



**Alabama Department of Environmental Management**  
**adem.alabama.gov**

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MR DOUG COTE  
WATER AND SEWER ASSISTANT DIRECTOR  
MOBILE AREA WATER AND SEWER SYSTEM  
4725 MOFFETT ROAD SUITE H  
MOBILE AL 36652

Re: REVISED DRAFT LOCAL LIMITS  
MOBILE AREA WATER AND SEWER SYSTEM  
MOBILE CLIFTON C WILLIAMS WWTP  
NPDES PERMIT NO. AL0023086

Dear Mr. Cote:

This letter is to provide notification that ADEM has revised the draft local limits document for the Clifton C Williams WWTP based on updated information. A copy of this draft along with supporting information is attached for your review and comment. ADEM is requesting that your comments be received no later than 14 days from the date of this letter.

Following evaluation of any additional information provided, revised draft local limits will be developed if needed. If your facility has no further comments, ADEM will proceed with the development of final local limits based on the attached revised draft. After consideration of any comments received during the public notice period, a final determination on the local limits will be made. All permits issued to industrial users must comply with adopted local limits.

Should you have any questions about this process, please contact Brian Marshall by email at [BMarshall@adem.alabama.gov](mailto:BMarshall@adem.alabama.gov) or by phone at (334) 271-7895.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Ramsey", is written over the word "Sincerely,".

Scott Ramsey, Chief  
Industrial Section  
Industrial/Municipal Branch  
Water Division

Attachments: Draft Local Limits  
Rationale for Local Limits  
Local Limits/Pass Through Calculations  
List of Significant Industrial Users

CC: Aaron Oil Company  
Aaron Oil Company  
Action Resources Inc  
Berg Spiral Pipe



Cintas Corp  
Continental Motors Inc  
Evonik Corp  
GAF Building Materials  
Global Oil Environmental Services  
INEOS America LLC  
Liquid Environmental Solutions  
Mitsubishi Polycrystalline Silicon America Corp  
Mobile Energy LC  
Oil Recovery Co  
Turkey Trot Landfill  
United Packers LLC  
Stephanie Ammons  
Brian Marshall

# LOCAL LIMITS

**PUBLICLY OWNED TREATMENT WORKS:** MOBILE CLIFTON C. WILLIAMS WWTP  
**LOCATION:** MOBILE, ALABAMA  
MOBILE COUNTY  
**PERMIT NUMBER:** AL0023086

## GENERAL PRETREATMENT PROHIBITIONS

No discharge to the Publicly Owned Treatment Works (POTW) shall exceed or otherwise violate the General Pretreatment Standards described in ADEM Administrative Code 335-6-5. Specifically the POTW shall ensure that discharges to their system comply with the following prohibitions to ensure protection of the treatment and collections systems and to ensure worker safety:

Pollutants which create a fire or explosion hazard including but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit;

Pollutants which will cause corrosive structural damage to the treatment works but in no case discharges with a pH lower than 5.0 S.U. unless the treatment works are specifically designed to accommodate such discharges;

Solid or viscous pollutants in amounts which will cause obstruction to the flow in sewers or other interference with the operation of the treatment works;

Any pollutant, including oxygen demanding pollutants released in a discharge of such volume or strength as to cause interference in the treatment works;

Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference, but in no case in such quantities that the temperature of the effluent at the treatment plant exceeds 104 degrees Fahrenheit unless the treatment plant is designed to accommodate such heat;

Pollutants which will result in the presence of toxic gases, vapors or fumes within the treatment works in a quantity that may cause acute worker health and safety problems;

Any trucked or hauled pollutants except at discharge points designated by the treatment works; and

Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in such amounts that will cause interference or pass through.

## GENERAL PRETREATMENT STANDARDS AND LOCAL LIMITS

### POLLUTANTS:

The total average daily loading of the substances from all sources shall not exceed the indicated mass listed below.

