eSMR^2 101

Basic steps for creating an eSMR^2 zipped upload file for CIWQS NPDES regulatory compliance, using PET Tool 2.3

March 9, 2011

BACWA Laboratory Committee
Prepared by Tony Pirondini

Steps needed to create a successful eSMR^2 upload to CIWQS using the PET Tool

(1) Obtain LRO & Data Submitter(s) registrations – *This should have been done already in the workshops. If not, talk to your regulator.*

(2) Download the PET Tool Excel workbook – *On the CIWQS website, file name = "blank_pet_tool 2.3.xls"*

(3) Create a monthly template using the *"blank pet tool 2.3.xls"* file to match your NPDES Monitoring & Reporting Program (MRP) – *an existing paper submittal SMR will likely work best to create this template*

(4) Add data to the template for the compliance period – *How you do this is YOUR choice (manually, LIMS or database export/import, etc.)*

(5) Download & install the CDF Tool file (*"petv2.3 setup.zip"*) on the Internet PC that you will NEED to create the zipped upload file *(you will need PC administrator permission to do this)*

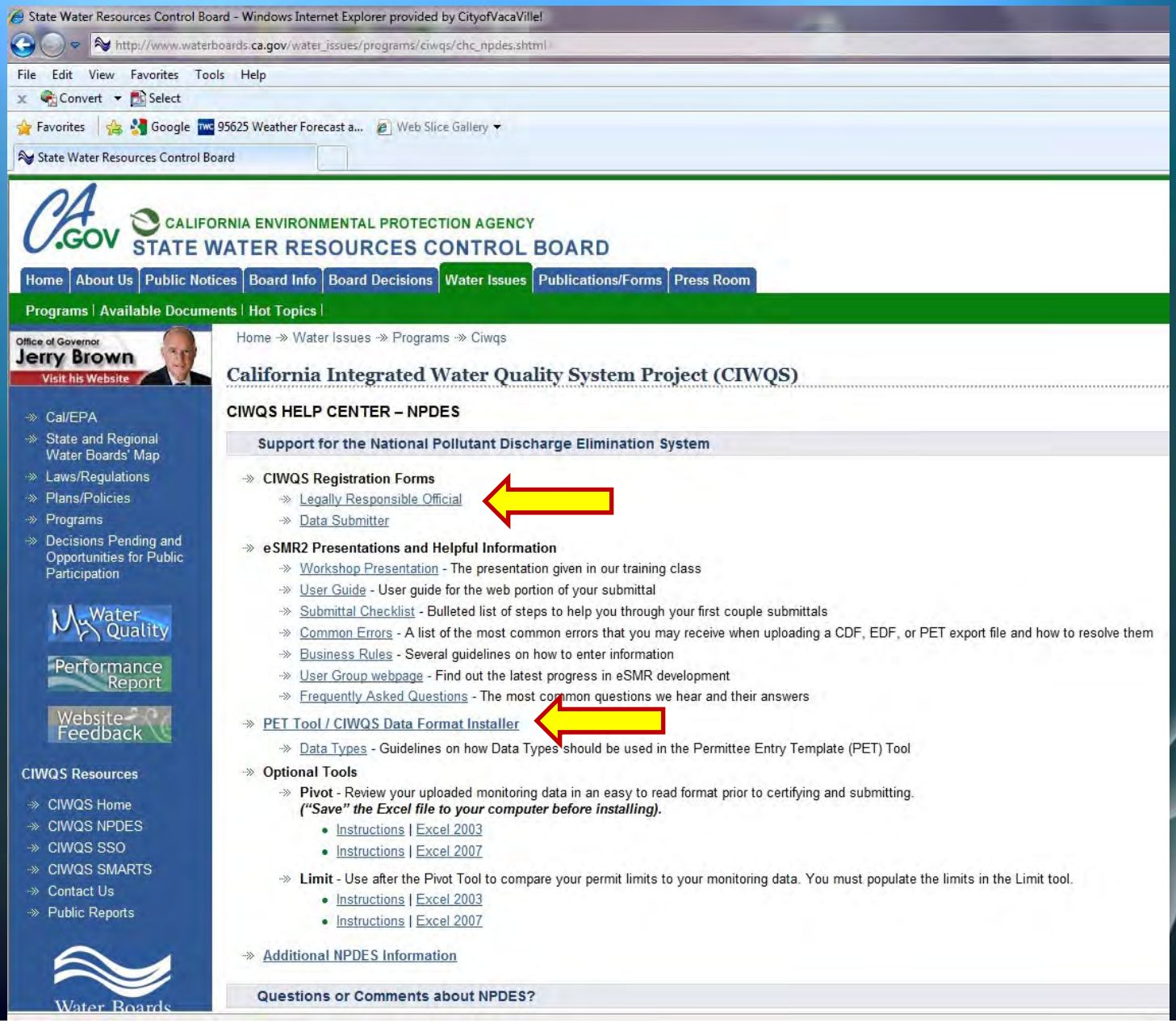
(6) Create the zipped upload file for data entered - *click of the mouse*

