

**City of Merced
Local Limits Review and
Re-Evaluation**



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CITY OF MERCED LOCAL LIMITS REVIEW AND RE-EVALUATION

OVERVIEW
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1.0 OVERVIEW

The purpose of this report is to present the results of a review and re-evaluation of the City of Merced (City) existing Industrial Pretreatment Program local industrial discharge limitations (local limits), and to provide recommendations regarding modifications to the City's existing local limits.

As required by Special Provision VI.C.5.a of Waste Discharge Requirements for the City of Merced Wastewater Treatment Facility (Order R5-2014-0096, NPDES No. CA0079219 [Order]) the City implements an industrial pretreatment program, in accordance with the Code of Federal Regulations, Title 40 – Protection of Environment, Chapter I – Environmental Protection Agency, Subchapter N – Effluent Guidance and Standards, Part 403 – General Pretreatment Regulations for Existing and New Sources of Pollution (40 CFR 403).

Among other elements, a pretreatment program is required to include legal authority (40 CFR 403.8(f)(1)) and local limits (40 CFR 403.8(f)(4)). The City's current local limits are contained in the City of Merced Code of Ordinances, Title 15 – Public Services, Division I – Sewer System, Chapter 15.24 – Use Restrictions, Section 15.24.110 – Specific Pollutant Limits. The purpose of enforcing local limits is to protect the collection system, the operation of the Wastewater Treatment Facility (Facility), City workers, the environment, and to ensure compliance with State and Federal regulatory requirements described in the Facility Order.

According to 40 CFR 122.44(j)(2)(ii), wastewater treatment facilities are required to “provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance.” *Local Limits Development Guidance*, EPA 2004 (Local Limits Guidance) recommends that a periodic evaluation of local limits be tied to the permit cycle and that more detailed evaluations be conducted on an as-needed basis.

Because the Facility has undergone several significant treatment process improvement upgrades since adoption of the current local limits, and the Facility's Order has been recently renewed (August 2014) with new effluent limits, a review and re-evaluation of the City's local limits is appropriate at this time. The local limits review and re-evaluation contained in this report were conducted in accordance with Local Limits Guidance.

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CURRENT LOCAL LIMITS
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2.0 CURRENT LOCAL LIMITS

The City's current local limits, contained in Title 15 of the City's Code of Ordinances, are summarized in Table 1.

Table 1:
City of Merced Current Local Limits

Pollutant	Local Limit (mg/L)
Arsenic	0.1
Cadmium	0.2
Chromium, total	0.5
Copper	2.0
Cyanide	1.0
Lead	1.0
Mercury	0.01
Nickel	1.0
Silver	0.2
Zinc	3.0
Total Identifiable Chlorinated Hydrocarbons	0.02
Phenolic Compounds	1.0

In addition to the local limits summarized in Table 1, the City's Code of Ordinances prohibits the discharge of wastewater containing more than 1,000 mg/L biochemical oxygen demand (BOD) or 1,000 mg/L total suspended solids (TSS) without a valid wastewater discharge permit. The City applies the 1,000 mg/L limit on both BOD and TSS to permitted significant industrial users as well.

Further, the City's Code of Ordinances contains limits specific to permitted groundwater contamination cleanup discharges. Permitted groundwater contamination cleanup discharge limits are summarized in Table 2.

Table 2:
City of Merced Current Groundwater Contamination Cleanup Limits

Pollutant	Limit (mg/L)
Benzene	0.24
Toluene	8.0
Xylene	15
Ethylene dibromide	0.001
Lead	1.0
1,2 Dichloroethane, Tetrachloroethylene	0.23 (cumulative)

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The City's Code of Ordinances, in Section 15.24.050 contains narrative discharge prohibitions. Within the narrative discharge prohibition, the following numeric prohibitions are listed.

- Explosive Mixtures – flashpoint <140° F (<60° C)
- Corrosive Wastes – pH <6 or >10
- Temperature – >150° F (>65.5° C)
- Oil and Grease – >300 mg/L (animal and vegetable); >100 mg/L (mineral or petroleum)

The above bulleted prohibitions are not typical parameters subject to local limits development, thus are not discussed further in this report. However, a quick review of these parameters was conducted, and the above are found to be acceptable and within EPA guidance, typical engineering standards, and best professional judgment.

3.0 EVALUATION OF POLLUTANTS OF CONCERN

An evaluation was conducted to determine an initial list of pollutants of concern to determine appropriate pollutants for local limits implementation. A list of potential pollutants of concern was determined in accordance with the following criteria, as described in Local Limits Guidance.

- On EPA list of 15 pollutants of concern
- Have an existing local limit
- Are limited by permit
- Have caused operational problems in the past
- Have implications for the protection of the treatment works, collection system, or health and safety of workers

Potential pollutants of concern, and basis for inclusion on the list, are summarized in Table 3. For completeness, in addition to the EPA criteria above, pollutants detected in the Facility influent at least 50 percent of the time were added to the list of pollutants of potential concern for further evaluation (based on four Facility priority pollutant monitoring events conducted from 2013 through 2014).

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Table 3: **City of Merced Pollutants of Potential Concern**

Pollutant	Basis			Notes
	EPA Pollutant of Concern	Existing City Ordinance Limit	Detected in Influent (≥50%)	
Ammonia	X		X	Only applicable if Facility accepts non-domestic sources of ammonia.
BOD	X	X	X	Limits applicable to non-permitted industrial dischargers.
TSS	X	X	X	Limits applicable to non-permitted industrial dischargers.
Antimony			X	
Arsenic	X	X	X	
Cadmium	X	X	X	
Chloroform			X	
Chromium, total	X	X	X	
Copper	X	X	X	
Cyanide	X	X		
Lead	X	X	X	
Mercury	X	X	X	
Molybdenum	X			No recent data available.
Nickel	X	X	X	
Selenium	X		X	
Silver	X	X	X	
Zinc	X	X	X	
Benzene		X		Limits applicable to groundwater contamination cleanup discharges.
1,2 Dichloroethane		X		Limits applicable to groundwater contamination cleanup discharges.
Ethylene dibromide		X		No recent data available. Limits applicable to groundwater contamination cleanup discharges.
Phenol		X	X	Ordinance limits phenolic compounds.
Tetrachloroethylene		X		Limits applicable to groundwater contamination cleanup discharges.
Toluene		X	X	Limits applicable to groundwater contamination cleanup discharges.
Xylene		X		No recent data available. Limits applicable to groundwater contamination cleanup discharges.
Total Identifiable Chlorinated Hydrocarbons		X		No recent data available and list of pollutants not defined.

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Several pollutants, presented in Table 3, are eliminated from the initial list of pollutants of concern for local limits evaluation for various reasons. Ammonia is eliminated as a pollutant of concern because the City does not accept significant non-domestic sources of ammonia. Molybdenum, ethylene dibromide, xylene, and total identifiable chlorinated hydrocarbons are eliminated from the list because there are no historical influent or effluent data available to calculate Facility removal efficiencies and maximum allowable headworks loading limits. Further, cyanide, benzene, 1,2-dichloroethane, and tetrachloroethylene are eliminated because these pollutants are detected at the Facility influent no more than 25 percent of the time.

Without adequate detected data, an accurate re-evaluation of local limits is not possible. It should be noted that, unlike the City's previous Order, the City's recently adopted current Order requires twice per year influent and effluent monitoring for molybdenum, ethylene dibromide, and xylene. Thus, these pollutants can be evaluated in the future, after adequate data are available, to determine the need for any modifications to local limits.

Below is the final list of pollutants of concern for further evaluation.

- BOD
- TSS
- Antimony
- Arsenic
- Cadmium
- Chloroform
- Chromium, total
- Copper
- Lead
- Mercury
- Nickel
- Selenium
- Silver
- Zinc
- Phenol
- Toluene

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Maximum Allowable Headworks Loadings
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4.0 MAXIMUM ALLOWABLE HEADWORKS LOADINGS

Local limits are based on maximum allowable headworks loadings (MAHLs) calculated for each pollutants of concern. An MAHL is the estimated maximum loading of a pollutant that can be received at the Facility without causing pass through or interference. MAHLs are determined by first calculating the allowable headworks loading (AHL) for each environmental criterion. An AHL is the estimated loading of a pollutant that can be received at the Facility that should not cause the Facility to violate a particular treatment plant or environmental criterion, such as Facility effluent limits, sludge criteria, or process inhibition thresholds. The most stringent AHL is the MAHL. A MAHL for a single pollutant of concern is calculated using the following three steps, as outlined in Local Limits Guidance:

1. Calculate Facility removal efficiency
2. Calculate AHLs for each environmental criterion
3. Designate as the MAHL the most stringent AHL

AHLs and the corresponding MAHL have been calculated for the final list of pollutants of concern in accordance with the formulas contained in Chapter 5 of Local Limits Guidance. A detailed spreadsheet, used to calculate MAHLs for each identified pollutant of concern, are included as Appendix A, and the data used in the calculations is provided as Appendix B. A summary of Facility removal efficiencies, MAHLs, and basis for each pollutant of concern is presented in Table 4.

Table 4: **City of Merced Maximum Allowable Headworks Loadings**

Pollutant of Concern	Facility Removal Efficiency (%)	MAHL (lbs/day)	Basis for MAHL
BOD	99	15,527	Facility Design Capacity
TSS	99	15,529	Facility Design Capacity
Antimony	54	7.4	CCR Sludge
Arsenic	52	0.59	40 CFR 503 Sludge
Cadmium	82	0.35	40 CFR 503 Sludge
Chromium, total	90	22	CCR Sludge
Copper	97	5.7	40 CFR 503 Sludge
Lead	94	2.4	40 CFR 503 Sludge
Mercury	99	0.13	40 CFR 503 Sludge
Nickel	81	3.8	40 CFR 503 Sludge
Selenium	55	1.4	40 CFR 503 Sludge
Silver	63	6.4	CCR Sludge
Zinc	87	12	Nitrification Inhibition
Chloroform	75	0.63	Anaerobic Digestion Inhibition
Phenol	99	280	Nitrification Inhibition
Toluene	97	12,000	Activated Sludge Inhibition

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Need for Local Limits
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5.0 NEED FOR LOCAL LIMITS

In Chapter 7 of Local Limits Guidance (Local Limits Reviews and Detailed Re-Evaluations), it is recommended that a wastewater treatment facility identify its maximum daily and maximum monthly average headworks loadings during the previous year for each pollutant of concern. If a pollutant of concern headworks loading is a high percentage of the MAHL, the local limit may require modification, or a local limit derived if one did not exist previously. Dividing the headworks loading of all pollutants of concern by their respective MAHL will provide a "percentage of MAHL". For pollutants that do not have an existing local limit, Local Limits Guidance recommends establishing a local limit if the current headworks loading exceeds the MAHL. Further, for pollutants that do have an existing local limit, if the current pollutant of concern exceeds the MAHL, revise the local limit.

Further, EPA recommends that local limits are needed when one or more of the following criteria are met:

- Average toxic pollutant influent loading exceeds 60 percent of the MAHL,
- Maximum daily toxic pollutant loading exceeds 80 percent of the MAHL, or
- Monthly average influent loading reaches 80 percent of design capacity.

A comparison of MAHLs and current Facility influent loadings (2013-2014), for each toxic pollutant of concern, is presented in Table 5. The City only conducts priority pollutant monitoring at the Facility influent and effluent twice per year, therefore, two years of data (2013-2014) were used to calculate current average and maximum influent loadings.

