2017

PRETREATMENT PROGRAM
ANNUAL REPORT

Connersville, Indiana

Respectfully Submitted To:

CONNERSVILLE BOARD of PUBLIC WORKS

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Summary of Program and Changes

In 1977, the United States Congress amended the Clean Water Act to include the requirement for the control of industrial discharges to municipal wastewater treatment plants. Pursuant to the Clean Water Act amendment, the United States Environmental Protection Agency promulgated the regulation for implementing pretreatment programs on a nationwide basis. This regulation became effective August 25, 1978.

In April, 1982, The Indiana Stream Pollution Control Board established policies, procedures and technical criteria for the implementation of a statewide program for the pretreatment of industrial wastewater discharged to municipal wastewater treatment plants.

The City of Connersville was required to establish an Industrial Pretreatment Program as described in the City's N.P.D.E.S. permit. A Pretreatment Program is required of all municipal treatment plants in the State of Indiana with a design loading of greater than 1,000,000 gallons per day. The purpose is to limit the discharge of wastes which pass through or interfere with treatment processes or which may contaminate the sludge generated.

The industries in the City of Connersville with the potential for discharging substances which might be subject to regulation under the pretreatment program were identified using the following sources of information:

1. Harris Industrial Directory of Indiana
2. MacRae Industrial Directory
3. Industrial/Commercial water billing records
4. Telephone Directory
5. Past data from the City's industrial Monitoring Program

With these sources of information, a listing of thirty-one commercial and industrial businesses in the Connersville WWTP service area was compiled. Upon identification of all known industries, it was necessary to evaluate which were potential dischargers of process wastewater. This was accomplished in the following manner:

1. City representatives most knowledgeable about local industrial activities reviewed the industrial inventory list and identified those industries which may be contributors of process wastewater.

2. Industries were evaluated for potential wastewater based on the activities indicated in the state industrial directory.

3. A review of water use records was conducted, and the data was compared to the number of employees at each industry.

4. A review was made of historical wastewater sampling data compiled by the City as it pertained to past industrial surveillance and pretreatment requirements.

The evaluation permitted a number of industries to be eliminated from further consideration. Of the 31 listed industries, 17 appeared to be justified for further evaluation. Those 17 industries were notified of the City's need to establish a formal pretreatment program and asked to complete an industrial waste survey (IWS) questionnaire. Completed questionnaires were returned by all of the industries surveyed. Sufficient information was derived from the completed questionnaires for the classification of each industry into either a "wet" or "dry" category. A "dry" industry is one where no process water is used in product manufacturing; thus, no industrial wastewater discharge would be expected. A "wet" industry generates process wastewater which may be discharged into the municipal sewer system. The questionnaire portion of the survey resulted in the conclusion that eight wet industries are connected to the municipal sewer system in Connersville.

On May 4, 1987, Connersville Utilities implemented its pretreatment program and issued permits. Since that time, no new industrial users have been issued permits, however, two permitted industries were changed from non-categorical to categorical. The original Industrial Waste Survey was updated in 1994. This was done in preparation of passing the “Metal Products and Machinery" regulations due to be published in the Federal Register during 1996.

Permits were originally issued for a period of one year. In order to reduce the amount of paperwork for the IU's as well as the WWTP staff, permits are now issued for a three year period. In February of 1995, a pretreatment program modification, to revise the City's Sewer Use Ordinance, by including a definition for significant industrial user and revising the local limits for oil and grease and pH was approved by the U.S. EPA and the Indiana Department of Environmental Management. These modifications were included in permits which were reissued in May.

1995 marked the loss of a major contributing industry to the pretreatment program. Frigidaire Co. formerly known as White Consolidated Industries and Design & Manufacturing ceased operations as of December 31, 1994. Connersville Industrial Center purchased the facility but phased out all operations and is no longer a permitted facility.

1996 and 1997 saw no changes in the pretreatment program.

In 1998, one permitted industry was changed from categorical to non-categorical status. Ready Machine Tool & Die discontinued the processes which caused it to be covered under the Metal Finishing category and was reclassified as a non-categorical industry. Only two other events had any significant impact on the pretreatment program in 1998. These were the removal of the zinc plating line at Stant Manufacturing and the removal of the zinc-phosphating line at Greene Manufacturing.

In 1999, two industries were removed from the permit system. Ready Machine Tool & Die and Dresser Industries, Roots Division were dropped because they no longer met the criteria for significant industrial users as defined in 40 CFR 403.3 (t). The only other change was at Custom Extrusions where they went to a closed loop system.

The year 2000 saw significant changes to the Pretreatment program. On April 1st, two major plating facilities, Stant Manufacturing and Greene Coatings Division, ceased operations in Connersville. Stant's union failed to ratify a contract proposal and subsequently the plating line was closed and the equipment sold. Greene's operations ceased when they were forced into bankruptcy court and all assets frozen. Also in 2000, a technical re-evaluation of local limits was

undertaken as a required by Connersville's new N.P.D.E.S. permit. As a result of the re-evaluation, it was determined that no changes to the local limits were necessary.

2001 saw the approval and adoption of major modifications to Connersville's Sewer Use Ordinance. The ordinance now reflects all modifications as required by the P.I.R.T and D.S.S. rules. All changes were approved by Region 5 of the EPA and adopted by the Connersville Common Council on November 19, 2001. Also in 2001, Connersville was considered for and selected to receive the Region 5 USEPA Operation and Maintenance (O & M) Excellence Award for first place in the large advanced category. In addition to excellent pollutant removal, the pretreatment program was cited for industrial waste controls reducing metals in the wastewater by 60 - 90 %.

There were no significant changes to the pretreatment program in 2002 or 2003.

In 2004, Altec, formerly known as Custom Extrusions, Inc, was purchased by Indalex Aluminum Solutions, Inc. New owners anticipated a dramatic increase in production. Previously, Indalex discharged no categorical wastes. Because of the increase in production, Indalex would once again begin discharge of categorical wastes to the Connersville sewer system.

2005 was a year of little change for the Pretreatment Program. In February, Visteon Systems, LLC suspended the production of 6mm condensers. With this shutdown came the discontinuation of the use of methanol and a flux that contained zinc chloride, which was the compound that produced the zinc constituent of their effluent.

2006 saw Ready Machine Tool & Die sold to Crown Equipment Corporation. No changes to the facility's operations or processes occurred.

On December 21, 2007, Visteon Systems, LLC, ceased operations. A plant closure plan was submitted and completed. Visteon was the largest industrial waste discharger to the Connersville sewer system accounting for over 90% of all permitted industrial flow. In 2007, construction began for facilities to house a new press at the Indalex facility. The new press will triple production at the facility and is expected to be operational by June, 2008.

2008 saw few but significant changes. While construction was underway at Indalex that was expected to increase production, installation was not completed as expected. Elements of a reorganization plan initiated in 2008 at the WWTP to streamline operations and reduce expenses impacted the pretreatment program by eliminating the Pretreatment Coordinator position and making changes in operator attendance.

In a proactive response to publication of the Pretreatment Streamlining revisions, Connersville submitted changes to the Indiana Department of Environmental Management and Region 5 of the EPA for approval in November, 2009. Several substantial modifications were necessary. Also in 2009, Sapa Extruder, Inc. purchased the Indalex facility. No changes to discharges from the facility are anticipated. The only other change was the addition of a lubricant manufacturing process at Reclaimed Energy. The wax blending operation was added in an effort to retain personnel. This is a problem all facilities tied to the printing and automotive industries share. The process is "0" discharge and will have little effect on the pretreatment program.

In 2010, Sewer Use Ordinance modifications for compliance with Pretreatment Streamlining revisions were approved and adopted. Sampling and evaluation in support of a technical re-evaluation of local limits was initiated for submittal as per NPDES permit requirements.

The technical re-evaluation of local limits initiated in 2010 was completed and submitted in January of 2011. The requirement to conduct periodic review of discharge limitations applicable to local industry is necessary to insure adequacy of the existing limitations and to determine the need for additional standards. Also, in response to an audit by IDEM, Industrial Discharge Permits were revised and reissued to incorporate streamlining provisions.

In implementing provisions of the City of Connersville's Sewer Use Ordinance and the Industrial Pretreatment Program, pretreatment personnel must look for changes to, omissions from and errors in the Industrial Waste Survey and regularly update it. This is essential in determining the nature and quantity of pollutants entering the wastewater treatment plant and in issuing or modifying permits. In 2012, a new, extensive IWS was conducted. Several industries were identified as possible sources of wastewater discharge and have been added to a list of site visits to be performed in 2013.

2013 saw no changes to the pretreatment program.

In June 2014 IDEM representatives visited three industries with Maryellen Blanton and it was determined at that time that Keener Corporation on 10th Street needed to be added to the permitted industries. Maryellen retired from the Connersville Utilities in July and was replaced with Bob Shoemaker as Superintendent of Connersville WWTP and Erin Johnson as the Pretreatment Coordinator and Laboratory Supervisor. The end of 2014 was spent familiarizing with the Connersville Pretreatment Program and working with Keener on the permit process.

In 2015, the Keener plant located at 419 E. 10th street was added to the permitted industries under the Metal Finishing category. Industrial Waste Surveys were sent to industries to provide an update to the nature and quantity of pollutants entering the wastewater treatment plant and to determine the need for additions or modifications to industry permits. Per NPDES permit requirements, sampling was performed in October for a technical re-evaluation of local limits. Evaluation of the sampling results led to a request to EPA Region 5 that no changes be made to the current local limits. In addition, the current sewer use ordinance was submitted for review as well.

2016 began with a request from the EPA to update the Legal Authority document from the original Legal Authority letter written in 1985. The Legal Authority document demonstrates that Connersville Utilities has the authority to effectively implement our Pretreatment Program and was updated with current references to both local and state regulations. In May, EPA Region 5 gave approval to the recommendation that no changes be made to the current local limits, however at that time the sewer use ordinance was still under review. EPA Region 5 found deficiencies with the current sewer use ordinance and gave a list of required revisions. The required revisions were made and submitted to EPA Region 5, which they responded with other revisions. At the end of 2016, approval for the final revisions of the sewer use ordinance from EPA Region 5 had not been received. In July, IDEM had an audit of the Pretreatment Program. There was minor changes to industrial permits required and Connersville Utilities needed to evaluate and determine if Jacobs & Brichford Cheese needed to be a permitted as a significant industrial user. Changes were made to ensure industrial permits were compliant and the decision was made that Jacobs & Brichford did not need to be permitted as a significant industrial user at that time.

In 2017, the updated sewer use ordinance was approved by the Board of Works and City Council. EPA gave final approval for the updated sewer use ordinance in May. Stant requested that we allow them to discharge water from their leak test station. After testing and an onsite inspection, approval was given that they could discharge water from the leak test station and did not need an industrial permit.

2017
PRETREATMENT PERFORMANCE SUMMARY

Connersville Utilities
216 Vine Street
Connersville, In
NPDES Permit # IN0032336
Contact: Erin Johnson 765-825-9411

"I certify that the information contained herein is complete and accurate to the best of my knowledge."

