Enter Data in Blue Areas Only Values entered in Blue area are for examples only. Update these.

A	B	C	
TABLE 1 - GENERAL DATA ENTRY			**Spreadsheet**
POTW NAME:	St. Vrain Sanitation District		
POTW HIGHEST MONTHLY AVERAGE FLOW **(MGD)**:	3.25		Max avg flo
DOMESTIC FLOW (**MGD**):	2.58		Total - SIU
SIU FLOW **(MGD)**:	0.27		current SIU
COMMERCIAL FLOW **(MGD)**:	0.34		2018 comn
TRUCKED AND HAULED WASTE FLOW **(MGD)**:	0		
COMMERCIAL FLOW AS A % OF ALL NON-DOMESTIC	56		
TOTAL **COMMERCIAL** FLOW AS A % OF TOTAL POTW FLOW	10		
TOTAL NON-DOMESTIC FLOW AS A % OF TOTAL POTW FLOW	19		
SPECIFIC GRAVITY OF SLUDGE TO DISPOSAL (kg/l)	1	Default 1	See Appendix M of the Strategy
SLUDGE FLOW TO DISPOSAL **(MGD)**:	0.0016		2017 average
% SOLIDS TO DISPOSAL **(%)**	22		2017 average
BIOSOLIDS TABLE (**1,3 OR "O"THER**) BASED ON DISPOSAL OPTION:	3		beneficial reuse
ARE YOU USING TABLE 2 FOR BIOSOLIDS **(Y/N)**?:	n		Table 3 for land application
SITE AREA **(ACRES)**:	0		NA
SITE LIFE **(YEARS)**:	0		NA
CHRONIC RECEIVING WATER FLOW **(MGD)**:	8.38		from WQA
ACUTE RECEIVING WATER FLOW **(MGD)**:	8.38		from WQA
HARDNESS FOR METALS CALCULATIONS **(MG/L)**:	400		from WQA & testing
IS YOUR RECEIVING WATER A DRINKING WATER SUPPLY **(Y/N)**?:	n		
APPLICABLE STANDARDS (ACUTE, CHRONIC, BOTH):	B	**A,C OR B**	

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	
Daily TABLE 2: CRITERIA AND STANDARDS POLLUTANT	Daily Max/7 Day NPDES PERMIT LIMITS MG/L	**STATE** ACUTE WQ STDS MG/L	**EPA ACUTE** H2O QUAL CRITERIA MG/L	FINAL ACUTE CRITERIA MG/L	MCLs MG/L	**OTHER CRITERIA**	POLLUTANT	
ARSENIC		0.815	0.34	0.8150			ARSENIC	
CADMIUM		0.022	0.0091	0.0220			CADMIUM	
CHROMIUM - TOTAL		4.251		4.2510			CHROMIUM - TOTAL	Cr3 Std
CHROMIUM (III)		4.251	1.7730	4.2510			CHROMIUM (III)	
CHROMIUM (VI)		0.038	0.0160	0.0380			CHROMIUM (VI)	
COPPER		0.118	0.0500	0.1180			COPPER	
LEAD		0.674	0.2810	0.6740			LEAD	
MERCURY		0.024		0.0240			MERCURY	
MOLYBDENUM							MOLYBDENUM	
NICKEL		3.628	1.5130	3.6280			NICKEL	
SELENIUM		0.038	0.0184	0.0380			SELENIUM	
SILVER		0.053	0.0220	0.0530			SILVER	
ZINC		1.089	0.4670	1.0890			ZINC	
BOD	45			45.0000			BOD	
TSS	45			45.0000			TSS	
MANGANESE		11.3	4.7380	11.3000			MANGANESE	
IRON							IRON	

Data: WQA metals

PD WQ standards

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J	K	L
Monthly TABLE 3: CRITERIA AND STANDARDS POLLUTANT	Monthly NPDES PERMIT LIMITS MG/L	**STATE** CHRONIC WQ STDS MG/L	**EPA CHRONIC** H2O QUAL CRITERIA MG/L	**FINAL** CHRONIC CRITERIA MG/L	POLLUTANT	**STATE** HUMAN HEALTH CRITERIA MG/L	**EPA** HUMAN HEALTH CRITERIA MG/L	**Final** HUMAN HEALTH CRITERIA MG/L	**OTHER CRITERIA** State Chronic Agriculture mg/l	POLLUTANT
ARSENIC		0.018	0.0076	0.0180	ARSENIC					ARSENIC
CADMIUM		0.0029	0.001200	0.0029	CADMIUM					CADMIUM
CHROMIUM - TOTAL		0.554		0.5540	CHROMIUM - TOTAL					CHROMIUM - TOTAL
CHROMIUM (III)		0.554	0.2310	0.5540	CHROMIUM (III)					CHROMIUM (III)
CHROMIUM (VI)		0.026	0.011	0.0260	CHROMIUM (VI)					CHROMIUM (VI)
COPPER		0.068	0.0290	0.0680	COPPER					COPPER
LEAD		0.026	0.0110	0.0260	LEAD					LEAD
MERCURY		0.00001	0.000001	0.00001	MERCURY					MERCURY
MOLYBDENUM					MOLYBDENUM					MOLYBDENUM
NICKEL		0.403	0.1680	0.4030	NICKEL					NICKEL
SELENIUM		0.0052	0.0046	0.0052	SELENIUM					SELENIUM
SILVER		0.0084	0.0035	0.0084	SILVER					SILVER
ZINC		0.94	0.4050	0.9400	ZINC					ZINC
BOD	30				BOD					BOD
TSS	30				TSS					TSS
MANGANESE		6.216	2.618	6.2160	MANGANESE					MANGANESE
IRON		2.006	1	2.0060	IRON					IRON