<u>Parameter</u>	<u>Allowable Average Daily Pollutant Load at Headworks of POTW</u> (lbs/day)
Arsenic, Trivalent	0.4126
Cadmium, Total Recoverable	1.193
Chromium, Total Recoverable	1168
Copper, Total Recoverable	23.34
Cyanide, Free	2.971
Lead, Total Recoverable	13.51
Mercury, Total Recoverable	0.1213
Nickel, Total Recoverable	11.37
Silver, Total Recoverable	12.57
Zinc, Total Recoverable	109.2

**HYDRAULIC LOADING:**

The hydraulic loading on an average basis is the design capacity of the treatment plant which is 28.0 million gallons per day.

**ORGANIC LOADING:**

The organic loading (CBOD<sub>5</sub>) is the design capacity of the treatment plant which is 38,998 pounds per day.

**SOLIDS LOADING**

The Total Suspended Solids loading (TSS) is the design capacity of the treatment plant which is 46,704 pounds per day.

**EFFECTIVE DATE:**

**ISSUANCE DATE:**

**DRAFT**

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**Alabama Department of Environmental Management**

## Rationale for Local Limits

Mobile Clifton C. Williams WWTP (AL0023086)  
28.0 MGD Activated sludge with pure oxygen  
Mobile/Mobile County

Reissuance  
Prepared Date: 2/12/2019  
Prepared By: Ed Hughes  
Revised Date: 2/20/2020, 3/4/2020

### Nonconventional Pollutants:

#### Pass Through:

Allowable pollutant loadings were based on state water quality standards applicable to streams with a use designation of Fish & Wildlife. Local limits calculations were performed using the receiving stream 7Q10, 1Q10 and annual average flow; however, due to the tidal influence in this stream segment, it was determined to be unreasonable to utilize conventional methods for calculating these critical flows. In this case, the 7Q10 was assumed to be 79.7 % of the flow based on the effluent dilution calculated by the CORMIX model used to develop chronic toxicity limits for this site. Specifically the CORMIX model determined that plant effluent represented 20.3 percent of the flow at the edge of the chronic mixing zone. Therefore, the stream flow would be 79.7 % of the total flow or 3.93 times the effluent flow of 28 million gallons per day. This equates to 110 MGD or 170 cfs. Using the accepted ratio of 1:0.75, a 1Q10 of 127.5 cfs was calculated. For lack of any acceptable method to calculate the annual average flow, a very conservative approach was taken which assumed this flow to be equivalent to the 7Q10. A stream hardness of 171.2 mg/l as CaCO<sub>3</sub> was used in the local limits calculations based on hardness data collected from the ADEM trend station located upstream of the POTW outfall.

The treatment plant removal rates and untreated domestic sewage pollutant concentrations were based on Best Professional Judgment using literature values and EPA recommended levels as the basis unless site specific data was available. Calculations estimate the allowable quantity of heavy metals (measured as Total Recoverable) and Free Cyanide that can be discharged into the POTW to ensure that state water quality standards for aquatic toxicity and human health criteria are met in the receiving stream during critical flow conditions. Because only the portion of heavy metals present in dissolved form is "bioavailable" to aquatic life, the calculations which evaluate aquatic toxicity take into account the relationship between "dissolved" metals and metals measured using the Total Recoverable test procedure. The allowable pollutant loadings based on pass through concerns are located in column 11 of the Local Limits-Pass Through (LL-PT) spreadsheet.

#### Interference:

The Department evaluated the potential for processes at the POTW to be inhibited as result of the pollutant loading entering the treatment works. Inhibition values were based on Best Professional Judgment using literature values and EPA recommended levels as the basis unless site specific information was provided by the POTW. The allowable pollutant loadings based on inhibition concerns are located in column 13 of the LL-PT spreadsheet.