Authorized Representative: Mike Bottomley
Utilities Manager

Total Categorical IU's = Two (2)
Total Significant Noncategorical IU's = One (1)

SIGNIFICANT INDUSTRIAL USER COMPLIANCE:	SIGNIFICANT INDUSTRIAL USERS CATEGORICAL	NONCATEGORICAL
1 Number of SIUs submitting BMRs/Number required	0/0	N/A
2 Number of SIUs submitting 90-Day compliance reports/Number required	0/0	N/A
3 Number of SIUs submitting semiannual reports/Number required	0/0	0/0
4 Number of SIUs meeting compliance schedules/Number required	0/0	0/0
5 Number of SIUs in Significant Noncompliance/Total number of SIUs	0/2	0/1
6 Rate of SNC for all SIUs (Categorical & Noncategorical)	0/3	

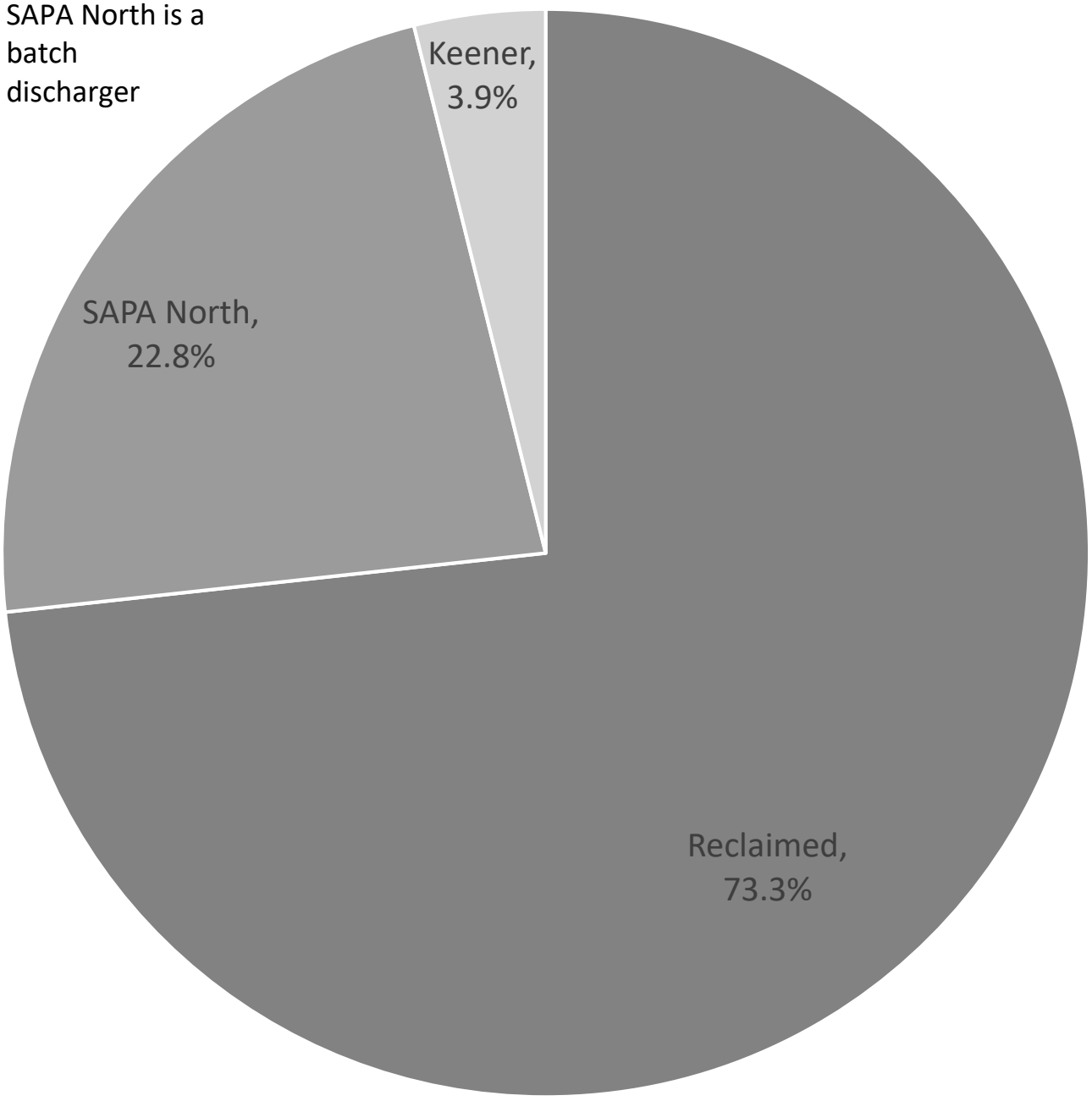
COMPLIANCE MONITORING PROGRAM:		
1 Number of nonsampling inspections conducted	2	2
2 Number of sampling visits conducted	4	4
3 Number of facilities inspected (all industrial users)	2	2
4 Number of facilities sampled (all industrial users)	1	1

ENFORCEMENT ACTIONS:		
1 Compliance schedules issued/Schedules required	0/0	0/0
2 Notices of violation issued to SIUs	0	0
3 Administrative orders issued to SIUs	0	0
4 Civil suits filed	0	0
5 Criminal suits filed	0	0
6 Significant violators (attach newspaper list)	0	0
7 Amount of penalties collected	$68.92 (surcharges)	$0.00
8 Other actions taken (sewer bans, etc.)	0	0

Industry Name	Permit Number	Expiration Date	Applicable Standards	Average Discharge Flow (gpd)	Control Authority Sampling Events	Control Authority Inspections	Industrial User Sampling Events
Reclaimed Energy	CU-106	8/30/2019	City Ordinance	16,044	4	2	59
SAPA North	CU-105	10/31/2019	40 CFR 467.35	5,000	0	1	0
Keener 419 E. 10th St.	CU - 110	4/7/2018	40 CFR 433.17	854	4	2	12

2017 Permitted Industrial Users: Average Discharge Flow

SAPA North is a batch discharger



An integral part of the Pretreatment Program is the Industrial Waste Survey which is sent to all industrial users to provide updated information on the quantity and nature of pollutants entering the sewer system from each industrial user. In 2018 the Pretreatment Survey will be updated and sent to industrial users. This information will be organized and used to prioritize site visits to non-permitted industrial users. Additionally the information will be used by the cross connection staff to determine if visits are necessary to any industrial users to ensure protection of the drinking water system. Working with the non-permitted industrial users as well as permitted will help to continue the progress the pretreatment program has made in regulating wastes and thus continuing to provide protection to the people, environment, collection system, and wastewater treatment plant.

Another goal for the year 2018 is to educate the restaurants, car washes, and other commercial users of the need for grease traps and interceptors to prevent a problem with fats, oils, and grease in the sewer system. The plan is to combine inspections with the cross connection staff to have better inspections of the grease traps, interceptors, and backflow devices and also provide a copy of the ordinance codes that explains the responsibility of users to have prevention devices in place that limit potentially contaminated water and fats, oils, and grease from entering the sewer system and causing issues.

INSPECTION

FACILITY	DATE OF INSPECTION	PROBLEMS ADDRESSED
Keener	6/7/2017	Took a sample from manhole in the middle of the building to test for phosphorus
	11/29/2017	Annual inspection - no issues found; Took a sample from manhole in line of the sampling manhole to test the phosphorus
Reclaimed Energy	12/8/2017	Annual Inspection - no problems found
SAPA	12/12/2017	Annual inspection - no problems found
Stant	3/13/2017	Inspected procedures for discharging water from the leak test stations
Sugarcreek	8/2/2017	Meet with compnay officials about hauling wastewater to WWTP

ENFORCEMENT

INDUSTRY	TYPE OF ENFORCEMENT	DATE	REASON

There were no instances of enforcement for the year 2017.

SIGNIFICANT NON-COMPLIANCE

There were no instances of significant non-compliance for the year 2017.

INTERFERENCE AND PASSTHROUGH

There were no instances of interference or passthrough for the year 2017.

MONTH	RECLAIMED ENERGY	STANT MFG.	HOWDEN ROOTS	SAPA EXTRUDER	FAYETTE TOOL	KEENER CORPORATION	INDIANA ORDINANCE
JANUARY	13,459	3,735	10,712	4,479	1,724	1,038	1,130
FEBRUARY	17,745	4,987	4,802	7,719	3,133	1,427	1,364
MARCH	15,533	5,055	2,258	7,476	1,704	852	1,052
APRIL	16,147	4,649	7,176	10,204	1,514	911	1,121
MAY	16,411	3,939	9,211	9,694	1,115	689	808
JUNE	16,560	4,029	8,604	8,027	1,130	763	89
JULY	16,628	4,431	12,406	9,548	1,126	916	61
AUGUST	17,514	5,125	5,497	10,535	1,084	1,537	82
SEPTEMBER	16,188	4,676	6,960	10,962	1,094	1,735	93
OCTOBER	16,408	5,250	4,134	10,525	1,136	1,980	28
NOVEMBER	17,209	27,681	3,167	11,517	1,233	1,296	26
DECEMBER	12,958	15,455	3,056	7,733	1,068	1,969	874
TOTAL GALLONS	5,856,203	2,703,338	2,377,155	3,297,090	514,508	459,488	203,100
2017 AVERAGE	16,044	7,406	6,513	9,033	1,410	1,259	556

PREVIOUS YEARS AVERAGES							
2016 AVERAGE	17,129	8,544	5,133	10,305	1,884	1,352	566
2015 AVERAGE	16,200	7,267	11,866	18,652	1,969	2,097	90
2014 AVERAGE	15,951	2,147	9,531	10,105	1,992	2,631	2,392
2013 AVERAGE	14,066	2,010	15,065	9,333	3,021	2,347	2,008
2012 AVERAGE	12,847	2,407	10,595	8,849	1,756	2,068	2,118
2011 AVERAGE	11,896	2,061	10,794	8,467	4,365	2,843	2,147
2010 AVERAGE	9,978	1,573	5,528	9,133	2,761	2,055	1,283
2009 AVERAGE	11,034	1,656	10,353	12,082	6,764	2,099	2,852
2008 AVERAGE	11,750	1,294	10,804	5,051	8,315	1,579	1,859
2007 AVERAGE	12,468	2,857	16,661	8,716	-	-	-
2006 AVERAGE	11,900	1,707	17,364	30,716	-	-	-
2005 AVERAGE	13,502	2,155	38,541	17,906	-	-	-
2004 AVERAGE	14,206	3,664	52,254	17,320	-	-	-
2003 AVERAGE	12,988	4,272	46,782	12,351	-	-	-
2002 AVERAGE	13,686	6,494	33,769	11,335	-	-	-
2001 AVERAGE	13,733	3,235	15,755	7,422	-	-	-
2000 AVERAGE	15,157	11,990	19,730	6,600	-	-	-
1999 AVERAGE	14,898	32,684	25,887	31,487	-	-	-

