

Lagoon Lane Wastewater Treatment Plant



2018

Wastewater, Year End Report

Environmental Compliance Approval: #6222-AFGSNY

Introduction

The Lagoon Lane Wastewater Treatment Plant (WWTP), which services the Town of Bracebridge, is owned and operated by the District Municipality of Muskoka. The plant is located at 1000 Lagoon Lane, and was commissioned in 2011. It services a population of approximately 7,000 people.

The treatment facility consists of 60 acres of facultative lagoons and a membrane bio-reactor (MBR) treatment plant. The first two lagoons were constructed in 1959. They were 23 acres in size. By 1976, additional capacity was required to meet the needs of the town. At that time, an additional 37 acres of lagoons were constructed bringing the total to 60 acres.

In 1983, an extended aeration treatment plant was commissioned to provide additional capacity for the growing town.

During 2010-11 a new membrane filtration (MBR) plant was constructed to replace the extended aeration facility. Alum is used as the coagulant and disinfection is by ultra-violet lights. The final effluent is discharged to the Muskoka River by way of a diffuser.

The Plant operates under the MOE Environmental Compliance Approval (Sewage) # 6222-AFGSNY, issued December 16, 2016. Under the terms of the Certificate of Approval, the plant is permitted to treat an average daily flow of 8,000 m³/day peak flow rating of 18,000 m³/day. Additionally, effluent limit criteria are as follows:

Effluent Parameter	Concentration
CBOD	10 mg/l
Total Suspended Solids	10 mg/l
Total Phosphorous	0.4 mg/l
Total Ammonia Nitrogen	
Summer (May 15 to September 30)	5.0 mg/l
Winter (October 01 to May 14)	10.0 mg/l
E. coli	80 counts/100ml (Monthly Geometric Mean Density)

The Membrane Bioreactor plant (MBR) is a combination of suspended growth activated sludge and membrane equipment, with the latter performing the critical solids/liquid separation function that is traditionally accomplished using secondary clarifiers as in most other Muskoka wastewater treatment plants.

MBRs rely upon membrane equipment for liquids/solids separation prior to discharge of the effluent. The membrane equipment installed at the Lagoon Lane WWTP is an immersed system, i.e. a system that is designed for installation within membrane tanks, which utilizes hollow fibre membranes.

Waste sludge from the MBR process is sent to one of the three primary facultative lagoons.

General Information

A review of the District of Muskoka's infrastructure needs is conducted annually by the Director of Water and Sewer Services, Area Manager and Chief Operator, and recommendations for maintenance, rehabilitation and renewal programs are considered.

Efforts to eliminate the discharge of untreated or partially treated wastewater to receiving waters are being accomplished by a long term financial commitment to correct excessive infiltration into the wastewater collection system by means of sewer main rehabilitation / replacement, manhole rehabilitation and pumping station rehabilitation programs.

The treatment facility is capable of effective operation during emergencies; maintenance shut downs, and power failures. This is achieved through such measures as preventive maintenance of duty / standby units, the duplication of major treatment components, the provision of standby power sources and extensive use of the SCADA systems. All pumping stations and treatment control systems use SCADA (Supervisor control and Data Acquisition), in combination with Data Highway Plus, and programmable logic controllers.

All operators are qualified to operate the systems efficiently and effectively in order to achieve the highest level of treatment at all times. A commitment to provide Operator training and certification is being sustained.

Regulatory sampling is carried out to meet the requirements outlined in the ECA, and additional in house operational sampling beyond these regulatory requirements is being performed on a routine basis. These efforts have resulted in an effective treatment process which ensures that effluent discharges generally meet effluent objectives and are environmentally safe. All final effluent sample results for the MBR facilities met their effluent limits.

All data in this report is a compilation of test results received from SGS Canada and their accredited laboratory, Lakefield Research. All in-plant sampling, analysis and recording of results conforms, in order of precedence, to the following 3 standards: Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works", Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" and the American Water Works Association/Water Environment Federation (AWWA/WEF) publication "Standard Methods for the Examination of Water and Wastewater".

Executive Summary

In all respects, test results of the treated effluent for the parameters of CBOD5, suspended solids, ammonia, total phosphorous, and E. Coli are in compliance with the limits outlined in the Certificate of Approval regarding monthly allowable concentrations and total effluent loading throughout the entire year.