#### Sludge Disposal:

The POTW disposes the majority of sludge using land application and a small amount (approximately 3%) by landfilling. For the purpose of developing local limits, it was assumed that all sludge is land applied and

the amount land applied was adjusted to the level anticipated to be generated when the POTW operates at 100 percent hydraulic capacity. Based on the sludge disposal data reported in the POTW's most recent NPDES permit application, this equates to 5.98 tons per day at a wastewater flow of 28 MGD. For POTWs that use land application as a means of disposal the LL-PT spreadsheet calculates the allowable pollutant loading to ensure that metal concentrations in the sludge comply with EPA 503 regulations for land application of biosolids. The results of these calculations are located in column 14 of the spreadsheet.

Column 15 of the LL-PT spreadsheet indicates the most stringent of the above three criteria. These loadings are considered the POTW's total headworks capacity for the pollutants of concern.

The LL-PT spreadsheet also lists the current loading of the pollutants of concern from domestic/commercial and industrial sources and determines the remaining capacity currently available. Domestic/commercial loadings are indicated in Columns 16 and current industrial loadings are shown in column 17 (a listing of each significant industrial user and their permit limits and average reported discharge level for pollutants without permit limits is shown on the attached Significant Industrial Users sheet). Column 18 of that spreadsheet shows the remaining capacity after subtracting the current loadings. Negative values indicate that no additional capacity is available for these pollutants.

It should be noted that the available pollutant loadings shown in column 18 have been reduced by 10%, which is the percent of total capacity reserved for future growth.

### **Conventional Pollutants**

#### Temperature:

The Department is not aware of any specific circumstances related to this POTW which require a temperature limitation more stringent than general standards and prohibitions contained in ADEM Administrative code 335-6-5-.03(2)(e).

#### pH:

The Department is not aware of any specific circumstances related to this POTW which require a minimum pH limitation more stringent than general standards and prohibitions contained in ADEM Administrative code 335-6-5-.03(2)(b).

#### Hydraulic loading:

The hydraulic loading is the design capacity of the treatment plant as indicated by the POTW, 28.0 MGD.

#### Organic loading:

The organic loading (CBOD<sub>5</sub>) is the design capacity of the treatment plant. This loading was calculated using the design flow of the POTW and an influent CBOD<sub>5</sub> concentration of 167 mg/l.

#### Total Suspended Solids loading

The Total Suspended Solids (TSS) loading was calculated using the design flow of the POTW and an influent TSS concentration of 200 mg/l.

While ADEM develops local limits and reviews compliance, POTWs are responsible for ensuring proper management of Significant Industrial Users and other sources to meet their NPDES limits and to prevent pass through and interference problems and to ensure compliance with the prohibitions contained in ADEM Administrative Code 335-6-5-.03 for protection of the treatment works, collection system and worker safety. The POTWs' responsibilities include establishing any additional limitations via local ordinances, etc. to protect the POTW and comply with their permit.

**Revision (2/20/2020):**

In this revision, the default hardness of 50 mg/l as CaCO<sub>3</sub> was replaced with the average hardness measured at the ADEM trend station located upstream of the municipal outfall. This change did not affect the list of over allocated pollutants but did increase the available allocation for Silver. The revised spreadsheet indicates that Cyanide is the only pollutant that is currently over allocated.

**Revision (3/4/2020):**

In this revision, the stream classification was updated to Fish & Wildlife and the mixing zone IWC determined by the 2015 mixing zone analysis was used to estimate the critical stream flows. The first paragraph of this rationale was revised to provide details of changes to stream flows calculations. The headworks loading allocations were recalculated using the most recent version of the local limits spreadsheet, which incorporated the use of site-specific data provided by the water system for influent, effluent and domestic waste concentrations. (Note: The removal rate for Cyanide was based on the default value instead of the value calculated from site-specific data. This is because the measured values were consistently less than detection levels such that the percent removal calculation did not provide realistic results).

The result of these changes shows that no pollutant is currently over allocated.

