at the permittee's facility from residential sources within the municipal Act 537 planning area. Three pounds (3 lbs) of TN Offsets per year may be approved per 1,000 gallons of septage accepted and processed at the facility. Offsets may be approved for the acceptance of residential septage only. For the purpose of these Offsets, septage is defined as material removed from a septic tank by pumping. No other hauled-in wastes, including but not limited to holding tank wastes, solids and sludges generated at other facilities, may be approved. Such approved Offsets may only be applied in the Compliance Year in which the septage was accepted, and are not cumulative.

If a joint municipal or regional authority is the permittee, the Act 537 planning area is the combination of all 537 planning areas in municipalities that receive sewer services from the authority. If a treatment facility provides sewer service to one municipality only, the 537 planning area is the entirety of the one municipality.

- The transfer of load between facilities owned by the same entity, where the facilities have Cap Loads. Such Offsets may only be applied in the Compliance Year in which the load was transferred, and are not cumulative. Such transfers may only be authorized if (1) the facility receiving the transfer does not discharge to receiving waters that are classified as impaired for nutrients and (2) the facilities have the same Delivery Ratio for TN or TP, as applicable.

This transfer can occur in two ways: 1) Facility A has discharged a load that is below the Cap Load, in which the difference may be transferred to Facility B (owned by the same entity); or 2) Facility A has Offsets approved in a permit that are not needed to achieve compliance with Cap Loads, and may be transferred to Facility B (owned by the same entity).

- The diversion of flow from an indirect discharger to a new facility. If for example Municipality A is connected to Municipality B's public sewer system for treatment, and Municipality A decides to divert its flows to Municipality C, Municipality C may be approved for Offsets equivalent to Municipality A's actual annual average flow and loads, and Municipality B's Cap Loads may be decreased accordingly.
- Other nutrient load reduction activities may be approved at DEP's discretion. All new proposals for the generation of Offsets must be coordinated with DEP's Bureau of Clean Water.

Offsets may not be approved for new or existing indirect discharges to public sewer systems.

Unless DEP has specifically authorized to do so in a permit or other agreement, Offsets may not be sold as Credits.

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Once approval for Offsets is obtained, the permittee must report the Offsets on the Nitrogen Budget worksheet of DEP's Annual Chesapeake Bay Spreadsheet to apply the Offsets toward compliance with the Cap Loads.

C. Connection of Facilities

If Facility A has a permitted discharge and decides to eliminate the discharge through connection to Facility B, the lesser of the existing annual TN and TP loads or Cap Loads of Facility A may be transferred to Facility B's Cap Load. The transferred loads are not considered Offsets and can be used for nutrient trading purposes.

If Facility A is an indirect discharger to Facility B and decides to remove its flow, opting to obtain an NPDES permit for its own discharge, Facility A will receive zero (0) for Cap Loads and Facility B will retain its original Cap Loads.

D. Non-Significant Facilities

Non-Significant Sewage Facilities

For Phase 4 sewage facilities (average annual design flow on August 29, 2005 \geq 0.2 MGD and $<$ 0.4 MGD), a future decision may be made as to the establishment of Cap Loads in permits. Until then, DEP will permit Phase 4 sewage facilities as follows:

1. Renewed or amended permits for facilities that do not increase design flow (compared to the date of the latest prior permit action) will contain monitoring and reporting for TN and TP throughout the permit term at a frequency no less than monthly.
2. Renewed or amended permits that include an increase in design flow will contain Cap Loads based on the lesser of a) existing TN and TP concentrations at current design average annual flow or b) 7,306 lbs/yr TN and 974 lbs/yr TP.

For Phase 5 sewage facilities with individual permits (average annual design flow on August 29, 2005 $>$ 0.002 MGD and $<$ 0.2 MGD), DEP will issue individual permits with monitoring and reporting for TN and TP throughout the permit term at a frequency no less than annually, unless 1) the facility has already conducted at least two years of nutrient monitoring and 2) a summary of the monitoring results are included in the next permit's fact sheet. If, however, Phase 5 facilities choose to expand, the renewed or amended permits will contain Cap Loads based on the lesser of a) existing TN/TP concentrations at current design average annual flow or b) 7,306 lbs/yr TN and 974 lbs/yr TP.