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Table 5:
City of Merced Comparison of Facility Toxic Pollutant Loadings to MAHLs

Pollutant	MAHL (lbs/day)	Influent Loading (2013-2014)		Percent of MAHL		Local Limit Needed? ^(a)
		Average (lbs/day)	Maximum (lbs/day)	Average (%)	Maximum (%)	
Antimony	7.4	0.033	0.56	0.44	0.75	No
Arsenic	0.59	0.44	0.76	75	130	Yes
Cadmium	0.35	0.018	0.033	5.0	9.0	No
Chromium, total ^(b)	22	0.51	0.94	2.3	4.2	No
Copper	5.7	4.7	11	83	190	Yes
Lead	2.4	0.30	0.57	13	24	No
Mercury	0.13	0.0086	0.015	6.6	11	No
Nickel	3.8	0.44	1.1	12	29	No
Selenium	1.4	0.077	0.12	5.7	9.1	No
Silver	6.4	0.035	0.064	0.55	1.0	No
Zinc	12	16	35	140	300	Yes
Chloroform	0.63	0.090	0.19	14	31	No
Phenol	280	1.4	1.9	0.50	0.68	No
Toluene	12,000	0.083	0.11	0.00071	0.00090	No

(a) A local limit is needed if the average influent loading exceeds 60% of the MAHL, or if the maximum influent loading exceeds 80% of the MAHL.

(b) Monitoring data are as chromium III, which for this analysis is assumed to be equal to total chromium.

A comparison of average design capacity and current Facility influent loadings (2014) for each conventional pollutant (i.e., BOD and TSS) is presented in Table 6. Since BOD and TSS are monitored three times per week, instead of only twice per year like toxic pollutants, twelve months of data are adequate for comparison to Facility design capacity.

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Table 6:
City of Merced Comparison of Facility Conventional Loadings to MAHLs

Pollutant	Average Design Capacity (lbs/day)	Maximum Monthly Average Influent Loading in 2014 (lbs/day)	Percent of Average Design Capacity (%)	Local Limit Needed? ^(a)
BOD	28,190	16,802	60	No
TSS	30,360	18,948	62	No

(a) A local limit is needed if the influent loading reaches 80% of the design capacity.

In accordance with Local Limits Guidance criteria, local limits are needed for the following pollutants:

- Arsenic
- Copper
- Zinc

6.0 MAXIMUM ALLOWABLE INDUSTRIAL LOADINGS

MAHLs estimate the maximum combined loadings that can be received at the Facility influent from all sources. Maximum allowable industrial loadings (MAILs) represent the amount of pollutant loadings the Facility can receive from industrial sources controlled through local limits. In accordance with Local Limits Guidance, MAILs are calculated by subtracting estimated loadings from uncontrollable (i.e., domestic) sources from the MAHL adjusted with a safety factor.

Uncontrollable loadings have been determined using data from two domestic collection system monitoring events conducted November 8, 2012 April 30, 2013, and the assumption that uncontrollable flows contribute an average of approximately 20 percent of the total Facility influent flows. Further, the minimum EPA recommended safety factor of 10 percent has been subtracted in determining MAILs. The spreadsheet used to calculate MAILs for each pollutant that requires a local limit are included as Appendix A. MAILs for the three pollutants that require local limits are summarized in Table 7.

Table 7:
City of Merced Comparison MAILs

Pollutant	MAHL (lbs/day)	10% Safety Factor (lbs/day)	Uncontrollable (Domestic) Load (lbs/day)	MAIL (lbs/day)
Arsenic	0.59	<0.059>	<0.11>	0.42
Copper	5.67	<0.57>	<1.4>	3.7
Zinc	11.54	<1.15>	<3.3>	7.1

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Local Limits Allocation
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7.0 LOCAL LIMITS ALLOCATION

There are several options available for allocating MAILs to controllable sources outlined in Local Limits Guidance. The most common and easiest to implement of these local limits allocation methods is the uniform concentration method. The uniform concentration method, which is the method currently used by the City, allocates MAILs uniformly as concentration-based limits among all of the City's industrial users.

The uniform concentration allocation method has several advantages over other allocations methods. With the uniform concentration allocation method, limits are clear to the industrial users, limits are easy to calculate from MAILs, and compliance is easy to determine. The disadvantages of the uniform concentration allocation method are that the sewer use ordinance requires modifications when limits change, the limits are inflexible, and the limits may be overly restrictive because some industrial users may get an allocation for a pollutant not discharged.

At this time, it is believed that continuing with the uniform concentration allocation method is most appropriate for the City. For the pollutants identified as needing local limits, MAHLs, MAILs, recommended uniform concentration local limits, and current limits (for comparison purposes) are presented in Table 8. See Appendix A for uniform concentration calculations in accordance with Local Limits Guidance.

Table 8:
City of Merced Uniform Concentration Local Limits

Pollutant	MAHL (lbs/day)	MAIL (lbs/day)	Proposed Local Limit (mg/L)	Current Limit (mg/L)
Arsenic	0.59	0.42	0.036	0.10
Copper	5.7	3.7	0.32	2.0
Zinc	12	7.1	0.60	3.0

8.0 RECOMMENDATIONS

Based on the local limits review and re-evaluation results presented in this report, the City should consider the following recommendations related to updating its local limits.

- Local Limits Allocation - Continue local limits implementation using the uniform concentration allocation method.

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- Local Limits Modification - Adopt and implement the new, technically-based, more stringent, uniform concentration local limits on arsenic, copper, and zinc presented in Table 8.
- Current Local Limits - Although Local Limits Guidance procedures do not dictate a need for local limits on the remainder of pollutants with current local limits, contained in Section 15.24.080 and Section 15.24.110 of the City's Code of Ordinances (beyond those listed in Table 8), it is recommended that the City continue to implement its existing local limits, with the exception of the proposed new local limits on arsenic, copper, and zinc.
- Local Limits Relaxation - Although it is not recommended at this time that any of the City's current local limits be relaxed, there might come a time in the future when one or more of the City's permitted industrial dischargers is unable to meet one or more of the City's historic local limits which are not based on current assumptions and data. In such an event, it is recommended that the City conduct a detailed re-evaluation based on current data and submit a request to the Regional Water Board to relax the local limit(s) for the pollutant(s) no longer of concern, based on available current data and information.
- BOD and TSS Limits - Currently, BOD and TSS discharges are limited to 1,000 mg/L without a valid wastewater discharge permit, and the City carries these limits over to permitted industrial dischargers as well. Even though Local Limits Guidance procedures do not trigger the need for local limits on BOD and TSS, a limit of 1,000 mg/L on BOD and TSS may be somewhat high considering that typical domestic concentrations are estimated at 200 mg/L and average influent concentrations of BOD and TSS, based on 2014 data, are 290 and 327 mg/L, respectively. For reference, using Local Limits Guidance to derive a uniform concentration local limit on BOD and TSS provides a suggested local limit of approximately 400 mg/L. Thus, the City may want to conduct a more in depth evaluation of the limits on these constituents and perhaps consider reducing its current limits on BOD and TSS in the future. Calculations for BOD and TSS local limits are summarized in Appendix A. Alternatively, the City could consider implementing a different allocation method for BOD and TSS that would allow permitted industrial dischargers higher limits than non-permitted industrial dischargers (as long as the MAHLs are not exceeded).
- Phenolic Compounds and Total Identifiable Chlorinated Hydrocarbons – Based on this local limits review and detailed re-evaluation of individual pollutants, it does not appear that local limits are necessary for these groups of pollutants. However, if the City intends to retain current limits on these groups of pollutants, it is recommended that the individual compounds included in each group be listed in the City's Code of Ordinances. Without the individual compounds being identified, it would be difficult to determine compliance.
- Continued Local Limits Monitoring - Ongoing NPDES permit-required monitoring of Facility influent, effluent, and biosolids appears adequate for building a database that can be used for future local limits reviews and detailed re-evaluations. However, there is no set schedule for monitoring uncontrollable pollutant sources (i.e., the domestic wastewater

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collection system) and primary treatment effluent. Therefore, it is recommended that the City implement a domestic collection system and primary treatment effluent monitoring program on a minimum frequency of once every five years. The data obtained from this monitoring program will be useful in conducting future detailed local limits re-evaluations.

- Future Reviews - Since the Facility does not have a history of performance problems (i.e., pass through, interference, or permit violations), local limits reviews could likely be performed less frequently than once per year. In addition to periodic reviews, it is recommended that the City conduct a detailed local limits evaluation any time there is a significant change in the City's industrial users, NPDES permit limits, or treatment process technology (i.e., any time the data or assumptions used to derive local limits may no longer be appropriate).

Appendix A

LOCAL LIMITS CALCULATIONS AND ASSUMPTIONS

City of Merced Toxic Pollutant Local Limits					
		Units	Arsenic	Copper	Zinc
Existing Conditions					
	Average Influent Flow	mgd	7.02	7.02	7.02
	Average Non-Domestic Flow	mgd	1.40	1.40	1.40
	Average Influent Concentration	mg/L	0.008	0.081	0.267
	Average Influent Loading	lbs/day	0.441	4.73	15.6
	Maximum Influent Concentration	mg/L	0.013	0.180	0.60
	Maximum Influent Loading	lbs/day	0.761	10.5	35.1
	Average Effluent Flow	mgd	7.00	7.00	7.00
	Average Effluent Concentration	mg/L	0.004	0.002	0.036
	Maximum Effluent Concentration	mg/L	0.004	0.003	0.046
	Average Domestic Concentration	mg/L	0.002	0.030	0.071
	Average Domestic Loading	lbs/day	0.111	1.41	3.30
Removal Efficiency					
	In-Plant Total Removal	%	51.6%	97.2%	86.6%
	In-Plant Primary Removal	%	no data	48.4%	59.4%
Existing Conditions (Biosolids)					
	Biosolids Flow to Digester	mgd	0.057	0.057	0.057
	Biosolids Flow to Disposal	lbs/day	7975	7975	7975
	Percent Solids at Disposal	%	93	93	93
	Biosolids Density at Disposal	kg/L	1	1	1
Treatment/Discharge/Disposal Limits					
	Activated Sludge Inhibition	ug/L	100	1000	300
	Nitrification Inhibition	ug/L	1500	50	80
	Anaerobic Digestion Inhibition	ug/L	1600	40000	400000
	Biosolids 40 CFR 503, Dry	mg/kg	41	1500	2800
	Biosolids CCR, Wet	mg/kg	500	2500	5000
Headworks Loading Limits					
	Activated Sludge Inhibition	lbs/day	5.85	113	43.3
	Nitrification Inhibition	lbs/day	87.8	5.67	11.5
	Anaerobic Digestion Inhibition	lbs/day	1.47	19.6	219.5
	Biosolids 40 CFR 503	lbs/day	0.589	11.4	24.0
	Biosolids CCR	lbs/day	7.72	20.5	46.0
Maximum Allowable Headworks Loading (MAHL)					
	Limiting MAHL	lbs/day	0.589	5.67	11.5
	Driving Factor		Biosolids 40 CFR 503 Loading Limit	Nitrification Inhibition Loading Limit	Nitrification Inhibition Loading Limit
Maximum Allowable Industrial Loading (MAIL)					
	Safety Factor	10%	0.059	0.57	1.15
	Industrial Allocation	lbs/day	0.419	3.70	7.08
	Uniform Concentration Limit	ug/L	35.8	316	605