**LOCAL LIMIT/ PASS THROUGH CALCULATIONS**

POTW NAME: Mobile CC Williams WWTP  
 NPDES PERMIT NUMBER: AL0023086

DATE PREPARED: 2/28/2020  
 PREPARED BY: Ed Hughes  
 REVISED DATE: 3/3/2020

STREAM DATA AND POTW FLOW DATA					
RECEIVING STREAM CLASSIFICATION	=	F & W	0	RECEIVING STREAM TIDALLY INFLUENCED =	Yes
POTW DESIGN FLOW	=		28 MGD		
FLOW FROM OTHER CONTRIBUTORS	=		MGD		
DOMESTIC FLOW	=		25.994 MGD		
7Q10	=		170.12 CFS	OR	109.90 MGD
1Q10	=		127.60 CFS	OR	82.43 MGD
7Q2	=		CFS	OR	0.00 MGD
ANNUAL AVG FLOW	=		170.12 CFS	OR	109.90 MGD
STREAM HARDNESS (DEFAULT VALUE 100)	=		171.2 MGL AS CaCO3		

ALLOWABLE LOADING TO STREAM BASED ON WATER QUALITY AND HH STANDARDS										
PARAMETER	1) CHRONIC	SW CHRONIC	2) MAX W Q	3) ACUTE	SW ACUTE	4) MAX W Q	5) HUMAN	6) MAX W Q	7) WQ / HH	PARAMETER
	TOXICITY	TOXICITY	INSTREAM	TOXICITY	TOXICITY	INSTREAM	HEALTH	INSTREAM	BASED DISC	
	(MG/L)	(MG/L)	(LBS/D)	(MG/L)	(MG/L)	(LBS/D)	(MG/L)	(LBS/D)	LEVEL (LBS/D)	
ANTIMONY, TOTAL RECOVERABLE	----	----	----	----	----	----	0.3733333	429.358	429.358	ANTIMONY, TR
ARSENIC, TRIVALENT	0.1500	0.0360	41.402	0.3400	0.0690	63.548	0.00030	0.349	0.349	ARSENIC, TRI
CADMIUM, TOT RECOVERABLE	0.0004	0.0088	1.741	0.0034	0.0400	13.251	----	----	1.741	CADMIUM, TR
CHROMIUM, TOT RECOVERABLE	0.1151	----	630.44340	0.8850	----	3881.204	----	----	630.443	CHROMIUM, TR
CHROMIUM, HEXAVALENT	0.0110	0.0500	12.651	0.0160	1.1000	14.736	----	----	12.651	CHROMIUM, HEX
COPPER, TOTAL RECOVERABLE	0.0142	0.0031	3.585	0.0223	0.0048	4.421	----	----	3.585	COPPER, TR
CYANIDE, FREE	0.0052	0.0010	1.150	0.0220	0.0010	0.921	9.3333	10733.94	0.921	CYANIDE, FREE
LEAD, TOT RECOVERABLE	0.0045	0.0081	9.316	0.1154	0.2100	193.406	----	----	9.316	LEAD, TR
MERCURY, TOT RECOVERABLE	0.000012	0.000025	0.02875	0.0024	0.0021	1.934	0.0000424	0.049	0.02875	MERCURY, TR
MOLYBDENUM	----	----	----	----	----	----	----	----	----	MOLYBDENUM
NICKEL, TOT RECOVERABLE	0.0820	0.0082	9.431	0.7379	0.0740	68.153	0.9929078	1141.909	9.431	NICKEL, TR
SELENIUM, TOTAL RECOVERABLE	0.0005	0.0071	0.575	0.0020	0.0290	1.842	2.4305566	2795.298	0.575	SELENIUM, TR
SILVER, TOT RECOVERABLE	----	----	----	0.0081	0.0019	1.750	----	----	1.750	SILVER, TR
ZINC, TOT RECOVERABLE	0.1863	0.0810	93.155	0.1848	0.0900	82.888	14.8936170	17128.63	82.888	ZINC, TR



