PUBLIC NOTICE
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

NOTICE OF REQUEST FOR APPROVAL

OF A

SUBSTANTIAL PRETREATMENT PROGRAM MODIFICATION

In accordance with Title 40 of the Code of Federal Regulations (CFR), Part 403, Section 403.18, Western Riverside County Regional Water Authority (WRCRWA) has developed and submitted for approval by the California Regional Water Quality Control Board, Santa Ana Region, (Regional Board) a report, which supports proposed revisions to its wastewater discharge limits (Local Limits). Regional Board staff has made a determination that the proposed modifications meet the requirements of 40 CFR 403.9 (b) and, therefore, is proposing to approve the proposed modifications of WRCRWA's pretreatment program.

The report and related documents, and all comments and petitions if received may be inspected and copied at the Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501-3348 (phone 951-782-4130) by appointment scheduled between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday.

Interested persons are encouraged to submit written comments on the proposed pretreatment program modifications. All written comments submitted in a timely manner will be considered by the Regional Board staff in the decision on whether or not to approve the proposed modifications. In accordance with 40 CFR 403.11, this public notice comment period will end thirty (30) days from the date of posting/publication. The proposed pretreatment program modifications will be considered approved, as is, if no substantive comments are received within 30-days of posting/publication.

Any interested person may request a public hearing concerning this matter. The request for public hearing must be filed with the Regional Board within 30 days of the posting/publication of this notice. Persons requesting a public hearing must state their interest in the matter and state reasons why such a hearing is warranted.

Please send comments or requests for public hearing to the attention of Mr. Najah N. Amin, at the address located at the top of this notice.

To view on/or download a copy of the report supporting the pretreatment program modifications, please access the Regional Board's website at
http://www.waterboards.ca.gov/santaana/public_notices/public_notices.shtml.

Western Riverside County
Regional Wastewater Authority

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FINAL DRAFT

Technically Based Local Limits & Best Management Plan (BMP) Criteria

Western Riverside County Regional Wastewater Treatment Plant

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Western Riverside County Regional Wastewater Authority Treatment Plant

Local Limits & Best Management Plan Development

1. Introduction

1.1. Purpose and Need

Western Riverside Country Regional Wastewater Authority (WRCRWA or Authority) which is comprised of member agencies including the City of Norco, Home Gardens Sanitary District, Western Municipal Water District, Jurupa Community Services District, and the Santa Ana Watershed Project Authority operates a tertiary wastewater treatment plant with a design capacity of approximately 8 MGD. The State of California Regional Water Quality Control Board – Santa Ana Region issued Order No. R8-2002-0024, NPDES Permit No. 8000316 on December 3, 2002, which was amended March 4, 2005 by Order No. R8-2005-0008. Treated wastewater is discharged to Reach 3 of the Santa Ana River at latitude 33°55'11" and longitude 117°36'25".

Santa Ana Regional Board Order (R8-2008-0005, NPDES Permit No. 8000316) was adopted on July 18, 2008. The new Order eliminated some of the previous numerical limitations (primarily mineral constituents such as sodium, chloride, sulfate, etc.). Total Dissolved Solids (TDS) is used by the new Permit to regulate mineral constituents. Various other pollutant parameters limitations were removed in response to routine monitoring results reported during the past 5 years. Some new pollutant limitations have been added. The proposed local limits contained herein have considered the new limitations included in Order No. R8-2008-0005.

An initial Pollutants of Concern (POC) report was completed in July 2007, prior to receipt of Order No. R8-2008-0005 but has since been updated to reflect limitations contained in said Order. POC included all required EPA pollutants, all pollutants regulated under NPDES Permit No. 8000316, and any other pollutants that were detected in the influent, effluent, or sludge in amounts that met POC screening criteria as listed in *EPA Local Limits Development Guidance, EPA 833-R-04-002A, July 2004.* The Pollutants of Concern listed in Section II are further reviewed in this report to establish if a technically based local limit is warranted and specifically which concentration or best management practices value is most appropriate and legally defensible.

2. Criteria for Pollutants of Concern (POC)

2.1. POC List

Pollutant	Symbol	EPA Req. POC	NPDES Permit Limit	Process Interference	Sludge Quality	Worker Health & Safety
Conventional Pollutants						
Upper pH Limit	pH		Yes			
Lower pH Limit	pH		Yes			
Biochemical Oxygen Demand	BOD	Yes	Yes			
Total Suspended Solids	TSS	Yes	Yes			
Fats, Oil & Grease	FOG			Yes		
Oil & Grease, Total	TOG			Yes		
Coliform	--		Yes			
Minerals and Nutrients						
Ammonia-Nitrogen	NH_3-N	Yes	Yes	Yes		
Sulfides, Dissolved	S			Yes		
Hydrogen Sulfide	H_2S					Yes
Hardness, Total	$CaCO_3$					
Sodium	Na					
Chloride	Cl_2			Yes		
Fluoride	F					
Sulfate	SO_4					
Total Dissolved Solids	TDS		Yes			
Total Inorganic Nitrogen	TIN		Yes			
Boron	B					
Chromium, Trivalent	Cr^{+3}			Yes		
Toxic Pollutants						
Arsenic, Total	As	Yes		Yes	Yes	
Cadmium, Total	Cd	Yes			Yes	
Chromium, Total	Cr	Yes		Yes		
Chromium, Hexavalent	Cr^{+6}			Yes		
Copper	Cu	Yes		Yes	Yes	
Cyanide	CN	Yes	Yes	Yes		
Lead	Pb	Yes		Yes	Yes	
Molybdenum	Mo	Yes				
Mercury	Hg	Yes			Yes	
Nickel	Ni	Yes		Yes	Yes	
Selenium	Se	Yes			Yes	
Silver	Ag	Yes		Yes		
Zinc	Zn	Yes		Yes	Yes	
Bis(2-ethylhexyl) phthalate	$C_{24}H_{38}O_4$		Yes	Yes		