(7) Upload the file to the CIWQS website *(Data Submitter)*

(8) If errors are generated, repeat steps (4)-(7) until no errors

(9) Review & Approve (LRO) the data submitted on CIWQS

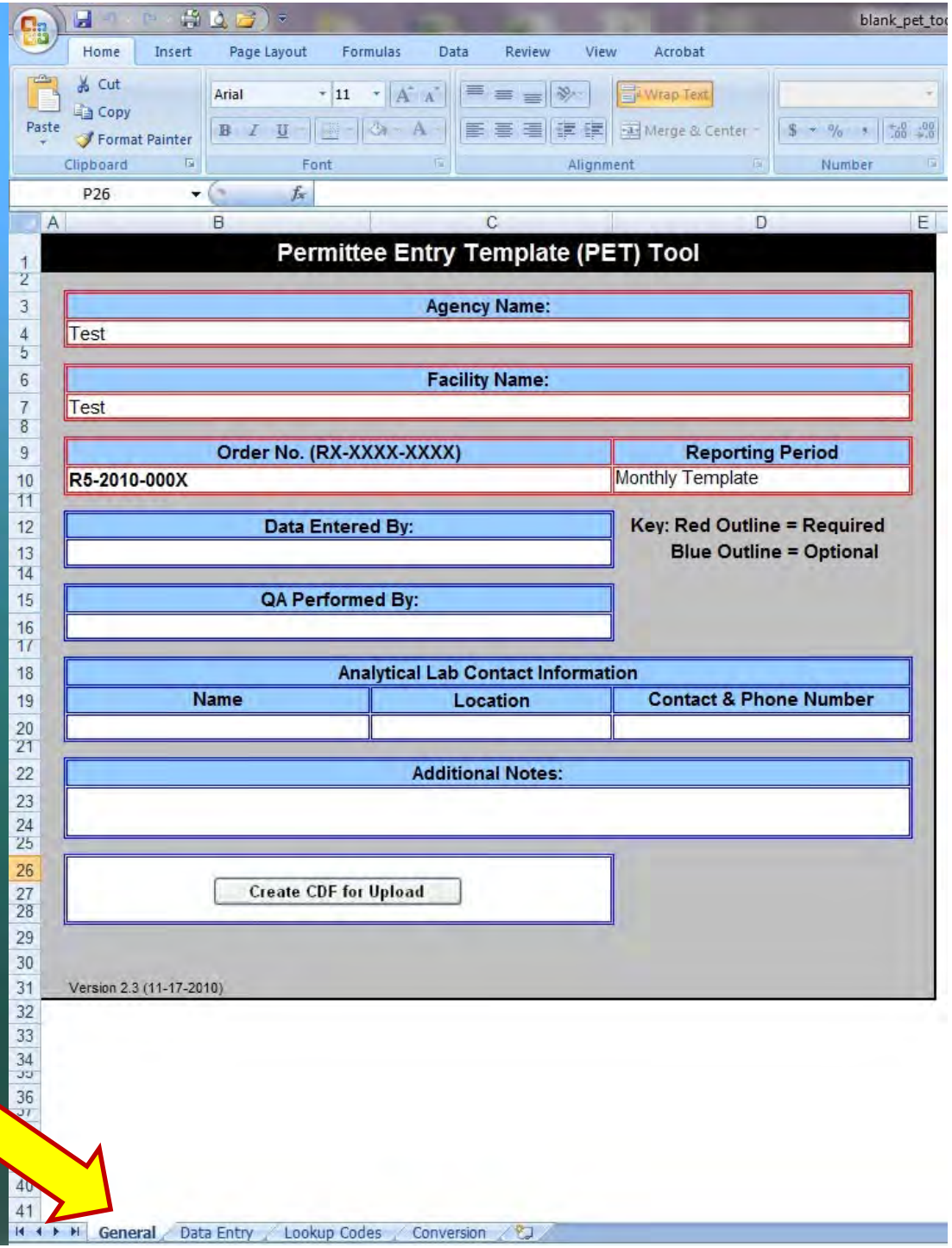
Steps 1, 2 &5: CIWQS website



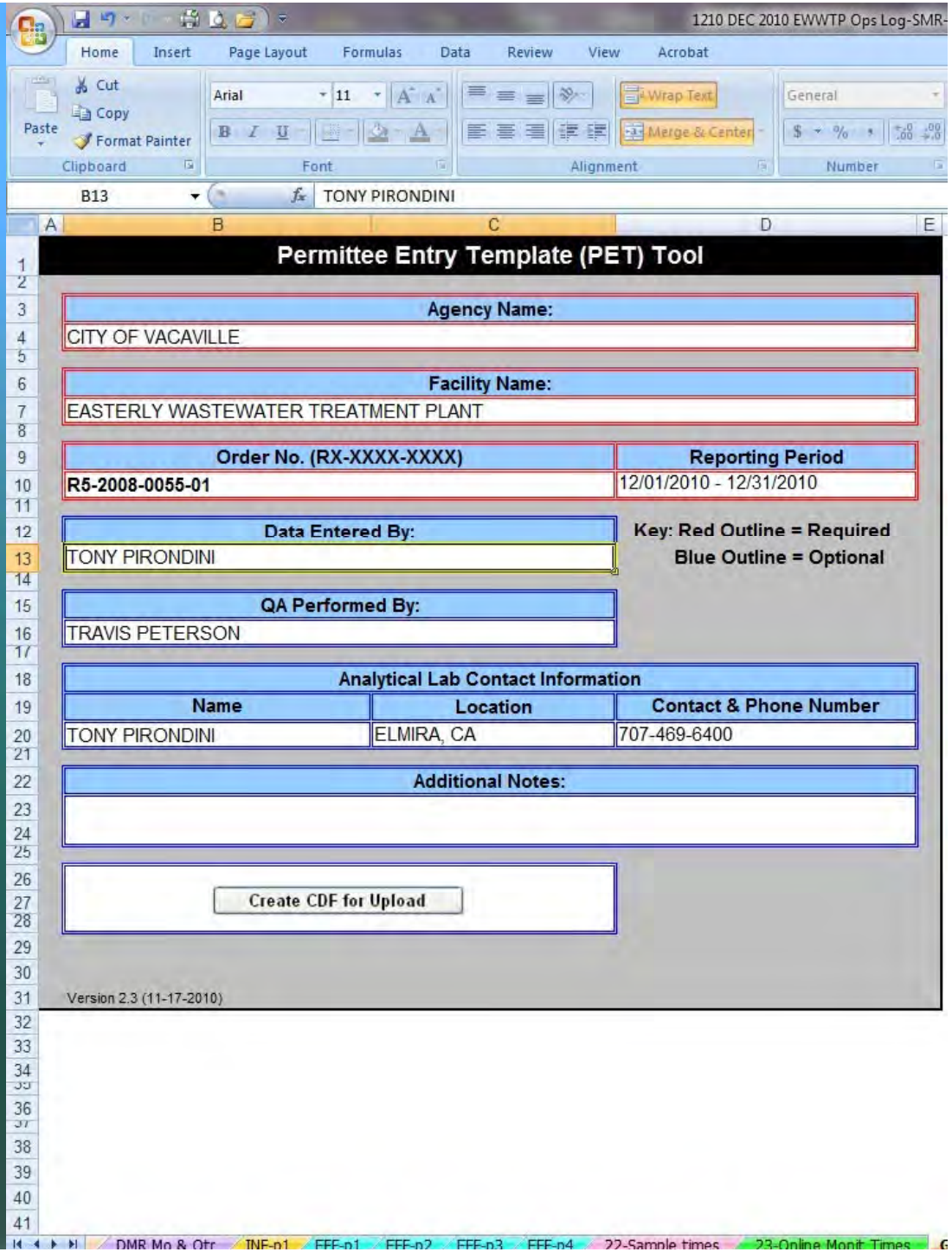
Step (3) - Creating a Reporting Template: **What is the PET Tool?**

- (1) **GENERAL** tab: This spreadsheet describes basic NPDES permit information *AND it is used to "Create CDF for Upload" file.*
- (2) **DATA ENTRY** tab: This spreadsheet is where you enter ALL* compliance data that is acceptable for CIWQS upload. You need to modify this to match your MRP! *Some data can't be uploaded using DATA ENTRY yet, so are submitted via Acrobat PDF file attachment(s).
- (3) LOOKUP CODES & CONVERSION tabs: Used for LIMS programmers and zip conversion QA, but are not needed for MRP DATA ENTRY template creation

PET TOOL GENERAL tab (blank)



PET TOOL
GENERAL tab
(AFTER edit)