If no data are available to determine existing concentrations for expanding Phase 4 or 5 facilities, default concentrations of 25 mg/l TN and 4 mg/l TP may be used (these are the average estimated concentrations of all non-significant sewage facilities).

DEP will not issue permits to existing Phase 4 and 5 facilities containing Cap Loads unless it is done on a broad scale or unless the facilities are expanding.

For new Phase 4 and 5 sewage discharges, in general DEP will issue new permits containing Cap Loads of "0" and new facilities will be expected to purchase credits and/or apply offsets to achieve compliance, with the exception of small flow and single residence facilities.

Non-Significant IW Facilities

For non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. In general, facilities that discharge groundwater and cooling water with no addition of chemicals containing N or P do not require monitoring. Monitoring for facilities with other discharges will generally conform to the following minimum sampling frequencies, with the permit writer having final discretion:

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- Food processing and related discharges, discharges associated with textiles, lumber and paper processing, discharges associated with residual waste management (e.g., landfill leachate, coal ash sluice water) – 1/month.
- Stormwater expected to contain TN or TP, discharges from metal finishing and related processing, discharges associated with chemicals, plastics and allied product manufacturing – 1/quarter.
- Cooling water or other discharges treated with chemical additives containing N and/or P – 1/year.

Non-significant IW facilities that propose expansion or production increases and as a result will discharge at least 75 lbs/day TN or 25 lbs/day TP (on an annual average basis), will be classified as Significant IW dischargers and receive Cap Loads in their permits based on existing performance (existing TN/TP concentrations at current average annual flow).

In general, for new non-significant IW discharges (including existing facilities discharging without a permit), DEP will issue permits containing Cap Loads of “0” and these facilities will be expected to purchase credits and/or apply offsets to achieve compliance.

E. Compliance Schedules

Compliance schedules will continue to be placed in permits through the completion of the initial round of permitting. Compliance schedules may also be used in permits for facilities that are expanding. In general, once a compliance schedule is issued in a final permit and is administratively final, the final date to achieve compliance with Cap Loads should not be modified. In the event a facility is not able to meet Cap Loads by the final compliance date in the permit, nutrient Credits may be purchased to achieve compliance. If the compliance schedule will exceed one year to achieve compliance with Cap Loads, interim milestones must be used in intervals no less than one year.

F. Reporting

Facilities with NPDES permits must use DEP’s eDMR system for reporting, except small flow treatment facilities. An Annual DMR must be submitted by the end of the Truing Period, November 28. As attachments to the Annual DMR a facility must submit a completed Annual Chesapeake Bay Spreadsheet, available through DEP’s [Supplemental Reports website](#), which contains an Annual Nutrient Monitoring worksheet and an Annual Nutrient Budget worksheet. This Spreadsheet will be submitted once per Compliance Year only, and reflect all nutrient sample results (for the period October 1 – September 30), Credit transactions (including the Truing Period) and Offsets applied during the Compliance Year.

G. Nutrient Credits

Nutrient Credits may be used for compliance with the Cap Loads where authorized under 25 Pa. Code § 96.8 (Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay Watershed), including amendments, updates and revisions thereto; in accordance with this Wastewater Supplement; the [Phase 2 WIP Nutrient Trading Supplement](#) (Nutrient Trading Supplement); and additional guidance available on DEP’s website (see www.dep.pa.gov/nutrient_trading).

H. Unanticipated Events

DEP may waive the collection of samples and/or the use of data for compliance assessment purposes where flooding or other natural disasters preclude the collection of quality data. Such waivers would be issued to specific facilities based on actual conditions in the field. If such waivers are granted, Credits may not be verified for the period of time covered by the waiver. Facilities will be instructed to use a “no discharge” code on their DMR.

In addition, where non-compliance with a Cap Load is the result of an unmet obligation of a contractual agreement for Credits resulting from failure of the pollutant reduction activity, the failure of the pollutant reduction activity was due to uncontrollable or unforeseeable circumstances, and the permittee provides timely

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notice to DEP, DEP may consider the factors contained in 25 Pa. Code 96.8(h)(5)(i), (ii), and (iii) to determine the appropriate resolution.