3. Methodology and Assumptions

3.1. Sources of Data

The current review of existing local limits is being performed to account for the new wastewater flows being received from Jurupa Community Services District (JCSD), changes in the NPDES Permit, and upgrades to the WRCRWA Treatment Plant. The primary sources of data used in this analysis comes from 2007 treatment plant influent, effluent, and sludge reports (Appendix A); domestic data from seven separate connection points in the JCSD area which is represented as composite data at the River Road Lift Station (Appendix B); and literature values for process interference, and removal rates for primary, secondary, and tertiary processes (Appendix C).

The domestic site data summarized in Appendix B include flows from seven separately monitored locations which include: Cleveland, Chandler, Harrison, 58th Street, Archibald, Hamner, and Celebration. All sites represent domestic and uncontrolled commercial flows and are all directed through a central monitoring station at the River Road Lift Station.

The previous local limit analysis was conducted in the year 2000 by Kennedy-Jenks. Kennedy-Jenks provided reports of findings which contained the analysis and recommendations for local limits in August and December 2000. WRCRWA adopted local limits with Resolution No. 00-66 on December 7, 2000.

The waste volume and waste strength of wastewater received by the WRCRWA treatment plant since April 2007 is substantially different than what was received in previous years. A high strength, moderate flow Industrial User discontinued its discharge and the JCSD domestic wastewater flows (approximately 2 MGD) accounted for the increased volume and decreased BOD and TSS concentrations. For this reason, the local limits are based primarily on data received since April 2007. Influent and effluent data are used to determine overall treatment plant removal rates with literature values and previous studies (i.e. Kennedy-Jenks 2000 local limits) to determine removal rates for primary, secondary, and tertiary processes.

3.2. Assumptions and Projections

Previous estimates regarding the percentage of industrial flow received by the WRCRWA were set at 3% (this was before Norco Egg Ranch discontinued their discharge and prior to the acceptance of approximately 2 MGD of domestic sewage from JCSD). The revised percentage is set at 2% and is based largely on the new “uncontrolled” domestic flows being received from JCSD. The latest BOD and TSS data indicate average daily influent values below the 300 mg/L. Current influent plant flows have leveled off at approximately 5.6 MGD which is roughly 70% of the plant design. The assumed 2% Industrial flow factor combined with safety and growth factors ranging from 10%-30% is conservative and is applied to provide compliance assurance for conventional and non-conventional pollutant loading.
The calculated BOD and TSS local limits are substantially higher than previous limits and better

reflect a reasonable allocation for industry and commercial businesses. The BOD and TSS concentration limitations also have a "cap" or maximum allowable daily loading based upon a 25,000 gpd discharge. In practice, the concentration limits for BOD & TSS are secondary limits. That is to say, that at lower concentrations (i.e., below 25,000 gpd) industries would be held only to the lbs/day maximum limitation. All discharges that exceed the daily mass limit are then held strictly to the technically based-concentration limit. A 2% industrial flow was used in the local limit development to calculate the 108,000 gpd and a 30%-35% (growth & safety) factor was used to allow for additional contributions. Both factors are conservative and protective of the WRCRWA Treatment Plant. The mass loading approach allows each agency to allow smaller quantity dischargers (e.g. restaurants, bakeries, etc.) to discharge above the established concentration limit provided they do not exceed the daily lbs/day allocation. The proposed limits in this document represent regulatory limitations and do not address the cost of treating increased BOD and TSS. A surcharge program or rate structure that considers the cost of treatment should be developed and implemented that equitably distributes costs to each sewer user based upon waste strength and volume.

It is assumed that overall BOD and TSS loading from the commercial sector will decrease in response to the Fats, Oils, and Grease (FOG) Control Program requirements included in the Statewide General Permit regarding Sanitary Sewer Overflows and proposed modifications to the WRCRWA Ordinance that include Best management Practices (BMP) requirements. More frequent grease interceptor inspections combined with the adoption of (BMPs) and educational outreach for controlling pollutants from sources previously considered "uncontrolled" including a control of FOG in residential areas are expected to cause reductions in the BOD loading.

Mineral loading is a problem for inland surface dischargers. In some instances, agencies have been able to apply for off-set credits based upon local ground water remediation projects that reduce groundwater TDS levels thereby improving (lowering) public water supply contributions of minerals. A TDS proposed offset credit program was submitted to the Executive Officer of the Santa Ana Regional Water Quality Control Board (SARWQCB) on January 18, 2008.

Based upon comments received from Wildermuth Environmental Inc., WRCRWA submitted a revised proposed TDS offset Credit Program to the Executive Officer of the Santa Ana Regional Water Quality Control Board on April 30, 2008. In general, the revision proposed to obtain credit for lower TDS water produced at the Arlington Desalter and discharged to the Santa Ana River via the Arlington Valley Drain to offset higher TDS effluent from the WRCRWTP by using the blending calculations of the original salt credit implementation plan.