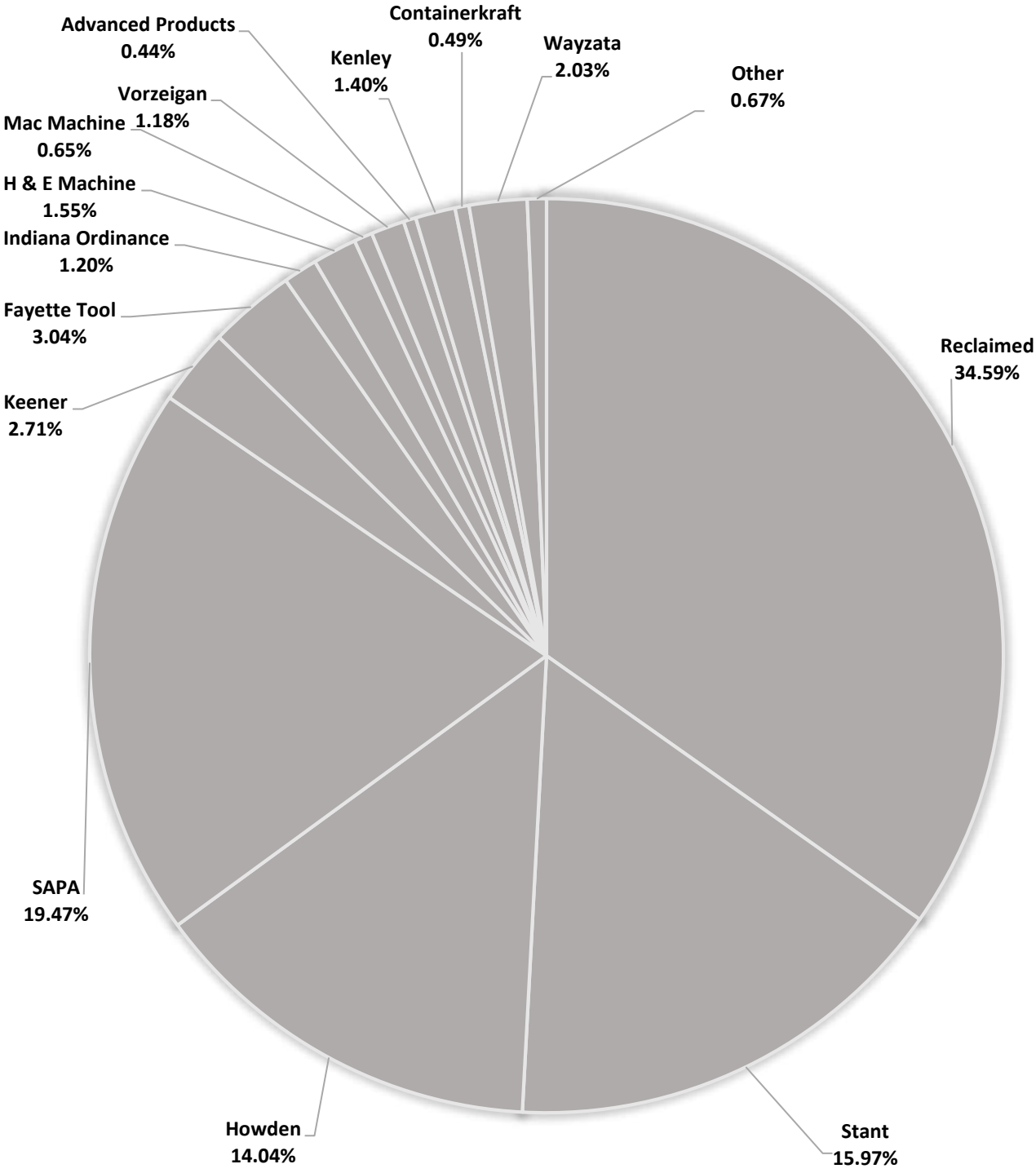
	MAC	H & E	VORZEIGAN	ADVANCED	ECONOMIC	KENLEY	DIECO	CONTAINER-
MONTH	MACHINE	MACHINE	MACHINING	PRODUCTS	GROUP			KRAFT
JANUARY	237	702	265	217	280	419	78	304
FEBRUARY	337	797	249	318	197	230	167	306
MARCH	563	667	2,609	235	107	576	117	223
APRIL	263	811	363	221	99	273	128	268
MAY	268	736	394	188	113	346	96	267
JUNE	265	748	371	234	90	428	65	224
JULY	263	463	305	183	118	240	65	206
AUGUST	292	632	345	185	169	849	104	217
SEPTEMBER	260	712	424	160	132	827	105	190
OCTOBER	263	807	370	170	144	1116	163	172
NOVEMBER	288	877	408	168	148	1221	211	189
DECEMBER	317	698	393	171	136	1246	148	180
TOTAL GALLONS	110,018	262,583	199,095	74,220	52,628	237,473	43,875	83,303
2017 AVERAGE	301	719	545	203	144	651	120	228

PREVIOUS YEARS AVERAGES								
2016 AVERAGE	280	559	273	200	369	475	117	322
2015 AVERAGE	291	470	301	234	212	231	119	262
2014 AVERAGE	285	419	412	227	141	392	105	317
2013 AVERAGE	285	464	292	221	170	466	131	280
2012 AVERAGE	285	680	332	-	233	-	-	-
2011 AVERAGE	846	459	360	-	305	-	-	-
2010 AVERAGE	276	351	673	-	337	-	-	-
2009 AVERAGE	-	-	888	-	2,262	-	-	-
2008 AVERAGE	-	-	-	-	1,212	-	-	-
2007 AVERAGE	-	-	-	-	1,904	-	-	-
2006 AVERAGE	-	-	-	-	3,815	-	-	-
2005 AVERAGE	-	-	-	-	3,861	-	-	-
2004 AVERAGE	-	-	-	-	6,604	-	-	-
2003 AVERAGE	-	-	-	-	1,594	-	-	-
2002 AVERAGE	-	-	-	-	1,653	-	-	-
2001 AVERAGE	-	-	-	-	-	-	-	-
2000 AVERAGE	-	-	-	-	-	-	-	-
1999 AVERAGE	-	-	-	-	-	-	-	-

	WAYZATA	C & P	MADISON	BROWNFIELDS	INDIANA	ADVANTAGE
MONTH			AVE		TOOL	WIRE
JANUARY	787	48	45	97	10	18
FEBRUARY	1,034	45	50	117	17	217
MARCH	961	38	41	106	14	46
APRIL	940	45	0	348	17	29
MAY	817	55	40	82	16	22
JUNE	829	50	30	84	15	22
JULY	840	52	60	66	14	22
AUGUST	1,154	44	62	87	22	23
SEPTEMBER	1,100	58	43	55	33	28
OCTOBER	1,072	52	68	233	18	49
NOVEMBER	947	56	46	135	18	88
DECEMBER	834	53	39	119	15	93
TOTAL GALLONS	343,830	18,105	15,975	53,610	6,315	19,560
2017 AVERAGE	942	50	44	147	17	54

PREVIOUS YEARS AVERAGES						
2016 AVERAGE	422	54	65	154	22	41
2015 AVERAGE	221	64	48	116	16	33
2014 AVERAGE	286	46	55	216	32	41
2013 AVERAGE	-	-	-	-	-	-
2012 AVERAGE	-	-	-	-	-	-
2011 AVERAGE	-	-	-	-	-	-
2010 AVERAGE	-	-	-	-	-	-
2009 AVERAGE	-	-	-	-	-	-
2008 AVERAGE	-	-	-	-	-	-
2007 AVERAGE	-	-	-	-	-	-
2006 AVERAGE	-	-	-	-	-	-
2005 AVERAGE	-	-	-	-	-	-
2004 AVERAGE	-	-	-	-	-	-
2003 AVERAGE	-	-	-	-	-	-
2002 AVERAGE	-	-	-	-	-	-
2001 AVERAGE	-	-	-	-	-	-
2000 AVERAGE	-	-	-	-	-	-
1999 AVERAGE	-	-	-	-	-	-

2017INDUSTRY BREAKDOWN: METERED WATER USAGE



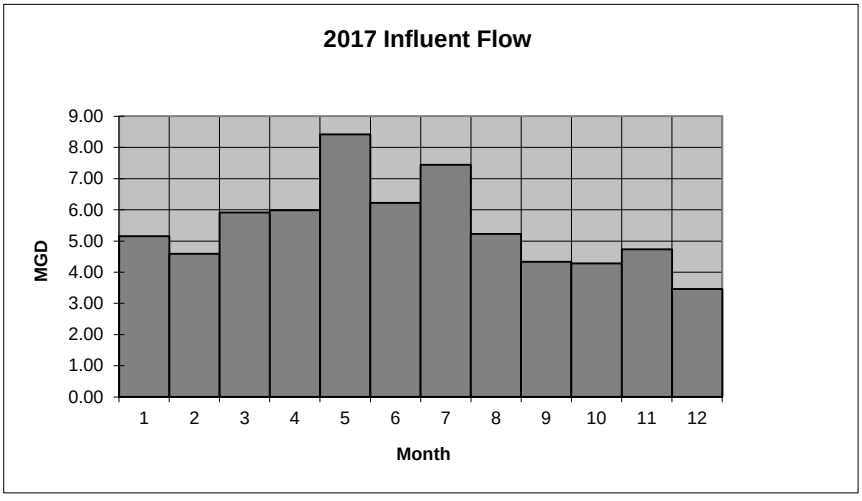
ORGANIC POLLUTANT MONITORING

The Connersville Wastewater Treatment Plant N.P.D.E.S Permit requires that in addition to priority pollutants, a reasonable attempt must be made to provide identification and quantification of the ten most abundant constituents (excluding priority pollutants or un-substituted aliphatic compounds) present in the influent, effluent and sludge shown to be present by peaks on the total ion plots. The peaks must be ten times higher than the adjacent background noise. After visual confirmation by an out side lab engaged by the WWTP, the following compounds were identified.

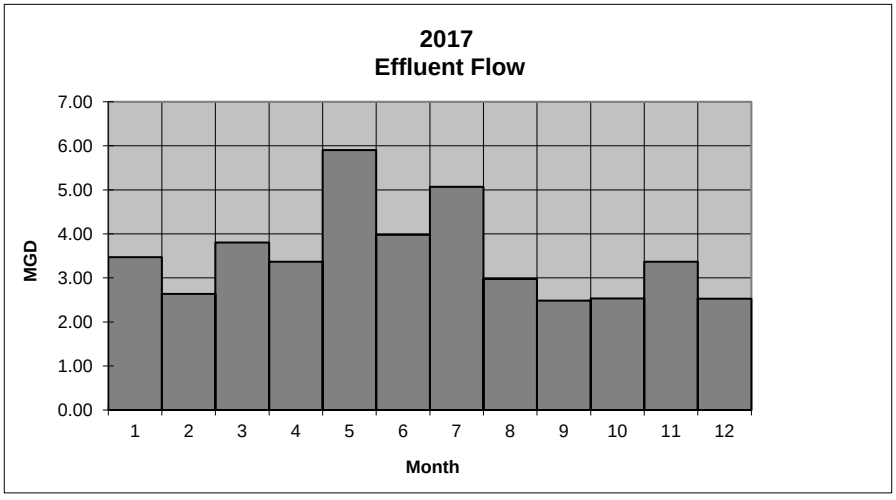
	Conc. Rank	Concentration	Name	Identification
Influent Volatiles			**No library search compounds detected.**	
Effluent Volatiles			**No library search compounds detected.**	
Sludge Volatiles	**4**	**27.95 ppb**	**2-tert-Butylcyclohexanone**	Unknown source
Influent Semi-volatiles	**1**	**0.07 ng/ul**	**Hexadecanoic Acid**	Aka Palmitic acid; One of the most common saturated acids found in animals, plants, and microorganisms; Also found in meats, cheeses, and dairy products
Effluent Semi-volatiles			**No library Search compounds detected.**	
Sludge Semi-volatiles	**1**	**84.26 ng/ul**	**Coprostan-3-one**	Intermediate in conversion of cholesterol to coprostanol that occurs in gut of many higher animals; found in human waste
	2	**16.82 ng/ul**	**2-Methylphenanthro [3,4-D][1,3]oxazol-10-ol**	Unknown source
	3	**15.95 ng/ul**	**Cholestan-3-one, 4,4-dimethyl-5α-**	Component in human body and food; a cholesterol derivative in human feces and other biological matter
	4	**12.01 ng/ul**	**Colan-24-oic acid, 3-oxo-, meth…**	Unknown source
	5	**7.62 ng/ul**	**Benzenamine, 2,3,4,5-tertracholoro-**	Unknown source
	6	**6.77 ng/ul**	**Pregnan-20-one, 3-(acetyloxy)-5,6-epoxy-,(3b,5a,6a)**	Unknown source
	7	**6.17 ng/ul**	**Pyrrolo[2,3-b]indole, 1,2,3,3a,8,8a-hexahydro-**	Aka Eseroline; A drug that acts as an opioid agonist