Cr3 Std

Data: WQA metals

Enter Data in Blue Areas Only

THIS INFORMATION IS ONLY NECESSARY IF YOU ARE CALCULATING REMOVAL EFFICIENCY FROM POTW INF AND EFF DATA ONLY (See Rem Eff TABLE)

B	C	D	E	F	G	H	I	J	K
TABLE 4: INFLUENT AND EFFLUENT DATA	AVERAGE POTW INFLUENT MG/L	POTW FLOW MGD	COMMENT AND NOTES	POTW INFLUENT LBS/DAY	AVERAGE POTW EFFLUENT MG/L	POTW FLOW MGD	COMMENT AND NOTES	POTW EFFLUENT LBS/DAY	
POLLUTANT									POLLUTANT
ARSENIC	0.00067	3.1		0.017322	0.00047	3.1		0.01215138	ARSENIC
CADMIUM	0.00087	3.1		0.022493	0.0002	3.1		0.0051708	CADMIUM
CHROMIUM - TOTAL	0.00384	3.1		0.099279	0.00362	3.1		0.09359148	CHROMIUM - TOTAL
CHROMIUM (III)		3.1				3.1			CHROMIUM (III)
CHROMIUM (VI)	0.005	3.1	1/2 DL	0.12927	0.0025	3.1	1/4 DL	0.064635	CHROMIUM (VI)
COPPER	0.0463	3.1		1.19704	0.005	3.1		0.12927	COPPER
LEAD	0.00178	3.1		0.04602	0.0009	3.1		0.0232686	LEAD
MERCURY	0.0000452	3.1	1631	0.001169	0.0000019	3.1	1631	4.9123E-05	MERCURY
MOLYBDENUM	0.00309	3.1		0.079889	0.00242	3.1		0.06256668	MOLYBDENUM
NICKEL	0.00309	3.1		0.079889	0.0044	3.1		0.1137576	NICKEL
SELENIUM	0.00307	3.1		0.079372	0.0017	3.1		0.0439518	SELENIUM
SILVER	0.00032	3.1		0.008273	0.00022	3.1		0.00568788	SILVER
ZINC	0.1368	3.1		3.536827	0.0634	3.1		1.6391436	ZINC
BOD	279	3.1		7213.266	7	3.1		180.978	BOD
TSS	283	3.1		7316.682	7	3.1		180.978	TSS
MANGANESE	0.0454	3.1		1.173772	0.0291	3.1		0.7523514	MANGANESE
IRON	0.4046	3.1		10.46053	0.0741	3.1		1.9157814	IRON

Yellow = BDL majority data used

Enter Data in Blue Areas Only
Purple Areas are Optional Data Entry Columns

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
TABLE 5: POLLUTANT LOADING AND RECEIVING WATER	TOTAL CURRENT SIU LOADING TO POTW		DOMESTIC CONTRIBUTION TO POTW	USER ENTERED DOMESTIC LOADING TO POTW		FINAL CALCULATED DOMESTIC CONTRIBUTION			COMMERCIAL USER DISCHARGE TO POTW	USER ENTERED COMMERCIAL LOADING TO POTW		CALCULATED COMMERCIAL CONTRIBUTION	TOTAL DOMESTIC PLUS COMMERCIAL LOADING	USER ENTERED TRUCKED AND HAULED WASTE LOADING TO POTW	UPSTREAM RECEIVING WATER	
POLLUTANT	LBS/D		MG/L	LBS/DAY		LBS/DAY	POLLUTANT		MG/L	LBS/DAY		LBS/DAY	LBS/D	LBS/DAY	MG/L	POLLUTANT
ARSENIC	0.0012		0.00063			0.013555836	ARSENIC		0.00154			0.004366824	0.01792266	0		ARSENIC
CADMIUM	0.0008		0.00035			0.00753102	CADMIUM		0.00037			0.001049172	0.008580192	0		CADMIUM
CHROMIUM - TOTAL	0.0092		0.001			0.0215172	CHROMIUM - TOTAL		0.0106			0.03005736	0.05157456	0		CHROMIUM - TOTAL
CHROMIUM (III)						Need Domestic Data	CHROMIUM (III)					Need Commercial Data	Dom or Comm Data Missing	0		CHROMIUM (III)
CHROMIUM (VI)	0.0073		0.0025			0.053793	CHROMIUM (VI)		0.0025			0.007089	0.060882	0		CHROMIUM (VI)
COPPER	0.017		0.0705			1.5169626	COPPER		0.081			0.2296836	1.7466462	0		COPPER
LEAD	0.002		0.0012			0.02582064	LEAD		0.037			0.1049172	0.13073784	0		LEAD
MERCURY	0.000120		0.000025			0.00053793	MERCURY		0.000025			0.00007089	0.00060882	0		MERCURY
MOLYBDENUM	0.0083		0.0023			0.04948956	MOLYBDENUM		0.003			0.0085068	0.05799636	0		MOLYBDENUM
NICKEL	0.0095		0.004			0.0860688	NICKEL		0.0071			0.02013276	0.10620156	0		NICKEL
SELENIUM	0.0019		0.0013			0.02797236	SELENIUM		0.0019			0.00538764	0.03336	0		SELENIUM
SILVER	0.00042		0.0002			0.00430344	SILVER		0.00035			0.00099246	0.0052959	0		SILVER
ZINC	0.249		0.168			3.6148896	ZINC		0.184			0.5217504	4.13664	0		ZINC
BOD	700		368			7918.3296	BOD		400			1134.24	9052.5696	0		BOD
TSS	400		246			5293.2312	TSS		291			825.1596	6118.3908	0		TSS
MANGANESE	0.03		0.0232			0.49919904	MANGANESE		0.0602			0.17070312	0.66990216	0		MANGANESE
IRON	0.18		0.214			4.6046808	IRON		1.077			3.0539412	7.658622	0		IRON