City of Merced Local Limits Assumptions

Factor	Formula/Source/Assumption
Existing Conditions	
Average Influent Flow	City of Merced WWTF data (Oct 2013-Sept 2014)
Average Non-Domestic Flow	Assumed 20% of WWTF influent flow (consistent with historical local limits evaluations)
Average Influent Concentration	City of Merced WWTF data (April 2013-July 2014)
Average Influent Loading	average flow (MGD) * average influent concentration (mg/L) * 8.34
Maximum Influent Concentration	WWTF data (April 2013-July 2014)
Maximum Influent Loading	average influent flow (MGD) * maximum influent concentration (mg/L) * 8.34
Average Effluent Flow	City of Merced WWTF data (Oct 2013-Sept 2014)
Average Effluent Concentration	City of Merced WWTF data (April 2013-July 2014)
Maximum Effluent Concentration	City of Merced WWTF data (April 2013-July 2014)
Average Domestic Concentration	City of Merced domestic collection system data (Nov 2012; April 2013)
Average Domestic Loading	((average influent flow (MGD) - average non-domestic flow (MGD)) * (average domestic concentration (mg/L))) * 8.34
Removal Efficiency	
In-Plant Total Removal	$\frac{((\text{influent flow} * \text{average influent concentration}) - (\text{effluent flow} * \text{average effluent concentration}))}{(\text{influent flow} * \text{average influent concentration})} * 100$
In-Plant Primary Removal	Metals: Local Limits Guidance - Appendix R (median value) * 2.2 for metals. A conservative multiplier of 2.2 was applied based on historical (2006) local limits monitoring data. Organics: Local Limits Guidance - Appendix R median values. For constituents with no Local Limits Guidance default value, a conservative assumption of 0% primary removal was assumed.
Existing Conditions (Biosolids)	
Biosolids Flow to Digester	City of Merced estimate
Biosolids Flow to Disposal	City of Merced estimate
Percent Solids at Disposal	City of Merced estimate
Biosolids Density at Disposal	Local Limits Guidance
Treatment/Discharge/Disposal Limits	
Activated Sludge Inhibition	Local Limits Guidance
Nitrification Inhibition	Local Limits Guidance
Anaerobic Digestion Inhibition	Local Limits Guidance
Biosolids 40 CFR 503, Dry	Code of Federal Regulations (40 CFR 503.13)
Biosolids CCR, Wet	California Code of Regulations (CCR 22-66261.24)
Headworks Loading Limits	
Activated Sludge	$(\text{activated sludge inhibition limit} * \text{average influent flow} * 0.00834) / (\text{in-plant primary removal efficiency} / 100)$
Nitrification	$(\text{nitrification inhibition limit} * \text{average influent flow} * 0.00834) / (\text{in-plant primary removal} / 100)$
Anaerobic Digestion	$(\text{anaerobic digestion inhibition limit} * \text{biosolids flow to digester} * 0.00834) / (\text{in-plant total removal} / 100)$
Biosolids 40 CFR 503 Loading	$(\text{biosolids flow to disposal}) * (\text{percent solids at disposal} / 100) * (40\text{CFR}503 \text{ limit}) / (\text{in-plant total removal}) / 1,000,000$
Biosolids CCR Loading	$(\text{biosolids flow to disposal} * \text{biolsolids CCR limit, wet} / (\text{in-plant total removal})) / 1,000,000$
Maximum Allowable Headworks Loading (MAHL)	
Limiting MAHL	Lowest AHL
Driving Factor	Lowest AHL basis
Maximum Allowable Industrial Loading (MAIL)	
Safety Factor	limiting MAHL * 10%
Industrial Allocation	limiting MAHL - average domestic loading - safety factor
Uniform Concentration Limit	industrial allocation / average non-domestic flow / 0.00834

City of Merced Conventional Pollutant Local Limits				
		Units	BOD	TSS
Existing Conditions				
	Average Influent Flow	mgd	6.95	6.95
	Average Non-Domestic Flow	mgd	1.39	1.39
	Max Monthly Average Influent Concentration	mg/L	290	327
	Average Influent Loading	lbs/day	16802	18948
	Average Effluent Flow	mgd	6.96	6.96
	Max Monthly Average Effluent Concentration	mg/L	4.20	4.70
	Average Domestic Concentration	mg/L	200	200
	Average Domestic Loading	lbs/day	9270	9271
Removal Efficiency				
	In-Plant Total Removal	%	98.5%	98.6%
Existing Conditions (Biosolids)				
	Biosolids Flow to Digester	mgd	0.057	0.057
	Biosolids Flow to Disposal	lbs/day	7975	7975
	Percent Solids at Disposal	%	93	93
	Biosolids Density at Disposal	kg/L	1	1
Treatment/Discharge/Disposal Limits				
	Discharge (Daily)	mg/L	20	20
	Discharge (Weekly)	mg/L	15	15
	Discharge (Monthly)	mg/L	10	10
	Facility Capacity	mg/L	268	268
Headworks Loading Limits				
	Daily Discharge	lbs/day	79814	80432
	Weekly Discharge	lbs/day	59861	60324
	Monthly Discharge	lbs/day	39907	40216
	Facility Capacity	lbs/day	15527	15529
Maximum Allowable Headworks Loading (MAHL)				
	Limiting MAHL	lbs/day	15527	15529
	Driving Factor		Facility Capacity	Facility Capacity
Maximum Allowable Industrial Loading (MAIL)				
	Safety Factor	10%	1553	1553
	Industrial Allocation	lbs/day	4705	4705
	Equivalent Across-the-Board Limit	mg/L	406	406

City of Merced Local Limits Conventional Pollutant Assumptions

Factor	Formula/Source/Assumption
Existing Conditions	
Average Influent Flow	City of Merced WWTF data (Oct 2013-Sept 2014)
Average Non-Domestic Flow	Assumed 20% of WWTF influent flow (consistent with historical local limits evaluations)
Average Influent Concentration	City of Merced WWTF data (April 2013-July 2014)
Average Influent Loading	average flow (MGD) * average influent concentration (mg/L) * 8.34
Maximum Influent Concentration	WWTF data (April 2013-July 2014)
Maximum Influent Loading	average influent flow (MGD) * maximum influent concentration (mg/L) * 8.34
Average Effluent Flow	City of Merced WWTF data (Oct 2013-Sept 2014)
Average Effluent Concentration	City of Merced WWTF data (April 2013-July 2014)
Maximum Effluent Concentration	City of Merced WWTF data (April 2013-July 2014)
Average Domestic Concentration	City of Merced domestic collection system data (Nov 2012; April 2013)
Average Domestic Loading	((average influent flow (MGD) - average non-domestic flow (MGD)) * (average domestic concentration (mg/L)) * 8.34
Removal Efficiency	
In-Plant Total Removal	$\frac{((\text{influent flow} * \text{average influent concentration}) - (\text{effluent flow} * \text{average effluent concentration}))}{(\text{influent flow} * \text{average influent concentration})} * 100$
Existing Conditions (Biosolids)	
Biosolids Flow to Digester	City of Merced estimate
Biosolids Flow to Disposal	City of Merced estimate
Percent Solids at Disposal	City of Merced estimate
Biosolids Density at Disposal	Local Limits Guidance
Treatment/Discharge/Disposal Limits	
Discharge Limit (Daily)	NPDES Permit
Discharge Limit (Weekly)	NPDES Permit
Discharge Limit (Monthly)	NPDES Permit
Facility Capacity	Design Capacity
Headworks Loading Limits	
Discharge Limit (Daily)	$(\text{average influent concentration} * \text{discharge limit (daily)} * 8.34 / (1 - \text{in-plant total removal}))$
Discharge Limit (Weekly)	$(\text{average influent concentration} * \text{discharge limit (weekly)} * 8.34 / (1 - \text{in-plant total removal}))$
Discharge Limit (Monthly)	$(\text{average influent concentration} * \text{discharge limit (monthly)} * 8.34 / (1 - \text{in-plant total removal}))$
Facility Capacity	Average influent concentration * facility capacity
Maximum Allowable Headworks Loading (MAHL)	
Limiting MAHL	Lowest AHL
Driving Factor	Lowest AHL basis
Maximum Allowable Industrial Loading (MAIL)	
Safety Factor	limiting MAHL * 10%
Industrial Allocation	limiting MAHL - average domestic loading - safety factor
Uniform Concentration Limit	industrial allocation / average non-domestic flow / 0.00834

Appendix B

LOCAL LIMITS DATA

City of Merced WWTF 2013-2014 Data									
Location	Parameter	Units	MDL	Results				Average	Maximum
				4/17/2013 - 4/19/2013	10/15/2013 - 10/17/2013	3/12/2014 - 3/14/2014	7/29/2014 - 7/31/2014		
Influent	Antimony, Total Recoverable	ug/L	0.23	J 0.43	< 0.115	0.95	0.75	0.56125	0.95
Influent	Arsenic, Total Recoverable	ug/L	0.045	4.5	4.6	13	8	7.525	13
Influent	Beryllium, Total Recoverable	ug/L	0.23	< 0.23	< 0.23	< 0.23	< 0.23	0.23	0.23
Influent	Cadmium, Total Recoverable	ug/L	0.11	< 0.11	J 0.072	0.57	0.51	0.3155	0.57
Influent	Chromium (III)	ug/L	0.23	3	2.8	16	13	8.7	16
Influent	Chromium (VI)	ug/L	0.027	J 0.098	< 0.027	< 0.027	< 0.027	0.04475	0.098
Influent	Copper, Total Recoverable	ug/L	0.23	20	13	180	110	80.75	180
Influent	Lead, Total Recoverable	ug/L	0.045	1	0.45	9	9.8	5.0625	9.8
Influent	Mercury, Total Recoverable	ug/L		0.081	0.023	0.251	0.235	0.1475	0.251
Influent	Nickel, Total Recoverable	ug/L	0.45	1.9	2.2	19	7.3	7.6	19
Influent	Selenium, Total Recoverable	ug/L	0.45	J 0.86	J 0.63	1.7	2.1	1.3225	2.1
Influent	Pyrene	ug/L	0.0014	< 0.0014	< 0.0014	< 0.0014	0.036	0.01005	0.036
Influent	1,2,4-Trichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Aldrin	ug/L	0.00079	< 0.00079	< 0.00079	< 0.00079	< 0.00079	0.00079	0.00079
Influent	alpha-BHC	ug/L	0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	0.0025	0.0025
Influent	beta-BHC	ug/L	0.00054	< 0.00054	< 0.00054	< 0.00054	< 0.00054	0.00054	0.00054
Influent	gamma-BHC	ug/L	0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	0.0025	0.0025
Influent	delta-BHC	ug/L	0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.006	0.006
Influent	Chlordane	ug/L	0.026	< 0.026	< 0.026	< 0.026	< 0.026	0.026	0.026
Influent	4,4-DDT	ug/L	0.0007	< 0.0007	< 0.0007	< 0.0007	< 0.0007	0.0007	0.0007
Influent	4,4-DDE	ug/L	0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	0.00061	0.00061
Influent	Silver, Total Recoverable	ug/L	0.45	< 0.45	< 0.45	1.1	0.85	0.7125	1.1
Influent	4,4-DDD	ug/L	0.00072	< 0.00072	< 0.00072	< 0.00072	< 0.00072	0.00072	0.00072
Influent	Dieldrin	ug/L	0.00097	< 0.00097	< 0.00097	< 0.00097	< 0.00097	0.00097	0.00097
Influent	alpha-Endosulfan	ug/L	0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	0.00089	0.00089
Influent	beta-Endosulfan	ug/L	0.0018	< 0.0018	< 0.0018	< 0.0018	< 0.0018	0.0018	0.0018
Influent	Endosulfan Sulfate	ug/L	0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	0.00074	0.00074
Influent	Endrin	ug/L	0.00081	< 0.00081	< 0.00081	J 0.037	< 0.00081	0.009858	0.037
Influent	Endrin Aldehyde	ug/L	0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	0.00067	0.00067
Influent	Heptachlor	ug/L	0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	0.00069	0.00069
Influent	Heptachlor Epoxide	ug/L	0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	0.00069	0.00069
Influent	PCB-1016	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Influent	Thallium, Total Recoverable	ug/L	0.45	< 0.45	< 0.45	< 0.45	< 0.45	0.45	0.45
Influent	PCB-1221	ug/L	0.063	< 0.063	< 0.063	< 0.063	< 0.063	0.063	0.063
Influent	PCB-1232	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Influent	PCB-1242	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Influent	PCB-1248	ug/L	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	0.02
Influent	PCB-1254	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Influent	PCB-1260	ug/L	0.015	< 0.015	< 0.015	< 0.015	< 0.015	0.015	0.015
Influent	Toxaphene	ug/L	0.035	< 0.035	< 0.035	< 0.035	< 0.035	0.035	0.035
Influent	Zinc, Total Recoverable	ug/L	2.3	58	39	600	370	266.75	600
Influent	Cyanide, Total (as CN)	mg/L	0.0017	J 0.0021	< 0.00085	< 0.00085	< 0.00085	0.001163	0.0021
Influent	Acrolein	ug/L	1.1	< 1.1	< 1.1	< 1.1	< 1.1	1.1	1.1
Influent	Acrylonitrile	ug/L	0.63	< 0.63	< 0.63	< 0.63	< 0.63	0.63	0.63
Influent	Benzene	ug/L	0.065	< 0.065	< 0.065	< 0.065	< 0.065	0.065	0.065
Influent	Bromoform	ug/L	0.14	< 0.14	< 0.14	< 0.14	< 0.14	0.14	0.14
Influent	Carbon Tetrachloride	ug/L	0.082	< 0.082	< 0.082	< 0.082	< 0.082	0.082	0.082
Influent	Chlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Chlorodibromomethane	ug/L	0.16	< 0.16	< 0.16	< 0.16	< 0.16	0.16	0.16
Influent	Chloroethane	ug/L	0.062	< 0.062	< 0.062	< 0.062	< 0.062	0.062	0.062
Influent	2-Chloroethylvinyl Ether	ug/L	0.39	< 0.39	< 0.39	< 0.39	< 0.39	0.39	0.39
Influent	Chloroform	ug/L	0.077	1.1	3.3	1	0.72	1.53	3.3
Influent	Dichlorobromomethane	ug/L	0.067	< 0.067	< 0.067	< 0.067	< 0.067	0.067	0.067
Influent	1,1-Dichloroethane	ug/L	0.065	< 0.065	< 0.065	< 0.065	< 0.065	0.065	0.065
Influent	1,2-Dichloroethane	ug/L	0.043	< 0.043	< 0.043	< 0.043	< 0.043	0.043	0.043
Influent	1,1-Dichloroethylene	ug/L	0.067	< 0.067	< 0.067	< 0.067	< 0.067	0.067	0.067