For the purposes of calculating a technically based local limit for TDS, the assumption is made that the amount of off-set will be so small that the conservative approach is to not expect any "off-set" credits and that the discharge will have to meet the 12-month flow weighted average as stipulated in the NPDES Permit. The proposed TDS concentration local limit presented in this draft document is based upon current loading, a 2.5% growth rate, and a 625 mg/L NPDES permit limitation. A mass loading approach, like the approach described above for BOD and TSS, will be used to control the TDS received at the wastewater plant.

There is currently no local limit for TIN; however the local limit for ammonia (NH_4) of 106 mg/L is proposed to be lowered to 104 mg/L which will control TIN to levels that allow for continued compliance based upon the data analyzed in this report. (TIN = NH_4, NO_3, and NO_2).

The NPDES Permit contains limits for free cyanide and Bis (2-ethylhexyl) phthalate that are used for calculating the local limit. The limits for both pollutants will present a high potential for intermittent violations even with local limits set at zero for controlled (Industrial User) discharges. WRCRWA needs to conduct more sampling for each pollutant in the influent, effluent, and downstream locations to determine if conventional source control methods can reduce the potential for violation.

The calculated local limit for cyanide (0.37 mg/L) was higher than the current local limit (0.12 mg/L); however in an attempt to further control the quantity being received by the WRCRWA TP, it was decided to leave the current limit in place.

Regarding the control of Bis (2-ethylhexyl) phthalate, it is recommended that a Best Management Practices (BMP) limit be adopted to control all toxic organics rather than merely one specific pollutant. The justification is that exceedances of the chronic and acute toxicity limits contained in the NPDES Permit can be caused by any of the more than 120 toxic organics. The recommendation of this report is to adopt an established technology based limit for TTOs of 0.58 mg/L and apply it to all significant industrial users. This value is currently used by Orange county Sanitation and the City of Corona. The proposed maximum value is 0.58 mg/L is the cumulative value of all toxic organics detected in amounts above 0.01 mg/L (10 ppb).

One of the EPA mandatory pollutants of concern is molybdenum and no domestic or treatment plant influent or effluent data was available for review. The annual average (2007) for sludge (dry weight) concentration for molybdenum was 9.375 mg/kg. The 503 Sludge Regulations (Table 1 of §40CFR503.13) lists a Maximum Ceiling Limit of 75 mg/kg for molybdenum. There is not a Cumulative, Monthly Average, or Annual loading limit for molybdenum. The 9.375 mg/kg concentration detected in the sludge represents less than 13% of the allowable Maximum Ceiling Concentration limit and therefore no local limit is deemed necessary at this time.

3.3. Regulatory Limits (R8-2008-0005)

The following Table lists effluent limitations contained in NPDES Permit No. 8000316 (Order No. R8-2008-0005).

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD	mg/L	20	30	--	--	--
TSS	mg/l	20	30	--	--	--
pH	Standard Units	--	--	--	6.5	8.5
Coliform	MPN		2.2 (7-DAY MEDIAN)			

OTHER POLLUTANT LIMITATIONS		
Constituent	**Maximum Daily (mg/L)**	**Average Monthly (mg/L) unless otherwise indicated**
Total Dissolved Solids	-	625 (12-month avg.)*
Total Inorganic Nitrogen (TIN)	-	10 (12-month avg.)
Ammonia Nitrogen	-	5
Cyanide	0.0085	0.0042
Bis(2-ethylhexyl) phthalate	0.012	0.0059

*The TDS limit is also determined by a 250 mg/L increment over the TDS of 12-month weighted average of the water supply. Whichever value represents the lowest concentration shall prevail. The 625 mg/L is the ceiling limit, however a lower limit would apply for all periods when the 12-month weighted average of the source water for TDS is less than 375 mg/L.

Compliance with state and federal sludge regulations is determined by limitations found in California Code of Regulations (CCR) Title 27, Chapter 15 and 40CFR503 respectively.

4. Current Local Limits

The WRCRWA adopted the current local wastewater discharge limits in Resolution No. 00-66 on December 7, 2000. The following Table shows the limits adopted in said Resolution.

	Column 1	Column 2
Constituents	**Local Limits Concentration (mg/L)**	**Local Limits Maximum Threshold Loadings (lbs/day)[1]**
Ammonia	106	---
Arsenic	1.5	---
BOD	283	11.80
Boron	1.04	0.04
Cadmium	0.33	---
Chloride	510	21.27
Chromium (total)	0.7	---
Copper	2.8	---
Cyanide	0.12	---
Fluoride	1	0.04
Iron	200	---
Lead	1.7	---
Mercury	0.1	---
Nickel	8.9	---
Oil & Grease	150	---
Selenium	0.008	---
Silver	1.4	---
Sodium	141	5.88
Sulfate	300	---
Surfactants	15	---
TDS	751	31.32
Total Hardness	5600	---
TSS	433	18.06
Zinc	18.64	---

[1]Industrial users may discharge at any concentration up to the daily threshold loadings specified in column 2 for the seven constituents shown. Discharges exceeding column 2 daily loadings limits shall comply with concentration limits specified in column 1.

The lbs/day limitations listed in the Current Local Limits Table appear to be based upon a maximum

0.005 MGD (5,000 gpd) discharge maximum per Industrial User.

The following table indicates the values obtained for domestic concentrations of pollutants from actual influent data, domestic site data, or literature values. In general, specific data was used except when insufficient data existed. In cases where insufficient data (less than 4 sample data points) existed, the average literature value was used.