I. Adaptive Management

DEP will continue to use an adaptive management philosophy to guide decision-making for TMDL implementation. DEP may deviate from the guidelines stated herein where warranted to ensure that total aggregate loads remain at or below the WLAs prescribed by the TMDL. Where DEP deviates from these guidelines, it will be done in a systematic, centralized manner, and will be documented through the submission of status/milestone reports to EPA.

ATTACHMENT A

TMDL WLA ERRORS FOR CERTAIN SIGNIFICANT SEWAGE DISCHARGERS

The following facilities were credited with additional WLA in the TMDL than was intended.

Phase 1 WLA Errors

- Berwick Municipal Authority (PA0023248): additional 92,198 lbs/yr TN and 8,913 lbs/yr TP
- Danville Municipal Authority (PA0023531): additional 66,118 lbs/yr TN and 8,816 lbs/yr TP
- Dillsburg Borough Authority (PA0024431): additional 31,345 lbs/yr TN and 3,726 lbs/yr TP
- Hanover Borough (PA0026875): additional 83,441 lbs/yr TN and 10,959 lbs/yr TP
- Lower Allen Township Authority (PA0027189): additional 114,154 lbs/yr TN and 15,221 lbs/yr TP
- Shippensburg Borough Authority (PA0030643): additional 60,273 lbs/yr TN and 8,036 lbs/yr TP

Phase 2 WLA Errors

- Mt. Carmel Municipal Authority (PA0024406): additional 82,190 lbs/yr TN and 10,958 lbs/yr TP
- Moshannon Valley Authority (PA0037966): additional 31,670 lbs/yr TN and 4,218 lbs/yr TP
- KBM Regional Authority (PA0064025): additional 13,637 lbs/yr TN and 1,705 lbs/yr TP

Phase 3 WLA Errors

- Lackawanna River Basin Sewer Authority (PA0027081): additional 25,572 lbs/yr TN and 3,410 lbs/yr TP
- Little Washington Wastewater Co. (PA0061590): additional 24,073 lbs/yr TN and 3,210 lbs/yr TP
- Gregg Township (PA0114821): additional 23,013 lbs/yr TN and 3,068 lbs/yr TP

ATTACHMENT B

CHANGES BETWEEN SIGNIFIGANT AND NON-SIGNIFIGANT SEWAGE

Numerous changes have occurred since 2010. The following is a summary of changes that have occurred.

- New Morgan Landfill Co. Inc. ("Conestoga Landfill", PA0055328) is now a Significant IW facility because it has modified its treatment process which will result in additional TN load. DEP has issued a final NPDES permit to New Morgan Landfill with Cap Loads of 12,500 lbs/yr TN and 64 lbs/yr TP, with a compliance start date of October 1, 2016. These loads have been moved from the Non-Significant sector to the Significant IW sector.
- Keystone Protein Co. (PA0080829) is a Significant IW discharger due to its existing discharge loads of TN and TP. A final NPDES permit was issued to Keystone Protein with Cap Loads of 19,786 lbs/yr TN and 381 lbs/yr TP at a design flow of 0.15 MGD. These loads have been moved from the Non-Significant sector to the Significant IW sector. However, a new permit (PA0266345) has been issued for a new facility which will be constructed adjacent to the existing facility (PA0080829). The existing facility will be abandoned upon completion of the new facility, which will have a design flow of 3 MGD.
- Swatara Township Authority's NPDES Permit (PA0026735) was amended on August 19, 2015 to account for the connection of a non-significant facility, Lower Paxton Township (Springford Village) (NPDES Permit No. PA0087017). The Cap Loads for Swatara were increased by 3,272 lbs/yr TN and 524 lbs/yr TP due to this connection, and 300 lbs/yr of TN Offsets that were incorporated into Swatara's Cap Load were removed.
- West Branch Regional Authority (PA0234117) has consolidated flows from Montgomery Borough (PA0020699) and Muncy Borough (PA0024325), and Montgomery's and Muncy's permits have been terminated. Cap Loads from Montgomery and Muncy have been reassigned to West Branch. In addition, the Cap Loads for West Branch have been increased by 728 lbs/yr TN and 139 lbs/yr TP for connecting PA College of Technology WWTP (PA0041327), and by 685 lbs/yr TN and 110 lbs/yr TP for connecting Moran Industries (PA0010421). Both industrial facilities have ceased discharging to surface waters and permits were terminated on July 25, 2017 and November 13, 2017 respectively.
- New Morgan Borough STP (PA0088048) has planning approval to expand to 0.5 MGD, but has not submitted a Water Quality Management (WQM) permit application to construct upgraded facilities, and is currently discharging flows below the threshold for significant Chesapeake Bay dischargers (0.4 MGD). The submission of a WQM permit application and issuance of a WQM permit by DEP is required prior to an upgrade. New Morgan's WLAs of 9,132 lbs/yr TN and 1,218 lbs/yr TP have been moved from the Significant Sewage sector to the Non-Significant sector.
- Lower Paxton (PA0088633) was slated to receive Cap Loads of 45,662 lbs/yr TN and 6,088 lbs/yr TP, but has not received an NPDES permit. These WLAs have been retained in the Significant Sewage sector.
- PA Department of Public Welfare (PA0029432) has reduced its design flow from 0.6 MGD to 0.395 MGD. As a result, this facility is no longer considered significant, and Cap Loads were not established in its permit. This facility was projected to receive Cap Loads of 10,961 lbs/yr TN and 1,459 lbs/yr TP which will remain in the Significant Sewage sector in the TMDL. The annual loads for this facility have been moved to the non-significant sector in this document.
- South Mountain Restoration Center (PA0029297) has reduced its design flow from 0.5 MGD to 0.395 MGD. As a result, this facility is no longer part of Phase 3 and Cap Loads were not established in the permit. This facility was projected to receive Cap Loads of 9,136 lbs/yr TN and 1,217 lbs/yr TP in the TMDL, which will remain in the Significant Sewage sector in the TMDL. The annual loads for this facility have been moved to the non-significant sector in this document.
- Bonneauville Borough Authority (PA0028592) has expanded its design flow from 0.331 MGD to 0.55 MGD. A final permit was issued to this facility on October 30, 2006 with Cap Loads of 9,741 pounds/year TN and