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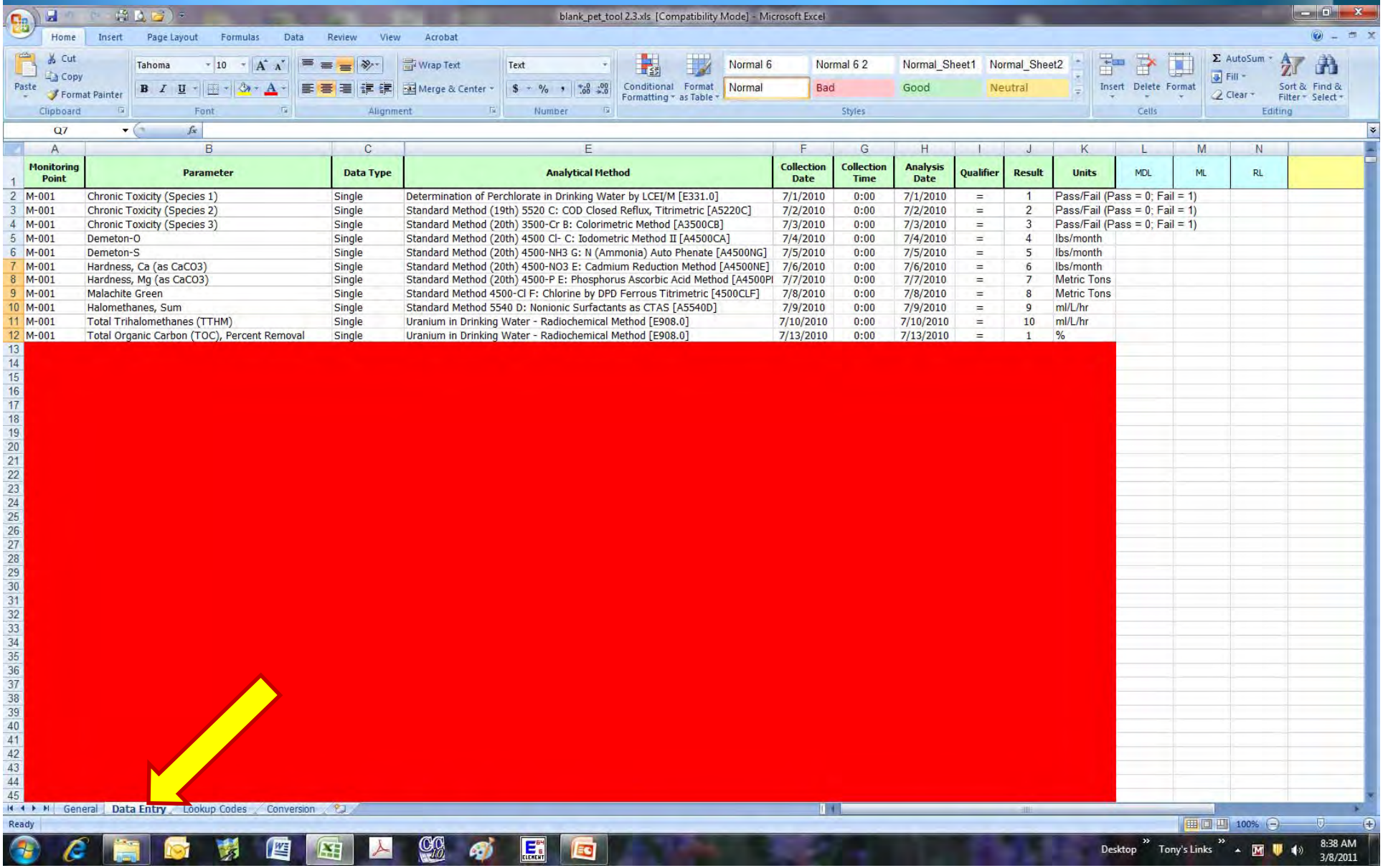
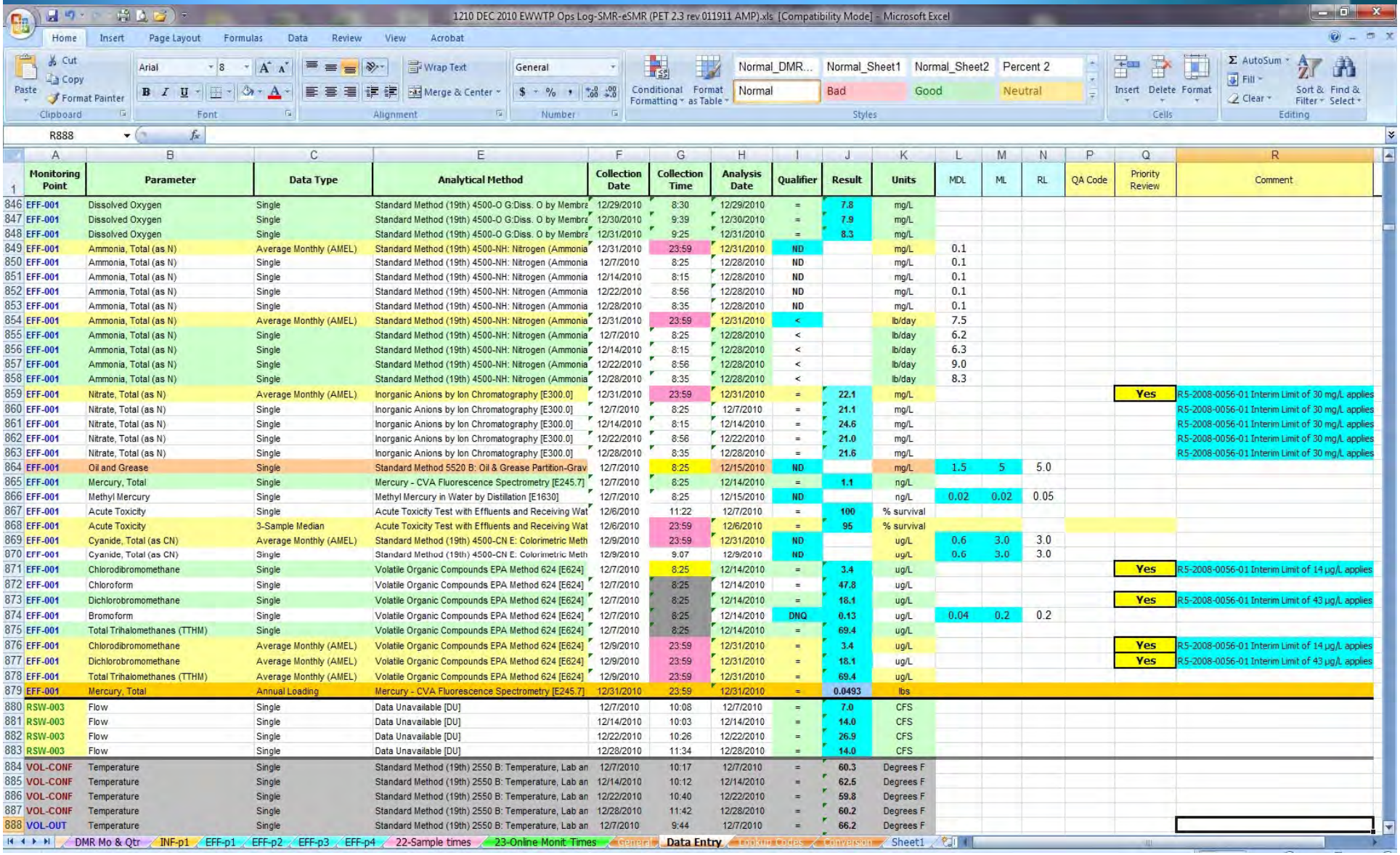


blank_pet_tool 2.3.xls [Compatibility Mode] - Microsoft Excel

Monitoring Point	Parameter	Data Type	Analytical Method	Collection Date	Collection Time	Analysis Date	Qualifier	Result	Units	MDL	ML	RL
M-001	Chronic Toxicity (Species 1)	Single	Determination of Perchlorate in Drinking Water by LCEI/M [E331.0]	7/1/2010	0:00	7/1/2010	=	1	Pass/Fail (Pass = 0; Fail = 1)			
M-001	Chronic Toxicity (Species 2)	Single	Standard Method (19th) 5520 C: COD Closed Reflux, Titrimetric [A5220C]	7/2/2010	0:00	7/2/2010	=	2	Pass/Fail (Pass = 0; Fail = 1)			
M-001	Chronic Toxicity (Species 3)	Single	Standard Method (20th) 3500-Cr B: Colorimetric Method [A3500CB]	7/3/2010	0:00	7/3/2010	=	3	Pass/Fail (Pass = 0; Fail = 1)			
M-001	Demeton-O	Single	Standard Method (20th) 4500 Cl- C: Iodometric Method II [A4500CA]	7/4/2010	0:00	7/4/2010	=	4	lbs/month			
M-001	Demeton-S	Single	Standard Method (20th) 4500-NH3 G: N (Ammonia) Auto Phenate [A4500NG]	7/5/2010	0:00	7/5/2010	=	5	lbs/month			
M-001	Hardness, Ca (as CaCO3)	Single	Standard Method (20th) 4500-NO3 E: Cadmium Reduction Method [A4500NE]	7/6/2010	0:00	7/6/2010	=	6	lbs/month			
M-001	Hardness, Mg (as CaCO3)	Single	Standard Method (20th) 4500-P E: Phosphorus Ascorbic Acid Method [A4500PI	7/7/2010	0:00	7/7/2010	=	7	Metric Tons			
M-001	Malachite Green	Single	Standard Method 4500-Cl F: Chlorine by DPD Ferrous Titrimetric [4500CLF]	7/8/2010	0:00	7/8/2010	=	8	Metric Tons			
M-001	Halomethanes, Sum	Single	Standard Method 5540 D: Nonionic Surfactants as CTAS [A5540D]	7/9/2010	0:00	7/9/2010	=	9	ml/L/hr			
M-001	Total Trihalomethanes (TTHM)	Single	Uranium in Drinking Water - Radiochemical Method [E908.0]	7/10/2010	0:00	7/10/2010	=	10	ml/L/hr			
M-001	Total Organic Carbon (TOC), Percent Removal	Single	Uranium in Drinking Water - Radiochemical Method [E908.0]	7/13/2010	0:00	7/13/2010	=	1	%			