DOMESTIC	DATA VALUE	Antimony	Arsenic	Cadmium	Chromium, Tot	Chromium, VI	Copper	Cyanide	Lead	Mercury	Molybdenum	Nickel
	LIT VALUE	0.0004	0.0009	0.0001	0.0013	0.0000	0.0241	0.0048	0.0019	0.0001	0.0009	0.0028
	DATA VALUE	Selenium	Silver	Zinc	0.0010	0.0000	0.0600	0.0400	0.0500	0.0000	0.0000	0.0200
	LIT VALUE	0.0005	0.0003	0.0793	0.0000	0.0100	0.1800					

TYPE OF TREATMENT =	2	Act Sludge
TREATMENT INCLUDE NITIFICATION?	No	

SLUDGE DISPOSAL	
DOES THE POTW HAVE SECONDARY CLARIFICATION?	Yes
AVERAGE TONS OF SLUDGE PER DAY (DRY WEIGHT)	5.98
IS SLUDGE LAND APPLIED?	Yes

GROWTH ALLOCATION	
% ALLOCATION RESERVED FOR FUTURE GROWTH =	10

PARAMETER	7) MAX WQ INSTREAM (LBS/D)	8) ALLOCATION FROM BACKGROUND (LBS/D)	9) ALLOWABLE DISC FROM POTW (LBS/D)	10) REMOVAL RATE (%)	11) ALLOWABLE DISCHARGE (WQ / HH) (LBS/D)	12) INHIBITION TRESHOLD CONC (MGL)	13) ALLOWABLE DISCHARGE (INHIBITION) (LBS/D)	14) ALLOWABLE DISCHARGE (SLUDGE) (LBS/D)	15) ALLOWABLE DISCHARGE LOCAL LIMIT (LBS/D)	16) DOMESTIC INFLUENT LOADING (LBS/D)	17) INDUSTRIAL INFLUENT LOADING (LBS/D)	18) AVAILABLE CAPACITY FOR GROWTH (LBS/D)	LIMITING FACTOR
ANTIMONY, TOT RECOVERABLE	429.3577	0	429.3577	5	452.2377				429.3577	0.0860	0.1210	386.2357	WATER QUALITY
ARSENIC, TRIVALENT	0.3485	0	0.3485	16	0.4126	0.100	23.3520	5.774224335	0.4126	0.1925	0.1863	0.0304	WATER QUALITY
CADMIUM, TOT RECOVERABLE	1.7412	0	1.7412	85	11.7689	1.000	233.5200	1.193108571	1.1931	0.0196	0.0855	0.9792	SLUDGE
CHROMIUM, TOT RECOVERABLE	630.4434	0	630.4434	83	3798.3515	5.000	1167.6000	-----	1167.6000	0.2727	3.8710	1047.1107	INHIBITION
CHROMIUM, HEXAVALENT	12.6507	0	12.6507	83	74.4160	1.000	233.5200	-----	74.4160	0.0061	0.0209	66.9502	WATER QUALITY
COPPER, TOTAL RECOVERABLE	3.5652	0	3.5652	85	23.3388	1.000	233.5200	60.7005291	23.3388	5.2246	2.6494	13.9183	WATER QUALITY
CYANIDE, FREE	0.9210	0	0.9210	69	2.9709	0.100	23.3520	-----	2.9709	1.0298	0.4787	1.3162	WATER QUALITY
LEAD, TOT RECOVERABLE	9.3155	0	9.3155	74	36.3671	1.000	233.5200	13.50599346	13.5060	0.4119	1.4752	10.4570	SLUDGE
MERCURY, TOT RECOVERABLE	0.0288	0	0.0288	76	0.1213	0.100	23.3520	0.8935225	0.1213	0.0155	0.0008	0.0945	WATER QUALITY
MOLYBDENUM		0						0.897	0.8970	0.2010	0.0000	-----	SLUDGE
NICKEL, TOT RECOVERABLE	9.4305	0	9.4305	44	16.8905	1.000	233.5200	11.37328302	11.3733	0.6168	2.2959	7.6145	SLUDGE
SELENIUM	0.5750	0	0.5750	43	1.0108			2.774352941	1.0108	0.0999	0.0000	0.8197	WATER QUALITY
SILVER, TOT RECOVERABLE	1.7499	0	1.7499	86	12.5719	0.250	58.3800	-----	12.5719	0.0605	0.1477	11.1273	WATER QUALITY
ZINC, TOT RECOVERABLE	82.8885	0	82.8885	82	463.8179	1.000	233.5200	109.2182991	109.2183	17.1914	25.2120	60.1333	SLUDGE