Overall, the plant treatment processes performed satisfactorily and are deemed to be adequate. All sample test results of the final effluent were within levels outlined in the plant ECA (#6222-AFGSNY).

Quantity of Flow Summary

The plant has a daily average flow design capacity of 8,000 m³/day. The actual average daily flow for the year was 3,449 m³/day, however, the 3-year average is 3,809 m³/day, which represents 48% of the plant capacity.

Plant Operational Upsets or Process Failures

There was one plant operational problem in 2018.

The event coincided with winter 2018, with rain and snow melt generated high inflows resulting in poor nitrification performance in the bio-reactors. This resulted in the facility failing to meet the Ammonia objective for three months. The January to March 2018 monthly Ammonia results in the MBDR effluent were 3.1 mg/L, 2.3 mg/L and 2.4 mg/L respectively. At all times the MBR effluent was in compliance with the effluent criteria for Ammonia.

Summary of Maintenance

There were significant plant upgrades on major infrastructure in 2018 with the construction of the facility administration building addition as outlined in the Phase II works of the ECA .

All equipment information at this plant is entered into a computer database. From this information, a scheduled preventive maintenance programme has been established. The maintenance programme includes (and not limited to):

- Monthly testing of emergency testing (under load) of the standby generators.
- Annual servicing of emergency standby generators.
- Annual replacement of U.V. bulbs.
- Annual infrared inspection of Motor Control panels.
- Annual calibration of flow metering devices.
- Annual cleaning of all sewage pumping stations.
- Marine inspection of effluent outfall and diffuser completed in 2017. (5 year cycle)

Evaluation of the Need for Improvement Works

The treatment facility is operating at a plant capacity of 48% and is in compliance with specified effluent parameter criteria. However, the facility is using the existing old plant as a pre-treatment works. In 2019 it is planned to proceed with the headworks construction as required by the phase II works stated in the ECA.

Summary of Proposed Work Requiring Approval under OWRA

Since the treatment facility is operating satisfactorily there is no anticipated works requiring an ECA amendment for 2018.

Interpretation of Analytical Results

All sample results for Raw Sewage and Final Effluent are reported in this section. Other tables in this report include Chemical Usage, Biosolids Quality, and Biosolids Quantity.

Raw Sewage

The information reported in the Raw Sewage sample results summary table consists of test results of analysis conducted on composite samples of the plant influent flow as required by the plant ECA. Samples are sent for analysis to Lakefield Research, as well as analysis conducted on site using Standard Methods or equivalent. Weekly analysis has been performed and reported as specified under the terms outline in the ECA.

Effluent analysis

The information reported in the Final Effluent sample results summary table #7 consists of test results of analysis conducted on final effluent composite samples. Bacteriological samples, however, consisted of grab samples. Weekly analysis has been performed and reported as specified under the terms outlined in the ECA.

Final Effluent Analysis Summary

	Minimum	4 Week Average Maximum	Annual Average	Average Loading kg/day
CBOD5 (mg/l)	2.0	3.3	2.1	7.2
Suspended Solids (mg/l)	2.0	2.0	2.0	6.9
Total Phosphorous (mg/l)	0.03	0.23	0.09	0.3
Ammonia (mg/l)	0.1	3.1	0.8	2.8
E. Coli (#/100 ml)	0	0.5	0	Not Applicable
pH	Min – 6.34	Max – 7.76	6.84	Not Applicable

All final effluent samples tested for CBOD5, suspended solids, ammonia, E. Coli, and total phosphorous were below non-compliance limits outlined in the ECA.

Biosolids Sludge generation throughout the reporting period

The quality and volume of biosolids both generated and hauled from the facility for disposal is outlined in the table provided. Waste activated sludge is pumped from the Lagoon Lane WWTP to the Lagoon Cell #3. The lagoon provides storage and stabilization for the waste activated sludge.

In 2018 stabilized biosolids was removed from Lagoon Cell #3 and land applied in Sundridge, Ontario (NASM plan #21651) by Bartels Environmental Services. In addition, stabilized septage biosolids were removed and land applied in Sundridge, Ontario (NASM plan #21651) by Bartels Environmental.