	8	**4.66 ng/ul**	**Pregn-4-ene-3, 20-dione, (9.beta,10.alpha)-**	aka Retroprogesterone; A synthetic steroid
	9	**4.38 ng/ul**	**(5A.alpha.,9A.alpha.)-4,5,5a,6,7,8,9,9a-octahydro-6,6,9a-trimethylnaphtho[1,2-c]furan-1(3H)-one**	Aka Isodrimenin; Unknown source
	10	**3.96 ng/ul**	**1(2H)-Naphthalenone, 8a.beta.-et….**	Unknown source
	11	**3.76 ng/ul**	**Acetyl-1-(3-n-propoxyphenyl)-2-p….**	Unknown source
	12	**3.65 ng/ul**	**Dibenzo-p-dioxin**	The carbon skeleton of polychlorinated dibenzodioxins (PCDDs)

2017 Day of Month	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	3.69	4.49	12.90	5.29	6.71	6.66	6.70	5.67	4.58	4.19	6.46	3.79
2	4.13	4.54	5.61	5.73	5.89	6.45	5.18	6.29	4.99	4.48	3.94	3.54
3	5.44	4.50	5.57	5.96	5.66	6.70	5.20	6.10	4.12	4.24	3.77	3.59
4	4.09	4.43	5.02	5.71	14.75	6.07	7.52	6.05	4.93	4.19	3.77	3.93
5	3.94	3.96	4.56	7.22	17.02	6.56	5.70	5.24	8.09	7.52	6.82	5.51
6	3.90	4.24	8.41	6.55	10.68	5.61	11.20	5.26	4.54	3.46	8.92	3.70
7	3.72	7.16	7.62	5.16	8.21	5.44	9.61	5.51	4.44	5.72	7.06	3.32
8	3.71	4.62	5.53	5.07	7.34	5.54	8.50	5.26	4.12	7.65	4.66	3.50
9	3.86	4.48	5.40	5.41	10.89	5.73	7.25	5.19	4.28	4.47	5.03	3.30
10	5.22	4.42	5.28	5.37	8.02	5.82	6.75	5.56	4.27	3.75	4.40	3.48
11	4.72	4.16	4.99	5.41	8.46	6.09	14.77	5.22	4.13	4.50	4.50	3.61
12	7.73	4.71	5.01	5.39	6.97	6.53	9.14	5.60	4.13	3.83	4.43	3.63
13	5.19	4.21	5.00	5.25	6.52	7.06	8.58	5.25	4.55	3.96	3.76	3.40
14	5.93	4.50	5.13	5.37	6.33	5.78	7.26	5.26	3.88	4.18	3.78	3.56
15	4.80	4.17	4.55	5.29	6.62	9.55	6.89	5.58	4.12	4.29	4.78	3.41
16	4.97	4.07	4.49	5.29	6.19	5.27	6.53	5.87	4.39	3.81	2.81	3.20
17	8.00	4.49	5.41	5.60	5.70	5.31	10.15	6.76	3.99	3.85	2.95	3.07
18	5.18	4.33	4.47	5.48	5.72	8.44	7.43	4.58	4.15	3.83	7.38	3.44
19	5.33	4.47	4.45	5.39	7.03	5.21	7.03	4.77	4.53	3.91	6.42	3.58
20	13.00	4.96	8.83	8.46	6.14	5.07	7.16	4.53	3.92	3.59	4.59	3.74
21	6.51	4.50	5.73	6.10	6.23	5.11	8.22	4.68	3.77	4.00	4.88	3.29
22	5.66	4.39	4.90	4.96	5.22	5.29	7.60	6.09	3.60	3.58	4.51	3.14
23	5.66	4.43	5.16	4.60	5.41	10.81	7.19	4.20	4.19	4.73	4.16	6.12
24	5.46	5.93	4.61	4.67	13.16	6.88	6.39	4.59	3.97	4.30	3.85	2.94
25	4.64	4.00	4.41	4.46	17.71	4.76	6.30	4.59	4.33	3.95	4.05	2.54
26	4.76	3.75	8.83	4.88	10.60	5.33	6.11	4.55	4.18	3.54	3.83	2.51
27	3.94	4.39	6.19	5.09	10.12	5.69	7.75	4.66	4.07	5.55	4.05	2.92
28	3.67	6.31	6.76	8.29	9.33	5.18	5.96	4.52	4.02	3.88	4.20	3.27
29	3.91		5.92	14.80	8.15	5.28	5.59	6.01	3.90	3.23	4.05	2.29
30	4.61		6.35	7.24	7.22	7.49	5.31	4.36	3.91	3.48	4.27	3.16
31	4.40		6.40		6.86		5.70	4.24		2.98		2.76
TOTAL	159.77	128.61	183.49	179.49	260.86	186.71	230.67	162.04	130.09	132.64	142.08	107.24
AVERAGE FLOW	5.15	4.59	5.92	5.98	8.41	6.22	7.44	5.23	4.34	4.28	4.74	3.46



2017 Day of Month	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	2.17	2.73	8.66	3.04	4.51	4.39	4.70	3.43	2.75	1.92	4.66	2.42
2	2.40	2.52	3.71	2.88	3.92	4.04	3.44	3.36	2.96	2.11	3.00	2.45
3	3.73	2.50	3.05	3.19	3.55	3.91	3.25	3.24	2.08	2.06	2.49	2.42
4	2.33	2.45	3.16	2.93	10.73	3.87	4.92	4.54	2.47	2.14	2.36	2.54
5	2.29	2.49	2.84	4.33	13.41	4.61	3.69	2.97	5.63	4.98	4.60	3.91
6	2.12	2.52	5.72	3.79	8.02	3.62	8.25	3.15	2.65	2.57	7.16	2.54
7	2.08	4.89	5.45	2.99	5.83	3.58	7.13	3.44	2.43	3.55	5.01	2.47
8	2.08	2.75	3.62	2.75	5.23	3.39	5.93	3.03	2.31	5.28	3.03	2.36
9	2.29	2.51	3.12	2.92	7.63	3.44	5.26	2.87	2.30	3.35	3.10	2.44
10	3.41	2.58	3.77	2.86	5.36	3.35	4.49	2.90	2.30	2.41	2.82	2.48
11	3.28	2.63	2.83	2.99	5.97	3.26	10.75	2.94	2.38	2.52	2.70	2.47
12	5.62	2.83	2.81	2.53	4.66	3.39	6.58	2.99	2.41	2.13	2.88	2.34
13	3.34	2.39	2.98	2.61	4.13	4.38	6.25	2.77	2.65	2.24	2.79	2.41
14	3.89	2.51	2.71	2.50	4.22	3.79	5.14	2.87	2.60	2.13	2.61	2.29
15	2.99	2.32	2.67	2.60	3.80	6.77	4.35	2.79	3.05	2.75	4.11	2.39
16	3.49	2.38	2.53	2.62	3.81	3.35	4.57	2.87	2.22	2.12	2.61	2.37
17	5.83	2.39	3.17	2.52	3.66	3.29	6.69	4.25	2.19	2.04	2.50	2.38
18	3.48	2.38	2.77	2.39	3.76	6.05	4.98	2.69	2.47	2.22	5.80	2.47
19	3.24	2.40	2.59	2.57	4.81	3.43	4.43	2.61	2.95	2.01	4.69	2.39
20	10.68	2.39	6.07	4.87	4.30	3.38	4.85	2.56	2.34	1.93	3.86	2.27
21	5.14	2.34	3.57	3.90	4.53	3.07	5.84	2.60	2.51	1.97	3.35	2.25
22	4.03	2.36	2.99	2.85	3.37	3.08	5.28	3.89	2.16	1.97	3.04	2.46
23	3.68	2.30	2.94	2.57	3.17	7.46	5.30	2.49	2.16	2.96	2.96	4.90
24	3.41	3.34	2.98	2.91	9.58	4.81	4.11	2.38	2.10	2.80	2.83	2.50
25	3.27	2.31	2.85	2.42	14.04	3.14	3.81	2.41	2.25	2.00	2.80	2.29
26	3.08	2.16	9.30	2.46	7.77	3.77	3.67	2.38	2.22	1.94	2.68	2.23
27	3.06	2.32	3.98	2.56	7.45	3.40	5.03	2.37	2.10	3.11	2.76	2.21
28	2.84	4.11	4.50	4.97	6.74	3.32	4.04	2.58	1.98	2.53	2.72	2.27
29	2.75		3.31	11.34	5.72	3.29	3.50	3.97	1.96	2.09	2.53	3.09
30	2.74		3.62	5.21	4.77	4.75	3.35	2.43	1.90	2.55	2.64	2.24
31	2.77		3.70		4.53		3.48	2.43		2.07		2.10
TOTAL	107.51	73.80	117.97	101.07	182.98	119.38	157.06	92.20	74.48	78.45	101.09	78.35
AVERAGE FLOW	3.47	2.64	3.81	3.37	5.90	3.98	5.07	2.97	2.48	2.53	3.37	2.53



2017 MONTH	CADMIUM mg/l	CHROMIUM mg/l	COPPER mg/l	LEAD mg/l	NICKEL mg/l	ZINC mg/l	CYANIDE mg/l	PHOSPHORUS mg/l
JANUARY	<0.00020	0.00063	0.0141	0.00226	0.00256	0.0564	< 0.0040	2.96
FEBRUARY	0.00020			0.00273				3.70
MARCH	0.00031			0.01437				2.50
APRIL	0.00025	0.00077	0.0220	0.00196	0.00433	0.0508	<0.0040	2.32
MAY	0.00024			0.00098				1.29
JUNE	0.00028			0.00304				4.18
JULY	0.00031	0.00108	0.0141	0.00404	0.00336	0.0357	<0.0040	1.60
AUGUST	0.00026			0.00210				2.02
SEPTEMBER	0.00022			0.00305				3.43
OCTOBER	0.00021	0.00126	0.0206	0.00273	0.00571	0.0675	<0.0040	2.92
NOVEMBER	0.00031			0.00567				3.31
DECEMBER	<0.00020			0.00082				3.22
TOTAL	0.00299	0.0037	0.0708	0.0438	0.0160	0.2104	<0.0040	33.450
2017 AVERAGE	0.00025	0.0009	0.0177	0.0036	0.0040	0.0526	<0.0040	2.79

PREVIOUS YEAR'S AVERAGES

2016 AVERAGES	0.00033	0.0020	0.0214	0.0052	0.0040	0.0763	<0.0040	2.92
2015 AVERAGES	0.0003	0.0010	0.0199	0.0055	0.0027	0.0497	0.0252	-
2014 AVERAGES	<0.005	<0.020	0.049	<0.050	<0.050	0.101	0.0060	-
2013 AVERAGES	0.000	0.000	0.017	0.000	0.000	0.090	0.0020	-
2012 AVERAGES	0.000	0.000	0.009	0.000	0.000	0.054	0.0020	-
2011 AVERAGES	0.000	0.020	0.010	0.000	0.000	0.039	0.0030	-
2010 AVERAGES	0.000	0.020	0.025	0.007	<0.050	0.081	0.0020	-
2009 AVERAGES	<0.002	<0.005	0.033	<0.004	<0.020	0.101	<0.005	-
2008 AVERAGES	<0.002	<0.005	0.03	<0.004	<0.020	0.050	<0.005	-
2007 AVERAGES	<0.002	<0.005	0.024	0.001	<0.020	0.038	<0.005	-
2006 AVERAGES	<0.002	<0.005	0.023	<0.004	<0.020	0.045	0.0030	-
2005 AVERAGES	<0.002	<0.005	0.015	<0.004	<0.020	0.049	0.0370	-
2004 AVERAGES	<0.002	0.006	0.019	<0.004	<0.020	0.064	0.0010	-
2003 AVERAGES	<0.002	<0.005	0.034	<0.004	<0.020	0.073	0.0030	-
2002 AVERAGES	<0.002	<0.005	0.039	<0.004	<0.020	0.069	0.0010	-
2001 AVERAGES	<0.002	0.001	0.040	0.002	0.002	0.125	0.0070	-
2000 AVERAGES	<0.002	0.020	0.042	0.001	0.022	0.164	0.0060	-
1999 AVERAGES	<0.002	0.033	0.046	0.004	0.023	0.232	0.0120	-
1998 AVERAGES	<0.002	0.036	0.045	0.033	0.022	0.264	0.0170	-
1997 AVERAGES	<0.002	0.067	0.044	<0.004	0.026	0.238	0.0270	-
1996 AVERAGES	<0.002	0.084	0.045	0.021	0.047	0.235	0.0140	-
1995 AVERAGES	<0.002	0.058	0.041	0.034	0.832	0.227	0.0360	-