SIU loading = existing load + Agilent + Smuckers estimates based on WQ would be the same as the Aurora Dairy metals.
Hg & Cr6+ SIU loadings based on 1/4 DL
Commercial & Residential data collected 10X each 2016/17

Data: pg 7 WQA
Used St. Vrain Creek mean values

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J
TABLE 6: BIOSOLIDS POLLUTANT	POTW BIOSOLIDS TO DISPOSAL MG/KG DRY WT.	TABLE 1 MAXIMUM LAND APP SLUDGE CRITERIA MG/KG	TABLE 3 "CLEAN" LAND APP SLUDGE CRITERIA MG/KG	TABLE 2 (CAR) CUMULATIVE APPLICATION RATE LBS/ACRE	TABLE 2 CALC. SLUDGE DISPOSAL CRITERIA MG/KG	ENTER DEFAULT BIOSOLIDS DISPOSAL CRITERIA MG/KG	FINAL SLUDGE CRITERIA MG/KG	POLLUTANT
ARSENIC	2.6		41				41.00	ARSENIC
CADMIUM	2.2		39				39.00	CADMIUM
CHROMIUM - TOTAL	18						No Criteria	CHROMIUM - TOTAL
CHROMIUM (III)							No Criteria	CHROMIUM (III)
CHROMIUM (VI)							No Criteria	CHROMIUM (VI)
COPPER	454		1500				1500.00	COPPER
LEAD	10.9		300				300.00	LEAD
MERCURY	1		17				17.00	MERCURY
MOLYBDENUM	8.8	75				75	75.00	MOLYBDENUM
NICKEL	26.5		420				420.00	NICKEL
SELENIUM	19.6		100				100.00	SELENIUM
SILVER	2.2						No Criteria	SILVER
ZINC	708.5		2800				2800.00	ZINC
BOD							No Criteria	BOD
TSS							No Criteria	TSS
MANGANESE							No Criteria	MANGANESE
IRON	8495						No Criteria	IRON

Table 1 lim

Table 3 land application criteria used

Enter Data in Blue Areas Only
Purple Areas are Optional Data Entry Columns

B	C	D	E	F	G	H	I	J	K	L	M	N	O
TABLE 7: REMOVAL EFFICIENCY CALCULATIONS	**INFEFF**	**ADRE**	**MRE**	**DECILE**	**LIT**		ENTER THE NAME OF THE REMOVAL EFFICIENCY TO BE USED: **INFEFF, ADRE, MRE, DECILE,** OR **LIT**		USER ENTERED SLUDGE REMOVAL EFFICIENCY %	USE SLUDGE REMOVAL EFFICIENCY? Y/N		FINAL POTW REMOVAL %	
Removal Efficiencies must be 1-99%	**Influent/Effluent Method** Removal Efficiency %	**ADRE METHOD** REMOVAL EFFICIENCY %	**MRE METHOD** REMOVAL EFFICIENCY %	**DECILE METHOD** REMOVAL EFFICIENCY %	**LITERATURE** REMOVAL EFFICIENCY %	SOURCE OF LITERATURE REMOVAL EFFICIENCY DATA							
POLLUTANT													POLLUTANT
ARSENIC	27				49	EPA	LIT			N		49	ARSENIC
CADMIUM	44				64	EPA	LIT			N		64	CADMIUM
CHROMIUM - TOTAL	all below DL				77	EPA	LIT			N		77	CHROMIUM - TOTAL
CHROMIUM (III)	Influent-Effluent Data Prevents Reff Calc									N		NO DATA	CHROMIUM (III)
CHROMIUM (VI)	75						INFEFF			N		75	CHROMIUM (VI)
COPPER	89				86	EPA	INFEFF			N		89	COPPER
LEAD	41				63	EPA	LIT			N		63	LEAD
MERCURY	94				62	EPA	INFEFF			N		94	MERCURY
MOLYBDENUM	26				29	EPA	LIT			N		29	MOLYBDENUM
NICKEL	8				40	EPA	LIT			N		40	NICKEL
SELENIUM	42				48	EPA	INFEFF			N		42	SELENIUM
SILVER	29				77	EPA	LIT			N		77	SILVER
ZINC	52				73	EPA	INFEFF			N		52	ZINC
BOD	97						INFEFF			N		97	BOD
TSS	98						INFEFF			N		98	TSS
MANGANESE	**37**						INFEFF			N		37	MANGANESE
IRON	**83**						INFEFF			N		83	IRON

Actual removal efficiencies used for inf/eff data above DL
EPA Region 8 LL guidance removals used otherwise

