pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

North East Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0039861**
Facility Type	**Industrial**	APS ID	**542397**
Major / Minor	**Minor**	Authorization ID	**1158906**

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

Applicant and Facility Information

Applicant Name	**Altadis USA Inc.**	Facility Name	**Altadis McAdoo Plant**
Applicant Address	1000 Tresckow Road	Facility Address	1000 Tresckow Road
	McAdoo, PA 18237-2504		McAdoo, PA 18237-2504
Applicant Contact	Joseph Glowaski	Facility Contact	Joseph Glowaski
Applicant Phone	(570) 929-2355 x 234	Facility Phone	(570) 929-2355 x 234
Client ID	149075	Site ID	236805
SIC Code	7389, 2844	Municipality	Banks Township
SIC Description	Services - Business Services, NEC, Manufacturing - Toilet Preparations	County	Carbon
Date Application Received	November 1, 2016	EPA Waived?	Yes
Date Application Accepted	January 11, 2017	If No, Reason	-
Purpose of Application	Renewal of existing NPDES permit.		

Summary of Review

The applicant is requesting renewal of their NPDES permit to discharge up to 0.086 MGD of industrial wastewater to Catawissa Creek (stream code 27529), a Cold Water and Migratory fish receiving stream in state water plan basin 05-E (Catawissa – Roaring Creeks). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use.

The discharge location is upstream of the Catawissa Creek Watershed TMDL for acid mine drainage (AMD), dated March 1, 2003. Since the discharge location is upstream from where the AMD impairments begin, and the discharge is not expected to contribute to the stream's impairment, mandatory monitoring requirements for the three primary metals associated with AMD (iron, manganese and aluminum) are not included in the permit. Please note that monitoring requirements are included for aluminum based on water quality modeling (see below).

As per the TMDL, deep mining, and the subsequent collapse of the underground workings, and extensive strip mining have destroyed the natural drainage patterns in the Jeansville Coal Basin (Gannett Fleming 1974). Catawissa Creek and its tributary Hunkydory Creek both lose their entire surface flow into the deep mines. Their flows infiltrate through the broken strata or strip pits and are then conveyed as AMD by the Audenried drainage tunnel into Catawissa Creek.

In the permit application and subsequent correspondence, Altadis provided information about their soap manufacturing processes at the facility which would have been subject to 40 CFR Part 417 (Soap and Detergent Manufacturing Point Source Category) Subpart S (Manufacture of Detergent Bars and Cakes Subcategory). In an email from the Altadis factory manager Joseph Glowaski, dated July 24, 2019, DEP was informed that Altadis has discontinued all soap operations.

Limitations and monitoring frequencies for the following parameters are carried over from the previous permit: Outfall 001 – pH, DO, $CBOD_5$ and TSS; IMP 101 - $CBOD_5$ % removal and TSS % removal.

Approve	Deny	Signatures	Date
X		/s/ Brian Burden, E.I.T. / Project Manager	July 25, 2019
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	July 25, 2019

Summary of Review

Quarterly monitoring/reporting requirements are continued at Outfall 001 for NH_3-N, Total Kjeldahl Nitrogen, NO_2+NO_3-N, Total Nitrogen and Total Phosphorus. Those parameters were only monitored for the first 2 years of the previous permit term. The facility is considered a "non-significant" industrial waste facility per the Deparment's "Chesapeake Bay Industrial Wastewater Compliance Plan" (January 2010). As recommended in Appendix B of the Plan for flows less than 1 MGD, nutrient monitoring is required quarterly.

Modeling the discharge through WQM 7.0 resulted in no need for more stringent $CBOD_5$ or DO limitations (see attached) when using the previously determined point of first use (pond downstream of I-81 bridge) and stream flow value. The point of first use is not expected to move upstream due to the drainage conditions cited above. Long term average flow and flow data collected from DMRs suggest that 0.086 MGD is an appropriate discharge flow to model for. WQM modeling suggested a 21.4 mg/L monthy average limitation for NH_3-N, however, this pollutant is not expected to be present in this discharge in any significant quantity. Sampling submitted with the permit application confirms this assumption (all pollutant sampling results were non-detect using a QL of 0.2 mg/L). As mentioned above, quarterly monitoring and reporting for NH_3-N is continued in this renewal. For modeling, RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Elevations were obtained using the Spot Elevation feature of USGS's National Map. Drainage areas were estimated using the Watershed Delineation feature USGS's StreamStats interactive map (see Watershed Information attachment).

Sampling results for Pollutant Groups were screened through the Department's Toxics Screening Analysis and modeled through PENTOX if warranted (see PENTOX attachment). The results of PENTOX modeling are outlined below:

- **Total Alumimum**: highest reported concentration was 1,880 µg/L. Since the most stringent WQBEL is 4,072 µg/L as a monthly average, monitoring was recommended. Quarterly monitoring/reporting is included in the permit for Total Aluminum.

- **Total Copper**: highest reported Outfall 001 concentration was 94.5 µg/L. The influent concentration was 95 µg/L. Since the most stringent WQBEL is 27.3 µg/L, limitations were recommended at Outfall 001. At this time it does not appear that the facility is contributing to the Copper loading to Catawissa Creek. Quarterly monitoring reporting for influent Total Copper and effluent Total Copper is included in the permit to monitor that assumption.