City of Merced WWTF 2013-2014 Data									
Influent	1,2-Dichloropropane	ug/L	0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.06	0.06
Influent	1,3-Dichloropropylenes, Sum	ug/L	0.061	< 0.061	< 0.061	< 0.061	< 0.061	0.061	0.061
Influent	Ethylbenzene	ug/L	0.09	< 0.09	< 0.09	J 0.31	< 0.09	0.145	0.31
Influent	Methyl Bromide	ug/L	0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.44	0.44
Influent	Methyl Chloride	ug/L	0.08	< 0.08	< 0.08	< 0.08	< 0.08	0.08	0.08
Influent	Methylene Chloride	ug/L	0.13	< 0.13	0.88	J 0.15	0.25	0.3525	0.88
Influent	1,1,2,2-Tetrachloroethane	ug/L	0.056	< 0.056	< 0.056	< 0.056	< 0.056	0.056	0.056
Influent	Tetrachloroethylene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Toluene	ug/L	0.09	1.4	1.5	1.8	1	1.425	1.8
Influent	trans-1,2-Dichloroethylene	ug/L	0.059	< 0.059	< 0.059	< 0.059	< 0.059	0.059	0.059
Influent	1,1,1-Trichloroethane	ug/L	0.046	< 0.046	< 0.046	< 0.046	< 0.046	0.046	0.046
Influent	1,1,2-Trichloroethane	ug/L	0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.12	0.12
Influent	Trichloroethylene	ug/L	0.057	< 0.057	< 0.057	< 0.057	< 0.057	0.057	0.057
Influent	Vinyl Chloride	ug/L	0.062	< 0.062	< 0.062	< 0.062	< 0.062	0.062	0.062
Influent	2-Chlorophenol	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Influent	2,4-Dichlorophenol	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	2,4-Dimethylphenol	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Influent	2-Methyl-4,6-Dinitrophenol	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Influent	2,4-Dinitrophenol	ug/L	0.27	< 0.27	< 0.27	< 0.27	< 0.27	0.27	0.27
Influent	2-Nitrophenol	ug/L	0.21	< 0.21	< 0.21	< 0.21	< 0.21	0.21	0.21
Influent	4-Nitrophenol	ug/L	0.26	< 0.26	< 0.26	< 0.26	< 0.26	0.26	0.26
Influent	4-Chloro-3-methylphenol	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Pentachlorophenol	ug/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	0.2
Influent	Phenol, Single Compound	ug/L	2	33	14	29	21	24.25	33
Influent	2,4,6-Trichlorophenol	ug/L	0.14	< 0.14	< 0.14	< 0.14	< 0.14	0.14	0.14
Influent	Acenaphthene	ug/L	0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.004	0.004
Influent	Acenaphthylene	ug/L	0.046	0.54	< 0.046	< 0.046	< 0.046	0.1695	0.54
Influent	Anthracene	ug/L	0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	0.002
Influent	Benzidine	ug/L	28	< 28	< 28	< 28	< 28	28	28
Influent	Benzo(a)anthracene	ug/L	0.046	< 0.046	< 0.046	< 0.046	< 0.046	0.046	0.046
Influent	Benzo(a)pyrene	ug/L	0.066	< 0.066	< 0.066	< 0.066	< 0.066	0.066	0.066
Influent	Benzo(b)fluoranthene	ug/L	0.041	< 0.041	< 0.041	< 0.041	< 0.041	0.041	0.041
Influent	Benzo(ghi)perylene	ug/L	0.077	< 0.077	< 0.077	< 0.077	< 0.077	0.077	0.077
Influent	Benzo(k)fluoranthene	ug/L	0.055	< 0.055	< 0.055	< 0.055	< 0.055	0.055	0.055
Influent	Bis (2-Chloroethoxy) Methane	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Bis (2-Chloroethyl) Ether	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Influent	Bis (2-Chloroisopropyl) Ether	ug/L	0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.12	0.12
Influent	Bis (2-Ethylhexyl) Phthalate	ug/L	0.29	13	< 0.29	J 12	< 0.29	6.395	13
Influent	4-Bromophenyl Phenyl Ether	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Butylbenzyl Phthalate	ug/L	0.1	J 2.6	< 0.1	< 0.1	< 0.1	0.725	2.6
Influent	2-Chloronaphthalene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	4-Chlorophenyl Phenyl Ether	ug/L	0.23	< 0.23	< 0.23	< 0.23	< 0.23	0.23	0.23
Influent	Chrysene	ug/L	0.023	< 0.023	< 0.023	< 0.023	< 0.023	0.023	0.023
Influent	Dibenzo(a,h)anthracene	ug/L	0.062	< 0.062	< 0.062	< 0.062	< 0.062	0.062	0.062
Influent	1,2-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	1,3-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	1,4-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	3,3-Dichlorobenzidine	ug/L	11	< 11	< 11	< 11	< 11	11	11
Influent	Diethyl Phthalate	ug/L	0.1	3.1	< 0.1	J 2.8	< 0.1	1.525	3.1
Influent	Dimethyl Phthalate	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Di-n-butyl Phthalate	ug/L	0.14	J 0.58	< 0.14	< 0.14	< 0.14	0.25	0.58
Influent	2,4-Dinitrotoluene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	2,6-Dinitrotoluene	ug/L	0.36	< 0.36	< 0.36	< 0.36	< 0.36	0.36	0.36
Influent	Di-n-octyl Phthalate	ug/L	0.1	J 3.6	< 0.1	J 7.4	< 0.1	2.8	7.4
Influent	1,2-Diphenylhydrazine	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Fluoranthene	ug/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001
Influent	Fluorene	ug/L	0.0043	< 0.0043	< 0.0043	< 0.0043	< 0.0043	0.0043	0.0043
Influent	Hexachlorobenzene	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Influent	Hexachlorobutadiene	ug/L	0.13	< 0.13	< 0.13	< 0.13	< 0.13	0.13	0.13

City of Merced WWTF 2013-2014 Data									
Influent	Hexachlorocyclopentadiene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Hexachloroethane	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	Indeno (1,2,3-cd) Pyrene	ug/L	0.054	< 0.054	< 0.054	< 0.054	< 0.054	0.054	0.054
Influent	Isophorone	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Influent	Naphthalene	ug/L	0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	0.0027	0.0027
Influent	Nitrobenzene	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Influent	N-Nitrosodimethylamine	ug/L	0.48	< 0.48	< 0.48	< 0.48	< 0.48	0.48	0.48
Influent	N-Nitrosodi-n-Propylamine	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Influent	N-Nitrosodiphenylamine	ug/L	0.24	< 0.24	< 0.24	< 0.24	< 0.24	0.24	0.24
Influent	Phenanthrene	ug/L	0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	0.0024	0.0024
Effluent	Antimony, Total Recoverable	ug/L	0.23	0.32	< 0.115	J 0.49	< 0.115	0.26	0.49
Effluent	Arsenic, Total Recoverable	ug/L	0.045	4	4.2	3.5	2.9	3.65	4.2
Effluent	Beryllium, Total Recoverable	ug/L	0.23	< 0.23	< 0.23	< 0.23	< 0.23	0.23	0.23
Effluent	Cadmium, Total Recoverable	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Effluent	Chromium (III)	ug/L	0.23	0.77	0.86	0.97	0.92	0.88	0.97
Effluent	Chromium (VI)	ug/L	0.027	0.2	J 0.13	J 0.13	0.12	0.145	0.2
Effluent	Copper, Total Recoverable	ug/L	0.23	2.3	1.9	2.8	2.1	2.275	2.8
Effluent	Lead, Total Recoverable	ug/L	0.045	0.21	0.22	0.56	0.19	0.295	0.56
Effluent	Mercury, Total Recoverable	ug/L		0.001	0.0011	0.00093	0.0011	0.001033	0.0011
Effluent	Nickel, Total Recoverable	ug/L	0.45	1.3	1.6	1.5	1.4	1.45	1.6
Effluent	Selenium, Total Recoverable	ug/L	0.45	0.58	0.32	J 0.95	0.54	0.5975	0.95
Effluent	Pyrene	ug/L	0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	0.0014	0.0014
Effluent	1,2,4-Trichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Aldrin	ug/L	0.00079	< 0.00079	< 0.00079	< 0.00079	< 0.00079	0.00079	0.00079
Effluent	alpha-BHC	ug/L	0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	0.0025	0.0025
Effluent	beta-BHC	ug/L	0.00054	< 0.00054	< 0.00054	< 0.00054	< 0.00054	0.00054	0.00054
Effluent	gamma-BHC	ug/L	0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	0.0025	0.0025
Effluent	delta-BHC	ug/L	0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.006	0.006
Effluent	Chlordane	ug/L	0.026	< 0.026	< 0.026	< 0.026	< 0.026	0.026	0.026
Effluent	4,4-DDT	ug/L	0.0007	< 0.0007	< 0.0007	< 0.0007	< 0.0007	0.0007	0.0007
Effluent	4,4-DDE	ug/L	0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	0.00061	0.00061
Effluent	Silver, Total Recoverable	ug/L	0.45	< 0.45	< 0.45	< 0.45	< 0.45	0.45	0.45
Effluent	4,4-DDD	ug/L	0.00072	< 0.00072	< 0.00072	< 0.00072	< 0.00072	0.00072	0.00072
Effluent	Dieldrin	ug/L	0.00097	< 0.00097	< 0.00097	< 0.00097	< 0.00097	0.00097	0.00097
Effluent	alpha-Endosulfan	ug/L	0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	0.00089	0.00089
Effluent	beta-Endosulfan	ug/L	0.0018	< 0.0018	< 0.0018	< 0.0018	< 0.0018	0.0018	0.0018
Effluent	Endosulfan Sulfate	ug/L	0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	0.00074	0.00074
Effluent	Endrin	ug/L	0.00081	< 0.00081	< 0.00081	< 0.00081	< 0.00081	0.00081	0.00081
Effluent	Endrin Aldehyde	ug/L	0.00067	< 0.00067	< 0.00067	< 0.00067	< 0.00067	0.00067	0.00067
Effluent	Heptachlor	ug/L	0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	0.00069	0.00069
Effluent	Heptachlor Epoxide	ug/L	0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	0.00069	0.00069
Effluent	PCB-1016	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Effluent	Thallium, Total Recoverable	ug/L	0.45	< 0.45	< 0.45	J 0.27	< 0.45	0.405	0.45
Effluent	PCB-1221	ug/L	0.063	< 0.063	< 0.063	< 0.063	< 0.063	0.063	0.063
Effluent	PCB-1232	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Effluent	PCB-1242	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Effluent	PCB-1248	ug/L	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	0.02
Effluent	PCB-1254	ug/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.05
Effluent	PCB-1260	ug/L	0.015	< 0.015	< 0.015	< 0.015	< 0.015	0.015	0.015
Effluent	Toxaphene	ug/L	0.035	< 0.035	< 0.035	< 0.035	< 0.035	0.035	0.035
Effluent	Zinc, Total Recoverable	ug/L	2.3	36	33	46	28	35.75	46
Effluent	Cyanide, Total (as CN)	mg/L	0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	0.0017	0.0017
Effluent	Acrolein	ug/L	1.1	< 1.1	< 1.1	< 1.1	< 1.1	1.1	1.1
Effluent	Acrylonitrile	ug/L	0.63	< 0.63	< 0.63	< 0.63	< 0.63	0.63	0.63
Effluent	Benzene	ug/L	0.065	< 0.065	< 0.065	< 0.065	< 0.065	0.065	0.065
Effluent	Bromoform	ug/L	0.14	< 0.14	< 0.14	< 0.14	< 0.14	0.14	0.14
Effluent	Carbon Tetrachloride	ug/L	0.082	< 0.082	< 0.082	< 0.082	< 0.082	0.082	0.082
Effluent	Chlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Chlorodibromomethane	ug/L	0.16	< 0.16	< 0.16	< 0.16	< 0.16	0.16	0.16