DOMESTIC / BACKGROUND VALUES					
	INFLUENT Average (mg/L)	JCSD Average (mg/L)	Combined Average (mg/L)	Literature Value Range/Average Value (mg/L)	VALUE USED FOR EVALUATION (mg/L)
Ammonia	35	43	39	-	39
Antimony	0.004			-	0.004
Arsenic	0.0025	0.0003	0.001	0.0004-0.088 / 0.007	0.001
Barium				0.04-0.216 / 0.115	-
Bis-2- Ethylhexylphthalate	0.0009	0.014	0.007	0.00002-0.022 / 0.006	0.007
BOD	271	313	292	-	292
Boron	0.67	0.331	0.501	0.1-0.42 / 0.3	0.5
Cadmium	0.0002	0.00005	0.0001	0.00076-0.11 / 0.008	0.0001
Chloride	149	151	150	-	150
Chloroform	0.0011			0.001-0.069	0.001
Chromium, Total	0.0054	0.00015	0.0028	0.001-1.2 / 0.034	0.03
Copper	0.07	0.086	0.078	0.005-0.74	0.08
Cyanide	0.0025	0.0025	0.0025	0.01-0.37 / 0.082	0.0025
Fluoride	0.36	0.14	0.250	0.24-0.27 / 0.255	0.25
Iron	1.28	-	-	0.0002-3.4 / 0.99	1.3
Lead	0.023	0.026	0.025	0.001-2.04 / 0.058	0.025
Manganese	-	0.036	0.036	0.04-0.161 / 0.087	0.087
Mercury	0.0001	0.00025	0.00018	0.00005-0.54 / .0002	0.0002
Molybdenum*	-	-	-	-	9.375
Nickel	0.0048	0.00045	0.0026	0.0005-1.6 / 0.047	0.0026
Phenols	-	0.0237	0.024	0.00002-0.00003 / 0.000025	0.024
pH	7.3	7.79	7.545	-	-
Selenium	0.0025	0.001	0.0018	-	0.0018
Silver	0.0013	0.005	0.0032	0.0007-1.052 / 0.019	0.0032
Sodium	118	88	103	-	103
Sulfate	52	22	37	-	37
TDS	626	587	607	-	607
Total Hardness	200	217	209	-	209
TIN	33	37	35	-	35
TSS	258	268	263	-	263
Zinc	0.157	-	-	0.01-1.28 / 0.231	0.231
*based on sludge data (value shown is in mg/kg - dry weight)					

5. Proposed Local Limits

5.1. Technically Based Local Limits (TBLL)

The proposed local limits presented in this section are designed to prevent upset, interference and pass-through of pollutants at the WRCRWA treatment plant. Further, the proposed limits are comprised of technically based limits in the instances where numeric standards are established in either NPDES Permit limits; sludge regulations; process interference (inhibition) criteria; water quality (chronic and acute) toxicity thresholds; air quality; and health and safety standards. In some instances, Best Management Practices (BMPs) standards have been proposed (see Section VII) when technically derived values could not be established. An example of a BMP standard is the Fats, Oils, and Grease (FOG) (also referred to as polar oil and grease) limitation. The proposed limit for FOG is based upon effective maintenance of the treatment equipment (interceptor) and pollution prevention (mainly effective grease management practices within the food service establishment). The limit is designed to protect the collection system from obstructions that cause or contribute to sanitary sewer overflows. The primary method of determining compliance should be on-site inspections of the food service establishment to document grease management practices; maintenance of the grease interceptor; and documentation (records) that indicate proper disposal of interceptor contents. The numeric limit proposed is a ceiling limit that can be used to determine compliance in those instances where on-site best management practices can not be verified with certainty.

The proposed local limits for BOD and TSS are listed as a range to indicate that a maximum allowable limit can be derived (based upon headworks loading) however, being conventional pollutants (i.e., amenable to treatment), additional costs are incurred as the concentration go up. Therefore, WRCRWA could develop a “surcharge” cost for those discharges above conventional levels (i.e. 300 mg/L) up to the maximum value. A ceiling of 2,702 mg/L was established for BOD and a 2,285 mg/L limit for TSS.

The BMP for silver (2 mg/L) is achievable using and effectively maintaining silver recovery (ion exchange) systems and applies at the end of process rather than in a combined stream. The technically derived limitation for silver based upon chronic toxicity (0.43 mg/L) was determined and will be used as the local limit (“end of pipe”). A technology standard for removing silver from photoprocessing waste streams of 2 mg/L will be used to determine compliance with BMP standards. For large volume discharges, a mass limit can be applied by permit to control the total loading using the proposed BMP.

The recommendation of this report is to adopt a technically based Total Dissolved Solids (TDS) limitation and to use that limitation to control loading of other minerals (i.e., sodium, chloride, sulfate, boron, calcium, magnesium, etc.). This approach is consistent with the approach taken by the Regional Water Quality Control Board in recent NPDES Permit limitations and will continue to be protective of beneficial reuse criteria.

The proposed sulfide and dissolved sulfide limits are based on industry standards established for controlling odors, preventing corrosion, and to protect workers from malodorous and toxic gas (H_2S)

levels rather than headworks loading.