2017 MONTH	CADMIUM mg/l	CHROMIUM mg/l	COPPER mg/l	LEAD mg/l	NICKEL mg/l	ZINC mg/l	CYANIDE mg/l	PHOSPHORUS mg/l
JANUARY	<0.00020	<0.00040	0.00346	0.00044	0.00218	0.0359	<0.0040	2.14
FEBRUARY	<0.00020			0.00054				1.57
MARCH	0.00020			0.00103				1.33
APRIL	0.00021	<0.00040	0.00887	0.00057	0.00314	0.0286	<0.0040	1.25
MAY	0.00020			0.00032				1.00
JUNE	0.00022			0.00030				1.14
JULY	0.00021	0.00044	0.00636	0.00030	0.00273	0.0217	<0.0040	1.24
AUGUST	0.00023			0.00030				1.53
SEPTEMBER	<0.00020			0.00027				2.18
OCTOBER	0.00020	0.00069	0.0160	0.00030	0.00496	0.0495	<0.0040	2.21
NOVEMBER	<0.00020			0.00032				1.68
DECEMBER	<0.00020			0.00035				2.04
TOTAL	0.00247	0.00193	0.0347	0.00504	0.01301	0.1357	<0.0040	19.31
2017 AVERAGE	0.00021	0.00048	0.00867	0.00042	0.00325	0.0339	<0.0040	1.61

PREVIOUS YEAR'S AVERAGES

2016 AVERAGE	<0.00020	<0.00040	0.0059	0.00040	0.00281	0.0219	<0.0040	1.58
2015 AVERAGE	<0.00220	<0.01265	0.00430	0.000	0.002	0.0262	0.0056	-
2014 AVERAGE	<0.005	<0.020	<0.020	<0.050	<0.050	0.0310	0.0050	-
2013 AVERAGE	0.000	0.000	0.00000	0.000	0.000	0.0260	0.0000	-
2012 AVERAGES	0.000	0.000	0.00000	0.000	0.000	0.0240	0.0000	-
2011 AVERAGES	0.000	0.000	0.00200	0.000	0.000	0.0080	0.0010	-
2010 AVERAGES	0.000	0.000	0.00000	0.000	0.000	0.0200	0.0010	-
2009 AVERAGES	0.000	0.001	0.00500	0.000	0.000	0.0090	0.0010	-
2008 AVERAGES	0.000	0.001	0.00600	0.000	0.000	0.0140	0.0010	-
2007 AVERAGES	0.000	0.000	0.00200	0.000	0.000	0.1240	0.0030	-
2006 AVERAGES	0.000	0.000	0.00400	0.000	0.000	0.0060	0.0020	-
2005 AVERAGES	0.000	0.000	0.00400	0.000	0.000	0.0060	0.0010	-
2004 AVERAGES	0.000	0.000	0.01000	0.000	0.000	0.1400	0.0000	-
2003 AVERAGES	0.000	0.000	0.01300	0.000	0.000	0.0290	0.0020	-
2002 AVERAGES	0.000	0.000	0.01700	0.000	0.000	0.0310	0.0010	-
2001 AVERAGES	<0.002	<0.005	0.02400	<0.004	<0.020	0.0740	0.0020	-
2000 AVERAGES	<0.002	0.009	0.01500	<0.004	<0.020	0.0930	0.0040	-
1999 AVERAGES	<0.002	0.002	0.00800	<0.004	0.005	0.0920	0.0030	-
1998 AVERAGES	<0.002	<0.005	0.01100	<0.004	<0.020	0.0980	0.0070	-
1997 AVERAGES	<0.002	0.002	0.01800	<0.004	0.006	0.1200	0.0160	-
1996 AVERAGES	<0.002	0.003	0.02400	<0.004	<0.020	0.1240	0.0160	-
1995 AVERAGES	<0.002	0.005	0.00900	0.011	0.200	0.0790	0.0040	-

DIGESTED SLUDGE

MONTH	TRANSFERRED TO HOLDING 1000 GALS/MONTH	% TOTAL SOLIDS	% VOL SOLIDS	METRIC DRY TONS TO HOLDING	DRY TONS LAND APPLIED	METRIC TONS LAND APPLIED	TONS TO LANDFILL	METRIC TONS TO LANDFILL
JANUARY	199.5	6.53	47.7	49.3		0.0	0.00	0.0
FEBRUARY	132.3	6.00	49.5	30.0		0.0	0.00	0.0
MARCH	94.5	5.93	52.0	21.2		0.0	0.00	0.0
APRIL	0.0			0.0	122.4	111.0	0.00	0.0
MAY	80.9	5.96	52.0	18.2		0.0	0.00	0.0
JUNE	132.3	5.59	52.0	28.0		0.0	0.00	0.0
JULY	51.0	5.53	51.0	10.7		0.0	0.00	0.0
AUGUST	77.7	5.41	60.0	15.9		0.0	0.00	0.0
SEPTEMBER	50.4	5.98	50.0	11.4		0.0	0.00	0.0
OCTOBER	206.8	5.91	48.3	46.2		0.0	0.00	0.0
NOVEMBER	226.1	6.12	48.0	52.3	150.2	136.3	0.00	0.0
DECEMBER	254.7	6.30	50.0	60.7	125.3	113.7	0.00	0.0
TOTAL	1506.2	65.26	560.5	344.0	397.9	361.0	0.0	0.0
2017 AVERAGE	136.93	5.93	50.95					

PREVIOUS YEARS AVERAGES

2016 AVERAGE	112.90	5.58	49.42	188.60	252.10	228.70	0.00	0.00
2015 AVERAGE	238.4	11.99	107.0	162.6	182.4	256.2	0.0	0.0
2014 AVERAGE	173.4	5.84	49.6		162.0	146.9	312.3	283.1
2013 AVERAGE	149.3	4.88	53.9		37.5	34.0	0.0	0.0
2012 AVERAGE	84.3	5.65	53.2		68.9	62.4	0.0	0.0
2011 AVERAGE	92.2	5.80	51.0		203.2	184.2	0.0	0.0
2010 AVERAGE	96.5	4.82	53.0		120.9	109.6	22.5	20.4
2009 AVERAGE	102.0	5.03	55.0		112.2	101.7	40.7	36.9
2008 AVERAGE	185.9	4.67	51.5		0.0	-	80.50	73.00
2007 AVERAGE	177.5	3.83	53.8		0.0	-	118.60	107.50
2006 AVERAGE	157.9	4.69	53.5		0.0	-	146.10	132.40
2005 AVERAGE	163.0	4.86	53.1		0.0	-	121.70	110.30
2004 AVERAGE	182.1	4.83	52.0		0.0	-	166.75	151.18
2003 AVERAGE	178.9	4.98	53.0		0.0	-	148.47	134.60
2002 AVERAGE	166.2	5.29	51.0		0.0	-	147.67	133.88
2001 AVERAGE	164.9	4.84	-		0.0	-	150.36	136.32
2000 AVERAGE	178.8	4.54	-		0.0	-	149.91	135.91

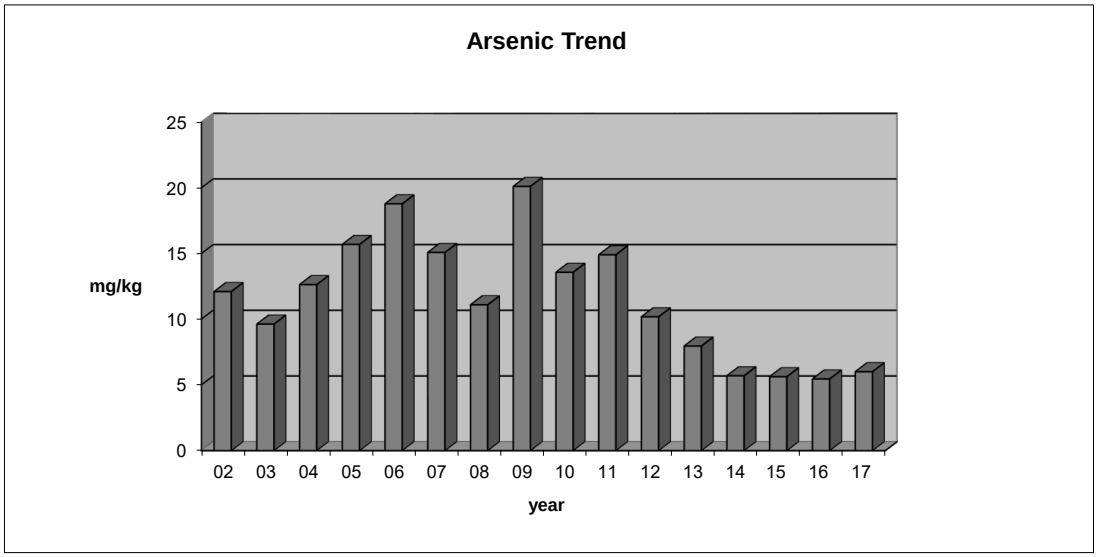
ARSENIC
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	0.436	5.96	7.31
FEBRUARY			
MARCH	0.211	5.93	3.56
APRIL			
MAY	0.220	5.86	3.75
JUNE			
JULY	0.236	5.43	4.34
AUGUST			
SEPTEMBER	0.410	5.26	7.79
OCTOBER			
NOVEMBER	0.550	5.95	9.24
DECEMBER			
TOTAL	2.06	34.39	35.99
2017 AVERAGE	0.34	5.73	6.00

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	0.290	5.52	5.45
2015 AVERAGE	0.260	4.46	5.62
2014 AVERAGE	0.300	5.90	5.69
2013 AVERAGE	0.390	4.95	7.95
2012 AVERAGE	0.610	5.65	10.18
2011 AVERAGE	0.900	6.23	14.90
2010 AVERAGE	0.730	5.45	13.57
2009 AVERAGE	0.640	5.05	20.11
2008 AVERAGE	0.530	4.53	11.09
2007 AVERAGE	0.580	3.78	15.08
2006 AVERAGE	0.870	4.69	18.78
2005 AVERAGE	0.750	4.76	15.69
2004 AVERAGE	0.590	4.66	12.63
2003 AVERAGE	0.480	4.99	9.62
2002 AVERAGE	0.622	5.14	12.10