(3) PET Tool: DATA ENTRY tab (edit)



	A	B	C	E	F	G	H	I	J	K	L	M	N	P	Q	R
1	Monitoring Point	Parameter	Data Type	Analytical Method	Collection Date	Collection Time	Analysis Date	Qualifier	Result	Units	MDL	ML	RL	QA Code	Priority Review	Comment
846	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/29/2010	8:30	12/29/2010	=	7.8	mg/L						
847	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/30/2010	9:39	12/30/2010	=	7.9	mg/L						
848	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/31/2010	9:25	12/31/2010	=	8.3	mg/L						
849	EFF-001	Ammonia, Total (as N)	Average Monthly (AMEL)	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/31/2010	23:59	12/31/2010	ND		mg/L	0.1					
850	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/7/2010	8:25	12/28/2010	ND		mg/L	0.1					
851	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/14/2010	8:15	12/28/2010	ND		mg/L	0.1					
852	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/22/2010	8:56	12/28/2010	ND		mg/L	0.1					
853	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/28/2010	8:35	12/28/2010	ND		mg/L	0.1					
854	EFF-001	Ammonia, Total (as N)	Average Monthly (AMEL)	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/31/2010	23:59	12/31/2010	<		lb/day	7.5					
855	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/7/2010	8:25	12/28/2010	<		lb/day	6.2					
856	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/14/2010	8:15	12/28/2010	<		lb/day	6.3					
857	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/22/2010	8:56	12/28/2010	<		lb/day	9.0					
858	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/28/2010	8:35	12/28/2010	<		lb/day	8.3					
859	EFF-001	Nitrate, Total (as N)	Average Monthly (AMEL)	Inorganic Anions by Ion Chromatography [E300.0]	12/31/2010	23:59	12/31/2010	=	22.1	mg/L					Yes	R5-2008-0056-01 Interim Limit of 30 mg/L applies
860	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/7/2010	8:25	12/7/2010	=	21.1	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
861	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/14/2010	8:15	12/14/2010	=	24.6	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
862	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/22/2010	8:56	12/22/2010	=	21.0	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
863	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/28/2010	8:35	12/28/2010	=	21.6	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
864	EFF-001	Oil and Grease	Single	Standard Method 5520 B: Oil & Grease Partition-Grav	12/7/2010	8:25	12/15/2010	ND		mg/L	1.5	5	5.0			
865	EFF-001	Mercury, Total	Single	Mercury - CVA Fluorescence Spectrometry [E245.7]	12/7/2010	8:25	12/14/2010	=	1.1	ng/L						
866	EFF-001	Methyl Mercury	Single	Methyl Mercury in Water by Distillation [E1630]	12/7/2010	8:25	12/15/2010	ND		ng/L	0.02	0.02	0.05			
867	EFF-001	Acute Toxicity	Single	Acute Toxicity Test with Effluents and Receiving Wat	12/6/2010	11:22	12/7/2010	=	100	% survival						
868	EFF-001	Acute Toxicity	3-Sample Median	Acute Toxicity Test with Effluents and Receiving Wat	12/6/2010	23:59	12/6/2010	=	95	% survival						
869	EFF-001	Cyanide, Total (as CN)	Average Monthly (AMEL)	Standard Method (19th) 4500-CN E: Colorimetric Meth	12/9/2010	23:59	12/31/2010	ND		ug/L	0.6	3.0	3.0			
870	EFF-001	Cyanide, Total (as CN)	Single	Standard Method (19th) 4500-CN E: Colorimetric Meth	12/9/2010	9:07	12/9/2010	ND		ug/L	0.6	3.0	3.0			
871	EFF-001	Chlorodibromomethane	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	3.4	ug/L					Yes	R5-2008-0056-01 Interim Limit of 14 µg/L applies
872	EFF-001	Chloroform	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	47.8	ug/L						
873	EFF-001	Dichlorobromomethane	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	18.1	ug/L					Yes	R5-2008-0056-01 Interim Limit of 43 µg/L applies
874	EFF-001	Bromoform	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	DNQ	0.13	ug/L	0.04	0.2	0.2			
875	EFF-001	Total Trihalomethanes (TTHM)	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	69.4	ug/L						
876	EFF-001	Chlorodibromomethane	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	3.4	ug/L					Yes	R5-2008-0056-01 Interim Limit of 14 µg/L applies
877	EFF-001	Dichlorobromomethane	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	18.1	ug/L					Yes	R5-2008-0056-01 Interim Limit of 43 µg/L applies
878	EFF-001	Total Trihalomethanes (TTHM)	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	69.4	ug/L						
879	EFF-001	Mercury, Total	Annual Loading	Mercury - CVA Fluorescence Spectrometry [E245.7]	12/31/2010	23:59	12/31/2010	=	0.0493	lbs						
880	RSW-003	Flow	Single	Data Unavailable [DU]	12/7/2010	10:08	12/7/2010	=	7.0	CFS						
881	RSW-003	Flow	Single	Data Unavailable [DU]	12/14/2010	10:03	12/14/2010	=	14.0	CFS						
882	RSW-003	Flow	Single	Data Unavailable [DU]	12/22/2010	10:26	12/22/2010	=	26.9	CFS						
883	RSW-003	Flow	Single	Data Unavailable [DU]	12/28/2010	11:34	12/28/2010	=	14.0	CFS						
884	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/7/2010	10:17	12/7/2010	=	60.3	Degrees F						
885	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/14/2010	10:12	12/14/2010	=	62.5	Degrees F						
886	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/22/2010	10:40	12/22/2010	=	59.8	Degrees F						
887	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/28/2010	11:42	12/28/2010	=	60.2	Degrees F						
888	VOL-OUT	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/7/2010	9:44	12/7/2010	=	66.2	Degrees F						

Step (3) - Modifying the DATA ENTRY sheet to match YOUR MRP

- Use the MRP table in your NPDES permit OR past successful paper SMRs that match your current MRP
- Be sure to use site labels: EFF-001, INF-001, etc.

(3a) Current MRP (example)

A. Monitoring Location EFF-001

1. The Discharger shall monitor effluent from the Easterly WWTP when discharging to Old Alamo Creek at EFF-001 as follows:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	mgd	Meter	Continuous	
Total Residual Chlorine[1]	mg/L	Meter	Continuous	
Turbidity[2]	NTU	Meter	Continuous	
Temperature	°F	Meter	Continuous	
pH	pH units	Meter	Continuous	
BOD 5-day 20°C	mg/L	24-hr Composite[6]	5 days/week	
Total Suspended Solids	mg/L	24-hr Composite[6]	5 days/week	
Total Coliform Organisms	MPN/100 mL	Grab	5 days/week	
Settleable Solids	mL/L	Grab	1/day	
Dissolved Oxygen	mg/L	Grab	1/day	
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/day	
Ammonia (as N)[3, 4]	mg/L	Grab	1/week	
Nitrate (as N)	mg/L	Grab	1/week	
Total Dissolved Solids	mg/L	Grab	1/month	
Cyanide, Total[5]	µg/L	Grab	1/month	
Chlorodibromomethane[5]	µg/L	Grab	1/month	
Chloroform[5]	µg/L	Grab	1/month	
Dichlorobromomethane[5]	µg/L	Grab	1/month	
Bromoform	µg/L	Grab	1/month	
Total Trihalomethanes[8]	µg/L	Grab	1/month	
Bis(2-ethylhexyl) phthalate[5]	µg/L	Grab	1/quarter	
Oil and Grease	mg/L	Grab	1/month	
Mercury, total	ng/L	Grab	1/month	[7]
Mercury, methyl	ng/L	Grab	1/month	[7]
Radionuclides		Grab	1/year	

or… (3b) **Paper SMR** (example)