The proposed pH limitation is within the range recommended by USEPA.

The proposed limits for BOD and TSS include a range to indicate:

a. A maximum threshold based on headworks loading and meeting the established 20 mg/L 30-day average concentration listed in the NPDES permit; and
b. A lower end to indicate a concentration that represents domestic strength and therefore a concentration that would not be accompanied by a surcharge or additional treatment costs. (WRCRWA could adopt a surcharge program to allow industry to discharge up to the maximum value for a specified cost per lb of BOD and TSS above the domestic strength value)

5.2. Best Management Practices (BMP) Limits

Fats, Oils, & Grease: The new Fats, Oils, and Grease (FOG) Control Program requirements contained in the Statewide General Permit for Sanitary Sewers, require the development and implementation of BMPs to control FOG discharges. There are compelling reasons for the move towards BMPs for controlling FOG. The traditional local limits established for FOG are not technically based, but rather assumed to be established to protect the collection system from blockages. Typical concentration values adopted range from 250-500 mg/L which is based upon interceptor studies to determine a concentration attainable by a well maintained interceptor. The value adopted by most agencies is therefore a treatment standard (best available treatment) rather than a technically based limit designed to protect the collection system. Source control inspections at food service establishments is necessary to confirm BMPs and inspectors can verify non-compliance immediately (e.g. not having to wait for a sample analysis speeds up corrective actions) using interceptor maintenance guidelines (i.e., 25% Rule) and therefore resolve problems much faster. The industry standard for BMPs in the food service industry includes pollution prevention, good housekeeping practices, and proper interceptor maintenance. The 25% rule, is an industry standard for maintaining grease interceptors, and should be used by inspectors to determine the adequacy of maintenance of the grease interceptor. In summary, the BMP approach for compliance with FOG is recommended because it resolves problems quicker and is more defensible. As previously stated, the 500 mg/L limitation can be used when validating BMPs is problematic or to confirm a finding of non-compliance with the FOG BMPs.

Silver: The standard treatment for silver in the photoprocessing business is silver recovery. Technology for silver recovery is capable of consistently achieving 2 mg/L of silver in well maintained systems. The limit of 2 mg/L, like the FOG BMP limit described, is an end of pipe treatment limit as opposed to a combined stream “local limit”. The recommendation of this report is to adopt BMPs to control the silver coming from medical and photoprocessing businesses. Many of these businesses are low volume dischargers that are rarely sampled or permitted and therefore the requirement to develop BMPs for controlling silver discharges is seen as a good general approach to reducing silver levels being received from IUs and to ensure continued compliance with silver limitations. Research indicates that technology exists to reduce waste fixer to levels at or below 2

mg/L which seems like a good value to use to verify the effectiveness of the BMPs being utilized by IUs that perform photoprocessing or x-ray functions. Please note that the 2 mg/L limit is therefore an "end-of-process" limit rather than a local limit. See (http://www.dj.com/ESP/silver_recovery.htm) for more information on BMPs for silver recovery technology.

Total Petroleum Hydrocarbons (TPH) or Non-Polar Oil & Grease: The proposed limit for TPH is a federal standard adopted based upon treatment technologies and implementation of pollution prevention techniques for categorical dischargers. Many agencies have adopted the TPH limit of 100 mg/L to be consistent with a federal treatment standard. The recommendation of this report is to adopt a 100 mg/L for total petroleum type oil and grease also referred to as TPH.

Toxic Organics: As previously stated, the overall approach to controlling toxic organics recommended in this report is to adopt a TTO limit rather than for individual toxic organic compounds. The New Source Performance Standard (NSPS) adopted by the EPA for TTOs is 0.58 mg/L for certain federal categorical industries. TTO sampling is normally not required for any industrial users not classified as significant. The proposed limit for toxic organics in this report is consistent with the Best Available Treatment (BAT) limit adopted for TTOs by the EPA. Pretreatment Programs for the participating agencies must establish screening mechanisms to determine which IUs must develop and implement BMPs for the control of toxic organics.

LIST OF TOTAL TOXIC ORGANIC (TTO) POLLUTANTS
SUBJECT TO TTO LOCAL LIMIT OR TOXIC ORGANIC MANAGEMENT PLAN (TOMP)

The analysis methods set forth in 40 CFR Part 136, Methods 624, 625, and 608, provide data on the TTO constituents. Method 608 may not always be required. Unless specifically required, Method 1613 for dioxin compounds is not mandatory for routine analysis of TTO constituents. The constituents with concentrations greater than 0.01 mg/L must be added together to determine compliance with the proposed BMP limitations for TTOs. The following Constituents (and sample method) are included in the TTO limit requirement:

METHOD 624

Acrolein	Acrylonitrile	Benzene	Bromoform
Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane
2-Chloroethyl vinyl ether	Chloroform	1,2-Dichlorobenzene	1,3-Dichlorobenzene
1,4-Dichlorobenzene	Dichlorobromomethane	1,1-Dichloroethane	1,2-Dichloroethane
1,1-Dichloroethylene	1,2-Dichloropropane	1,3-Dichloropropylene	1,2-*trans*-Dichloroethylene
Ethylbenzene	Methyl bromide	Methyl chloride	Methylene chloride
Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethylene	Toluene
1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethylene	Vinyl chloride