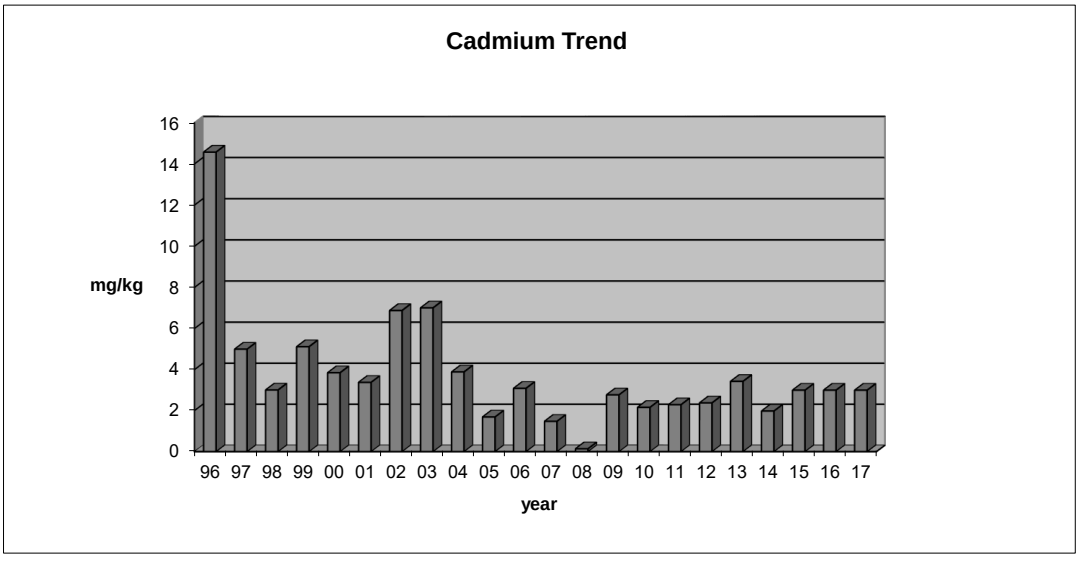
CADMIUM
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	<0.18	5.96	<3
FEBRUARY			
MARCH	<.18	5.93	<3
APRIL			
MAY	<0.18	5.86	<3
JUNE			
JULY	<0.163	5.43	<3
AUGUST			
SEPTEMBER	<0.16	5.26	<3
OCTOBER			
NOVEMBER	<.18	5.95	<3
DECEMBER			
TOTAL	0.00	34.39	0.00
2017 AVERAGE	<0.18	5.73	<3

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	<0.166	5.52	<3
2015 AVERAGE	<0.170	4.81	<3
2014 AVERAGE	0.119	6.453	1.98
2013 AVERAGE	0.18	5.82	3.43
2012 AVERAGE	0.15	5.65	2.38
2011 AVERAGE	0.15	6.28	2.29
2010 AVERAGE	0.12	5.45	2.16
2009 AVERAGE	0.31	5.05	6.86
2008 AVERAGE	0.05	4.53	1.62
2007 AVERAGE	0.05	3.78	1.48
2006 AVERAGE	0.11	4.69	3.09
2005 AVERAGE	0.07	4.76	1.69
2004 AVERAGE	0.17	4.66	3.89
2003 AVERAGE	0.35	4.99	7.01
2002 AVERAGE	0.35	5.14	6.88
2001 AVERAGE	0.15	4.44	3.38
2000 AVERAGE	0.17	4.41	3.85
1999 AVERAGE	0.19	3.71	5.12



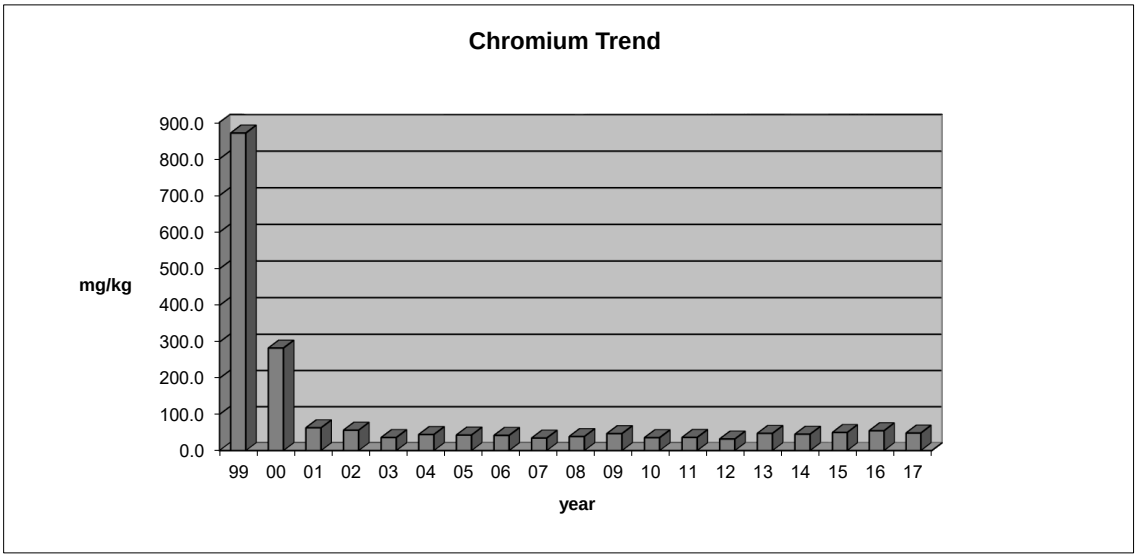
CHROMIUM
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	4.19	5.96	70.30
FEBRUARY			
MARCH	2.56	5.93	43.17
APRIL			
MAY	2.38	5.86	40.61
JUNE			
JULY	2.33	5.43	42.91
AUGUST			
SEPTEMBER	2.45	5.26	46.58
OCTOBER			
NOVEMBER	2.83	5.95	47.56
DECEMBER			
TOTAL	16.74	34.39	291.14
2017 AVERAGE	2.79	5.73	48.52

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	3.05	5.52	54.92
2015 AVERAGE	2.31	4.46	50.08
2014 AVERAGE	2.69	5.90	45.34
2013 AVERAGE	2.38	4.95	47.58
2012 AVERAGE	1.81	5.64	32.06
2011 AVERAGE	2.22	6.28	36.57
2010 AVERAGE	1.92	5.45	35.78
2009 AVERAGE	2.28	5.05	46.60
2008 AVERAGE	1.77	4.53	38.93
2007 AVERAGE	1.31	3.78	34.71
2006 AVERAGE	1.96	4.69	42.04
2005 AVERAGE	2.04	4.76	42.48
2004 AVERAGE	2.11	4.66	44.50
2003 AVERAGE	1.82	4.99	36.12
2002 AVERAGE	2.89	5.14	56.48
2001 AVERAGE	2.8	4.44	63.06
2000 AVERAGE	12.5	4.41	283.45
1999 AVERAGE	32.3	3.71	870.62



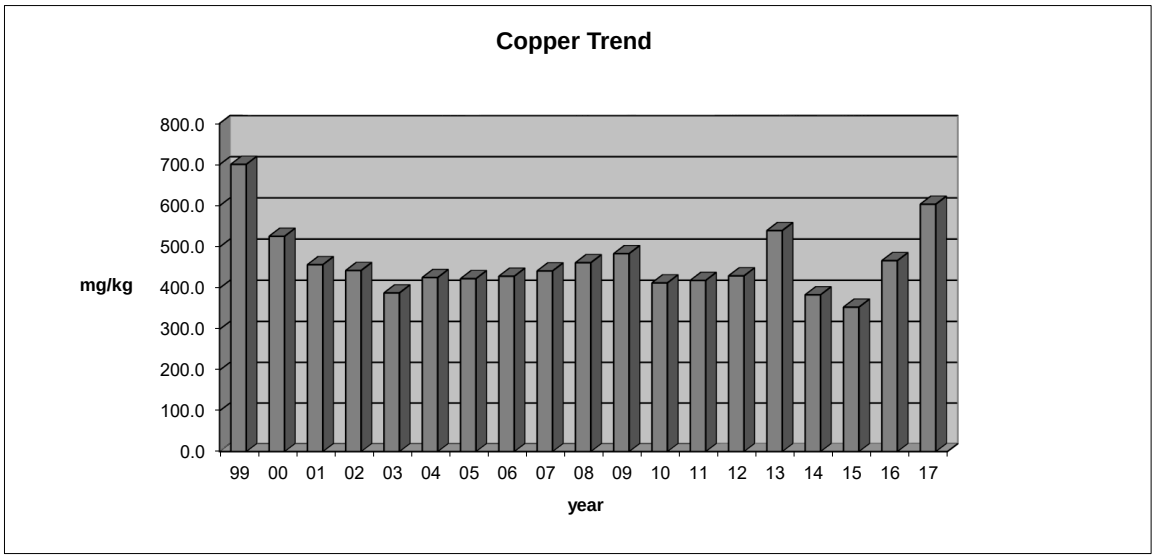
COPPER
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	28.30	5.96	474.83
FEBRUARY			
MARCH	26.00	5.93	438.45
APRIL			
MAY	31.90	5.86	544.37
JUNE			
JULY	33.50	5.43	616.94
AUGUST			
SEPTEMBER	35.70	5.26	678.71
OCTOBER			
NOVEMBER	51.80	5.95	870.59
DECEMBER			
TOTAL	106.10	17.84	1783.87
2016 AVERAGE	34.53	5.73	603.98

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	25.94	5.52	466.93
2015 AVERAGE	15.37	4.46	353.79
2014 AVERAGE	22.62	5.9	384.32
2013 AVERAGE	27.11	4.95	540.24
2012 AVERAGE	24.24	5.65	429.55
2011 AVERAGE	24.32	6.28	419.11
2010 AVERAGE	22.14	5.45	413.66
2009 AVERAGE	23.78	5.05	484.04
2008 AVERAGE	20.84	4.53	462.05
2007 AVERAGE	16.72	3.78	442.04
2006 AVERAGE	20.18	4.69	429.08
2005 AVERAGE	20.24	4.76	423.26
2004 AVERAGE	19.93	4.66	425.99
2003 AVERAGE	19.58	4.99	388.57
2002 AVERAGE	22.78	5.14	443.04
2001 AVERAGE	20.3	4.44	457.21
2000 AVERAGE	23.2	4.41	526.08
1999 AVERAGE	26.0	3.71	700.81

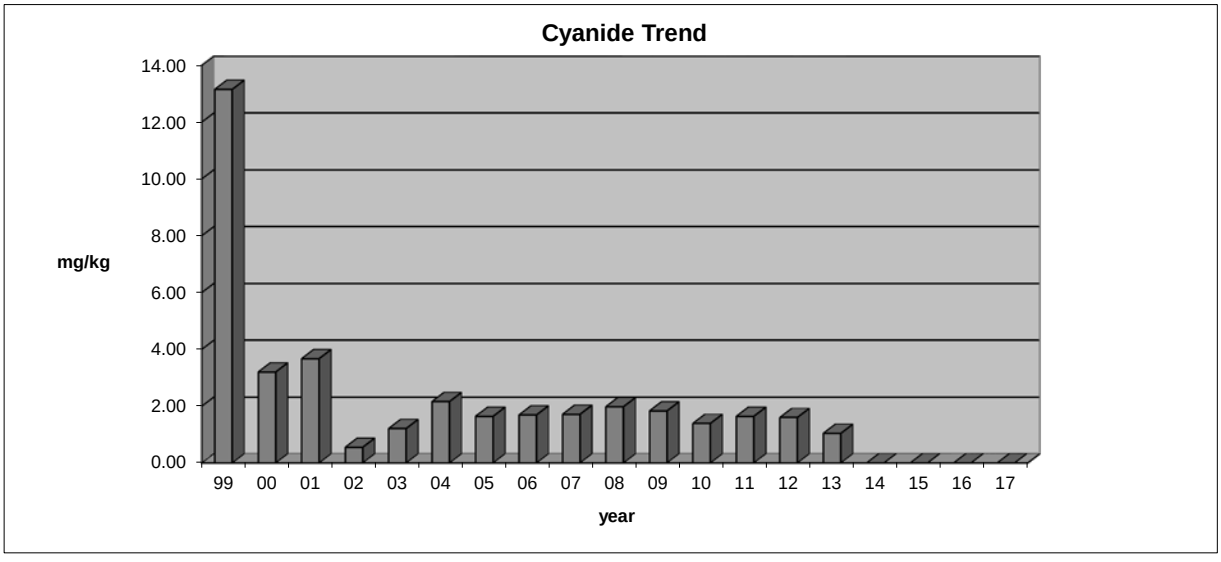


2017

MONTH	WET WEIGHT mg/l	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	<0.005	5.96	
FEBRUARY			
MARCH	<0.005	5.93	
APRIL			
MAY	<0.005	5.86	
JUNE			
JULY	<0.005	5.43	
AUGUST			
SEPTEMBER	<0.005	5.26	
OCTOBER			
NOVEMBER	<0.005	5.95	
DECEMBER			
TOTAL	0.000	34.390	0.000
2017 AVERAGE	<0.005	5.73	<0.09