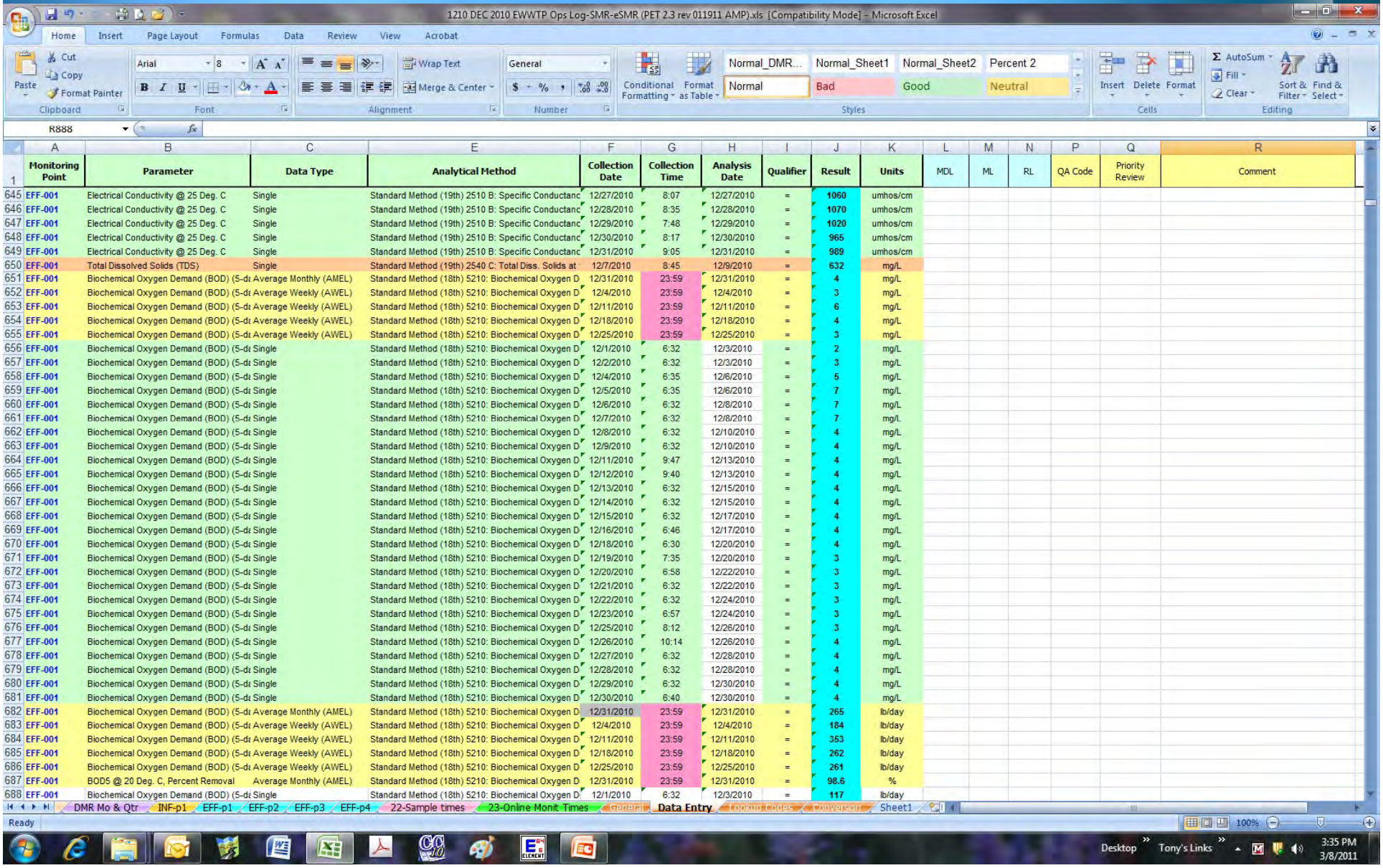
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	**CITY OF VACAVILLE**										**EFFLUENT MONITORING**												**December 2010**
2	Easterly Wastewater Treatment Plant																						PAGE 4
3	SELF MONITORING REPORT																						Easterly WWTP
4	Order No. R5-2008-0055-01																						CA0077691
5	STATION DESCRIPTION		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT		EFFLUENT
6	CONSTITUENT NAME		BOD		BOD		BOD		BOD		BOD		TSS		TSS		TSS		TSS		TSS		SETTLEABLE SOLIDS
7	UNITS		MG/L		MG/L		LBS/DAY**		LBS/DAY**		PERCENT		MG/L		MG/L		LBS/DAY**		LBS/DAY**		PERCENT		ML/L-HR
8	SAMPLE TYPE		24 HR COMP		24 HR COMP		24 HR COMP		24 HR COMP		REMOVAL		24 HR COMP		24 HR COMP		24 HR COMP		24 HR COMP		REMOVAL		GRAB
9	FREQUENCY		5 / WEEK		WEEKLY AVG		5 / WEEK		WEEKLY AVG		MONTHLY		5 / WEEK		WEEKLY AVG		5 / WEEK		WEEKLY AVG		MONTHLY		DAILY
10	DAY-MONTH-YEAR	*		*		*		*		*		*		*		*		*		*		*	
11	1-Dec-10	1	2			1	117					1	1.8			1	105					1	<0.1
12	2-Dec-10	1	3			1	173					1	1.4			1	81					1	<0.1
13	3-Dec-10											1	1.6			1	92					1	<0.1
14	4-Dec-10	1	5	1	3	1	296	1	184			1	1.8	1	1.8	1	107	1	103			1	<0.1
15	5-Dec-10	1	7			1	444					1	2.8			1	177					1	<0.1
16	6-Dec-10	1	7			1	455					1	3.0			1	195					1	<0.1
17	7-Dec-10	1	7			1	432					1	2.6			1	160					1	<0.1
18	8-Dec-10	1	4			1	267					1	4.0			1	267					1	<0.1
19	9-Dec-10	1	4			1	270					1	2.4			1	162					1	<0.1
20	10-Dec-10											1	2.0			1	128					1	<0.1
21	11-Dec-10	1	4	1	6	1	250	1	353			1	2.2	1	2.7	1	138	1	175			1	<0.1
22	12-Dec-10	1	4			1	257					1	2.6			1	167					1	<0.1
23	13-Dec-10	1	4			1	244					1	1.8			1	110					1	<0.1
24	14-Dec-10	1	4			1	254					1	3.0			1	190					1	<0.1
25	15-Dec-10	1	4			1	247					1	2.2			1	136					1	<0.1
26	16-Dec-10	1	4			1	257					1	3.2			1	205					1	<0.1
27	17-Dec-10											1	3.0			1	203					1	<0.1
28	18-Dec-10	1	4	1	4	1	314	1	262			1	3.2	1	2.7	1	251	1	180			1	<0.1
29	19-Dec-10	1	3			1	315					1	4.6			1	483					1	<0.1
30	20-Dec-10	1	3			1	263					1	3.6			1	315					1	<0.1
31	21-Dec-10	1	3			1	240					1	2.6			1	208					1	<0.1
32	22-Dec-10	1	3			1	270					1	3.4			1	306					1	<0.1
33	23-Dec-10	1	3			1	248					1	2.4			1	198					1	<0.1
34	24-Dec-10											1	3.2			1	251					1	<0.1
35	25-Dec-10	1	3	1	3	1	230	1	261			1	3.4	1	3.3	1	261	1	289			1	<0.1
36	26-Dec-10	1	4			1	320					1	3.6			1	288					1	<0.1
37	27-Dec-10	1	4			1	314					1	3.4			1	267					1	<0.1
38	28-Dec-10	1	4			1	334					1	5.2			1	434					1	<0.1
39	29-Dec-10	1	4			1	404					1	6.6			1	666					1	<0.1
40	30-Dec-10	1	4			1	344					1	4.2			1	361					1	<0.1
41	31-Dec-10									1	98.6	1	3.4			1	281			1	99.2	1	<0.1
42																							
43	MONTHLY AVERAGE		4		4		291		265		98.6		3.0		2.6		232		187		99.2		ND <0.1
44	MONTHLY HIGH		7		6		455		353		98.6		6.6		3.3		666		289		99.2		ND <0.1
45	MONTHLY LOW		2		3		117		184		98.6		1.4		1.8		81		103		99.2		ND <0.1
46	TOTAL RECORDINGS MO		26		4		26		4		1		31		4		31		4		1		31
47	REQUIREMENT #1 **		MONTH AVG 20		WEEK AVG MAX 25		MONTH AVG 2504		WEEK AVG MAX 3129		> 85%		MONTH AVG 30		WEEK AVG MAX 45		MONTH AVG 3755		WEEK AVG MAX 5633		> 85%		30-D-AVG 0.1
48	TIMES EXCEEDED		0		0		0		0		0		0		0		0		0		0		0
49	REQUIREMENT #2 **		DAILY MAX 30				DAILY MAX 3755						DAILY MAX 50				DAILY MAX 6259						DAY MAX 0.2
50	TIMES EXCEEDED		0				0						0				0						0
51	* NUMBER OF SAMPLES EACH DAY						REMARKS:																
52	**Mass limits do not apply during wet weather months, if precipitation causes exceedence of permitted dry weather flows.																						
53																							