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I
DAILY TABLE 8: MAHL CALCULATIONS				**OTHER CRITERIA FROM Daily Criteria&Stds COLUMN H**			
POLLUTANT	**Daily/7 day NPDES LOADING LBS/DAY**	**ACUTE LOADING LBS/DAY**	**LOADING FOR MCL LBS/DAY**		**MOST STRINGENT CRITERIA LBS/DAY**	**NAME OF MAHL FOR DAILY MAX LIMITS**	**POLLUTANT**
ARSENIC	999999	155.0005353	999999	999999	155.0005353	WQ-ACUTE	ARSENIC
CADMIUM	999999	5.927423333	999999	999999	5.927423333	WQ-ACUTE	CADMIUM
CHROMIUM - TOTAL	999999	1792.705844	999999	999999	1792.705844	WQ-ACUTE	CHROMIUM - TOTAL
CHROMIUM (III)	999999	999999	999999	999999	No Criteria	No Criteria	CHROMIUM (III)
CHROMIUM (VI)	999999	14.7431184	999999	999999	14.7431184	WQ-ACUTE	CHROMIUM (VI)
COPPER	999999	105.9836225	999999	999999	105.9836225	WQ-ACUTE	COPPER
LEAD	999999	176.6867319	999999	999999	176.6867319	WQ-ACUTE	LEAD
MERCURY	999999	38.79768	999999	999999	38.79768	WQ-ACUTE	MERCURY
MOLYBDENUM	999999	999999	999999	999999	No Criteria	No Criteria	MOLYBDENUM
NICKEL	999999	586.491596	999999	999999	586.491596	WQ-ACUTE	NICKEL
SELENIUM	999999	6.354792414	999999	999999	6.354792414	WQ-ACUTE	SELENIUM
SILVER	999999	22.35083739	999999	999999	22.35083739	WQ-ACUTE	SILVER
ZINC	999999	220.0555913	999999	999999	220.0555913	WQ-ACUTE	ZINC
BOD	48614.75357	173966.0259	999999	999999	48614.75357	NPDES Daily	BOD
TSS	49311.73929	176460.1624	999999	999999	49311.73929	NPDES Daily	TSS
MANGANESE	999999	1739.737238	999999	999999	1739.737238	WQ-ACUTE	MANGANESE
IRON	999999	999999	999999	999999	No Criteria	No Criteria	IRON

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J
MONTHLY TABLE 9: MAHL CALCULATIONS POLLUTANT	**Monthly NPDES LOADING LBS/DAY**	**CHRONIC Toxicity Loading LBS/DAY**	**LOADING FOR HUMAN HEALTH LBS/DAY**	**OTHER CRITIERIA FROM Mo Criteria&Stds Column K State Chronic Agriculture mg/l**	**TABLE 1, 2, 3 OR OTHER SLUDGE LOADING LBS/DAY**	**MOST STRINGENT CRITERIA LBS/DAY**	**NAME OF MAHL For Monthly Limits**	**POLLUTANT**
ARSENIC	999999	3.423324706	999999	999999	0.245638531	0.245638531	Biosolids	ARSENIC
CADMIUM	999999	0.781342167	999999	999999	0.178893	0.178893	Biosolids	CADMIUM
CHROMIUM - TOTAL	999999	233.6295078	999999	999999	999999	233.6295078	WQ-CHRONIC	CHROMIUM - TOTAL
CHROMIUM (III)	999999	999999	999999	999999	999999	No Criteria	No Criteria	CHROMIUM (III)
CHROMIUM (VI)	999999	10.0873968	999999	999999	999999	10.0873968	WQ-CHRONIC	CHROMIUM (VI)
COPPER	999999	61.07530786	999999	999999	4.936633801	4.936633801	Biosolids	COPPER
LEAD	999999	6.815808649	999999	999999	1.397942857	1.397942857	Biosolids	LEAD
MERCURY	999999	0.0161657	999999	999999	0.053092085	0.0161657	WQ-CHRONIC	MERCURY
MOLYBDENUM	999999	999999	999999	999999	0.759227586	0.759227586	Biosolids	MOLYBDENUM
NICKEL	999999	65.147771	999999	999999	3.082464	3.082464	Biosolids	NICKEL
SELENIUM	999999	0.869603172	999999	999999	0.698971429	0.698971429	Biosolids	SELENIUM
SILVER	999999	3.54239687	999999	999999	999999	3.54239687	WQ-CHRONIC	SILVER
ZINC	999999	189.946975	999999	999999	15.80750769	15.80750769	Biosolids	ZINC
BOD	32409.83571	999999	999999	999999	999999	32409.83571	NPDES Monthly	BOD
TSS	32874.49286	999999	999999	999999	999999	32874.49286	NPDES Monthly	TSS
MANGANESE	999999	957.00944	999999	999999	999999	957.00944	WQ-CHRONIC	MANGANESE
IRON	999999	1144.53156	999999	999999	999999	1144.53156	WQ-CHRONIC	IRON