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1,218 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.

- Elizabethville Area Authority (PA0037737) has a design flow of 0.4 MGD, but was overlooked for the original Significant Sewage sector. It has been issued a final permit with Cap Loads of 7,481 lbs/yr TN and 974 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- ORD Sewer Authority (PA0228915) has a design flow of 0.4 MGD, but was overlooked for the original Significant Sewage sector. It has been issued a final permit with Cap Loads of 9,748 lbs/yr TN and 1,218 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Newville Borough (PA0046221) is expanding to a design flow of 0.6 MGD. It has been issued a final permit with Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Williamstown Borough (PA0021491) is expanding to a design flow to 0.45 MGD. It has been issued a final permit with Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Woodward Township (PA0208922) has a design flow of 0.56 MGD, but was overlooked for the original Significant Sewage sector. A permit with Cap Loads of 10,288 lbs/yr TN and 1,364 lbs/yr TP was issued on June 11, 2013. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Hallstead-Great Bend Joint Sewer Authority (PA0060518) will be upgrading to a design flow of 0.5 MGD. This facility was originally a non-significant discharger (0.35 MGD). A permit has been issued with Cap Loads of 9,741 lbs/yr TN and 1,218 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Leacock Township (PA0084212) will be upgrading to a design flow of 0.45 MGD. It has been issued a final permit with Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Fredericksburg Sewer & Water Authority (PA0261670) is a new facility with a design flow of 0.433 MGD. It has been issued a final permit with Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Glendale Valley Municipal Authority (PA0253812) has increased its design flow to 0.45 MGD. Cap Loads are 7,808 lbs/yr TN and 1,041 lbs/yr TP have been issued in the permit. Four non-significant sewage facilities will be have been connected to Glendale Valley Municipal Authority: Glendale Yearound STP (PA0097705), Glendale School District (PA0097411), Matthews Mobile Home Park (PA0035262), and Noel Zimmerman WWTP (PA0204587).
- Zerbe Township Municipal Authority (PA0038865) has expanded to a design flow of 0.5 MGD. Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP were issued in the permit. This facility was previously considered non-significant, and so its load will be moved from the Non-Significant sector to the Significant Sewage sector.
- Milton Regional Sewage Authority's (PA0020273) Cap Loads have been revised in the renewed permit. Two non-significant sewage facilities, Watsontown Borough (PA0021733) and Delaware Township Municipal Authority (PA0028606), ceased discharging and connected to the Milton's facility on May 8, 2013, and July 8, 2013, respectively. The NPDES permits for Watsontown and Delaware have been terminated and removed from the non-significant dischargers list. A total of 9,752 lbs/yr TN (7,306 for Watsontown and 2,446 for Delaware) and 1,720 lbs/yr TP (974 for Watsontown and 746 for Delaware) have been added to

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Milton's respective Cap Loads. Offsets due to 703 on-lot retiring systems, which were earlier included in Milton's TN Cap Load, have been removed.