METHOD 625

Acenaphthene	Acenaphthylene	Anthracene	1,2-Benzanthracene
Benzidine	3,4-Benzofluoranthene	11,12-Benzofluoranthene	1,12-Benzoperylene
3,4-Benzopyrene	bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether	bis(2-Chloroisopropyl) ether
bis(2-Ethylhexyl) phthalate	4-Bromophenyl phenyl ether	Butyl benzyl phthalate	4-Chloro-3-methylphenol
2-Chloronaphthalene	2-Chlorophenol	4-Chlorophenyl phenyl ether	Chrysene
1,2,5,6-Dibenzanthracene	3,3-Dichlorobenzidine	2,4-Dichlorophenol	Diethyl phthalate

2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	4,6-Dinitro-*ortho*-cresol
2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Di-n-octyl phthalate
1,2-Diphenylhydrazine	Fluoranthene	Fluorene	Hexachlorobenzene
Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-c,d)pyrene
Isophorone	Naphthalene	Nitrobenzene	2-Nitrophenol
4-Nitrophenol	N-Nitrosodimethylamine	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine
Pentachlorophenol	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene
2,4,6-Trichlorophenol			

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Aldrin	Alpha-BHC	Alpha-endosulfan	Beta-BHC
Beta-endosulfan	Chlordane	4,4'-DDD	4,4'-DDT
Delta-BHC	Endosulfan sulfate	Endrin	Endrin aldehyde
Gamma-BHC [lindane]	Heptachlor	Heptachlor epoxide	Toxaphene

The proposed limits for all constituents are shown in Section 5.3. Section 5.4 presents limitations from other local agencies for comparison purposes.

5.3. Proposed Concentration & Mass Limits

WRCRWA LOCAL LIMITS & BEST MANAGEMENT PRACTICES (BMPs)				
Constituents	Existing Local Limits Concentration (mg/L)	Existing Maximum Mass Loadings (lbs/day)[1]	Proposed Local Limits Concentration (mg/L)	Proposed Maximum Mass Loadings (lbs/day)[2]
METALS				
Arsenic	1.5	-	1.4	---
Cadmium	0.33	---	0.25	---
Copper	2.8	---	2.4	---
Ammonia	106	-	104	---
Chromium (Total)	0.7	---	2.4	---
Iron	200	---	94	---
Lead	1.7	---	0.52	---
Mercury	0.1	---	0.1	---
Nickel	8.9	---	5.3	---
Silver	1.4		0.43	---
Zinc	18.64	---	4.2	---
NON-METALS				
BOD	283	11.8	2,702	563
Boron	1.04	0.04		
Cyanide	0.12	---	0.12	---
Fluoride	1	0.04		
pH			5.0 - 11.0	
Selenium	0.008	---	0.31	---
Surfactants	15	---		---
TDS	751	31.32	726	151
TSS	433	18.06	2,285	476
BMP LIMITATIONS				
Oil & Grease, Petroleum[3]	150	---	100	---
Fats, Oil & Grease (FOG)[4]	-	---	500	
Silver[5]	-	---	2	---
Total Toxic Organics (TTOs)[6]	-	---	0.58	---

[1] Based on a 0.005 MGD discharge

[2] Based on a 0.025 MGD discharge

[3] BMPs will be used to control petroleum oil and grease discharges using pollution prevention and interceptor maintenance. A federal standard of 100 mg/L may be used to validate BMP compliance.

[4] BMPs will be used to control FOG discharges based using pollution prevention and interceptor maintenance guidelines. The 500 mg/L maximum may be used to validate BMP compliance.

[5] BMPs will be used to control silver using pollution prevention, best available treatment technology, and proper maintenance practices. The 2 mg/L limitation is determined at the "end of process" to demonstrate compliance with BMP.

[6] BMPs will used to control TTOs using product substitution, waste minimization, best available treatment, and proper maintenance. The 0.58 mg/L limit will be used to demonstrate compliance with BMP requirements at the local limit ("end of pipe") approved sample point.