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
TABLE 10: DAILY LOCAL LIMITS POLLUTANT	**Most** Stringent MAHL	**FINAL MAHL FOR Daily LOCAL LIMITS**	Name FOR MAHL	SAFETY/ EXPANSION FACTOR % FOR DAILY MAX LIMITS	MAHL WITH SAFETY - EXPANSION FACTOR LBS/DAY	ENTER "Y" FOR for a SIU and a Commercial Limit ENTER A "N" FOR SIU Limit Only	MAHL minus DOM LOADING LBS/DAY	**Maximum Allowable Load MAL LBS/DAY**	**MAL is for**	MASS **RESERVED** FOR HAULED WASTE lbs/d	**MAL** MINUS THE HAULED WASTE LBS/DAY	POLLUTANT	If you are adopting a Commercial Limit, then these are the loadings from Table 5 lbs/day	If setting **SIU and Commercial limits** Enter % of MAL to allocate to SIUs **Enter 100% if no Commercial Limit** %	Percentage of MAL that will be allocated to Commercial Users %	**MACL** Calculated ALLOCATION FOR COMMERCIAL LBS/DAY	**MAIL** Calculated ALLOCATION FOR SIUs LBS/DAY	CALCULATED UNIFORM LOCAL LIMITS FOR SIUs MG/L	POLLUTANT
ARSENIC	0.24563853	0.245638531	Biosolids	15	0.208792751	n	0.190870091	0.190870091	SIUs		0.190870091	ARSENIC		100.0	**n/a**	N/A	0.190870091	0.0850	ARSENIC
CADMIUM	0.178893	0.178893	Biosolids	15	0.15205905	n	0.143478858	0.143478858	SIUs		0.143478858	CADMIUM		100.0	**n/a**	N/A	0.143478858	0.0639	CADMIUM
CHROMIUM - TOTAL	233.629508	233.6295078	WQ-CHRONIC	70	70.08885235	n	70.03727779	70.03727779	SIUs		70.03727779	CHROMIUM - TOTAL		100.0	**n/a**	N/A	70.03727779	31.193	CHROMIUM - TOTAL
CHROMIUM (III)	No Criteria	No Criteria	No Criteria		No Criteria		No Criteria	No Criteria	SIUs		No Criteria	CHROMIUM (III)		100.0	**0.0**	No Criteria	No Criteria	No Criteria	CHROMIUM (III)
CHROMIUM (VI)	10.0873968	10.0873968	WQ-CHRONIC	15	8.57428728	n	8.51340528	8.51340528	SIUs		8.51340528	CHROMIUM (VI)		100.0	**n/a**	N/A	8.51340528	3.792	CHROMIUM (VI)
COPPER	4.9366338	4.936633801	Biosolids	15	4.196138731	n	2.449492531	2.449492531	SIUs		2.449492531	COPPER		100.0	**n/a**	N/A	2.449492531	1.091	COPPER
LEAD	1.39794286	1.397942857	Biosolids	15	1.188251429	n	1.057513589	1.057513589	SIUs		1.057513589	LEAD		100.0	**n/a**	N/A	1.057513589	0.471	LEAD
MERCURY	0.0161657	0.0161657	WQ-CHRONIC	15	0.013740845	n	0.013132025	0.013132025	SIUs		0.013132025	MERCURY		100.0	**n/a**	N/A	0.013132025	0.0058	MERCURY
MOLYBDENUM	0.75922759	0.759227586	Biosolids	15	0.645343448	n	0.587347088	0.587347088	SIUs		0.587347088	MOLYBDENUM		100.0	**n/a**	N/A	0.587347088	0.262	MOLYBDENUM
NICKEL	3.082464	3.082464	Biosolids	15	2.6200944	n	2.51389284	2.51389284	SIUs		2.51389284	NICKEL		100.0	**n/a**	N/A	2.51389284	1.120	NICKEL
SELENIUM	0.69897143	0.698971429	Biosolids	15	0.594125714	n	0.560765714	0.560765714	SIUs		0.560765714	SELENIUM		100.0	**n/a**	N/A	0.560765714	0.2497	SELENIUM
SILVER	3.54239687	3.54239687	WQ-CHRONIC	15	3.011037339	n	3.005741439	3.005741439	SIUs		3.005741439	SILVER		100.0	**n/a**	N/A	3.005741439	1.3387	SILVER
ZINC	15.8075077	15.80750769	Biosolids	15	13.43638154	n	9.299741538	9.299741538	SIUs		9.299741538	ZINC		100.0	**n/a**	N/A	9.299741538	4.142	ZINC
BOD	32409.8357	32409.83571	NPDES Monthly	60	12963.93429	n	3911.364686	3911.364686	SIUs		3911.364686	BOD		100.0	**n/a**	N/A	3911.364686	1742	BOD
TSS	32874.4929	32874.49286	NPDES Monthly	70	9862.347857	n	3743.957057	3743.957057	SIUs		3743.957057	TSS		100.0	**n/a**	N/A	3743.957057	1667	TSS
MANGANESE	957.00944	957.00944	WQ-CHRONIC	15	813.458024	n	812.7881218	812.7881218	SIUs		812.7881218	MANGANESE		100.0	**n/a**	N/A	812.7881218	361.992	MANGANESE
IRON	1144.53156	1144.53156	WQ-CHRONIC	15	972.851826	n	965.193204	965.193204	SIUs		965.193204	IRON		100.0	**n/a**	N/A	965.193204	429.869	IRON

Commercial + SIUs
SIUs

70% safety factor for Cd used to balance high literature removal factor used
60 & 70 % used on BOD/TSS to balance between overly restrictive state rating and loose limits produced from straight local limits calcs

Enter Data in Blue Areas Only

B	C	D	E	F	G	H
TABLE 11: Daily LOCAL LIMIT SUMMARY	**MOST STRINGENT OF DAILY AND MONTHLY DAILY AVERAGE LOCAL LIMIT INFORMATION**					
POLLUTANT	MAIL FOR SIUs LBS/DAY	UNIFORM CONCENTRATION FOR SIUs (MG/L)	MACL FOR COMMERCIAL USERS (LBS/DAY)	PROPOSED DAILY MAXIMUM LIMIT	PROPOSED MACL FOR COMMERCIAL USERS	POLLUTANT
ARSENIC	0.1909	0.0850	N/A	0.0650	N/A	ARSENIC
CADMIUM	0.1435	0.0639	N/A	0.0490	N/A	CADMIUM
CHROMIUM - TOTAL	70.0373	31.1926	N/A	24.0600	N/A	CHROMIUM - TOTAL
CHROMIUM (III)	No Criteria	No Criteria	No Criteria		N/A	CHROMIUM (III)
CHROMIUM (VI)	8.5134	3.7916	N/A	2.9250	N/A	CHROMIUM (VI)
COPPER	2.4495	1.0909	N/A	0.8460	N/A	COPPER
LEAD	1.0575	0.4710	N/A	0.3650	N/A	LEAD
MERCURY	0.0131	0.0058	N/A	0.0045	N/A	MERCURY
MOLYBDENUM	0.5873	0.2616	N/A	0.2020	N/A	MOLYBDENUM
NICKEL	2.5139	1.1196	N/A	0.8640	N/A	NICKEL
SELENIUM	0.5608	0.2497	N/A	0.1920	N/A	SELENIUM
SILVER	3.0057	1.3387	N/A	1.0320	N/A	SILVER
ZINC	9.2997	4.1418	N/A	3.2050	N/A	ZINC
BOD	3911.3647	1742.0077	N/A	1350	N/A	BOD
TSS	3743.9571	1667.4492	N/A	1300	N/A	TSS
MANGANESE	812.7881	361.9921	N/A	N/A	N/A	MANGANESE
IRON	965.1932	429.8689	N/A	N/A	N/A	IRON