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Effluent	Chloroethane	ug/L	0.062	< 0.062	< 0.062	< 0.062	< 0.062	0.062	0.062
Effluent	2-Chloroethylvinyl Ether	ug/L	0.39	< 0.39	< 0.39	< 0.39	< 0.39	0.39	0.39
Effluent	Chloroform	ug/L	0.077	0.54	J 0.36	J 0.46	0.15	0.3775	0.54
Effluent	Dichlorobromomethane	ug/L	0.067	< 0.067	< 0.067	< 0.067	< 0.067	0.067	0.067
Effluent	1,1-Dichloroethane	ug/L	0.065	< 0.065	< 0.065	< 0.065	< 0.065	0.065	0.065
Effluent	1,2-Dichloroethane	ug/L	0.098	< 0.098	< 0.098	< 0.098	< 0.098	0.098	0.098
Effluent	1,1-Dichloroethylene	ug/L	0.067	< 0.067	< 0.067	< 0.067	< 0.067	0.067	0.067
Effluent	1,2-Dichloropropane	ug/L	0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.06	0.06
Effluent	1,3-Dichloropropylenes, Sum	ug/L	0.061	< 0.061	< 0.061	< 0.061	< 0.061	0.061	0.061
Effluent	Ethylbenzene	ug/L	0.09	< 0.09	< 0.09	< 0.09	< 0.09	0.09	0.09
Effluent	Methyl Bromide	ug/L	0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.44	0.44
Effluent	Methyl Chloride	ug/L	0.08	< 0.08	< 0.08	< 0.08	< 0.08	0.08	0.08
Effluent	Methylene Chloride	ug/L	0.13	< 0.13	< 0.13	< 0.13	< 0.13	0.13	0.13
Effluent	1,1,2,2-Tetrachloroethane	ug/L	0.056	< 0.056	< 0.056	< 0.056	< 0.056	0.056	0.056
Effluent	Tetrachloroethylene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Toluene	ug/L	0.09	< 0.045	< 0.045	< 0.045	< 0.045	0.045	0.045
Effluent	trans-1,2-Dichloroethylene	ug/L	0.059	< 0.059	< 0.059	< 0.059	< 0.059	0.059	0.059
Effluent	1,1,1-Trichloroethane	ug/L	0.046	< 0.046	< 0.046	< 0.046	< 0.046	0.046	0.046
Effluent	1,1,2-Trichloroethane	ug/L	0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.12	0.12
Effluent	Trichloroethylene	ug/L	0.057	< 0.057	< 0.057	< 0.057	< 0.057	0.057	0.057
Effluent	Vinyl Chloride	ug/L	0.062	< 0.062	< 0.062	< 0.062	< 0.062	0.062	0.062
Effluent	2-Chlorophenol	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Effluent	2,4-Dichlorophenol	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	2,4-Dimethylphenol	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Effluent	2-Methyl-4,6-Dinitrophenol	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Effluent	2,4-Dinitrophenol	ug/L	0.27	< 0.27	< 0.27	< 0.27	< 0.27	0.27	0.27
Effluent	2-Nitrophenol	ug/L	0.21	< 0.21	< 0.21	< 0.21	< 0.21	0.21	0.21
Effluent	4-Nitrophenol	ug/L	0.26	< 0.26	< 0.26	< 0.26	< 0.26	0.26	0.26
Effluent	4-Chloro-3-methylphenol	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Pentachlorophenol	ug/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	0.2
Effluent	Phenol, Single Compound	ug/L	0.1	J 0.11	< 0.05	< 0.05	0.42	0.1575	0.42
Effluent	2,4,6-Trichlorophenol	ug/L	0.14	< 0.14	< 0.14	< 0.14	< 0.14	0.14	0.14
Effluent	Acenaphthene	ug/L	0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.004	0.004
Effluent	Acenaphthylene	ug/L	0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	0.0023	0.0023
Effluent	Anthracene	ug/L	0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	0.002
Effluent	Benzidine	ug/L	1.4	< 1.4	< 1.4	< 1.4	< 1.4	1.4	1.4
Effluent	Benzo(a)anthracene	ug/L	0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	0.0023	0.0023
Effluent	Benzo(a)pyrene	ug/L	0.0033	< 0.0033	< 0.0033	< 0.0033	< 0.0033	0.0033	0.0033
Effluent	Benzo(b)fluoranthene	ug/L	0.0021	< 0.0021	< 0.0021	< 0.0021	< 0.0021	0.0021	0.0021
Effluent	Benzo(ghi)perylene	ug/L	0.0038	< 0.0038	< 0.0038	< 0.0038	< 0.0038	0.0038	0.0038
Effluent	Benzo(k)fluoranthene	ug/L	0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0028	0.0028	0.0028
Effluent	Bis (2-Chloroethoxy) Methane	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Bis (2-Chloroethyl) Ether	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Effluent	Bis (2-Chloroisopropyl) Ether	ug/L	0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.12	0.12
Effluent	Bis (2-Ethylhexyl) Phthalate	ug/L	0.29	5.1	J 0.32	< 0.29	< 0.29	1.5	5.1
Effluent	4-Bromophenyl Phenyl Ether	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Butylbenzyl Phthalate	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	2-Chloronaphthalene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	4-Chlorophenyl Phenyl Ether	ug/L	0.23	< 0.23	< 0.23	< 0.23	< 0.23	0.23	0.23
Effluent	Chrysene	ug/L	0.0011	< 0.0011	< 0.0011	< 0.0011	0.0033	0.00165	0.0033
Effluent	Dibenzo(a,h)anthracene	ug/L	0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	0.0031	0.0031
Effluent	1,2-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	1,3-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	1,4-Dichlorobenzene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	3,3-Dichlorobenzidine	ug/L	0.54	< 0.54	< 0.54	< 0.54	< 0.54	0.54	0.54
Effluent	Diethyl Phthalate	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Dimethyl Phthalate	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Di-n-butyl Phthalate	ug/L	0.14	J 0.19	< 0.14	< 0.14	< 0.14	0.1525	0.19
Effluent	2,4-Dinitrotoluene	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1

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Effluent	2,6-Dinitrotoluene	ug/L	0.36	< 0.36	< 0.36	< 0.36	< 0.36	0.36	0.36
Effluent	Di-n-octyl Phthalate	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	1,2-Diphenylhydrazine	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Fluoranthene	ug/L	0.0012	< 0.0012	< 0.0012	< 0.0012	0.0041	0.001925	0.0041
Effluent	Fluorene	ug/L	0.0043	< 0.0043	< 0.0043	< 0.0043	< 0.0043	0.0043	0.0043
Effluent	Hexachlorobenzene	ug/L	0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	0.15
Effluent	Hexachlorobutadiene	ug/L	0.13	< 0.13	< 0.13	< 0.13	< 0.13	0.13	0.13
Effluent	Hexachlorocyclopentadiene	ug/L	0.14	< 0.14	< 0.14	< 0.14	< 0.14	0.14	0.14
Effluent	Hexachloroethane	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	Indeno (1,2,3-cd) Pyrene	ug/L	0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	0.0027	0.0027
Effluent	Isophorone	ug/L	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.11	0.11
Effluent	Naphthalene	ug/L	0.0027	J 0.0087	< 0.0027	< 0.0027	< 0.0027	0.0042	0.0087
Effluent	Nitrobenzene	ug/L	0.11	J 0.18	< 0.11	< 0.11	< 0.11	0.1275	0.18
Effluent	N-Nitrosodimethylamine	ug/L	0.48	< 0.48	< 0.48	< 0.48	< 0.48	0.48	0.48
Effluent	N-Nitrosodi-n-Propylamine	ug/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1
Effluent	N-Nitrosodiphenylamine	ug/L	0.24	< 0.24	< 0.24	< 0.24	< 0.24	0.24	0.24
Effluent	Phenanthrene	ug/L	0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	0.0024	0.0024

City of Merced Domestic Collection System Data April 2013

SAMPLE DATE	ANALYTE	UNITS	MDL	RL	Result
04/16/2013 12:35:00	Mercury	ug/L	0.091	0.20	ND
04/16/2013 12:35:00	Antimony	ug/L	0.23	0.50	0.34
04/16/2013 12:35:00	Arsenic	ug/L	0.045	0.10	4.3
04/16/2013 12:35:00	Beryllium	ug/L	0.23	0.50	ND
04/16/2013 12:35:00	Cadmium	ug/L	0.11	0.25	ND
04/16/2013 12:35:00	Chromium	ug/L	0.23	0.50	2.7
04/16/2013 12:35:00	Copper	ug/L	0.23	0.50	21
04/16/2013 12:35:00	Lead	ug/L	0.045	0.10	0.33
04/16/2013 12:35:00	Nickel	ug/L	0.45	1.0	1.1
04/16/2013 12:35:00	Selenium	ug/L	0.45	1.0	0.77
04/16/2013 12:35:00	Silver	ug/L	0.45	1.0	ND
04/16/2013 12:35:00	Thallium	ug/L	0.45	1.0	ND
04/16/2013 12:35:00	Zinc	ug/L	2.3	5.0	31
04/16/2013 12:35:00	Hexavalent Chromium	ug/L	0.027	0.20	1.8
04/16/2013 12:35:00	4,4'-DDD	ug/L	0.00072	0.050	ND
04/16/2013 12:35:00	Aroclor-1016	ug/L	0.050	0.50	ND
04/16/2013 12:35:00	Aroclor-1221	ug/L	0.063	0.50	ND
04/16/2013 12:35:00	Aroclor-1232	ug/L	0.050	0.50	ND
04/16/2013 12:35:00	Aroclor-1242	ug/L	0.050	0.50	ND
04/16/2013 12:35:00	Aroclor-1248	ug/L	0.020	0.50	ND
04/16/2013 12:35:00	Aroclor-1254	ug/L	0.050	0.50	ND
04/16/2013 12:35:00	Aroclor-1260	ug/L	0.015	0.50	ND
04/16/2013 12:35:00	beta-BHC	ug/L	0.00054	0.0050	ND
04/16/2013 12:35:00	Chlordane	ug/L	0.026	0.10	ND
04/16/2013 12:35:00	delta-BHC	ug/L	0.00060	0.0050	ND
04/16/2013 12:35:00	4,4'-DDE	ug/L	0.00061	0.050	ND
04/16/2013 12:35:00	Dieldrin	ug/L	0.00097	0.010	ND
04/16/2013 12:35:00	Endosulfan I	ug/L	0.00089	0.020	ND
04/16/2013 12:35:00	Endosulfan II	ug/L	0.0018	0.010	ND
04/16/2013 12:35:00	Endosulfan Sulfate	ug/L	0.00074	0.050	ND
04/16/2013 12:35:00	Endrin	ug/L	0.00081	0.010	ND
04/16/2013 12:35:00	Endrin Aldehyde	ug/L	0.00067	0.010	ND
04/16/2013 12:35:00	Heptachlor	ug/L	0.00069	0.010	ND
04/16/2013 12:35:00	Heptachlor Epoxide	ug/L	0.00069	0.010	ND
04/16/2013 12:35:00	Lindane	ug/L	0.0025	0.020	ND
04/16/2013 12:35:00	4,4'-DDT	ug/L	0.00070	0.010	ND
04/16/2013 12:35:00	Toxaphene	ug/L	0.035	0.50	ND
04/16/2013 12:35:00	Aldrin	ug/L	0.00079	0.0050	ND
04/16/2013 12:35:00	TCMX	ug/L			0.22
04/16/2013 12:35:00	alpha-BHC	ug/L	0.0025	0.010	ND
04/16/2013 12:35:00	Phenol	ug/L	2.0	10	14
04/16/2013 12:35:00	4,6-Dinitro-2-methylphenol	ug/L	0.11	5.0	ND
04/16/2013 12:35:00	Pentachlorophenol	ug/L	0.20	1.0	ND
04/16/2013 12:35:00	Benzidine	ug/L	1.4	5.0	ND
04/16/2013 12:35:00	N-Nitrosodimethylamine (NDMA)	ug/L	0.48	5.0	ND
04/16/2013 12:35:00	Bis(2-chloroethyl) ether	ug/L	0.15	1.0	ND
04/16/2013 12:35:00	Bis(2-chloroisopropyl) ether	ug/L	0.12	2.0	ND
04/16/2013 12:35:00	N-Nitrosodi-n-propylamine (NDPA)	ug/L	0.10	5.0	ND
04/16/2013 12:35:00	Hexachloroethane	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	Nitrobenzene	ug/L	0.11	1.0	ND
04/16/2013 12:35:00	Isophorone	ug/L	0.11	1.0	ND
04/16/2013 12:35:00	2-Chlorophenol	ug/L	0.11	2.0	ND
04/16/2013 12:35:00	Bis(2-chloroethoxy)methane	ug/L	0.10	5.0	ND