## Comments

Item 1: Allowable concentration instream based on above noted stream conditions and state standard to protect aquatic life from chronic toxicity.

Item 2: Mass of pollutant allowed instream based on above noted stream conditions and chronic criteria calculated as shown below:

Item 2 = stream 7Q10 x 8.34 x Item 1. If stream segment is tidally influenced, the more stringent of freshwater and saltwater criteria is used.

Item 3: Allowable concentration instream based above noted stream conditions and state standard to protect aquatic life from acute toxicity.

Item 4: Mass of pollutant allowed instream based on above noted stream conditions and acute criteria and calculated as shown below:

Item 4 = stream 1Q10 x 8.34 x Item 3. For LWF streams, Item 4 = stream 7Q2 x 8.34 x Item 3.

If stream segment is tidally influenced, the more stringent of freshwater and saltwater criteria is used.

Item 5: Allowable concentration instream based on above noted stream conditions and state human health standard for a stream with this use classification.

Item 6: Mass of pollutant allowed instream based on above noted stream condition, the human health standard and calculated as shown below:

Item 6 = Annual average stream flow x 8.34 x Item 5 (for carcinogens) and 7Q10 x 8.34 x Item 5 (for non-carcinogens).

Item 7: The most stringent of the requirements calculated in Items 2,4 and 6.

Item 8: Amount allocated to other facilities discharging to this stream segment.

Item 9: Remaining allocation available.

Item 10: Pollutant removal rates based on the treatment process.

Item 11: The calculated allowable discharge into the POTW based on water quality and human health concerns.

Item 12: Concentration of pollutant that could cause inhibition of biological processes utilized at the treatment plant.

Item 13: Allowable discharge into the POTW based on levels to prevent inhibition of biological treatment processes.

Item 14: Allowable discharge into the POTW based on levels to meet EPA 503 standards for land application of sludge, if sludge is land applied.

Item 15: Allowable discharge into the POTW based on the more stringent of Items 11, Item 13 and item 14 requirements. This column contains the Local Limits for this POTW.

Item 16: Domestic influent (lbs/d) based on domestic flow and sampled domestic influent data if available or literature values if not.

Item 17: Industrial influent (lbs/d) based on monthly average permit limits and actual average values for the past 2 to 5 years (depending on availability) for "monitor only" pollutants as shown on SIUs sheet. Values reported as less than detect are not included in average calculation.

Item 18: Available capacity remaining for new sources after subtracting capacity being utilized by industrial sources, domestic sources (including commercial sources and septage disposal) and capacity reserved for future growth.