The following tables are where you intend to set Daily and Monthly Loca

If you are intending to set Daily limits only, use the previous 2 tables.

al Limits

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
TABLE 12: DAILY LOCAL LIMITS where also calc monthly		FINAL MAHL FOR DAILY		SAFETY/ EXPANSION FACTOR % FOR DAILY	MAHL WITH SAFETY - EXPANSION FACTOR	ENTER "Y" FOR for a SIU and a Commercial Limit ENTER A "N" FOR	MAHL minus DOM + COM LOADING	**Maximum Allowable Load MAL**		MASS **RESERVED** FOR HAULED	**MAL** MINUS THE HAULED WASTE		If you are adopting a Commercial Limit, then these are the loadings from Table 5	If setting **SIU and Commercial limits** Enter % of MAL to allocate to SIUs **Enter 100% if no Commercial Limit**	Percentage of MAL that will be allocated to Commercial Users	**MACL** Calculated ALLOCATION FOR COMMERCIAL	**MAIL** Calculated ALLOCATION FOR SIUs	CALCULATED UNIFORM LOCAL LIMITS FOR SIUs	
POLLUTANT	Daily MAHL	LOCAL LIMITS	Name FOR MAHL	MAX LIMITS	LBS/DAY	SIU Limit Only	LBS/DAY	**LBS/DAY**	**MAL is for**	WASTE lbs/d	LBS/DAY	POLLUTANT	lbs/day	%	%	LBS/DAY	LBS/DAY	MG/L	POLLUTANT
ARSENIC	155.0005353	155.0005353	WQ-ACUTE	10	139.5004818	y	139.4869259	139.4869259	Commercial+SIUs		139.4869259	ARSENIC	0.00436824	100.0	0.0	Discharge b/c SIU Allocatio	139.4869259	62.123	ARSENIC
CADMIUM	5.927423333	5.927423333	WQ-ACUTE	10	5.334681	y	5.32714998	5.32714998	Commercial+SIUs		5.32714998	CADMIUM	0.001049172	100.0	0.0	Discharge b/c SIU Allocatio	5.32714998	2.373	CADMIUM
CHROMIUM - TOTAL	1792.705844	1792.705844	WQ-ACUTE	10	1613.43526	y	1613.413743	1613.413743	Commercial+SIUs		1613.413743	CHROMIUM - TOTAL	0.03005736	100.0	0.0	Discharge b/c SIU Allocatio	1613.413743	718.567	CHROMIUM - TOTAL
CHROMIUM (III)	No Criteria	No Criteria	No Criteria	10	No Criteria	y	No Criteria	No Criteria	Commercial+SIUs		No Criteria	CHROMIUM (III)	Need Commercial Data	100.0	0.0	No Criteria	No Criteria	No Criteria	CHROMIUM (III)
CHROMIUM (VI)	14.7431184	14.7431184	WQ-ACUTE	10	13.29880656	y	13.21501356	13.21501356	Commercial+SIUs		13.21501356	CHROMIUM (VI)	0.007089	100.0	0.0	Discharge b/c SIU Allocatio	13.21501356	5.686	CHROMIUM (VI)
COPPER	105.9836225	105.9836225	WQ-ACUTE	10	95.38526021	y	93.86829761	93.86829761	Commercial+SIUs		93.86829761	COPPER	0.2296836	100.0	0.0	Discharge b/c SIU Allocatio	93.86829761	41.806	COPPER
LEAD	176.6867319	176.6867319	WQ-ACUTE	10	159.0180587	y	158.9922381	158.9922381	Commercial+SIUs		158.9922381	LEAD	0.1049172	100.0	0.0	Discharge b/c SIU Allocatio	158.9922381	70.811	LEAD
MERCURY	38.79768	38.79768	WQ-ACUTE	10	34.917912	y	34.91737407	34.91737407	Commercial+SIUs		34.91737407	MERCURY	0.00007089	100.0	0.0	Discharge b/c SIU Allocatio	34.91737407	15.551	MERCURY
MOLYBDENUM	No Criteria	No Criteria	No Criteria	10	No Criteria	y	No Criteria	No Criteria	Commercial+SIUs		No Criteria	MOLYBDENUM	0.0085068	100.0	0.0	No Criteria	No Criteria	No Criteria	MOLYBDENUM
NICKEL	586.491596	586.491596	WQ-ACUTE	10	527.8424364	y	527.7563676	527.7563676	Commercial+SIUs		527.7563676	NICKEL	0.02013276	100.0	0.0	Discharge b/c SIU Allocatio	527.7563676	235.047	NICKEL
SELENIUM	6.354792414	6.354792414	WQ-ACUTE	10	5.719313172	y	5.691340812	5.691340812	Commercial+SIUs		5.691340812	SELENIUM	0.00538764	100.0	0.0	Discharge b/c SIU Allocatio	5.691340812	2.535	SELENIUM
SILVER	22.35083739	22.35083739	WQ-ACUTE	10	20.11575365	y	20.11145021	20.11145021	Commercial+SIUs		20.11145021	SILVER	0.00099246	100.0	0.0	Discharge b/c SIU Allocatio	20.11145021	8.957	SILVER
ZINC	220.0555913	220.0555913	WQ-ACUTE	10	198.0500321	y	194.4351425	194.4351425	Commercial+SIUs		194.4351425	ZINC	0.5217504	100.0	0.0	Discharge b/c SIU Allocatio	194.4351425	86.596	ZINC
BOD	48614.75357	48614.75357	NPDES Daily	10	43753.27821	y	35834.94861	35834.94861	Commercial+SIUs		35834.94861	BOD	1134.24	100.0	0.0	Discharge b/c SIU Allocatio	35834.94861	15959.840	BOD
TSS	49311.73929	49311.73929	NPDES Daily	10	44380.56536	y	39087.33416	39087.33416	Commercial+SIUs		39087.33416	TSS	825.1596	100.0	0.0	Discharge b/c SIU Allocatio	39087.33416	17408.358	TSS
MANGANESE	1739.737238	1739.737238	WQ-ACUTE		1739.737238		1739.238039	1739.238039	SIUs		1739.238039	MANGANESE		100.0	0.0	Discharge b/c SIU Allocatio	1739.238039	774.606	MANGANESE
IRON	No Criteria	No Criteria	No Criteria		No Criteria		No Criteria	No Criteria	SIUs		No Criteria	IRON		100.0	0.0	No Criteria	No Criteria	No Criteria	IRON