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	<0.005	5.52	<0.09
2015 AVERAGE	<0.005	4.46	<.0.11
2014 AVERAGE	<.005	5.9	<0.09
2013 AVERAGE	0.05	4.95	1.04
2012 AVERAGE	0.09	5.65	1.60
2011 AVERAGE	0.11	6.28	1.64
2010 AVERAGE	0.08	5.45	1.39
2009 AVERAGE	0.09	5.13	1.83
2008 AVERAGE	0.085	4.53	1.98
2007 AVERAGE	0.063	3.78	1.71
2006 AVERAGE	0.079	4.69	1.69
2005 AVERAGE	0.077	4.76	1.64
2004 AVERAGE	0.099	4.66	2.16
2003 AVERAGE	0.058	4.99	1.21
2002 AVERAGE	0.028	5.14	0.55
2001 AVERAGE	0.163	4.44	3.67
2000 AVERAGE	0.141	4.41	3.20
1999 AVERAGE	0.488	3.71	13.15



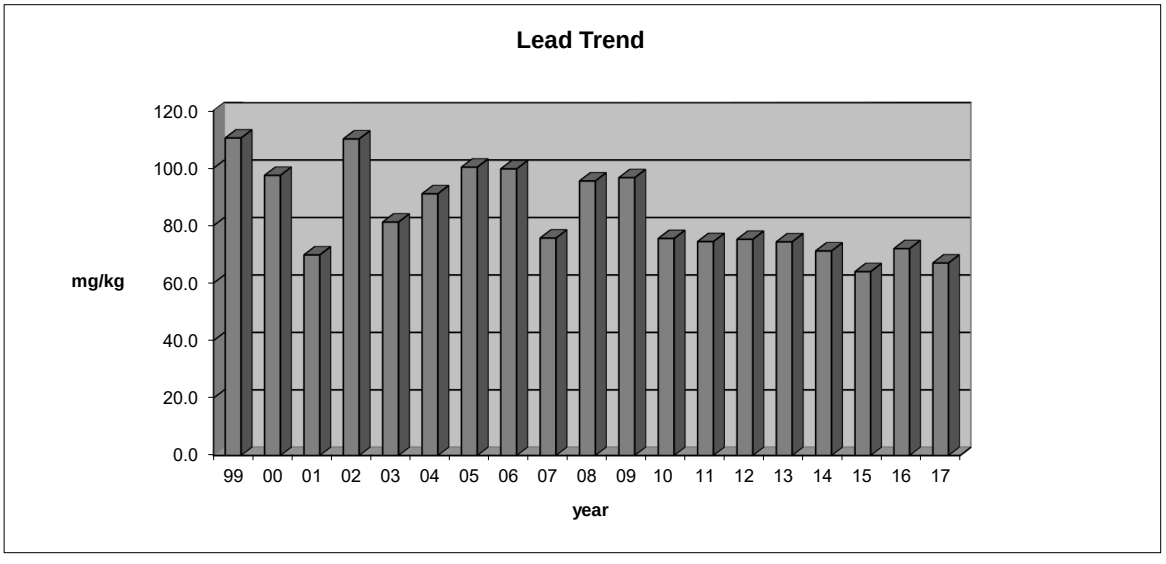
LEAD
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	4.30	5.96	72.1
FEBRUARY			
MARCH	3.48	5.93	58.7
APRIL			
MAY	3.57	5.86	60.9
JUNE			
JULY	3.49	5.43	64.3
AUGUST			
SEPTEMBER	3.91	5.26	74.3
OCTOBER			
NOVEMBER	4.08	5.95	68.6
DECEMBER			
TOTAL	22.83	34.39	398.93
2016 Average	3.81	5.73	66.49

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	3.80	5.28	72.25
2015 AVERAGE	2.87	4.46	64.32
2014 AVERAGE	4.2	5.90	71.96
2013 AVERAGE	3.7	4.95	74.37
2012 AVERAGE	4.2	5.65	75.24
2011 AVERAGE	4.6	6.28	74.46
2010 AVERAGE	4.0	5.45	75.53
2009 AVERAGE	4.7	5.05	96.71
2008 AVERAGE	4.3	4.53	95.55
2007 AVERAGE	2.9	3.78	75.68
2006 AVERAGE	4.7	4.69	99.76
2005 AVERAGE	4.8	4.76	102.51
2004 AVERAGE	4.3	4.66	91.20
2003 AVERAGE	4.1	4.99	81.96
2002 AVERAGE	5.7	5.14	110.89
2001 AVERAGE	3.1	4.44	69.82
2000 AVERAGE	4.3	4.41	97.51
1999 AVERAGE	4.1	3.71	110.51



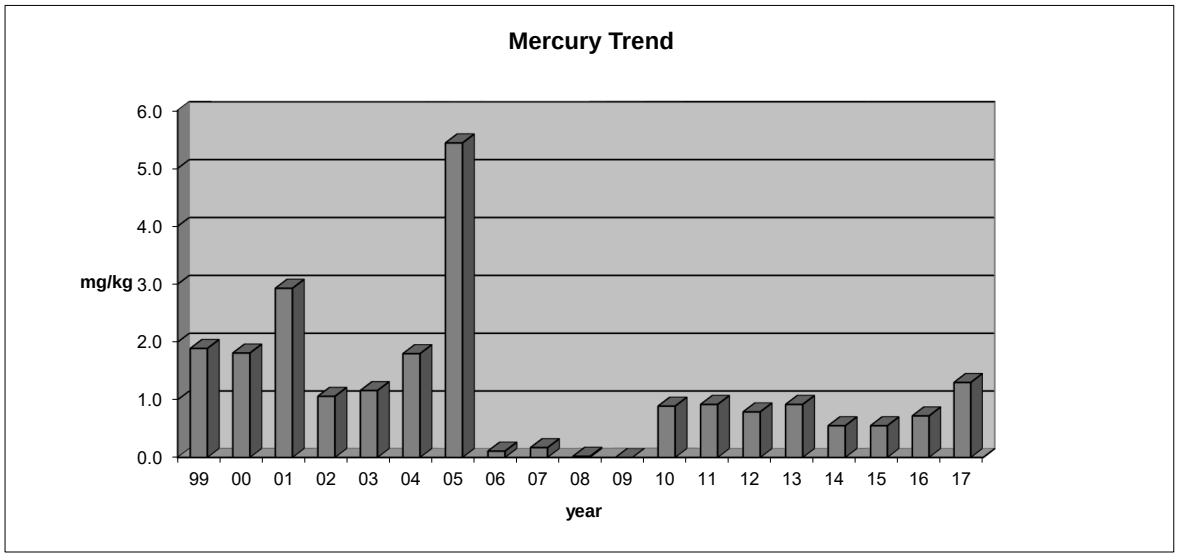
MERCURY
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	0.016	5.96	0.27
FEBRUARY			
MARCH	0.0327	5.93	0.55
APRIL			
MAY	0.3170	5.86	5.41
JUNE			
JULY	0.0250	5.43	0.46
AUGUST			
SEPTEMBER	0.0195	5.26	0.37
OCTOBER			
NOVEMBER	0.0371	5.95	0.62
DECEMBER			
			.
TOTAL	0.4473	34.3900	7.6840
2017 AVERAGE	0.0746	5.7317	1.2807

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	0.04	5.52	0.72
2015 AVERAGE	0.03	4.46	0.55
2014 AVERAGE	0.030	5.90	0.55
2013 AVERAGE	0.050	4.95	0.92
2012 AVERAGE	0.040	5.65	0.79
2011 AVERAGE	0.050	6.28	0.92
2010 AVERAGE	0.050	5.45	0.89
2009 AVERAGE	0.001	4.53	0.02
2008 AVERAGE	0.001	4.53	0.02
2007 AVERAGE	0.01	3.78	0.17
2006 AVERAGE	0.01	4.69	0.11
2005 AVERAGE	0.26	4.76	5.44
2004 AVERAGE	0.09	4.66	1.80
2003 AVERAGE	0.06	4.99	1.20
2002 AVERAGE	0.05	5.14	0.97
2001 AVERAGE	0.13	4.44	2.93
2000 AVERAGE	0.08	4.41	1.81
1999 AVERAGE	0.07	3.71	1.89



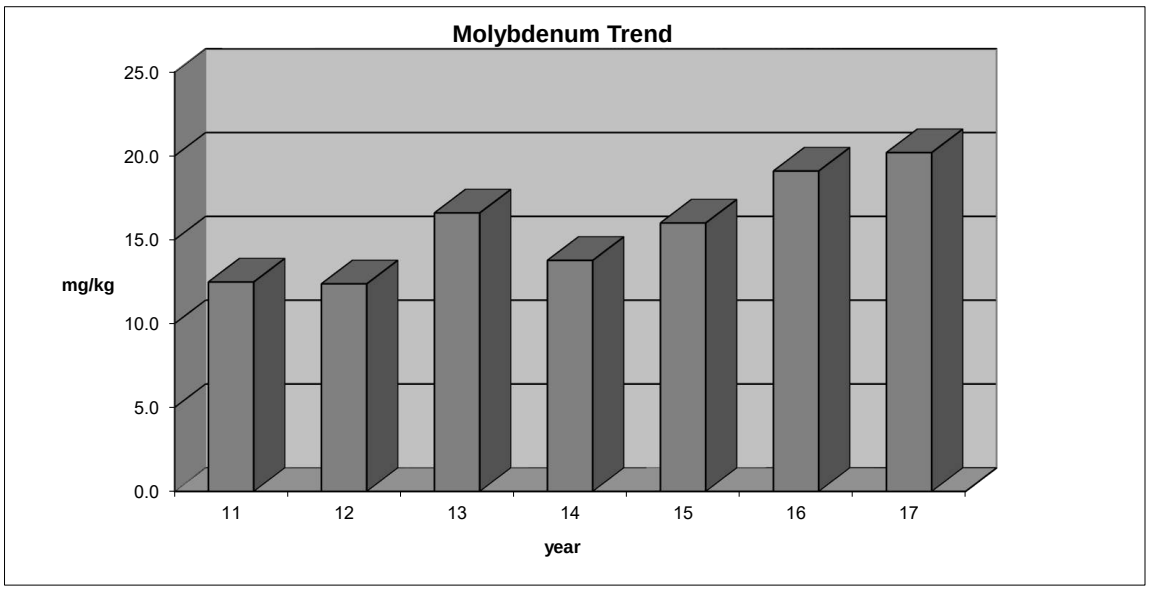
MOLYBDENUM
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	1.44	5.96	24.20
FEBRUARY			
MARCH	1.16	5.93	19.60
APRIL			
MAY	0.86	5.86	14.70
JUNE			
JULY	0.88	5.43	16.20
AUGUST			
SEPTEMBER	1.20	5.26	22.80
OCTOBER			
NOVEMBER	1.41	5.95	23.70
DECEMBER			
TOTAL	6.95	34.39	121.20
2017 AVERAGE	1.16	5.73	20.20

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	1.05	5.52	19.1
2015 AVERAGE	0.71	4.46	15.97
2014 AVERAGE	0.81	5.90	13.77
2013 AVERAGE	0.82	4.95	16.56
2012 AVERAGE	0.72	5.65	12.37
2011 AVERAGE	0.81	6.28	12.48