5.4. Local Limit Comparisons with Other Local Agencies

LOCAL LIMIT COMPARISONS								
DRAFT - WRCRWA LOCAL LIMITS								
Agency	Hemet-SJ RWRF	MoVal RWRF	City of Corona	City of Riverside	Western WRF	City of Colton	WRCRWA Current	Proposed WRCRWA
Constituent	Limit (mg/L)							
Arsenic	1.2	0.99	0.4	0.18	1.41	0.12	1.5	**1.4**
Barium	14	14	13.45	-	-	43		-
Boron	4.6	4.88	1.37	5.2	4.80	7.4	1.04	-
Cadmium	0.65	0.53	0.02	0.15	0.67	0.05	0.33	**0.25**
Chloride	338	416	290	350	350	258	510	-
Chromium, Total	3.3	3	1.2	0.68	4.58	-	0.7	**2.4**
Hexavalent Chromium	-	-	-	-	-	0.4	-	-
Cobalt	3.4	3.5	2.2	-	-	9.5	-	-
Copper	0.6	0.74	2.2	3.0	1.22	2.1	2.8	**2.4**
Cyanide	0.9	2.3	0.08	0.17	2.28	3.1	0.12	**0.12**
Fluoride	12.3	15.15	1.5	12.0	-	6	1	-
Hardness	626	271	310	2,500	630	600	5,600	-
Iron	53	10	46	-	24.00	20	200	**94**
Lead	3.9	3.8	0.6	1.2	1.65	0.37	1.7	**0.52**
Manganese	0.7	0.88	0.85	1.0	0.74	2	-	-
Mercury	0.2	0.2	0.02	0.001	0.08	-	0.1	**0.1**
Nickel	4.7	6.9	0.4	2.3	4.24	0.6	8.9	**5.3**
Oil and Grease, Petroleum*	100	100	100	100	100	100	150	**100**
Phenols	18	42	8.7	-	-	-	-	-
Selenium	0.3	0.3	0.016	-	0.30	0.11	0.008	**0.31**
Silver[4]	5	5	0.6	0.8 - 5.0	5	0.9	1.4	**0.43**
Sodium	215	362	282	250	345	306	141	-
Sulfate	505	330	277	250	326	300	300	-
Total Dissolved Solids (TDS)[1]	1580	1279	1,627	2,500	1083	1,100	751	**726**
Total Suspended Solids (TSS)[2]	350 - 3,150	350 - 3,150	250 - 8,300	2,000	250-5,750	220 - 4,700	433	**300 - 2285**
BOD	250 - 3,150	250 - 3,150	250 - 2,830	5,000[3]	250-5,750	230 - 9,000	283	**300 - 2702**
Total Toxic Organics (TTOs)	2.13	2.13	0.58	-	-	-	-	**0.58**
Fats Oil & Grease (FOG) *	250 - 500	250 - 500	250 - 1355	250 - 350	500	250	-	**500**
Zinc	4.2	3.7	1.54	6.7	2.01	3.9	18.64	**4.2**
Other Limits								
pH (Standard Units)		5.0 - 10.5	5.0 - 11.5		5.0 - 11.0	5.0 - 11.0	6.0-10.0	**5.0 -11.0**
Ammonia (mg/L)							106	**104**
Surfactants (MBAS)							15	-
Total Inorganic Nitrogen (TIN)**	(Calculated limit of 120 mg/L)						-	-
Bis 2-(ethylhexyl) phthalate	(Calculated limit of 0.52 mg/L) Recommend using a Total Toxic Organic limitation						-	-
* End of process limit - BMP								-
** Ammonia limit will be used to control TIN loading								
[1] TSS limit range is 300 mg/L - 2,285 mg/L (maximum local limit is 2,285 mg/L. Values greater than 300 mg/L up to the maximum may be surcharged)								
[2] BOD limit range is 300 mg/L - 2,702 mg/L (maximum local limit is 2,702 mg/L. Values greater than 300 mg/L up to the maximum may be surcharged)								
[3] COD Value used in Riverside is 8,000 mg/L which approximates a BOD limit of 5,000 mg/L								
4The local limit can be used to determine compliance at the "end of pipe". A BMP limit of 2.0 mg/L will be used at the end of process whenever feasible.								

Appendix A
POTW Influent, Effluent & Sludge Data

MONTHLY INFLUENT MONITORING

Constituent	Units	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	AVG
TOC	mg/l	47	98	82	66	57	56	69	94	60	64	87	53	69
Total Suspended Solids	mg/l	532	360	371	315	367	326	356	311	297	305	346	324	351
Ammonia-Nitrogen	mg/l	26	30	30	23	28.4	31.1	29.4	37.0	25.5	31	32.2	30.8	29
Chloride	mg/l	109	137	144	151	162	165	146	201	141	134	122	200	151
Sodium	mg/l	118	131	144	121	151	138	140	160	140	145	134	163	140
Sulfate	mg/l	52	47	93	88	95	90	52	72	72	53	81	83.2	73
Total Hardness	mg/l	215	194	293	199	275	233	206	245	226	194	186	220	224
Total Inorganic Nitrogen	mg/l	31	31.3	28	31	30.8	32.5	25.8	37.0	29.0	27.8	28.3	34.2	30
Total Dissolved Solids	mg/l	656	706	724	687	638	624	716	848	732	694	648	760	703
Boron	mg/l	0.51	0.506	0.554	0.59	1.02	0.702	0.834	0.98	0.859	0.807	0.564	0.63	1
Fluoride	mg/l	0	0.5	0.54	1	1	0.64	1	1	0.7	1	0.5	1	1
Constituent	Units	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	AVG
TOC	mg/l	57	64	47	66	60	60	67	85	60	55	50	63	61
Total Suspended Solids	mg/l	335	339	302	299	326	369	396	330	335	292	317	332	331
Ammonia-Nitrogen	mg/l	27	27	29	34	28.6	28.0	33.6	36.4	27.1	31	34.3	28.6	30
Chloride	mg/l	152	158	132	138	160	154	148	151	144	149	132	160	148
Sodium	mg/l	127	118	115	124	158	134	123	125	137	111	103	124	125
Sulfate	mg/l	86	75	74	82	79	92	46	67	50	66	69	59	70
Total Hardness	mg/l	210	196	181	163	202	188	176	216	208	199	188	188	193
Total Inorganic Nitrogen	mg/l	34	36	35	34	33	43	56	42	34	35	30	37	37
Total Dissolved Solids	mg/l	736	640	704	668	732	704	684	656	616	728	620	672	680
Boron	mg/l	0.61	0.48	0.45	0.60	0.83	0.86	0.91	0.63	0.71	0.68	0.59	0.49	1
Fluoride	mg/l	0.5	0.4	0.4	0.4	0.7	0.6	1.0	0.5	0.6	0.2	0.5	0.4	1
Constituent	Units	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	AVG
TOC	mg/l	68	70	55	57	69	61	55	63	43	55	59	59	60
Total Suspended Solids	mg/l	306	306	305	242	271	224	236	218	248	252	246	264	260
BOD	mg/l	317	297	276	268	274	259	261	250	240	262	278	270	271
Ammonia-Nitrogen	mg/l	31	36	25	37	38.0	26.3	33.0	34.0	32.0	42	38.0	46.0	35
Chloride	mg/l	164	164	136	146	162	165	130	130	170	140	140	140	149
Sodium	mg/l	140	138	110	109	108	139	100	110	120	120	110	110	118
Sulfate	mg/l	71	73	66	62	46	61	38	39	49	43	31	40	52
Total Hardness	mg/l	226	208	171	189	208	226	180	170	200	200	200	220	200
Total Inorganic Nitrogen	mg/l	38	31	31	33	41	37	30	28	29	32	36	33	33
Total Dissolved Solids	mg/l	664	584	620	680	668	636	600	604	556	628	656	616	626
Boron	mg/l	0.74	0.73	0.69	0.70	0.54	0.81	0.59	0.70	0.68	0.67	0.57	0.61	0.67
Fluoride	mg/l	0.4	0.3	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.4	0.36