## SIGNIFICANT INDUSTRIAL USERS

PERMITTEE	AVG FLOW (MGD)	DAILY AVG ANTIMONY (MG/L)	DAILY AVG ARSENIC (MG/L)	DAILY AVG CADMIUM (MG/L)	DAILY AVG CHROMIUM (MG/L)	DAILY AVG HEX CHROM (MG/L)	DAILY AVG COPPER (MG/L)	DAILY AVG CYANIDE (MG/L)	DAILY AVG LEAD (MG/L)	DAILY AVG MERCURY (MG/L)	DAILY AVG Molybdenum (mg/l)	DAILY AVG NICKEL (MG/L)	DAILY AVG SELENIUM (MG/L)	DAILY AVG SILVER (MG/L)	DAILY AVG ZINC (MG/L)
Aaron Oil (IU414900244)	0.0500	0.0000	0.1370	0.0000	0.4870	0.0000	0.3010	0.0000	0.1720	0.0000	0.0000	0.1302	0.0000	0.0000	4.4600
Aaron Oil (IU414900837)	0.1000	0.0000	0.0355	0.0000	0.4870	0.0000	0.3010	<b>0.2150</b>	<b>0.1720</b>	0.0000	0.0000	0.1810	0.0000	0.0000	<b>4.4600</b>
Action Resource (IU414900781)	0.0150	0.0000	0.0000	0.0000	0.0000	0.0000	0.8400	0.0000	0.0000	0.0031	0.0000	0.0000	0.0000	0.0000	0.0000
Berg Spiral Pipe (IU414900534)S03	0.0120	0.0000	0.0000	0.0700	1.7100	0.0000	2.0700	0.0400	0.4300	0.0000	0.0000	2.3800	0.0000	0.2400	1.4800
Berg Spiral Pipe (IU414900534)S04	0.0038	0.0000	0.0000	0.0700	1.7100	0.0000	2.0700	0.0400	0.4300	0.0000	0.0000	2.3800	0.0000	0.2400	1.4800
Cintas Corp (IU414900709)	0.0604	0.0000	0.0000	0.0038	0.0036	0.0000	0.0000	0.0000	0.0058	0.0000	0.0000	0.0145	0.0000	0.0000	0.2950
Continental Motors (IU414900069)S03	0.0250	0.0000	0.0000	0.0700	1.7100	0.1000	2.0700	0.3200	0.4300	0.0000	0.0000	2.3800	0.0000	0.2400	1.4800
Continental Motors (IU414900069)S08	0.0200	0.0000	0.0000	0.2600	1.7100	0.0000	2.0700	0.6500	0.4300	0.0000	0.0000	2.3800	0.0000	0.2400	1.4800
Evonik Corp (IU411900021)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
GAF Corp (IU414900025)	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Global Oil (IU414900429)	0.3000	0.0000	0.0000	0.0000	0.4870	0.0000	0.3010	0.0000	0.1720	0.0000	0.0000	0.0000	0.0000	0.0000	4.4600
INEOS America (IU414900690)	0.5250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0914	0.0000	0.0000	0.0000	0.0000	0.0000	0.3000
Liquid Envr Solut (IU414900418) S01A	0.0704	0.2060	0.1040	0.0075	0.4870	0.0000	0.3010	0.1600	0.1720	0.0007	0.0000	1.4500	0.0000	0.0351	0.6410
Mitsubishi (IU414900643)	0.2339	0.0000	0.0068	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0902
Mobile Energy (IU414900737)	0.3500	0.0000	0.0000	0.0000	0.2000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
Oil Recovery (IU414900655)	0.0750	0.0000	0.0403	0.0192	0.4870	0.0000	0.3010	0.0400	0.1720	0.0000	0.0000	0.0403	0.0000	0.0086	4.4600
Turkey Trot LF (IU414900001)	0.0508	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
United Packers (IU414900273)	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Industrial flow	2.0060														

Monthly average permit limits are listed in bold print.

Other values are based on a minimum of 24 months of data if available as reported on DMRs (for parameters with testing requirements in permits).