- On December 7, 2011, DEP issued a permit amendment to Lemoyne Borough (PA0026441). The amendment removed the Cap Loads that were to take effect on October 1, 2012. Those Cap Loads were 46,270 lbs/yr TN and 5,784 lbs/yr TP. The permit also specifies that new Cap Loads of 19,433 lbs/yr TN and 2,429 lbs/yr TP will become effective on October 1, 2015, which is beyond the term of the current permit. These Cap Loads were established in the renewed permit. The reduction in Cap Loads is a result of two municipalities deciding to remove its flows that are tributary to Lemoyne's facility, and connect to other facilities: Hampden Township (PA0080314) and East Pennsboro Township (PA0038415) .
- A permit was issued to Tiadaghton Valley Municipal Authority (PA0234079), a new facility, on March 16, 2012 with the same cap loads as those for Jersey Shore Borough (PA0028665). Ownership of the Jersey Shore facility was transferred to Tiadaghton Valley Municipal Authority on October 24, 2012. Permit No. PA0028665 was terminated on January 20, 2015.
- On December 7, 2011, DEP issued a permit amendment to East Pennsboro Township (PA0038415). The Cap Loads were increased from 67,579 lbs/yr TN and 9,011 lbs/yr TP to 72,206 lbs/yr TN and 9,589 lbs/yr TP, due to the receipt of new flows that was diverted from Lemoyne Borough.
- Lycoming County Water & Sewer Authority (PA0209228) has been issued a final permit amendment in which cap loads have been increased by 7,306 lbs/yr TN and 974 lbs/yr TP due to the receipt of sewage flows (0.1 MGD) from the Crown American Lycoming Mall Sewer Plant (PA0046167), which was decommissioned in 2006. This increase of 7,306 TN and 974 TP will be deducted from the Non-Significant sector.
- The permit for Palmyra Borough Authority (PA0024287) has been terminated. The Cap Loads of for Palmyra have been transferred to Londonderry Regional Authority (PA0261262).
- Jackson Township (PA0266566) and Spring Grove Borough (PA0266086) in York County have sewage treatment plants that discharged effluent into PH Glatfelter Company's industrial wastewater treatment facility (PA0008869). Glatfelter used the effluent as a nutrient source for its treatment processes. Glatfelter has notified Jackson and Spring Grove that they must remove their discharges to Glatfelter's facility. Glatfelter was originally considered a Significant IW discharger in the Bay TMDL. As discussed in Section II.B, below, Glatfelter has not been assigned Cap Loads to date because of the current belief that they do not actually meet the criteria for a Significant IW discharger. The WLAs assigned to Glatfelter have been moved to the Non-Significant sector. Normally DEP would authorize no new loads to a facility proposing a stream discharge that withdraws from another facility with Cap Loads; however, since Glatfelter does not have Cap Loads, DEP will authorize new loads for Jackson (proposed 0.6 MGD discharge) and Spring Grove (proposed 0.33 MGD discharge). Jackson Township is a Significant Sewage discharger, while Spring Grove is a non-significant discharger. Cap Loads that are assigned to Jackson Township will be moved from the Non-Significant sector to the Significant Sewage Sector (from Glatfelter's original WLAs).
- The Cap Loads for Lewistown Borough (PA0026280) have been increased by 494 lbs/yr TN and 79 lbs/yr TP due to the connection of East Derry Elementary School (PA0083135), whose permit was terminated on January 13, 2010. The annual average design flow for PA0083135 was 0.0065 MGD.
- Columbia Municipal Authority (PA0026123) has ceased discharging and transitioned its flows to Lancaster Area Sewer Authority (LASA) (PA0042269). Columbia's Cap Loads of 36,529 lbs Total TN and 4,871 lbs TP have been transferred to LASA, resulting in Cap Loads of 310,498 lbs/yr TN and 41,400 lbs/yr TP for LASA, effective September 24, 2018.
- Earl Township, Lancaster County (PA0086304) completed an expansion in September 2018, in which the design flow increased from 0.28 MGD to 0.65 MGD. Cap Loads of 7,306 lbs/yr TN and 974 lbs/yr TP are now in effect for the expanded facility.