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04/16/2013 12:35:00	1,2,4-Trichlorobenzene	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	Naphthalene	ug/L	0.0027	0.20	ND
04/16/2013 12:35:00	Hexachlorobutadiene	ug/L	0.13	1.0	ND
04/16/2013 12:35:00	Hexachlorocyclopentadiene	ug/L	0.14	5.0	ND
04/16/2013 12:35:00	2-Chloronaphthalene	ug/L	0.10	10	ND
04/16/2013 12:35:00	Dimethyl phthalate	ug/L	0.10	2.0	ND
04/16/2013 12:35:00	2,6-Dinitrotoluene	ug/L	0.36	5.0	ND
04/16/2013 12:35:00	Acenaphthylene	ug/L	0.0023	0.20	ND
04/16/2013 12:35:00	Acenaphthene	ug/L	0.0040	0.50	ND
04/16/2013 12:35:00	2-Nitrophenol	ug/L	0.21	10	ND
04/16/2013 12:35:00	2,4-Dinitrotoluene	ug/L	0.10	5.0	ND
04/16/2013 12:35:00	Diethyl phthalate	ug/L	0.10	2.0	2.3
04/16/2013 12:35:00	4-Chlorophenyl phenyl ether	ug/L	0.23	5.0	ND
04/16/2013 12:35:00	Fluorene	ug/L	0.0043	0.10	ND
04/16/2013 12:35:00	N-Nitrosodiphenylamine (as DPA)	ug/L	0.24	1.0	ND
04/16/2013 12:35:00	1,2-Diphenylhydrazine (as Azobenzene)	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	4-Bromophenyl phenyl ether	ug/L	0.10	5.0	ND
04/16/2013 12:35:00	Hexachlorobenzene	ug/L	0.15	1.0	ND
04/16/2013 12:35:00	Phenanthrene	ug/L	0.0024	0.050	ND
04/16/2013 12:35:00	Anthracene	ug/L	0.0020	2.0	ND
04/16/2013 12:35:00	2,4-Dimethylphenol	ug/L	0.15	1.0	ND
04/16/2013 12:35:00	Di-n-butyl phthalate	ug/L	0.14	10	ND
04/16/2013 12:35:00	Fluoranthene	ug/L	0.0012	0.050	ND
04/16/2013 12:35:00	Pyrene	ug/L	0.0014	0.050	ND
04/16/2013 12:35:00	Butyl benzyl phthalate	ug/L	0.10	10	ND
04/16/2013 12:35:00	Bis(2-ethylhexyl) phthalate	ug/L	0.29	5.0	6.3
04/16/2013 12:35:00	Benzo(a)anthracene	ug/L	0.0023	5.0	ND
04/16/2013 12:35:00	Chrysene	ug/L	0.0011	5.0	ND
04/16/2013 12:35:00	Di-n-octyl phthalate	ug/L	0.10	10	ND
04/16/2013 12:35:00	Benzo(b)fluoranthene	ug/L	0.041	10	ND
04/16/2013 12:35:00	Benzo(k)fluoranthene	ug/L	0.055	2.0	ND
04/16/2013 12:35:00	2,4-Dichlorophenol	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	Benzo(a)pyrene	ug/L	0.066	2.0	ND
04/16/2013 12:35:00	1,2-Dichlorobenzene	ug/L	0.10	2.0	ND
04/16/2013 12:35:00	1,3-Dichlorobenzene	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	1,4-Dichlorobenzene	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	3,3-Dichlorobenzidine	ug/L	0.54	5.0	ND
04/16/2013 12:35:00	Indeno(1,2,3-cd)pyrene	ug/L	0.054	0.20	ND
04/16/2013 12:35:00	Dibenzo(a,h)anthracene	ug/L	0.062	0.20	ND
04/16/2013 12:35:00	Benzo(g,h,i)perylene	ug/L	0.077	0.20	ND
04/16/2013 12:35:00	4-Chloro-3-methylphenol	ug/L	0.10	1.0	ND
04/16/2013 12:35:00	2,4,6-Trichlorophenol	ug/L	0.14	10	ND
04/16/2013 12:35:00	2,4-Dinitrophenol	ug/L	0.27	5.0	ND
04/16/2013 12:35:00	2,4,6-Tribromophenol	ug/L			6.6
04/16/2013 12:35:00	2-Fluorobiphenyl	ug/L			3.9
04/16/2013 12:35:00	2-Fluorophenol	ug/L			0.091
04/16/2013 12:35:00	p-Terphenyl-d14	ug/L			0.14
04/16/2013 12:35:00	Nitrobenzene-d5	ug/L			5.6
04/16/2013 12:35:00	Phenol-d6	ug/L			0.11
04/16/2013 12:35:00	4-Nitrophenol	ug/L	0.26	5.0	ND
04/16/2013 12:35:00	Cyanide (total)	mg/L	0.0017	0.0050	0.0025
04/16/2013 12:45:00	2-Chloroethyl vinyl ether	ug/L	0.39	1.0	ND
04/16/2013 12:45:00	1,2-Dichloroethane-d4	ug/L			9.3
04/16/2013 12:45:00	Bromofluorobenzene	ug/L			9.9

City of Merced Domestic Collection System Data April 2013					
04/16/2013 12:45:00	Toluene-d8	ug/L			9.5
04/16/2013 12:45:00	Acrolein	ug/L	1.1	2.0	ND
04/16/2013 12:45:00	Acrylonitrile	ug/L	0.63	2.0	ND
04/16/2013 12:45:00	1,2-Dichloroethane-d4	ug/L			9.3
04/16/2013 12:45:00	Bromofluorobenzene	ug/L			9.9
04/16/2013 12:45:00	Toluene-d8	ug/L			9.5
04/16/2013 12:45:00	Dichlorodifluoromethane	ug/L	0.074	1.0	ND
04/16/2013 12:45:00	1,1-Dichloroethene	ug/L	0.067	0.50	ND
04/16/2013 12:45:00	Carbon disulfide	ug/L	2.2	50	ND
04/16/2013 12:45:00	Dichloromethane	ug/L	0.13	0.50	ND
04/16/2013 12:45:00	Methyl-t-butyl ether	ug/L	0.10	0.50	ND
04/16/2013 12:45:00	trans-1,2-Dichloroethene	ug/L	0.059	0.50	ND
04/16/2013 12:45:00	1,1-Dichloroethane	ug/L	0.065	0.50	ND
04/16/2013 12:45:00	2-Butanone	ug/L	0.36	20	ND
04/16/2013 12:45:00	Chloromethane	ug/L	0.080	0.50	ND
04/16/2013 12:45:00	cis-1,2-Dichloroethene	ug/L	0.043	0.50	ND
04/16/2013 12:45:00	Chloroform	ug/L	0.077	0.50	ND
04/16/2013 12:45:00	1,1,1-Trichloroethane	ug/L	0.046	0.50	ND
04/16/2013 12:45:00	Carbon Tetrachloride	ug/L	0.082	0.50	ND
04/16/2013 12:45:00	1,2-Dichloroethane	ug/L	0.098	0.50	ND
04/16/2013 12:45:00	Benzene	ug/L	0.065	0.50	ND
04/16/2013 12:45:00	Vinyl Chloride	ug/L	0.062	0.50	ND
04/16/2013 12:45:00	Trichloroethene (TCE)	ug/L	0.057	0.50	ND
04/16/2013 12:45:00	1,2-Dichloropropane	ug/L	0.060	0.50	ND
04/16/2013 12:45:00	Bromodichloromethane	ug/L	0.067	0.50	ND
04/16/2013 12:45:00	cis-1,3-Dichloropropene	ug/L	0.061	0.50	ND
04/16/2013 12:45:00	Toluene	ug/L	0.090	0.50	ND
04/16/2013 12:45:00	trans-1,3-Dichloropropene	ug/L	0.16	0.50	ND
04/16/2013 12:45:00	Bromomethane	ug/L	0.44	1.0	ND
04/16/2013 12:45:00	1,1,2-Trichloroethane	ug/L	0.12	0.50	ND
04/16/2013 12:45:00	2-Hexanone	ug/L	0.34	20	ND
04/16/2013 12:45:00	Tetrachloroethene (PCE)	ug/L	0.10	0.50	ND
04/16/2013 12:45:00	Dibromochloromethane	ug/L	0.16	0.50	ND
04/16/2013 12:45:00	Chlorobenzene	ug/L	0.10	0.50	ND
04/16/2013 12:45:00	Ethylbenzene	ug/L	0.090	0.50	ND
04/16/2013 12:45:00	Chloroethane	ug/L	0.062	0.50	ND
04/16/2013 12:45:00	m,p-Xylenes	ug/L	0.22	0.50	ND
04/16/2013 12:45:00	o-Xylene	ug/L	0.092	0.50	ND
04/16/2013 12:45:00	Styrene	ug/L	0.067	5.0	0.25
04/16/2013 12:45:00	Bromoform	ug/L	0.14	0.50	ND
04/16/2013 12:45:00	1,1,2,2-Tetrachloroethane	ug/L	0.056	0.50	ND
04/16/2013 12:45:00	Trichlorofluoromethane	ug/L	0.092	0.50	ND
04/16/2013 12:45:00	4-Methyl-2-pentanone	ug/L	0.72	20	ND
04/16/2013 12:45:00	1,3-Dichlorobenzene	ug/L	0.059	0.50	ND
04/16/2013 12:45:00	1,4-Dichlorobenzene	ug/L	0.094	0.50	ND
04/16/2013 12:45:00	1,2-Dichlorobenzene	ug/L	0.054	0.50	ND
04/16/2013 12:45:00	1,2-Dichloroethane-d4	ug/L			10
04/16/2013 12:45:00	Bromofluorobenzene	ug/L			10
04/16/2013 12:45:00	Toluene-d8	ug/L			9.5
04/16/2013 12:45:00	Acetone	ug/L	1.4	20	7.8
04/16/2013 00:00:00	2-Chloroethyl vinyl ether	ug/L	0.39	1.0	ND
04/16/2013 00:00:00	1,2-Dichloroethane-d4	ug/L			9.7
04/16/2013 00:00:00	Bromofluorobenzene	ug/L			9.3
04/16/2013 00:00:00	Toluene-d8	ug/L			9.5

