TOWNSHIP OF BONNECHERE VALLEY **EGANVILLE SEWAGE TREATMENT PLANT** **YEAR: 2014**

WATER AND SEWAGE DEPARTMENT **SLUDGE MANAGEMENT REPORT**

ANALYSIS FOR MONTHLY GRAB SAMPLE OF ACTIVATED SLUDGE FROM AEROBIC DIGESTER																
	SLUDGE	PHOS.	TOTAL	VOLATILE	AMMONIA	Arsenic	Cadm.	Cobalt	Chrom.	Copper	Merc.	Moly	Nickel	Lead	Selen.	Zinc
MONTH	Processed		SOLIDS	SOLIDS	NITRATE	As	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Se	Zn
	m3	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
JAN.	76	570	18,300	11,400	1.89	0.10	0.03	0.03	0.20	7.16	0.022	0.06	0.19	0.3	0.10	6.40
FEB.	169	613	19,300	12,300	6.41	0.10	0.03	0.03	0.21	7.67	0.088	0.06	0.17	0.3	0.10	5.85
MAR.	82	586	18,200	12,100	11.90	0.10	0.03	0.03	0.17	6.70	0.015	0.05	0.15	0.2	0.10	4.88
APR.	296	493	19,700	12,600	18.60	0.10	0.03	0.03	0.22	7.83	0.024	0.05	0.18	0.3	0.10	5.51
MAY	141	468	16,000	9,970	19.50	0.10	0.03	0.03	0.17	5.45	0.007	0.05	0.16	0.2	0.10	4.45
JUN.	0	507	17,200	10,400	7.29	0.01	0.03	0.03	0.18	5.73	0.016	0.05	0.16	0.3	0.10	4.79
JUL.	174	434	13,800	8,100	31.40	0.10	0.03	0.03	0.21	6.12	0.011	0.05	0.17	0.3	0.10	5.30
AUG.	117	728	19,800	11,500	6.73	0.10	0.03	0.03	0.27	8.55	0.015	0.07	0.20	0.3	0.10	7.56
SEPT.	116	535	17,000	9,640	1.61	0.10	0.03	0.03	0.23	6.27	0.011	0.21	0.21	0.2	0.10	6.10
OCT.	71	541	17,400	9,610	0.71	0.10	0.03	0.03	0.24	7.20	0.019	0.06	0.16	0.3	0.10	7.10
NOV.	146	469	14,800	8,530	2.38	0.10	0.03	0.03	0.23	7.06	0.007	0.06	0.14	0.3	0.10	6.72
DEC.	51	562	16,400	9,640	4.63	0.10	0.03	0.03	0.25	7.84	0.010	0.06	0.16	0.3	0.10	7.48
TOTAL	**1439**															
AVG.	**120**	**542**	**17325**	**10483**	**9.61**	**0.09**	**0.03**	**0.03**	**0.22**	**6.97**	**0.02**	**0.07**	**0.17**	**0.28**	**0.10**	**6.01**

ANALYSIS FOR COMPOSITE SAMPLE OF DEWATERED SLUDGE PRIOR TO REMOVAL FROM GEOTUBES																
Geotube	**Volume**	**% Solids**	**% V.S.**	**Total P**	**Ammonia (N)**	**As**	**Cd**	**Co**	**Cr**	**Cu**	**Hg**	**Mo**	**Ni**	**Pb**	**Se**	**Zn**
	m3			**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
1 B (5)	**50**	**10.6**	**58.7**	**33000**	**3030**	**2**	**0.8**	**1**	**18**	**394**	**0.958**	**3**	**13**	**19**	**13**	**3**
2 A (5)	**56**	**11.8**	**60.0**	**42300**	**2170**	**2**	**0.8**	**1**	**19**	**381**	**1.22**	**3**	**14**	**19**	**14**	**3**
2 B (4)	**36**	**11.4**	**60.3**	**28800**	**1310**	**2**	**0.7**	**1**	**13**	**370**	**0.704**	**3**	**13**	**18**	**13**	**3**
TOTAL	**142**															
AVG.		**11.27**	**59.67**	**34700.00**	**2170.00**	**2.00**	**0.77**	**1.00**	**16.67**	**381.67**	**0.96**	**3.00**	**13.33**	**18.67**	**13.33**	**3.00**

EGANVILLE SEWAGE TREATMENT PLANT
SLUDGE MANAGEMENT REPORT

METALS	MAXIMUM PERMISSIBLE METAL CONCENTRATION (mg/kg of solids)		METAL CONCENTRATION IN DIGESTER SLUDGE (mg/kg of solids)		METAL CONCENTRATION IN GEOTUBE SLUDGE (mg/kg of solids)				
					1B(4)	2A(5)	2B(4)		AVG
ARSENIC (As)	170		5		2	2	2		2.00
CADMIUM (Cd)	34		1.73		0.8	0.7	0.8		0.77
COBALT (Co)	340		1.73		1	1	1		1.00
CHROMIUM (Cr)	2800		12.41		18	19	13		16.67
COPPER (Cu)	1700		402.02		394	381	370		381.67
MERCURY (Hg)	11		1.18		0.958	1.22	0.704		0.96
MOLYBDENUM (Mo)	94		3.99		3	3	3		3.00
NICKEL (Ni)	420		9.86		13	14	13		13.33
LEAD (Pb)	1100		15.87		19	19	18		18.67
SELENIUM (Se)	34		5.77		3	3	3		3.00
ZINC (Zc)	4200		346.99		385	415	360		386.67
E. coli					100	100	100		100.00
	8,000,000 / AVG. SLUDGE SOLIDS (mg/L)								
	462 m3 per hectare per 5 years								

DEWATERED BIOSOLIDS HAULED TO FIELDS				
DATE	**C of A #**	**Geotube#**	**VOLUME**	
			m3	
Nov.12/14	S4131-30	1B(4)	50	
Nov.12/14	S4131-30	2A(5)	56	
Nov.12/14	S4131-30	2B(4)	36	
TOTAL			**142**	