Enter Data in Blue Areas Only

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
TABLE 13: MONTHLY LOCAL LIMITS		FINAL MAHL FOR DAILY	NAME FROM TABLE 6	SAFETY/ EXPANSION FACTOR % FOR DAILY	MAHL WITH SAFETY - EXPANSION FACTOR	ENTER "Y" FOR for a SIU and a Commercial Limit ENTER A "N" FOR	MAHL minus DOM + COM LOADING	**Maximum Allowable Load MAL**			If you are adopting a Commercial Limit, then these are the loadings from Table 5	Percentage of MAL to allocate to SIUs Only	Percentage of MAL that will be allocated to Commercial Users	**MACL** Calculated ALLOCATION FOR COMMERCIAL	**MAIL** Calculated ALLOCATION FOR SIUs	CALCULATED UNIFORM LOCAL LIMITS FOR SIUs	
POLLUTANT	MONTHLY MAHL	LOCAL LIMITS	FOR MAHL	MAX LIMITS	LBS/DAY	SIU Limit Only	LBS/DAY	**LBS/DAY**	**MAL is for**	POLLUTANT	lbs/day	%	%	LBS/DAY	LBS/DAY	MG/L	POLLUTANT
ARSENIC	0.245638531	0.245638531	Biosolids	10	0.221074678	Y	0.207518842	0.207518842	Commercial+SIUs	ARSENIC	0.004366824	100.0	0.0	0 Discharge due to SIU Allocation	0.207518842	0.092	ARSENIC
CADMIUM	0.178893	0.178893	Biosolids	10	0.1610037	Y	0.15347268	0.15347268	Commercial+SIUs	CADMIUM	0.001049172	100.0	0.0	0 Discharge due to SIU Allocation	0.15347268	0.068	CADMIUM
CHROMIUM - TOTAL	233.6295078	233.6295078	WQ-CHRONIC	10	210.266557	y	210.2450398	210.2450398	Commercial+SIUs	CHROMIUM - TOTAL	0.03005736	100.0	0.0	0 Discharge due to SIU Allocation	210.2450398	93.637	CHROMIUM - TOTAL
CHROMIUM (III)	No Criteria	No Criteria	No Criteria	10	No Criteria	y	No Criteria	No Criteria	Commercial+SIUs	CHROMIUM (III)	Need Commercial Data	100.0	0.0	No Criteria	No Criteria	No Criteria	CHROMIUM (III)
CHROMIUM (VI)	10.0873968	10.0873968	WQ-CHRONIC	10	9.07865712	y	9.02486412	9.02486412	Commercial+SIUs	CHROMIUM (VI)	0.007089	100.0	0.0	0 Discharge due to SIU Allocation	9.02486412	4.019	CHROMIUM (VI)
COPPER	4.936633801	4.936633801	Biosolids	10	4.442970421	y	2.926007821	2.926007821	Commercial+SIUs	COPPER	0.2296836	100.0	0.0	0 Discharge due to SIU Allocation	2.926007821	1.303	COPPER
LEAD	1.397942857	1.397942857	Biosolids	10	1.258148571	y	1.232327931	1.232327931	Commercial+SIUs	LEAD	0.1049172	100.0	0.0	0 Discharge due to SIU Allocation	1.232327931	0.549	LEAD
MERCURY	0.0161657	0.0161657	WQ-CHRONIC	10	0.01454913	y	0.0140112	0.0140112	Commercial+SIUs	MERCURY	0.00007089	100.0	0.0	0 Discharge due to SIU Allocation	0.0140112	0.006	MERCURY
MOLYBDENUM	0.759227586	0.759227586	Biosolids	10	0.683304828	y	0.633815268	0.633815268	Commercial+SIUs	MOLYBDENUM	0.0085068	100.0	0.0	0 Discharge due to SIU Allocation	0.633815268	0.282	MOLYBDENUM
NICKEL	3.082464	3.082464	Biosolids	10	2.7742176	y	2.6881488	2.6881488	Commercial+SIUs	NICKEL	0.02013276	100.0	0.0	0 Discharge due to SIU Allocation	2.6881488	1.197	NICKEL
SELENIUM	0.698971429	0.698971429	Biosolids	10	0.629074286	y	0.601101926	0.601101926	Commercial+SIUs	SELENIUM	0.00538764	100.0	0.0	0 Discharge due to SIU Allocation	0.601101926	0.268	SELENIUM
SILVER	3.54239687	3.54239687	WQ-CHRONIC	10	3.188157183	y	3.183853743	3.183853743	Commercial+SIUs	SILVER	0.00099246	100.0	0.0	0 Discharge due to SIU Allocation	3.183853743	1.418	SILVER
ZINC	15.80750769	15.80750769	Biosolids	10	14.22675692	y	10.61186732	10.61186732	Commercial+SIUs	ZINC	0.5217504	100.0	0.0	0 Discharge due to SIU Allocation	10.61186732	4.726	ZINC
BOD	32409.83571	32409.83571	NPDES Monthly	10	29168.85214	y	21250.52254	21250.52254	Commercial+SIUs	BOD	1134.24	100.0	0.0	0 Discharge due to SIU Allocation	21250.52254	9464.363	BOD
TSS	32874.49286	32874.49286	NPDES Monthly	10	29587.04357	y	24293.81237	24293.81237	Commercial+SIUs	TSS	825.1596	100.0	0.0	0 Discharge due to SIU Allocation	24293.81237	10819.755	TSS
MANGANESE	957.00944	957.00944	WQ-CHRONIC		957.00944		956.510241	956.510241	SIUs	MANGANESE		100.0	0.0	0 Discharge due to SIU Allocation	956.510241	426.002	MANGANESE
IRON	1144.53156	1144.53156	WQ-CHRONIC		1144.53156		1139.926879	1139.926879	SIUs	IRON		100.0	0.0	0 Discharge due to SIU Allocation	1139.926879	507.690	IRON