It is not anticipated that there will be a significant increase in the total volume of biosolids produced in 2019.

Biosolids Co-Treatment

The treatment plant has the capability to co-treat additional wastes through the Septage Receiving Facility, which located on site at the Septage Lagoons. Septage and holding tank waste are hauled in by vacuum trucks, and dumped into the receiving cell, which is then blended into the plant influent flow. In addition, leachate from the District owned Rosewarne Landfill are trucked to the Septage Receiving Facility on a scheduled basis.

Co-Treatment Flow Summary

The plant ECA (Sewage) # 6222-AFGSNY, states that the average quantity of partially treated septage lagoon effluent shall not exceed 180 m³/day. The highest monthly average for partially treated septage lagoon effluent was 116.5 m³/day in May 2018 with no problems observed by this volume

Summary of Complaints received throughout the reporting period

There were no complaints received in the reporting period.

Bracebridge Wastewater Collection Summary

New Sewer Services

A total of 58 customers connected to existing sewer laterals in 2018.

New Sewer Mains

A total of 479 meters of 200 mm gravity sewer was installed in 2018 on Windsong Cres, Fawnbrook and Colton St's by owner's contractor.

Sewer Main Replacements

Approximately 500 meters of 200 mm gravity sewer was replaced in 2018 on James St, Kimberly St and Ontario St as part of District of Muskoka capital projects.

Low Pressure Sewer Breaks

There were no low pressure sewer breaks in Year.

Sewer Force Main Breaks

There were no sewer force main breaks in Year.

Sewer Force Main Valve Replacement

There were no sewer force main valve replacements in 2018.

Main Line Sewer Blockage

District staff excavated and repaired one sewer main blockage in 2018. The cost to repair the sewer blockage was \$6,400.00.

Sewer Lateral Blockage

District of Muskoka had 3 sewer lateral issues in 2018, all of which were excavated and repaired. The average cost to repair each sewer lateral was \$7,000.00.

Low Pressure Sewer Blockages

No low pressure sewer blockages in 2018.

Frozen Sewer Force Mains

No sewer force mains froze in 2018.

Frozen Sewer Service Laterals

No sewer service laterals froze in 2018.

Frozen Low Pressure Sewer Services

No low pressure sewer services froze in 2018.

Sewer Flushing/Video

Approximately of 5,200m of sewer main was flushed and video inspected in 2018.

Sewer Rehabilitation

The District of Muskoka, replaced six residential low pressure pump systems in 2018.

Sewer locates

District staff addressed 1,200 locate requests in 2018.

Certification of Reports

The plant has a daily average flow design capacity of 8,000 m³/day. The actual average daily flow for the year was 3,449 m³/day, however, the 3-year average is 3,809 m³/day, which represents 48% of the plant capacity.

I certify that the information in this document and all attachments are correct, accurate, and complete to the best of my knowledge.

Marcus Firman, C.E.T.
Director of Water and Wastewater Operations

Mark Pringle, C.E.T.
Manager of Water and Wastewater Operations

TABLE 1: EFFLUENT FLOW SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

Month	Mechanical Plant				Lagoons Monthly Flow (m ³)	Facility Total Monthly Flow (m ³)	Comments
	Plant Total Monthly Flow (m ³)	Average Day Flow (m ³ /d)	Maximum Day Flow (m ³ /d)	Minimum Day Flow (m ³ /d)			
January	102,173	3,296	4,935	2,489	0	102,173	
February	93,425	3,337	4,549	2,840	0	93,425	
March	104,920	3,385	4,384	2,828	0	104,920	
April	147,254	4,908	7,310	3,576	0	147,254	
May	138,875	4,480	7,070	3,011	0	138,875	
June	86,619	2,887	3,591	2,523	0	86,619	
July	84,112	2,713	3,309	1,934	0	84,112	
August	96,536	3,114	4,732	2,538	0	96,536	
September	92,215	3,074	4,441	2,461	0	92,215	
October	99,937	3,224	4,398	2,460	0	99,937	
November	104,466	3,482	4,830	2,496	0	104,466	
December	108,261	3,492	5,509	2,630	0	108,261	