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- The Cap Loads for Porter-Tower Joint Sanitary Authority (PA0046272) have increased by 2,068 lbs/yr TN and 274 lbs/yr TP due to the connection of Williams Valley School District WWTP (PA0083062), whose permit was terminated. The load has been moved the non-significant sector to the significant sector.
- A permit was issued to Weaverland Valley Authority (PA0266469), a new facility with a design flow of 0.41 MGD, on May 1, 2019. The new facility will receive flow from the Terre Hill Borough WWTP (PA0020222), the Conestoga Wood Specialties WWTP (PA0083909), the Goodville Industrial Center WWTP (PA0085448) and 224 Onlot Disposal Systems. The final permit has Cap Loads of 13,064 lbs/yr TN and 1,531 lbs/yr TP based on the existing loads from Conestoga Wood Specialties WWTP (5,303 lbs/yr TN & 508 lbs/yr TP) and Goodville Industrial Center WWTP (455 lbs/yr TN & 49 lbs/yr TP) and 7,306 lbs/yr TN and 974 lbs/yr TP which is more stringent than existing load (13,064 lbs/yr TN & 1,531 lbs/yr TP) from the Terre Hill Borough WWTP. Additionally, offsets of 5,600 lbs/yr of TN Offsets was issued in the final permit for retiring 224 Onlot Disposal Systems connected to the Weaverland Valley Authority WWTP.
- The Cap Loads for Mountaintop Area Joint Sanitary Authority (PA0045985) have increased by 337 lbs/yr TN and 54 lbs/yr TP due to the connection of the Crestwood School District Rice Elementary School STP (PA0060941), whose permit was terminated on December 9, 2013. The load has been moved the non-significant sector to the significant sector.

ATTACHMENT C

NON-SIGNIFICANT DISCHARGERS WITH CAP LOADS IN NPDES PERMITS

NPDES Permit No.	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0008281	PPL BRUNNER ISLAND INDUSTRIAL WASTES	7/27/2018	7/31/2023	10/1/2009	0	0	0.930	0.436
PA0020851	HYNDMAN STP	9/24/2013	9/30/2018	10/1/2013	7,306	974	0.930	0.436
PA0021652	KREAMER MUNI AUTH SEW STP	3/11/2015	3/31/2020	4/1/2015	7,306	974	0.733	0.436
PA0021776	FAIRFIELD STP	5/24/2013	5/31/2018	10/1/2012	7,306	974	0.961	0.436
PA0021849	MILLERSTOWN STP	6/22/2016	5/31/2021	10/1/2013	6,697	974	0.627	0.670
PA0024651	ATGLEN BOROUGH STP	5/16/2016	5/31/2021	10/1/2014	7,306	974	0.897	0.436
PA0036846	NEW BERLIN BORO MUNI AUTH WTP	8/26/2016	11/30/2020	10/1/2016	7,020	819	0.891	0.436
PA0044598	HARRISBURG AIRPORT STP	8/18/2015	8/31/2020	9/1/2015	7,306	974	0.951	0.436
PA0061123	MOSCOW SEW AUTH STP	1/25/2017	1/31/2022	10/1/2013	9,740	1,217	0.897	0.436
PA0065145	DUNN LAKE LLC	12/3/2018	12/31/2023	5/1/2013	0	0	0.951	0.436
PA0065307	COMM ENV SYS LANDFILL	3/13/2014	11/30/2016	10/1/2013	0	0	0.961	0.436
PA0080756	HERSHEY FARM MOTOR LODGE	6/12/2013	6/30/2018	10/1/2012	7,306	852	0.951	0.436
PA0080799	NEWBURG HOPEWELL JOINT AUTHORITY	10/5/2017	10/31/2022	11/1/2017	3380	325	0.951	0.436
PA0081264	PENN NATL HORSE RACE TRACK AND HOLLYWOOD CASINO – WWTP	10/22/2018	10/31/2023	2/1/2014	5,601	700	0.683	0.670
PA0082279	SPRING CREEK STP	9/23/2015	9/20/2020	10/1/2015	7,306	974	0.871	0.436
PA0083607	UNION TWP LEB CO LICKDALE STP	4/26/2016	4/30/2021	10/1/2012	7,306	974	0.951	0.436
PA0111422	THOMPSONTOWN STP	9/22/2015	9/30/2020	10/1/2015	7,032	974	0.961	0.436
PA0113093	CHRIST WESLEYAN CHURCH SEWER SYSTEM	8/18/2017	8/31/2022	9/1/2020	152	24	0.941	0.436
PA0021202	EAST BERLIN JOINT AUTHORITY – STP	3/31/2016	4/30/2021	10/1/2015	7,306	974	0.930	0.436
PA0232513	KELLY CROSSROADS SANI SEW SYS	8/10/2015	8/31/2020	9/1/2015	0	0	0.941	0.436
PA0232751	POTTER MILLS CENTRAL TREATMENT SYSTEM	9/16/2016	9/30/2021	10/1/2016	0	0	0.951	0.436
PA0232971	FRANKLIN TWP LAIRDSVILLE WWTP	7/30/2018	7/31/2023	10/1/2018	60	9.7	0.941	0.436
PA0233692	SOUTH CREEK TOWNSHIP WWTP	1/26/2015	1/31/2020	2/1/2015	0	0	0.951	0.436