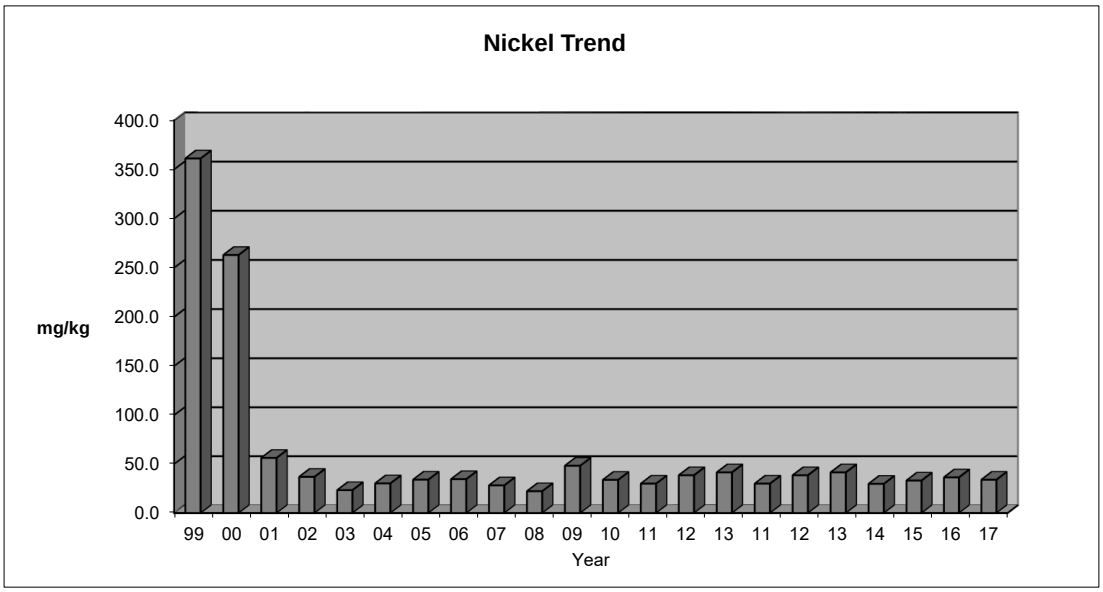
NICKEL
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	4.19	5.96	70.30
FEBRUARY			
MARCH	1.64	5.93	27.70
APRIL			
MAY	1.49	5.86	25.40
JUNE			
JULY	1.40	5.43	25.80
AUGUST			
SEPTEMBER	1.46	5.26	27.80
OCTOBER			
NOVEMBER	1.60	5.95	26.90
DECEMBER			
TOTAL	11.78	34.39	203.90
2017 AVERAGE	1.96	5.73	33.98

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	1.95	5.52	36.43
2015 AVERAGE	1.45	4.46	33.21
2014 AVERAGE	1.76	5.9	29.82
2013 AVERAGE	2.02	4.95	41.54
2012 AVERAGE	2.16	5.65	38.56
2011 AVERAGE	1.83	6.28	30.02
2010 AVERAGE	1.81	5.45	33.88
2009 AVERAGE	2.44	5.05	48.43
2008 AVERAGE	1.01	4.53	22.93
2007 AVERAGE	1.07	3.78	28.23
2006 AVERAGE	1.61	4.69	34.63
2005 AVERAGE	1.61	4.76	34.10
2004 AVERAGE	1.42	4.86	30.29
2003 AVERAGE	1.17	4.99	23.45
2002 AVERAGE	1.9	5.14	36.96
2001 AVERAGE	2.50	4.44	56.31
2000 AVERAGE	11.60	4.41	263.04
1999 AVERAGE	13.40	3.71	361.19



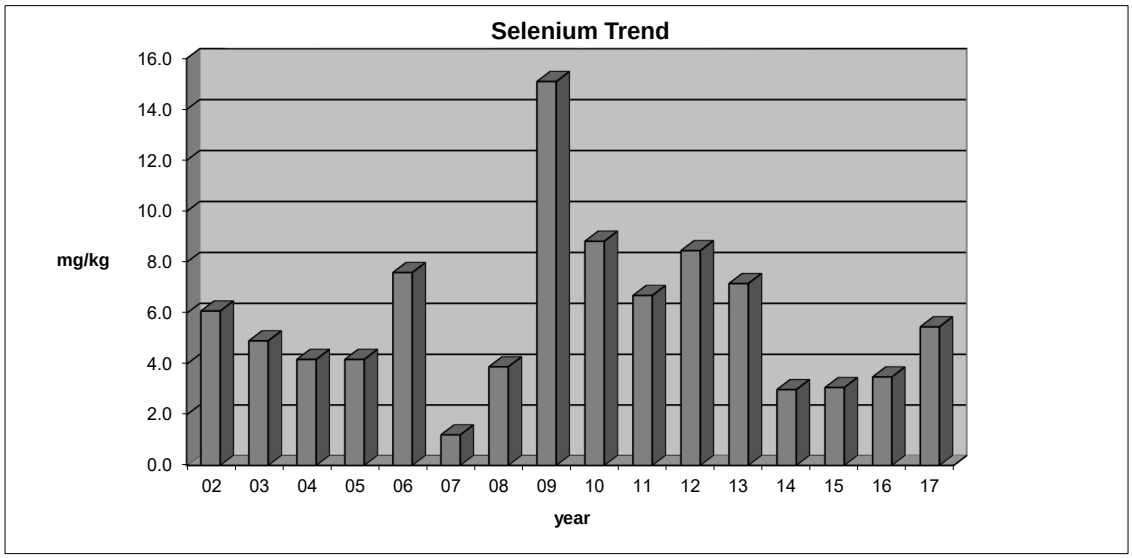
SELENIUM
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	0.24	5.96	4.04
FEBRUARY			
MARCH	<0.12	5.93	<2.0
APRIL			
MAY	<0.12	5.86	<2.0
JUNE			
JULY	<0.11	5.43	<2.0
AUGUST			
SEPTEMBER	<0.11	5.26	<2.0
OCTOBER			
NOVEMBER	0.410	5.95	6.89
DECEMBER			
TOTAL	0.65	34.39	10.93
2017 AVERAGE	0.33	5.73	5.47

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	0.19	5.52	3.5
2015 AVERAGE	<0.138	4.46	<3.08
2014 AVERAGE	<0.18	5.9	<3.0
2013 AVERAGE	0.360	4.95	7.17
2012 AVERAGE	0.520	5.65	8.46
2011 AVERAGE	0.410	6.28	6.65
2010 AVERAGE	0.480	5.45	8.83
2009 AVERAGE	0.760	5.05	15.12
2008 AVERAGE	0.179	4.53	3.90
2007 AVERAGE	0.050	3.78	1.21
2006 AVERAGE	0.348	4.69	7.60
2005 AVERAGE	0.251	4.76	5.28
2004 AVERAGE	0.192	4.66	4.19
2003 AVERAGE	0.250	4.99	5.01
2002 AVERAGE	0.314	5.14	6.11
2001 AVERAGE	0.230	4.44	5.18



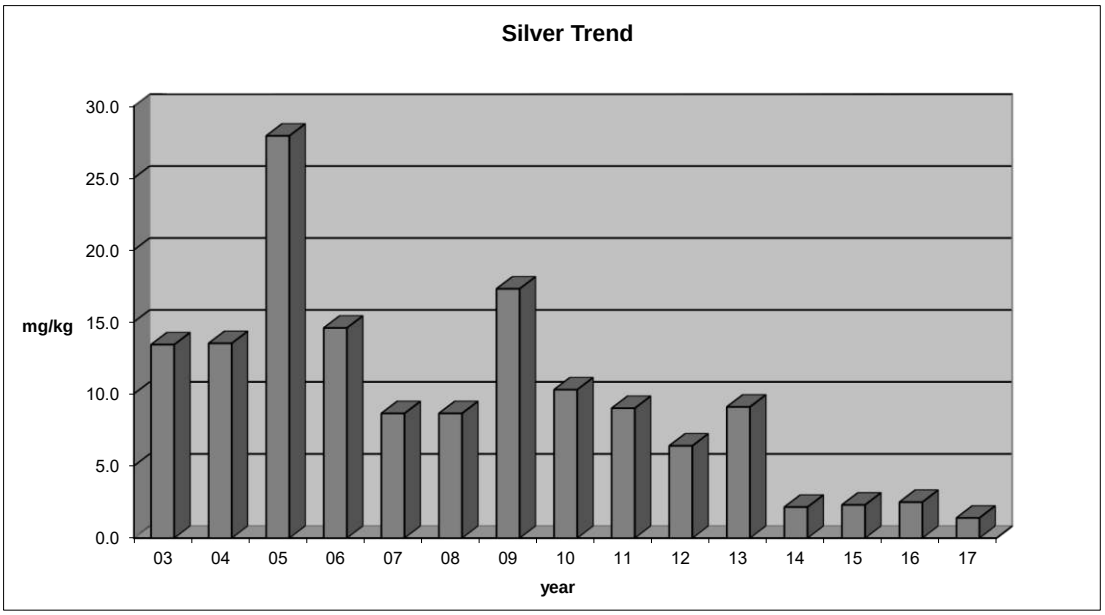
SILVER
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	0.086	5.96	1.44
FEBRUARY			
MARCH	0.080	5.93	1.35
APRIL			
MAY	0.079	5.86	1.35
JUNE			
JULY	0.082	5.43	1.51
AUGUST			
SEPTEMBER	0.053	5.26	<1
OCTOBER			
NOVEMBER	0.080	5.95	1.34
DECEMBER			
TOTAL	0.5	34.4	7.0
2017 AVERAGE	0.077	5.732	1.398

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	0.15	5.52	2.49
2015 AVERAGE	0.119	4.46	2.30
2014 AVERAGE	0.130	5.9	2.20
2013 AVERAGE	0.232	4.95	4.69
2012 AVERAGE	0.390	5.65	6.90
2011 AVERAGE	0.542	6.28	8.63
2010 AVERAGE	0.566	5.45	10.39
2009 AVERAGE	1.094	5.13	21.33
2008 AVERAGE	0.423	4.53	9.34
2007 AVERAGE	0.323	3.78	8.54
2006 AVERAGE	0.694	4.69	14.80
2005 AVERAGE	1.367	4.76	28.72
2004 AVERAGE	0.63	4.66	13.52
2003 AVERAGE	0.682	4.99	13.67
2002 AVERAGE	0.622	5.14	12.10



ZINC
in DIGESTED SLUDGE

2017

MONTH	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
JANUARY	59.3	5.96	995.00
FEBRUARY			
MARCH	47.7	5.93	805.00
APRIL			
MAY	48.50	5.86	827.00
JUNE			
JULY	45.40	5.43	836.00
AUGUST			
SEPTEMBER	52.50	5.26	988.00
OCTOBER			
NOVEMBER	58.6	5.95	985.00
DECEMBER			
TOTAL	312.00	34.39	5436.00
2017 AVERAGE	52.00	5.73	906.00

PREVIOUS YEARS AVERAGES

	WET WEIGHT MG/KG	% TOTAL SOLIDS	DRY WEIGHT MG/KG
2016 AVERAGE	51.76	5.52	946.99
2015 AVERAGE	44.74	4.46	1008.10
2014 AVERAGE	57.77	5.9	977.79
2013 AVERAGE	57.07	4.92	1144.22
2012 AVERAGE	51.69	5.65	912.9
2011 AVERAGE	60.28	6.28	997.66
2010 AVERAGE	58.59	5.45	1114.94
2009 AVERAGE	58.06	5.05	1149.70
2008 AVERAGE	43.14	4.53	942.60
2007 AVERAGE	36.65	3.78	972.40
2006 AVERAGE	50.52	4.69	1070.9
2005 AVERAGE	54.84	4.76	1142.04
2004 AVERAGE	51.05	4.66	1073.98
2003 AVERAGE	47.43	4.99	941.19
2002 AVERAGE	58.12	5.14	1129.28
2001 AVERAGE	52.20	4.44	1175.68