Mechanical Plant Only

Total 1,258,792

Average Day 3,449

Maximum Day 7,310

Minimum Day 1,934

TABLE 3: INFLUENT QUARTERLY ANALYSIS SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

Sample Date	Sample Identification Number	Weekly 24 Hour Composite Sample					
		BOD5 mg/L	Alkalinity (Total as CaCO3) mg/L	pH	Phosphate mg/L	Total Phosphorus mg/L	Suspended Solids mg/L
Feb 07/18	Raw Influent	325	510	~	~	7.1	1200
May 03/18	Raw Influent	134	149	~	~	6.85	213
Aug 01/18	Raw Influent	274	276	~	~	7.3	1010
Nov 07/18	Raw Influent	234	215	~	~	4.2	381
Yearly Average		241.8	287.5			6.4	701.0
Maximum		325.0	510.0			7.3	1200.0
Minimum		134.0	149.0			4.2	213.0

Sample Date	Weekly 24 Hour Composite Sample					
	Conductivity mg/L	Total Kjeldahl Nitrogen mg/L	Nitrate Nitrogen mg/L	Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Chloride mg/L
Feb 07/18	~	54.5	0.06	0.03	17.4	~
May 03/18	~	12.2	0.06	0.03	6.6	~
Aug 01/18	~	52.9	0.06	0.03	25.2	~
Nov 07/18	~	41.0	0.06	0.03	16.3	~
Yearly Average		40.2	0.06	0.03	16.4	
Maximum		54.5	0.06	0.03	25.2	
Minimum		12.2	0.06	0.03	6.6	

TABLE 4: CHEMICAL USAGE SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

Month	ALUM		SODA ASH		SODIUM HYPOCHLORITE	
	Average Dosage mg/L	Total kg (Dry)	Average Dosage mg/L	Total kg (Dry)	Average Usage L	Total L (12%)
January	29.9	4,945.2	15.0	1,462.2	300.0	300.0
February	30.2	4,457.4	15.0	1,304.0	300.0	300.0
March	28.3	4,759.5	15.0	1,484.4	300.0	300.0
April	20.6	4,731.9	15.0	2,030.1	300.0	300.0
May	29.3	6,405.7	15.0	1,927.7	300.0	300.0
June	39.4	5,588.2	15.0	1,251.9	300.0	300.0
July	48.1	6,407.8	15.0	1,176.2	300.0	300.0
August	42.7	6,908.6	15.0	1,429.5	300.0	1,700.0
September	39.9	6,058.6	15.0	1,342.0	300.0	1,700.0
October	39.6	6,384.2	15.0	1,425.2	300.0	300.0
November	35.0	5,889.1	15.0	1,485.2	300.0	300.0
December	32.2	5,500.1	15.0	1,510.0	300.0	300.0
Average Monthly	34.6	5669.7	15.0	1485.7	300	533.3
Total Yearly		68,036		17,828		6,405

TABLE 6: EFFLUENT QUARTERLY ANALYSIS SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

Sample Date	Sample Identification Number	Alkalinity (Total as CaCO ₃) mg/L	Nitrate Nitrogen mg/L	Chloride mg/L	Phosphate mg/L	BOD ₅ mg/L	CBOD mg/L	Coliforms E-coli
Feb 07/18	Final Effluent		23.5				2	0
May 03/18	Final Effluent		3.5				2	0
Aug 15/18	Final Effluent		22.0				2	0
Nov 07/18	Final Effluent		12.1				2	0
Yearly Average			15.3				2.0	0.0
Maximum			23.5				2.0	0.0
Minimum			3.5				2.0	0.0

Sample Date	Conductivity mg/L	Total Ammonia Nitrogen mg/L	Nitrite Nitrogen mg/L	pH @15C	Total Kjeldahl Nitrogen mg/L	Total Phosphorus mg/L	Unionized Ammonia (WSER) mg/L	Suspended Solids mg/L
Feb 07/18		2.5	0.03	7.16	3.5	0.04	0.010	2
May 03/18		0.1	0.04	7.15	2.2	0.03	0.001	2
Aug 15/18		0.1	<0.03	7.14	2.2	0.12	0.001	2
Nov 07/18		0.1	<0.03	7.71	0.5	0.08	0.001	2
Yearly Average		0.7	0.03	7.29	2.1	0.07	0.003	2.0
Maximum		2.5	0.04	7.71	3.5	0.12	0.010	2.0
Minimum		0.1	<0.03	7.14	0.5	0.03	0.001	2.0