PERMITTEE	AVG FLOW (MGD)	DAILY AVG ANTIMONY (LBS/D)	DAILY AVG ARSENIC (LBS/D)	DAILY AVG CADMIUM (LBS/D)	DAILY AVG CHROMIUM (LBS/D)	DAILY AVG HEX CHROM (LBS/D)	DAILY AVG COPPER (LBS/D)	DAILY AVG CYANIDE (LBS/D)	DAILY AVG LEAD (LBS/D)	DAILY AVG MERCURY (LBS/D)	DAILY AVG Molybdenum (LBS/D)	DAILY AVG NICKEL (LBS/D)	DAILY AVG SELENIUM (LBS/D)	DAILY AVG SILVER (LBS/D)	DAILY AVG ZINC (LBS/D)
Aaron Oil (IU414900244)	0.05	0.0000	0.0571	0.0000	0.2031	0.0000	0.1255	0.0000	0.0717	0.0000	0.0000	0.0543	0.0000	0.0000	1.8598
Aaron Oil (IU414900837)	0.1	0.0000	0.0296	0.0000	0.4062	0.0000	0.2510	0.1793	0.1434	0.0000	0.0000	0.1510	0.0000	0.0000	3.7196
Action Resource (IU414900781)	0.015	0.0000	0.0000	0.0000	0.0000	0.0000	0.1051	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000
Berg Spiral Pipe (IU414900534)S03	0.012	0.0000	0.0000	0.0070	0.1711	0.0000	0.2072	0.0040	0.0430	0.0000	0.0000	0.2382	0.0000	0.0240	0.1481
Berg Spiral Pipe (IU414900534)S04	0.0038	0.0000	0.0000	0.0022	0.0542	0.0000	0.0656	0.0013	0.0136	0.0000	0.0000	0.0754	0.0000	0.0076	0.0469
Cintas Corp (IU414900709)	0.0604	0.0000	0.0000	0.0019	0.0018	0.0000	0.0000	0.0000	0.0029	0.0000	0.0000	0.0073	0.0000	0.0000	0.1486
Continental Motors (IU414900069)S03	0.025	0.0000	0.0000	0.0146	0.3565	0.0209	0.4316	0.0667	0.0897	0.0000	0.0000	0.4962	0.0000	0.0500	0.3086
Continental Motors (IU414900069)S08	0.02	0.0000	0.0000	0.0434	0.2852	0.0000	0.3453	0.1084	0.0717	0.0000	0.0000	0.3970	0.0000	0.0400	0.2469
Evonik Corp (IU411900021)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
GAF Corp (IU414900025)	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Global Oil (IU414900429)	0.3	0.0000	0.0000	0.0000	1.2185	0.0000	0.7531	0.0000	0.4303	0.0000	0.0000	0.0000	0.0000	0.0000	11.1589
INEOS America (IU414900690)	0.525	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4002	0.0000	0.0000	0.0000	0.0000	0.0000	1.3136
Liquid Envr Solut (IU414900418) S01A	0.0704	0.1210	0.0611	0.0044	0.2859	0.0000	0.1767	0.0939	0.1010	0.0004	0.0000	0.8513	0.0000	0.0206	0.3764
Mitsubishi (IU414900643)	0.2339	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1760
Mobile Energy (IU414900737)	0.35	0.0000	0.0000	0.0000	0.5838	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.9190
Oil Recovery (IU414900655)	0.075	0.0000	0.0252	0.0120	0.3046	0.0000	0.1883	0.0250	0.1076	0.0000	0.0000	0.0252	0.0000	0.0054	2.7897
Turkey Trot LF (IU414900001)	0.0508	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
United Packers (IU414900273)	0.101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	2.0060	0.1210	0.1863	0.0855	3.8710	0.0209	2.6494	0.4787	1.4752	0.0008	0.0000	2.2959	0.0000	0.1477	25.2120

### CURRENT PERMITTED INDUSTRIAL LOADING TO POTW (LBS/DAY)

PARAMETER	
ANTIMONY	0.1210
ARSENIC	0.1863
CADMIUM	0.0855
CHROMIUM	3.8710
HEX CHROM	0.0209
COPPER	2.6494
CYANIDE	0.4787
LEAD	1.4752
MERCURY	0.0008
Molybdenum	0.0000
NICKEL	2.2959
SELENIUM	0.0000
SILVER	0.1477
ZINC	25.2120