MO SMR TOC> | M1-INF | M2-EFF1 | M3-EFF2 | **M4-EFF3** | M5-EFF4 | M6-EFF5 | M7-RW1 | M8-RW2 | M9-RW3 | M10-RW4 | M11-RW5 | M12-RW6 | M13-RW7

(3) Modifying the DATA ENTRY spreadsheet to match YOUR MRP

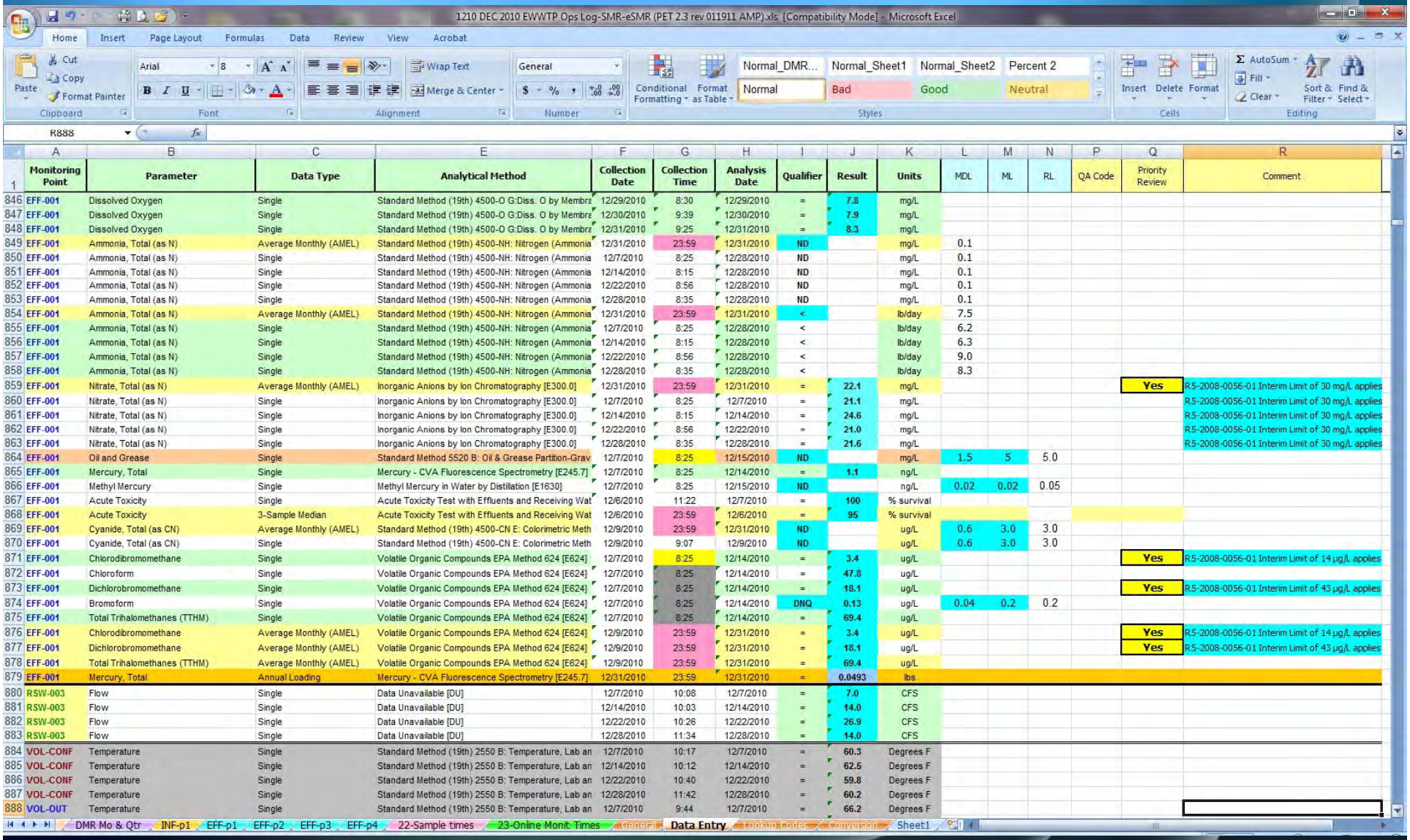
- Use the MRP table in your NPDES permit OR past successful paper SMRs that match your current MRP
- Be sure to use site labels: EFF-001, INF-001, etc.
- Recommend creating template with 31 days for daily & 5/day week tests, deleting rows at end of month

BOD example (5 days/wk)