- **Acrylamide**: highest reported concentration was "non-detect" using a quantitation limit (QL) of 10 µg/L. Since the most stringent WQBEL is 3.9 µg/L as a monthly average, limitations were recommended. The permittee was offered another chance to resample using a lower QL, however, was unable to test at a lower QL. The permit application indicates that a chemical utilized for sludge consolidation treatment (MasterGuard 1153) containing Acrylamide is used at a rate of 17.9 ppm (max usage rate). Quarterly monitoring/reporting is added to the permit for Acrylamide during this permit term. Data from this permit term should be used to determine if Acrylamide limitations are warranted in the next permit cycle.

The permittee provided sampling results for other potentially toxic pollutants known or expected to be present in the discharge. Of all the pollutants analyzed, only isopropyl alcohol (2-propanol) had specific water quality criteria: 89,000 µg/L CFC; 440,000 µg/L AFC. Since the highest reported concentration was 223.48 µg/L (at Outfall 001), there is no need to add monitoring requirements for that pollutant.

PA Chapter 95.2 lists effluent standards for industrial wastes. Specific pollutant requirements under 95.2 are listed below as well as justifications for including or not including them in this permit renewal:

- **pH**: must be between 6-9, unless wastes are discharged to an acid stream, in which case the pH may be greater than 9. This requirement has been included in previous permits and will be carried over in this renewal. Although this discharge eventually reaches AMD impaired surface waters, the upper pH limit of 9.0 will not be relaxed at this time. The permittee may wish to conduct site-specific studies to determine if relaxation of the upper limit would be appropriate.

- **Oil & Grease**: 15 mg/L quarterly average limitation; 30 mg/L IMAX. The maximum concentration reported in the permit application was 5.43 mg/L. Since the permittee no longer manufactures soap, a minimal sampling frequency of 1/quarter is included in the permit.

- **Dissolved Iron**: 7 mg/L IMAX limitation. Since the maximum concentration reported in the permit application for this parameter was < 20 µg/L (or <0.02 mg/L), a minimal sampling frequency of 1/quarter is included in this permit.

Summary of Review

Limitations for Oil & Grease and Dissolved Iron will come into effect one year after the permit effective date (see Part C.II).

DMR reports for the previous 2 years shows the following exceedances:

June 2017 (Outfall 001): TSS – 7.09 lbs/day (limit is 6.5 lbs/day)
August 2017 (Outfall 001): TSS – 7.66 lbs/day (limit is 6.5 lbs/day)
December 2017 (Outfall 001): $CBOD_5$ – 9.17 lbs/day (limit is 8.9 lbs/day)
January 2018 (Outfall 001): $CBOD_5$ – 10.61 lbs/day (limit is 8.9 lbs/day)
January 2018 (Outfall 001): TSS – 7.10 lbs/day (limit is 6.5 lbs/day)
April 2018 (Outfall 001): TSS – 8.24 lbs/day (limit is 6.5 lbs/day)
June 2018 (Outfall 001): $CBOD_5$ – 34.99 lbs/day (limit is 8.9 lbs/day)
July 2018 (Outfall 001): pH – 9.89 SU (limit is 9.0 SU)
July 2018 (Outfall 001): TSS – 7.06 lbs/day (limit is 6.5 lbs/day)
August 2018 (Outfall 001): TSS – 7.85 lbs/day (limit is 6.5 lbs/day)

Monitoring requirements for IMP 201 were not included in the previously issued permit and will not be included in this permit renewal. At IMP 201, NCCW mixes with piped stormwater from both on and off the site. Significant amounts of stormwater drainage from W. Oak St. (running along the southeastern side of the facility) enters the facility's lagoon at IMP 201.

The previously issued permit expired on April 30, 2017 and the application for permit renewal was submitted on time. There are no open violations for this client that would warrant withholding the issuance of this permit.


PENTOX.pdf


WQM Modeling.pdf


Watershed Information.pdf

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.086
Latitude	40º 54' 18.1"	Longitude	-75º 58' 55.6"
Quad Name	Hazleton	Quad Code	1138
Wastewater Description:	Non-Contact Cooling Water (NCCW), IW Process Effluent without ELG, Stormwater		
Receiving Waters	Catawissa Creek	Stream Code	27529
NHD Com ID	26284735	RMI	41.6
Drainage Area	5.38 mi^2	Yield (cfs/mi^2)	0.1*
Q_{7-10} Flow (cfs)	0.994	Q_{7-10} Basis	Previous modeling
Elevation (ft)	1633	Slope (ft/ft)	0.0063
Watershed No.	5-E	Chapter 93 Class.	CWF/MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Not Assessed		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Catawissa Municipal Water Authority		
PWS Waters	Catawissa Creek	Flow at Intake (cfs)	15 (using DA and 0.1 LFY)
PWS RMI	1.2	Distance from Outfall (mi)	~40

Other Comments: As in previous modeling, the Q_{7-10} flow of 0.994 cfs was input into the first node of WQM and PENTOX modeling. Other nodes assume the default LFY of 0.1 cfs/mi^2.