Phase 3 WIP Wastewater Supplement
Revised, December 17, 2019

NPDES Permit No.	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0234028	WETLAND EXT PROJ	2/11/2014	6/30/2017	10/1/2013	0	0	0.930	0.436
PA0247715	GETTYSBURG COMMONS	5/5/2017	5/31/2022	01/01/2009	5479	274	0.951	0.436
PA0248029	HUSTONTOWN STP	1/28/2013	1/31/2018	2/1/2013	682	85	0.749	0.670
PA0248061	JEFFERSON CODORUS STP	4/18/2014	4/30/2019	10/1/2013	6,624	828	0.951	0.436
PA0260738	NITTERHOUSE CONCRETE PRECAST PLT	11/22/2017	11/30/2022	10/1/2017	0	0	0.683	0.670
PA0261131	TAMARACK MHP	3/1/2019	2/29/2024	10/1/2008	1,260	0	0.683	0.670
PA0261343	JOSHUA HILL STP	7/21/2015	7/31/2020	8/1/2015	0	0	0.700	0.436
PA0261378	SHEETZ CLARKS FERRY	11/22/2016	11/30/2021	10/1/2013	38	3.8	0.961	0.436
PA0261416	READING TWP LAUCHMANS BOTTOM STP	1/12/2018	1/31/2023	12/1/2011	0	0	0.951	0.436
PA0261572	MT HOPE NAZARENE RETIREMENT COMM	3/10/2011	3/31/2016	10/1/2011	605	0	0.897	0.436
PA0261645	HERITAGE HOUSE WHITE SULPHUR SPRINGS	11/17/2017	11/30/2022	10/1/2011	380	0	0.627	0.670
PA0261661	RED CARPET INN WASTEWATER	10/31/2011	10/31/2016	10/1/2012	181	0	0.961	0.436
PA0261718	WINTER GREENES HOMEOWNERS ASSOCIATION	10/26/2018	10/31/2023	7/1/2012	0	0	0.683	0.670
PA0262072	KNOUSE FOODS PEACH GLEN FRUIT PROC FAC	4/20/2016	4/30/2021	5/1/2016	0	0	0.961	0.436
PA0262137	LOG CABIN MHP STP	9/15/2015	9/30/2020	10/1/2015	0	0	0.891	0.436
PA0263711	BENEZETTE WWTP	4/17/2018	4/30/2023	10/1/2012	0	0	0.871	0.436
PA0266086	SPRING GROVE STP	9/23/2015	9/30/2020	10/1/2015	7,306	974	0.961	0.436
PA0266663	GETTYSBURG BATTLEFIELD RESORT STP	6/21/2018	6/30/2023	10/1/2018	0	0	0.627	0.670
PA0276073	LAKE CAREY WWTP	7/19/2018	7/31/2023	10/1/2018	0	0	0.733	0.436