	A	B	C	E	F	G	H	I	J	K	L	M	N	P	Q	R
1	Monitoring Point	Parameter	Data Type	Analytical Method	Collection Date	Collection Time	Analysis Date	Qualifier	Result	Units	MDL	ML	RL	QA Code	Priority Review	Comment
645	EFF-001	Electrical Conductivity @ 25 Deg. C	Single	Standard Method (19th) 2510 B: Specific Conductanc	12/27/2010	8:07	12/27/2010	=	1060	umhos/cm						
646	EFF-001	Electrical Conductivity @ 25 Deg. C	Single	Standard Method (19th) 2510 B: Specific Conductanc	12/28/2010	8:35	12/28/2010	=	1070	umhos/cm						
647	EFF-001	Electrical Conductivity @ 25 Deg. C	Single	Standard Method (19th) 2510 B: Specific Conductanc	12/29/2010	7:48	12/29/2010	=	1020	umhos/cm						
648	EFF-001	Electrical Conductivity @ 25 Deg. C	Single	Standard Method (19th) 2510 B: Specific Conductanc	12/30/2010	8:17	12/30/2010	=	965	umhos/cm						
649	EFF-001	Electrical Conductivity @ 25 Deg. C	Single	Standard Method (19th) 2510 B: Specific Conductanc	12/31/2010	9:05	12/31/2010	=	989	umhos/cm						
650	EFF-001	Total Dissolved Solids (TDS)	Single	Standard Method (19th) 2540 C: Total Diss. Solids at	12/7/2010	8:45	12/9/2010	=	632	mg/L						
651	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Monthly (AMEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/31/2010	23:59	12/31/2010	=	4	mg/L						
652	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/4/2010	23:59	12/4/2010	=	3	mg/L						
653	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/11/2010	23:59	12/11/2010	=	6	mg/L						
654	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/18/2010	23:59	12/18/2010	=	4	mg/L						
655	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/25/2010	23:59	12/25/2010	=	3	mg/L						
656	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/1/2010	6:32	12/3/2010	=	2	mg/L						
657	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/2/2010	6:32	12/3/2010	=	3	mg/L						
658	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/4/2010	6:35	12/6/2010	=	5	mg/L						
659	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/5/2010	6:35	12/6/2010	=	7	mg/L						
660	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/6/2010	6:32	12/8/2010	=	7	mg/L						
661	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/7/2010	6:32	12/8/2010	=	7	mg/L						
662	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/8/2010	6:32	12/10/2010	=	4	mg/L						
663	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/9/2010	6:32	12/10/2010	=	4	mg/L						
664	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/11/2010	9:47	12/13/2010	=	4	mg/L						
665	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/12/2010	9:40	12/13/2010	=	4	mg/L						
666	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/13/2010	6:32	12/15/2010	=	4	mg/L						
667	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/14/2010	6:32	12/15/2010	=	4	mg/L						
668	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/15/2010	6:32	12/17/2010	=	4	mg/L						
669	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/16/2010	6:46	12/17/2010	=	4	mg/L						
670	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/18/2010	6:30	12/20/2010	=	4	mg/L						
671	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/19/2010	7:35	12/20/2010	=	3	mg/L						
672	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/20/2010	6:58	12/22/2010	=	3	mg/L						
673	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/21/2010	6:32	12/22/2010	=	3	mg/L						
674	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/22/2010	6:32	12/24/2010	=	3	mg/L						
675	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/23/2010	6:57	12/24/2010	=	3	mg/L						
676	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/25/2010	8:12	12/26/2010	=	3	mg/L						
677	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/26/2010	10:14	12/26/2010	=	4	mg/L						
678	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/27/2010	6:32	12/28/2010	=	4	mg/L						
679	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/28/2010	6:32	12/28/2010	=	4	mg/L						
680	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/29/2010	6:32	12/30/2010	=	4	mg/L						
681	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/30/2010	6:40	12/30/2010	=	4	mg/L						
682	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Monthly (AMEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/31/2010	23:59	12/31/2010	=	265	lb/day						
683	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/4/2010	23:59	12/4/2010	=	184	lb/day						
684	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/11/2010	23:59	12/11/2010	=	353	lb/day						
685	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/18/2010	23:59	12/18/2010	=	262	lb/day						
686	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Average Weekly (AWEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/25/2010	23:59	12/25/2010	=	261	lb/day						
687	EFF-001	BOD5 @ 20 Deg. C, Percent Removal	Average Monthly (AMEL)	Standard Method (18th) 5210: Biochemical Oxygen D	12/31/2010	23:59	12/31/2010	=	98.6	%						
688	EFF-001	Biochemical Oxygen Demand (BOD) (5-da	Single	Standard Method (18th) 5210: Biochemical Oxygen D	12/1/2010	6:32	12/3/2010	=	117	lb/day						

For weekly or less frequent testing, manual entry of individual points is needed



	Monitoring Point	Parameter	Data Type	Analytical Method	Collection Date	Collection Time	Analysis Date	Qualifier	Result	Units	MDL	ML	RL	QA Code	Priority Review	Comment
846	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/29/2010	8:30	12/29/2010	=	7.8	mg/L						
847	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/30/2010	9:39	12/30/2010	=	7.9	mg/L						
848	EFF-001	Dissolved Oxygen	Single	Standard Method (19th) 4500-O G:Diss. O by Membra	12/31/2010	9:25	12/31/2010	=	8.3	mg/L						
849	EFF-001	Ammonia, Total (as N)	Average Monthly (AMEL)	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/31/2010	23:59	12/31/2010	ND		mg/L	0.1					
850	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/7/2010	8:25	12/28/2010	ND		mg/L	0.1					
851	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/14/2010	8:15	12/28/2010	ND		mg/L	0.1					
852	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/22/2010	8:56	12/28/2010	ND		mg/L	0.1					
853	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/28/2010	8:35	12/28/2010	ND		mg/L	0.1					
854	EFF-001	Ammonia, Total (as N)	Average Monthly (AMEL)	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/31/2010	23:59	12/31/2010	<		lb/day	7.5					
855	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/7/2010	8:25	12/28/2010	<		lb/day	6.2					
856	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/14/2010	8:15	12/28/2010	<		lb/day	6.3					
857	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/22/2010	8:56	12/28/2010	<		lb/day	9.0					
858	EFF-001	Ammonia, Total (as N)	Single	Standard Method (19th) 4500-NH: Nitrogen (Ammonia	12/28/2010	8:35	12/28/2010	<		lb/day	8.3					
859	EFF-001	Nitrate, Total (as N)	Average Monthly (AMEL)	Inorganic Anions by Ion Chromatography [E300.0]	12/31/2010	23:59	12/31/2010	=	22.1	mg/L					Yes	R5-2008-0056-01 Interim Limit of 30 mg/L applies
860	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/7/2010	8:25	12/7/2010	=	21.1	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
861	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/14/2010	8:15	12/14/2010	=	24.6	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
862	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/22/2010	8:56	12/22/2010	=	21.0	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
863	EFF-001	Nitrate, Total (as N)	Single	Inorganic Anions by Ion Chromatography [E300.0]	12/28/2010	8:35	12/28/2010	=	21.6	mg/L						R5-2008-0056-01 Interim Limit of 30 mg/L applies
864	EFF-001	Oil and Grease	Single	Standard Method 5520 B: Oil & Grease Partition-Grav	12/7/2010	8:25	12/15/2010	ND		mg/L	1.5	5	5.0			
865	EFF-001	Mercury, Total	Single	Mercury - CVA Fluorescence Spectrometry [E245.7]	12/7/2010	8:25	12/14/2010	=	1.1	ng/L						
866	EFF-001	Methyl Mercury	Single	Methyl Mercury in Water by Distillation [E1630]	12/7/2010	8:25	12/15/2010	ND		ng/L	0.02	0.02	0.05			
867	EFF-001	Acute Toxicity	Single	Acute Toxicity Test with Effluents and Receiving Wat	12/6/2010	11:22	12/7/2010	=	100	% survival						
868	EFF-001	Acute Toxicity	3-Sample Median	Acute Toxicity Test with Effluents and Receiving Wat	12/6/2010	23:59	12/6/2010	=	95	% survival						
869	EFF-001	Cyanide, Total (as CN)	Average Monthly (AMEL)	Standard Method (19th) 4500-CN E: Colorimetric Meth	12/9/2010	23:59	12/31/2010	ND		ug/L	0.6	3.0	3.0			
870	EFF-001	Cyanide, Total (as CN)	Single	Standard Method (19th) 4500-CN E: Colorimetric Meth	12/9/2010	9:07	12/9/2010	ND		ug/L	0.6	3.0	3.0			
871	EFF-001	Chlorodibromomethane	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	3.4	ug/L					Yes	R5-2008-0056-01 Interim Limit of 14 µg/L applies
872	EFF-001	Chloroform	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	47.8	ug/L						
873	EFF-001	Dichlorobromomethane	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	18.1	ug/L					Yes	R5-2008-0056-01 Interim Limit of 43 µg/L applies
874	EFF-001	Bromoform	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	DNQ	0.13	ug/L	0.04	0.2	0.2			
875	EFF-001	Total Trihalomethanes (TTHM)	Single	Volatile Organic Compounds EPA Method 624 [E624]	12/7/2010	8:25	12/14/2010	=	69.4	ug/L						
876	EFF-001	Chlorodibromomethane	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	3.4	ug/L					Yes	R5-2008-0056-01 Interim Limit of 14 µg/L applies
877	EFF-001	Dichlorobromomethane	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	18.1	ug/L					Yes	R5-2008-0056-01 Interim Limit of 43 µg/L applies
878	EFF-001	Total Trihalomethanes (TTHM)	Average Monthly (AMEL)	Volatile Organic Compounds EPA Method 624 [E624]	12/9/2010	23:59	12/31/2010	=	69.4	ug/L						
879	EFF-001	Mercury, Total	Annual Loading	Mercury - CVA Fluorescence Spectrometry [E245.7]	12/31/2010	23:59	12/31/2010	=	0.0493	lbs						
880	RSW-003	Flow	Single	Data Unavailable [DU]	12/7/2010	10:08	12/7/2010	=	7.0	CFS						
881	RSW-003	Flow	Single	Data Unavailable [DU]	12/14/2010	10:03	12/14/2010	=	14.0	CFS						
882	RSW-003	Flow	Single	Data Unavailable [DU]	12/22/2010	10:26	12/22/2010	=	26.9	CFS						
883	RSW-003	Flow	Single	Data Unavailable [DU]	12/28/2010	11:34	12/28/2010	=	14.0	CFS						
884	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/7/2010	10:17	12/7/2010	=	60.3	Degrees F						
885	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/14/2010	10:12	12/14/2010	=	62.5	Degrees F						
886	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/22/2010	10:40	12/22/2010	=	59.8	Degrees F						
887	VOL-CONF	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/28/2010	11:42	12/28/2010	=	60.2	Degrees F						
888	VOL-OUT	Temperature	Single	Standard Method (19th) 2550 B: Temperature, Lab an	12/7/2010	9:44	12/7/2010	=	66.2	Degrees F						