TABLE 7: EFFLUENT LOADING and CONCENTRATION SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

MONTH	CBOD ₅			SUSPENDED SOLIDS			TOTAL AMMONIA NITROGEN						TKN			FECAL COLIFORM		TOTAL PHOSPHOROUS		
	Average		Maximum Daily	Average		Maximum Daily	Summer (May to Oct)			Winter (Nov to Apr)			Average		Maximum Daily	Average	Maximum Daily	Average		Maximum Daily
	mg/L	kg/d	kg/d	mg/L	kg/d	kg/d	mg/L	kg/d	kg/d	mg/L	kg/d	kg/d	mg/L	kg/d	kg/d	#/100 mL	#/100 mL	mg/L	kg/d	kg/d
January	2.00	6.59	9.87	2.00	6.59	9.87				3.10	10.22	15.29894	4.15	13.68	20.48	0.00	0.00	0.05	0.16	0.246757
February	2.00	6.67	9.10	2.00	6.67	9.10				2.34	7.81	10.64	3.60	12.01	16.38	0.00	0.00	0.04	0.13	0.18
March	2.00	6.77	8.77	2.00	6.77	8.77				4.00	13.53812	17.53408	2.85	9.65	12.49	0.00	0.00	0.04	0.14	0.175341
April	3.25	15.95	23.76	2.00	9.82	14.62				0.40	1.963387	2.923988	1.80	8.84	13.16	0.00	0.00	0.05	0.25	0.365499
May	2.00	8.96	14.14	2.00	8.96	14.14	0.12	0.537579	0.848419				1.50	6.72	10.61	0.00	0.00	0.09	0.40	0.636314
June	2.00	5.77	7.18	2.00	5.77	7.18	0.35	1.010552	1.256801				1.08	3.12	3.88	0.00	0.00	0.10	0.29	0.359086
July	2.00	5.43	6.62	2.00	5.43	6.62	0.50	1.356645	1.65				1.45	3.93	4.80	0.00	0.00	0.19	0.52	0.62871
August	2.00	6.23	9.46	2.00	6.23	9.46	0.14	0.44	0.66				1.04	3.24	4.92	0.00	0.00	0.17	0.53	0.80
September	2.00	6.15	8.88	2.00	6.15	8.88	0.13	0.399598	0.57733				0.65	2.00	2.89	0.00	0.00	0.12	0.37	0.53292
October	2.00	6.45	8.80	2.00	6.45	8.80	0.10	0.322377	0.43975				1.16	3.74	5.10			0.10	0.32	0.43975
November	2.00	6.96	8.58	2.00	6.96	8.58				0.10	0.34822	0.428985	1.28	4.46	5.49			0.07	0.24	0.30029
December	2.00	6.98	11.02	2.00	6.98	11.02				0.10	0.349229	0.550917	0.06	0.22	0.35	0.00	0.00	0.08	0.28	0.440733
Average Monthly	2.10	7.41	10.51	2.00	6.90	9.75	0.22	0.68	0.91	1.67	5.70	7.90	1.72	5.97	8.38	0.00	0.00	0.09	0.30	0.43
Average Yearly																				
Effluent Objective	5	40		5.00	40		2	16		2.00	16						0	0.30	2.4	
Non-Compliance	10	80		10.00	80		5	40		10.00	80						<2	0.40	3.2	

Note: Bracketed and Bolded Values indicate non-compliance ()

TABLE 9: LIQUID SLUDGE PRODUCTION SUMMARY - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