B	C	D	E	F	G	H	I	J	K	L	M	N
TABLE 14: LOCAL LIMIT SUMMARY FOR DAILY AND MONTHLY LL	**DAILY MAXIUM LOCAL LIMIT INFORMATION**						**MONTHLY AVERAGE LOCAL LIMIT INFORMATION**					
POLLUTANT	MAIL FOR SIUs LBS/DAY	UNIFORM CONCENTRATION FOR SIUs (MG/L)	MACL FOR COMMERCIAL USERS (LBS/DAY)	PROPOSED DAILY MAX LIMIT	PROPOSED MACL FOR COMMERCIAL USERS	POLLUTANT	**MAIL** FOR SIUs LBS/DAY	UNIFORM CONCENTRATION FOR SIUs (MG/L)	**MACL** FOR COMMERCIAL USERS (LBS/DAY)	PROPOSED MONTHLY AVERAGE LIMIT	PROPOSED MACL FOR COMMERCIAL USERS	POLLUTANT
ARSENIC	139.4869	62.1234	0 Discharge b/c SIU Allocation			ARSENIC	0.207519	0.092423	0 Discharge due to SIU Allocation			ARSENIC
CADMIUM	5.3271	2.3726	0 Discharge b/c SIU Allocation			CADMIUM	0.153473	0.068352	0 Discharge due to SIU Allocation			CADMIUM
CHROMIUM - TOTAL	1613.4137	718.5674	0 Discharge b/c SIU Allocation			CHROMIUM - TOTAL	210.245040	93.637005	0 Discharge due to SIU Allocation			CHROMIUM - TOTAL
CHROMIUM (III)	No Criteria	No Criteria	No Criteria			CHROMIUM (III)	No Criteria	No Criteria	No Criteria			CHROMIUM (III)
CHROMIUM (VI)	13.2150	5.8856	0 Discharge b/c SIU Allocation			CHROMIUM (VI)	9.024864	4.019411	0 Discharge due to SIU Allocation			CHROMIUM (VI)
COPPER	93.8683	41.8062	0 Discharge b/c SIU Allocation			COPPER	2.926008	1.303158	0 Discharge due to SIU Allocation			COPPER
LEAD	158.9922	70.8105	0 Discharge b/c SIU Allocation			LEAD	1.232328	0.548843	0 Discharge due to SIU Allocation			LEAD
MERCURY	34.9174	15.5512	0 Discharge b/c SIU Allocation			MERCURY	0.014011	0.006240	0 Discharge due to SIU Allocation			MERCURY
MOLYBDENUM	No Criteria	No Criteria	No Criteria			MOLYBDENUM	0.633815	0.282283	0 Discharge due to SIU Allocation			MOLYBDENUM
NICKEL	527.7564	235.0473	0 Discharge b/c SIU Allocation			NICKEL	2.688149	1.197223	0 Discharge due to SIU Allocation			NICKEL
SELENIUM	5.6913	2.5348	0 Discharge b/c SIU Allocation			SELENIUM	0.601102	0.267713	0 Discharge due to SIU Allocation			SELENIUM
SILVER	20.1115	8.9571	0 Discharge b/c SIU Allocation			SILVER	3.183854	1.417996	0 Discharge due to SIU Allocation			SILVER
ZINC	194.4351	86.5957	0 Discharge b/c SIU Allocation			ZINC	10.611867	4.726216	0 Discharge due to SIU Allocation			ZINC
BOD	35834.9486	15959.8403	0 Discharge b/c SIU Allocation			BOD	21250.522543	9464.362560	0 Discharge due to SIU Allocation			BOD
TSS	39087.3342	17408.3579	0 Discharge b/c SIU Allocation			TSS	24293.812371	10819.755033	0 Discharge due to SIU Allocation			TSS
MANGANESE	1739.2380	774.6059	0 Discharge b/c SIU Allocation			MANGANESE	956.510241	426.001746	0 Discharge due to SIU Allocation			MANGANESE
IRON	No Criteria	No Criteria	No Criteria			IRON	1139.926879	507.690164	0 Discharge due to SIU Allocation			IRON