Specific Template Editing

- DATA ENTRY table columns for eSMR^2:
  1) Monitoring Point: EFF-001, INF-001, etc. (see MRP)
  2) Parameter: Choose from “drop down menu” to match MRP
  3) Data Type: “Single” is a lab data point; “Average Monthly”, “Average Weekly”, etc. are calculated. Calculated results are different than single lab data (affects qualifer and reporting MDL, ML, RL – more later)
  4) Analytical Method: Choose from “drop down menu”. This can be tricky, as some methods are hard to find.

Specific Template Editing

- DATA ENTRY table columns for eSMR^2:
  5) Collection Date: Grab date, or composite date
  6) Collection Time: Grab time or composite time
  7) Analysis Date: Date of Analysis (started date)
  8) Qualifier: Choose from “drop down menu”, including “=“, “<“, “>”, “ND”, “DNQ”, “</=“, and “>/=“.
     IMPORTANT: Use “ND” for non-detect lab data;
     Use “<“ for CALCULATED results (loadings, etc.)
  9) Result: Lab result or Calculated value.
  10) Units: Choose from “drop down menu”

Specific Template Editing

- DATA ENTRY table columns for eSMR^2:
  11) MDL: ONLY required if "ND" lab result or "<" calculated value is reported
  12) ML: ONLY required if result is "DNQ"
  13) RL: ONLY required if result is "DNQ"
  14) QA Code: (Optional) Choose from "drop down menu" if the result reported needs explanation or is problematic (lab error, etc.)
  15) Priority Review: Choose "Yes" for a permit exceedance or to alert your regulator of an issue
  16) Comment: (Optional) To explain an issue in 50 characters or less.

Step (4): Add data to your template

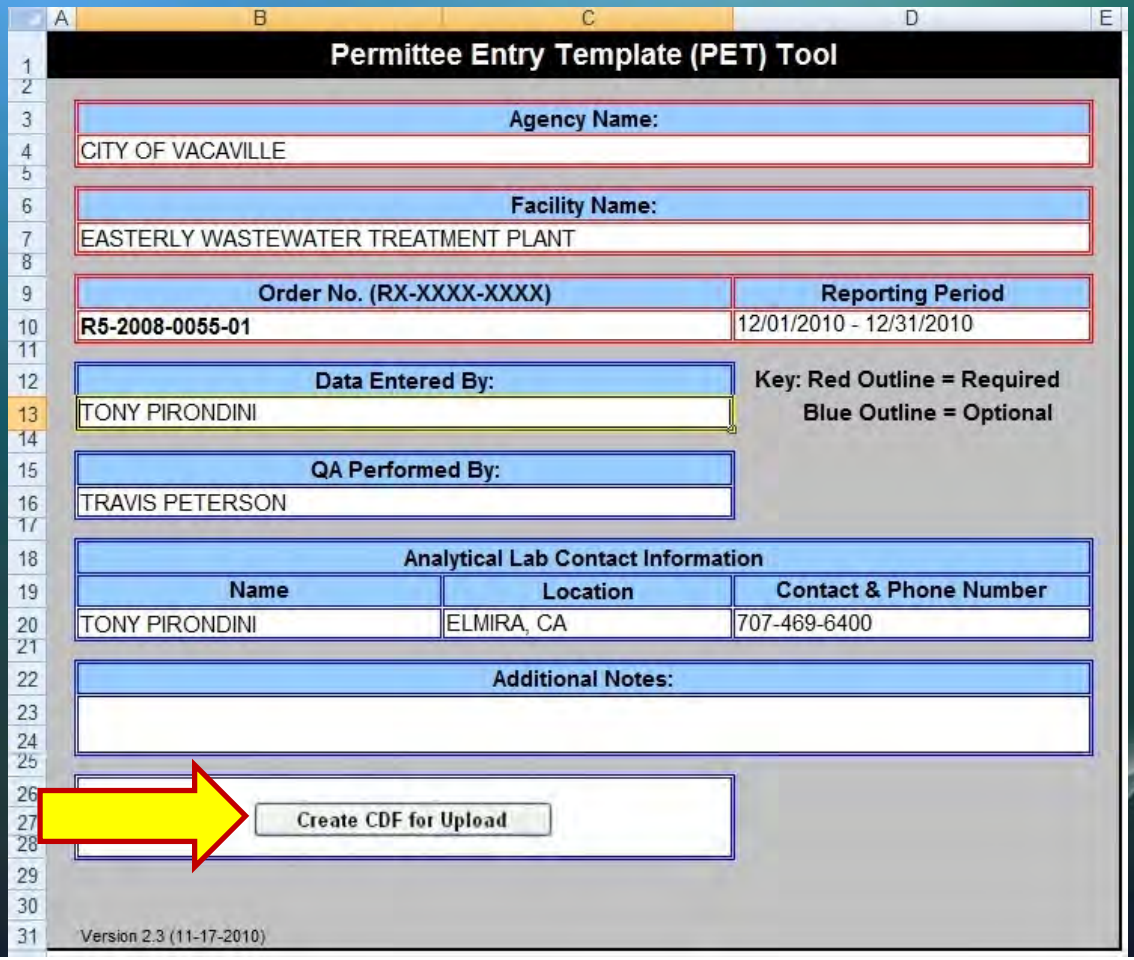
- Recommend using past paper SMR for reference
- Collection times and Analytical dates will need to be tracked – and reported with each data point
- If you have database management resources to upload data into your template – or create the upload file from a database or LIMS – you're in a good place… ☺

Step (5): Install the CDF Tool

- Using the PET Tool, you MUST install the CDF Tool program to convert your data into a zipped CDF upload file
- You will likely need administrative IT support to install the CDF Tool – *so don't wait until the last minute…*
- If your LIMS or database creates the CDF file, you don't need the CDF tool (or PET Tool)

Step (6) – Create the CDF Upload File

- Click the "**Create CDF Upload File**" button on the "GENERAL" tab and save the file.



Step (7) – Upload the File to CIWQS

- The assigned Data Submitter needs to log in on the CIWQS website, then upload the zipped file created in Step (6)
- Once uploaded, an "Error Report" will be created.
- Step (8) - You will need to go back to Step (4) and edit the report, create another zipped upload file, and upload the corrected file again. *Expect at least two attempts per month.*
- Step (9) – Final Review and LRO Approve = Done

Questions, Suggestions, Comments, or Concerns?