No.	Date	Hauler	Shipped To		Hauler	Shipped To		Comments
			Location	Volume		Location	Volume	
1	January	Pumped	Lagoon Cell 3	3302.9				
2	February	Pumped	Lagoon Cell 3	3340.4				
3	March	Pumped	Lagoon Cell 3	4832.8				
4	April	Pumped	Lagoon Cell 3	4265.2				
5	May	Pumped	Lagoon Cell 3	4491.6				
6	June	Pumped	Lagoon Cell 3	4866.5				
7	July	Pumped	Lagoon Cell 3	6988.9	Bartels	Land Application	3312	2000 from cell#3 & 1300 septage receiving cell
8	August	Pumped	Lagoon Cell 3	5468.8				
9	September	Pumped	Lagoon Cell 3	4306.9				
10	October	Pumped	Lagoon Cell 3	2174.1				
11	November	Pumped	Lagoon Cell 3	2599.5				
12	December	Pumped	Lagoon Cell 3	3005.3				
				Yearly Total			49,643	
				Yearly Average			4,137	
				Maximum			6,989	
				Minimum			2,174	

TABLE 10: SLUDGE QUALITY ANALYSIS - 2018

District of Muskoka - Lagoon Lane WPCP - Bracebridge

Parameter Sampled		QUARTERLY ANALYSIS				Average	Comments
		1st Quarter	2nd Quater	3rd Quater	4th Quater		
Date		Feb 07/18	May 03-18	Aug 18/18	Nov 07/18		
Sample ID		Waste Sludge	Waste Sludge	Waste Sludge	Waste Sludge		
Nitrate	mg/L	<0.3	0.4	1.3	1.5	0.9	
Mercury	mg/L	<0.001	0.001	0.003	0.002	0.002	
Chromium	mg/L	0.05	0.07	0.09	0.10	0.08	
Cobalt	mg/L	<0.01	<0.01	0.01	0.02	0.01	
Copper	mg/L	1.2	1.50	2.1	2.4	1.80	
Lead	mg/L	<0.1	<0.1	<0.1	<0.1	0.10	
Molybdenum	mg/L	<0.05	<0.05	<0.05	<0.05	0.05	
Nickel	mg/L	<0.04	0.05	0.06	0.06	0.05	
Selenium	mg/L	<0.1	<0.1	<0.1	<0.1	0.10	
Arsenic	mg/L	<0.1	<0.1	<0.1	<0.1	0.10	
Zinc	mg/L	<1	1.6	1.8	2.2	1.7	
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	0.005	
Ammonia	mg/L	13.5	12	3.2	4.2	8.2	
Total Kjeldahl Nitrogen	mg/L	308	396	241	354	325	
Total Phosphorus	mg/L	87	120	140	140	122	
Total Solids	mg/L	4610	5720	4720	6430	5370	
Volatile Solids	mg/L	3290	4810	4610	4390	4275	
Nitrite	mg/L	0.3	0.6	0.5	<0.2	0.4	
Potassium	mg/L	25	28	29	30	28	
Total Suspended Solids	mg/L	3960	4920	4060	5130	4518	

BYPASS AND/OR OVERFLOW EVENT REPORT

Location	Date	Event Start Time	Event End Time	Event Duration (hours)	Total Volume (m3)	Sampled	Flow Mes/Mod/Est	Level of Treatment Received	Disinfection status	Reason(s)	Comments
Rona sewer Easement, 10	10/01/2018	4:00:00 PM	5:00:00 PM	0:00	unknown	No	Est	Sewage, Raw	No	5	plugged sewer
300 Ecclestone(Beaumont SPS)	20/04/2018	9:30:00 PM	6:30:00 AM	0:00	10	no	Est	Sewage, Raw	No	8	FM plugged during capital construction project
									No		
									No		
									No		
									No		
									No		

Flow	Level of Treatment Received	Disinfection	Reason
Mod = Modelled	Sewage, Raw	No	1 = Precipitation
Mes = Measured	Sewage, Primary Treatment received	Yes, Chlorinated	2 = Spring Thaw / Snow Melt
Est = Estimated	Sewage, Secondary treatment received	Yes, UV	3 = Infiltration
	Sewage, Tertiary	Yes, Ozone	4 = Mechanical/Equipment Failure
	Sewage, Final Effluent		5 = Pipe Failure (break/leak/plugged)
			6 = Process Upsets
			7 = Power Failure
			8 = Planned Maintenance
			9 = Exceed Design Capacity
			10 = Other

Information about this sheet

- This sheet will contain each bypass and/or overflow event with associated information
- Each event will be associated with a Location
- When submitted will contain a log of each “*Event*” that occurred in the submitted time period
- When the event is reported to SAC please try to obtain a reference number to assist with tracking the events