City of Merced Domestic Collection System Data April 2013					
04/16/2013 00:00:00	Acrolein	ug/L	1.1	2.0	ND
04/16/2013 00:00:00	Acrylonitrile	ug/L	0.63	2.0	ND
04/16/2013 00:00:00	1,2-Dichloroethane-d4	ug/L			9.7
04/16/2013 00:00:00	Bromofluorobenzene	ug/L			9.3
04/16/2013 00:00:00	Toluene-d8	ug/L			9.5
04/16/2013 00:00:00	Dichlorodifluoromethane	ug/L	0.074	1.0	ND
04/16/2013 00:00:00	1,1-Dichloroethene	ug/L	0.067	0.50	ND
04/16/2013 00:00:00	Carbon disulfide	ug/L	2.2	50	ND
04/16/2013 00:00:00	Dichloromethane	ug/L	0.13	0.50	ND
04/16/2013 00:00:00	Methyl-t-butyl ether	ug/L	0.10	0.50	ND
04/16/2013 00:00:00	trans-1,2-Dichloroethene	ug/L	0.059	0.50	ND
04/16/2013 00:00:00	1,1-Dichloroethane	ug/L	0.065	0.50	ND
04/16/2013 00:00:00	2-Butanone	ug/L	0.36	20	ND
04/16/2013 00:00:00	Chloromethane	ug/L	0.080	0.50	ND
04/16/2013 00:00:00	cis-1,2-Dichloroethene	ug/L	0.043	0.50	ND
04/16/2013 00:00:00	Chloroform	ug/L	0.077	0.50	ND
04/16/2013 00:00:00	1,1,1-Trichloroethane	ug/L	0.046	0.50	ND
04/16/2013 00:00:00	Carbon Tetrachloride	ug/L	0.082	0.50	ND
04/16/2013 00:00:00	1,2-Dichloroethane	ug/L	0.098	0.50	ND
04/16/2013 00:00:00	Benzene	ug/L	0.065	0.50	ND
04/16/2013 00:00:00	Vinyl Chloride	ug/L	0.062	0.50	ND
04/16/2013 00:00:00	Trichloroethene (TCE)	ug/L	0.057	0.50	ND
04/16/2013 00:00:00	1,2-Dichloropropane	ug/L	0.060	0.50	ND
04/16/2013 00:00:00	Bromodichloromethane	ug/L	0.067	0.50	ND
04/16/2013 00:00:00	cis-1,3-Dichloropropene	ug/L	0.061	0.50	ND
04/16/2013 00:00:00	Toluene	ug/L	0.090	0.50	ND
04/16/2013 00:00:00	trans-1,3-Dichloropropene	ug/L	0.16	0.50	ND
04/16/2013 00:00:00	Bromomethane	ug/L	0.44	1.0	ND
04/16/2013 00:00:00	1,1,2-Trichloroethane	ug/L	0.12	0.50	ND
04/16/2013 00:00:00	2-Hexanone	ug/L	0.34	20	ND
04/16/2013 00:00:00	Tetrachloroethene (PCE)	ug/L	0.10	0.50	ND
04/16/2013 00:00:00	Dibromochloromethane	ug/L	0.16	0.50	ND
04/16/2013 00:00:00	Chlorobenzene	ug/L	0.10	0.50	ND
04/16/2013 00:00:00	Ethylbenzene	ug/L	0.090	0.50	ND
04/16/2013 00:00:00	Chloroethane	ug/L	0.062	0.50	ND
04/16/2013 00:00:00	m,p-Xylenes	ug/L	0.22	0.50	ND
04/16/2013 00:00:00	o-Xylene	ug/L	0.092	0.50	ND
04/16/2013 00:00:00	Styrene	ug/L	0.067	5.0	ND
04/16/2013 00:00:00	Bromoform	ug/L	0.14	0.50	ND
04/16/2013 00:00:00	1,1,2,2-Tetrachloroethane	ug/L	0.056	0.50	ND
04/16/2013 00:00:00	Trichlorofluoromethane	ug/L	0.092	0.50	ND
04/16/2013 00:00:00	4-Methyl-2-pentanone	ug/L	0.72	20	ND
04/16/2013 00:00:00	1,3-Dichlorobenzene	ug/L	0.059	0.50	ND
04/16/2013 00:00:00	1,4-Dichlorobenzene	ug/L	0.094	0.50	ND
04/16/2013 00:00:00	1,2-Dichlorobenzene	ug/L	0.054	0.50	ND
04/16/2013 00:00:00	1,2-Dichloroethane-d4	ug/L			10
04/16/2013 00:00:00	Bromofluorobenzene	ug/L			9.4
04/16/2013 00:00:00	Toluene-d8	ug/L			9.5
04/16/2013 00:00:00	Acetone	ug/L	1.4	20	ND

City of Merced Domestic Collection System Data November 2012

SAMPLE DATE	ANALYTE	UNITS	MDL	RL	Result
10/26/2012 14:15:00	Antimony	ug/L	0.91	2.0	ND
10/26/2012 14:15:00	Arsenic	ug/L	0.91	2.0	ND
10/26/2012 14:15:00	Beryllium	ug/L	0.45	1.0	ND
10/26/2012 14:15:00	Cadmium	ug/L	0.45	1.0	ND
10/26/2012 14:15:00	Chromium	ug/L	4.5	10	ND
10/26/2012 14:15:00	Copper	ug/L	2.3	5.0	39
10/26/2012 14:15:00	Lead	ug/L	2.3	5.0	ND
10/26/2012 14:15:00	Mercury	ug/L	0.18	0.40	ND
10/26/2012 14:15:00	Nickel	ug/L	4.5	10	ND
10/26/2012 14:15:00	Selenium	ug/L	0.91	2.0	ND
10/26/2012 14:15:00	Silver	ug/L	4.5	10	ND
10/26/2012 14:15:00	Thallium	ug/L	0.45	1.0	ND
10/26/2012 14:15:00	Zinc	ug/L	23	50	110
10/26/2012 14:15:00	Hexavalent Chromium	ug/L	0.019	0.20	0.91
10/26/2012 14:15:00	4,4'-DDD	ug/L	0.00072	0.050	ND
10/26/2012 14:15:00	Aroclor-1016	ug/L	0.050	0.50	ND
10/26/2012 14:15:00	Aroclor-1221	ug/L	0.063	0.50	ND
10/26/2012 14:15:00	Aroclor-1232	ug/L	0.050	0.50	ND
10/26/2012 14:15:00	Aroclor-1242	ug/L	0.050	0.50	ND
10/26/2012 14:15:00	Aroclor-1248	ug/L	0.020	0.50	ND
10/26/2012 14:15:00	Aroclor-1254	ug/L	0.050	0.50	ND
10/26/2012 14:15:00	Aroclor-1260	ug/L	0.015	0.50	ND
10/26/2012 14:15:00	beta-BHC	ug/L	0.00054	0.0050	ND
10/26/2012 14:15:00	Chlordane	ug/L	0.026	0.10	ND
10/26/2012 14:15:00	delta-BHC	ug/L	0.00060	0.0050	ND
10/26/2012 14:15:00	4,4'-DDE	ug/L	0.00061	0.050	ND
10/26/2012 14:15:00	Dieldrin	ug/L	0.00097	0.010	ND
10/26/2012 14:15:00	Endosulfan I	ug/L	0.00089	0.020	ND
10/26/2012 14:15:00	Endosulfan II	ug/L	0.0018	0.010	ND
10/26/2012 14:15:00	Endosulfan Sulfate	ug/L	0.00074	0.050	ND
10/26/2012 14:15:00	Endrin	ug/L	0.00081	0.010	ND
10/26/2012 14:15:00	Endrin Aldehyde	ug/L	0.00067	0.010	ND
10/26/2012 14:15:00	Heptachlor	ug/L	0.00069	0.010	ND
10/26/2012 14:15:00	Heptachlor Epoxide	ug/L	0.00069	0.010	ND
10/26/2012 14:15:00	Lindane	ug/L	0.0025	0.020	ND
10/26/2012 14:15:00	4,4'-DDT	ug/L	0.00070	0.010	ND
10/26/2012 14:15:00	Toxaphene	ug/L	0.035	0.50	ND
10/26/2012 14:15:00	Aldrin	ug/L	0.00079	0.0050	ND
10/26/2012 14:15:00	TCMX	ug/L			0.042
10/26/2012 14:15:00	alpha-BHC	ug/L	0.0025	0.010	ND
10/26/2012 14:15:00	Phenol	ug/L	1.0	5.0	23
10/26/2012 14:15:00	4,6-Dinitro-2-methylphenol	ug/L	1.1	5.0	ND
10/26/2012 14:15:00	Pentachlorophenol	ug/L	2.0	5.0	ND
10/26/2012 14:15:00	Benzidine	ug/L	14	50	ND
10/26/2012 14:15:00	N-Nitrosodimethylamine (NDMA)	ug/L	4.8	5.0	ND
10/26/2012 14:15:00	Bis(2-chloroethyl) ether	ug/L	1.5	5.0	ND
10/26/2012 14:15:00	Bis(2-chloroisopropyl) ether	ug/L	1.2	5.0	ND
10/26/2012 14:15:00	N-Nitrosodi-n-propylamine (NDPA)	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Hexachloroethane	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Nitrobenzene	ug/L	1.1	5.0	ND
10/26/2012 14:15:00	Isophorone	ug/L	1.1	5.0	ND
10/26/2012 14:15:00	2-Chlorophenol	ug/L	1.1	5.0	ND
10/26/2012 14:15:00	Bis(2-chloroethoxy)methane	ug/L	1.0	5.0	ND

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10/26/2012 14:15:00	1,2,4-Trichlorobenzene	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Naphthalene	ug/L	0.027	0.20	ND
10/26/2012 14:15:00	Hexachlorobutadiene	ug/L	1.3	5.0	ND
10/26/2012 14:15:00	Hexachlorocyclopentadiene	ug/L	1.4	5.0	ND
10/26/2012 14:15:00	2-Chloronaphthalene	ug/L	1.0	10	ND
10/26/2012 14:15:00	Dimethyl phthalate	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	2,6-Dinitrotoluene	ug/L	3.6	5.0	ND
10/26/2012 14:15:00	Acenaphthylene	ug/L	0.023	0.20	ND
10/26/2012 14:15:00	Acenaphthene	ug/L	0.040	0.50	ND
10/26/2012 14:15:00	2-Nitrophenol	ug/L	2.1	10	ND
10/26/2012 14:15:00	2,4-Dinitrotoluene	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Diethyl phthalate	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	4-Chlorophenyl phenyl ether	ug/L	2.3	5.0	ND
10/26/2012 14:15:00	Fluorene	ug/L	0.043	0.10	ND
10/26/2012 14:15:00	N-Nitrosodiphenylamine (as DPA)	ug/L	2.4	5.0	ND
10/26/2012 14:15:00	1,2-Diphenylhydrazine (as Azobenzene)	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	4-Bromophenyl phenyl ether	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Hexachlorobenzene	ug/L	1.5	5.0	ND
10/26/2012 14:15:00	Phenanthrene	ug/L	0.024	0.10	ND
10/26/2012 14:15:00	Anthracene	ug/L	0.020	2.0	ND
10/26/2012 14:15:00	2,4-Dimethylphenol	ug/L	1.5	5.0	ND
10/26/2012 14:15:00	Di-n-butyl phthalate	ug/L	1.4	10	ND
10/26/2012 14:15:00	Fluoranthene	ug/L	0.012	0.10	ND
10/26/2012 14:15:00	Pyrene	ug/L	0.014	0.10	ND
10/26/2012 14:15:00	Butyl benzyl phthalate	ug/L	1.0	10	ND
10/26/2012 14:15:00	Bis(2-ethylhexyl) phthalate	ug/L	2.9	50	ND
10/26/2012 14:15:00	Benzo(a)anthracene	ug/L	0.023	5.0	ND
10/26/2012 14:15:00	Chrysene	ug/L	0.011	5.0	ND
10/26/2012 14:15:00	Di-n-octyl phthalate	ug/L	1.0	10	15
10/26/2012 14:15:00	Benzo(b)fluoranthene	ug/L	0.021	10	ND
10/26/2012 14:15:00	Benzo(k)fluoranthene	ug/L	0.028	2.0	ND
10/26/2012 14:15:00	2,4-Dichlorophenol	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	Benzo(a)pyrene	ug/L	0.033	2.0	ND
10/26/2012 14:15:00	1,2-Dichlorobenzene	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	1,3-Dichlorobenzene	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	1,4-Dichlorobenzene	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	3,3-Dichlorobenzidine	ug/L	5.4	10	ND
10/26/2012 14:15:00	Indeno(1,2,3-cd)pyrene	ug/L	0.027	0.10	ND
10/26/2012 14:15:00	Dibenzo(a,h)anthracene	ug/L	0.031	0.10	ND
10/26/2012 14:15:00	Benzo(g,h,i)perylene	ug/L	0.038	0.10	ND
10/26/2012 14:15:00	4-Chloro-3-methylphenol	ug/L	1.0	5.0	ND
10/26/2012 14:15:00	2,4,6-Trichlorophenol	ug/L	1.4	10	ND
10/26/2012 14:15:00	2,4-Dinitrophenol	ug/L	2.7	10	ND
10/26/2012 14:15:00	2,4,6-Tribromophenol	ug/L			13
10/26/2012 14:15:00	2-Fluorobiphenyl	ug/L			5.5
10/26/2012 14:15:00	2-Fluorophenol	ug/L			4.1
10/26/2012 14:15:00	p-Terphenyl-d14	ug/L			6.7
10/26/2012 14:15:00	Nitrobenzene-d5	ug/L			6.1
10/26/2012 14:15:00	Phenol-d6	ug/L			5.7
10/26/2012 14:15:00	4-Nitrophenol	ug/L	2.6	10	ND
10/26/2012 14:15:00	Cyanide (total)	mg/L	0.0010	0.0050	ND
10/26/2012 14:12:00	2-Chloroethyl vinyl ether	ug/L	0.39	1.0	ND
10/26/2012 14:12:00	1,2-Dichloroethane-d4	ug/L			11
10/26/2012 14:12:00	Bromofluorobenzene	ug/L			9.0

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10/26/2012 14:12:00	Toluene-d8	ug/L			10
10/26/2012 14:12:00	Acrolein	ug/L	1.1	2.0	ND
10/26/2012 14:12:00	Acrylonitrile	ug/L	0.63	2.0	ND
10/26/2012 14:12:00	1,2-Dichloroethane-d4	ug/L			11
10/26/2012 14:12:00	Bromofluorobenzene	ug/L			10
10/26/2012 14:12:00	Toluene-d8	ug/L			10
10/26/2012 14:12:00	Dichlorodifluoromethane	ug/L	0.074	1.0	ND
10/26/2012 14:12:00	1,1-Dichloroethene	ug/L	0.067	0.50	ND
10/26/2012 14:12:00	Carbon disulfide	ug/L	2.2	50	ND
10/26/2012 14:12:00	Dichloromethane	ug/L	0.13	0.50	ND
10/26/2012 14:12:00	Methyl-t-butyl ether	ug/L	0.10	0.50	ND
10/26/2012 14:12:00	trans-1,2-Dichloroethene	ug/L	0.059	0.50	ND
10/26/2012 14:12:00	1,1-Dichloroethane	ug/L	0.065	0.50	ND
10/26/2012 14:12:00	2-Butanone	ug/L	0.36	20	ND
10/26/2012 14:12:00	Chloromethane	ug/L	0.080	0.50	ND
10/26/2012 14:12:00	cis-1,2-Dichloroethene	ug/L	0.043	0.50	ND
10/26/2012 14:12:00	Chloroform	ug/L	0.077	0.50	ND
10/26/2012 14:12:00	1,1,1-Trichloroethane	ug/L	0.046	0.50	ND
10/26/2012 14:12:00	Carbon Tetrachloride	ug/L	0.082	0.50	ND
10/26/2012 14:12:00	1,2-Dichloroethane	ug/L	0.098	0.50	ND
10/26/2012 14:12:00	Benzene	ug/L	0.065	0.50	ND
10/26/2012 14:12:00	Vinyl Chloride	ug/L	0.062	0.50	ND
10/26/2012 14:12:00	Trichloroethene (TCE)	ug/L	0.057	0.50	ND
10/26/2012 14:12:00	1,2-Dichloropropane	ug/L	0.060	0.50	ND
10/26/2012 14:12:00	Bromodichloromethane	ug/L	0.067	0.50	ND
10/26/2012 14:12:00	cis-1,3-Dichloropropene	ug/L	0.061	0.50	ND
10/26/2012 14:12:00	Toluene	ug/L	0.090	0.50	ND
10/26/2012 14:12:00	trans-1,3-Dichloropropene	ug/L	0.16	0.50	ND
10/26/2012 14:12:00	Bromomethane	ug/L	0.44	1.0	ND
10/26/2012 14:12:00	1,1,2-Trichloroethane	ug/L	0.12	0.50	ND
10/26/2012 14:12:00	2-Hexanone	ug/L	0.34	20	ND
10/26/2012 14:12:00	Tetrachloroethene (PCE)	ug/L	0.10	0.50	ND
10/26/2012 14:12:00	Dibromochloromethane	ug/L	0.16	0.50	ND
10/26/2012 14:12:00	Chlorobenzene	ug/L	0.10	0.50	ND
10/26/2012 14:12:00	Ethylbenzene	ug/L	0.090	0.50	ND
10/26/2012 14:12:00	Chloroethane	ug/L	0.062	0.50	ND
10/26/2012 14:12:00	m,p-Xylenes	ug/L	0.22	0.50	ND
10/26/2012 14:12:00	o-Xylene	ug/L	0.092	0.50	ND
10/26/2012 14:12:00	Styrene	ug/L	0.067	5.0	ND
10/26/2012 14:12:00	Bromoform	ug/L	0.14	0.50	ND
10/26/2012 14:12:00	1,1,2,2-Tetrachloroethane	ug/L	0.056	0.50	ND
10/26/2012 14:12:00	Trichlorofluoromethane	ug/L	0.092	0.50	ND
10/26/2012 14:12:00	4-Methyl-2-pentanone	ug/L	0.72	20	ND
10/26/2012 14:12:00	1,3-Dichlorobenzene	ug/L	0.059	0.50	ND
10/26/2012 14:12:00	1,4-Dichlorobenzene	ug/L	0.094	0.50	ND
10/26/2012 14:12:00	1,2-Dichlorobenzene	ug/L	0.054	0.50	ND
10/26/2012 14:12:00	1,2-Dichloroethane-d4	ug/L			11
10/26/2012 14:12:00	Bromofluorobenzene	ug/L			10
10/26/2012 14:12:00	Toluene-d8	ug/L			11
10/26/2012 14:12:00	Acetone	ug/L	1.4	20	ND
10/26/2012 00:00:00	Dichlorodifluoromethane	ug/L	0.074	1.0	ND
10/26/2012 00:00:00	1,1-Dichloroethene	ug/L	0.067	0.50	ND
10/26/2012 00:00:00	Carbon disulfide	ug/L	2.2	50	ND
10/26/2012 00:00:00	Dichloromethane	ug/L	0.13	0.50	ND

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10/26/2012 00:00:00	Methyl-t-butyl ether	ug/L	0.10	0.50	ND
10/26/2012 00:00:00	trans-1,2-Dichloroethene	ug/L	0.059	0.50	ND
10/26/2012 00:00:00	1,1-Dichloroethane	ug/L	0.065	0.50	ND
10/26/2012 00:00:00	2-Butanone	ug/L	0.36	20	ND
10/26/2012 00:00:00	Chloromethane	ug/L	0.080	0.50	ND
10/26/2012 00:00:00	cis-1,2-Dichloroethene	ug/L	0.043	0.50	ND
10/26/2012 00:00:00	Chloroform	ug/L	0.077	0.50	ND
10/26/2012 00:00:00	1,1,1-Trichloroethane	ug/L	0.046	0.50	ND
10/26/2012 00:00:00	Carbon Tetrachloride	ug/L	0.082	0.50	ND
10/26/2012 00:00:00	1,2-Dichloroethane	ug/L	0.098	0.50	ND
10/26/2012 00:00:00	Benzene	ug/L	0.065	0.50	ND
10/26/2012 00:00:00	Vinyl Chloride	ug/L	0.062	0.50	ND
10/26/2012 00:00:00	Trichloroethene (TCE)	ug/L	0.057	0.50	ND
10/26/2012 00:00:00	1,2-Dichloropropane	ug/L	0.060	0.50	ND
10/26/2012 00:00:00	Bromodichloromethane	ug/L	0.067	0.50	ND
10/26/2012 00:00:00	cis-1,3-Dichloropropene	ug/L	0.061	0.50	ND
10/26/2012 00:00:00	Toluene	ug/L	0.090	0.50	ND
10/26/2012 00:00:00	trans-1,3-Dichloropropene	ug/L	0.16	0.50	ND
10/26/2012 00:00:00	Bromomethane	ug/L	0.44	1.0	ND
10/26/2012 00:00:00	1,1,2-Trichloroethane	ug/L	0.12	0.50	ND
10/26/2012 00:00:00	2-Hexanone	ug/L	0.34	20	ND
10/26/2012 00:00:00	Tetrachloroethene (PCE)	ug/L	0.10	0.50	ND
10/26/2012 00:00:00	Dibromochloromethane	ug/L	0.16	0.50	ND
10/26/2012 00:00:00	Chlorobenzene	ug/L	0.10	0.50	ND
10/26/2012 00:00:00	Ethylbenzene	ug/L	0.090	0.50	ND
10/26/2012 00:00:00	Chloroethane	ug/L	0.062	0.50	ND
10/26/2012 00:00:00	m,p-Xylenes	ug/L	0.22	0.50	ND
10/26/2012 00:00:00	o-Xylene	ug/L	0.092	0.50	ND
10/26/2012 00:00:00	Styrene	ug/L	0.067	5.0	ND
10/26/2012 00:00:00	Bromoform	ug/L	0.14	0.50	ND
10/26/2012 00:00:00	1,1,2,2-Tetrachloroethane	ug/L	0.056	0.50	ND
10/26/2012 00:00:00	Trichlorofluoromethane	ug/L	0.092	0.50	ND
10/26/2012 00:00:00	4-Methyl-2-pentanone	ug/L	0.72	20	ND
10/26/2012 00:00:00	1,3-Dichlorobenzene	ug/L	0.059	0.50	ND
10/26/2012 00:00:00	1,4-Dichlorobenzene	ug/L	0.094	0.50	ND
10/26/2012 00:00:00	1,2-Dichlorobenzene	ug/L	0.054	0.50	ND
10/26/2012 00:00:00	1,2-Dichloroethane-d4	ug/L			10
10/26/2012 00:00:00	Bromofluorobenzene	ug/L			9.7
10/26/2012 00:00:00	Toluene-d8	ug/L			11
10/26/2012 00:00:00	Acetone	ug/L	1.4	20	ND

City of Merced WWTF 2014 BOD and TSS Data							
Year	Month	Ave Inf Flow	Ave Eff Flow	Average BOD (mg/L)		Average TSS (mg/L)	
				Influent	Effluent	Influent	Effluent
2014	January	6.965	7.042	250	2.1	313	3.3
2014	February	6.761	6.931	290	2.3	327	4.7
2014	March	6.785	6.696	261	1.3	315	2.3
2014	April	6.925	6.891	257	0.5	291	1.2
2014	May	6.958	6.764	276	0.0	301	1.3
2014	June	6.939	6.911	228	0.0	291	1.2
2014	July	6.889	6.771	220	0.0	297	1.0
2014	August	7.078	7.098	220	0.0	303	0.9
2014	September	7.219	7.527	238	0.0	293	1.1
2014	October	7.053	7.151	235	0.1	278	1.3
2014	November	6.901	6.896	235	0.2	299	1.4
2014	December	6.900	6.899	237	4.2	286	3.4
Average		6.948	6.965	290	4	327	5