MONTHLY EFFLUENT MONITORING

Constituent	Units	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
TOC	mg/L	4.9	4.7	6.6	6.5	5.7	6.9	9.2	7.5	7.4	8	6.7	7.1
Bicarbonate	mg/L	214	232	244	244	238	226	243	238	226	217	201	214
Calcium	mg/L	50.5	61.9	60.1	48.0	51.1	48.8	51.7	47.0	46.6	47.2	53.5	52.2
Carbonate	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	mg/L	13.7	15.8	17.5	14.9	13.7	14.8	12.7	12.8	13.4	13.7	12.6	13.4
Nitrate as N	mg/L	4.3	5.0	3.8	3.3	3.0	2.4	3.4	3.0	3.4	3.7	5	4.8
Cyanide (Free)	µg/l	5	ND	ND	ND	2.4	ND	8	ND	ND	10	50	ND
Hexachlorocyclohexane - gamma (Lindane)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-ethylhexyl) phthalate	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	µg/l	ND	ND	3	0.5	1	3	1.7	2	1	1	2	ND
Fluoride	mg/L	0	0	0	ND	1	1	1	1	1	1	1	1
Sulfate	mg/L	86	97	108	104	100	100	95	106	101	88	92	98.9
Total Hardness	mg/L	182	219	222	181	183	183	181	170	171	174	185	185
Total Inorganic Nitrogen	mg/L	4.6	5.0	3.9	3.3	3.0	2.5	3.4	3.2	3.6	3.7	5.0	4.8
Constituent	Units	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
TOC	mg/L	5.8	5.2	5.7	5.3	5.3	5.8	5.2	5.2	4.5	6	6.3	6.2
Bicarbonate	mg/L	195	201	186	155	223	212	192	207	204	198	190	204
Calcium	mg/L	47.4	49.5	49.4	52.6	52.8	43.5	47.6	49.1	55.3	50.3	49.1	44.0
Carbonate	mg/L	ND	ND	ND	ND	ND	ND	158	ND	ND	163	ND	ND
Magnesium	mg/L	12.5	12.9	13.0	13.3	13.2	11.7	13.5	13.4	13.5	12.8	14.7	12.9
Nitrate as N	mg/L	4.0	3.9	4.6	6.5	19.1	4.2	5.7	5.3	5.4	9.4	5.8	5.6
Cyanide (Free)	µg/l	20	ND	ND	20	ND	ND	ND	ND	ND	11	ND	ND
Hexachlorocyclohexane - gamma (Lindane)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-ethylhexyl) phthalate	µg/l	8.7	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	µg/l	1	1.6	1	0.9	1	3	2.3	1	3	1	1	1

MONTHLY EFFLUENT MONITORING CONTINUED

Constituent	Units	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
Fluoride	mg/L	1	0	0	1	1	1	1	1	1	0	0	0
Sulfate	mg/L	89.7	85.3	84.5	90.6	92.7	92.2	87.1	88.4	79.1	80	88.3	84
Total Hardness	mg/L	170	177	178	186	186	156	174	178	194	178	183	163
Total Inorganic Nitrogen	mg/L	4.0	4.0	4.6	6.6	4.3	4.2	6.1	5.3	5.6	9.4	6.3	5.7
Constituent	Units	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
*Biochemical Oxygen Demand	mg/L	2	2	2	2	2	2	2	2	2	2	2	
*Suspended Solids	mg/L	2	4	5	6	3	2	2	2	2	3	4	
*Ammonia-Nitrogen	mg/L	0.19	0.10	ND	0.24	0.60	ND	4.1	ND	ND	0.9	0.2	
TOC	mg/L	6.5	7.0	6.4	6	6.1	6.0	5.8	6.0	5.4	6.5	5.9	6.0
Bicarbonate	mg/L	180	156	123	170	192	204	200	200	200	200	200	200
Calcium	mg/L	53.9	52.4	45.7	50.6	54.7	55.2	47	49.0	54	52	55	58.0
Carbonate	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	mg/L	12.6	13.1	12.7	12.0	10.9	12.0	10	11.0	12	12	12	11.0
Nitrate as N	mg/L	9.6	13.5	14.1	5.9	3.8	2.6	1.8	2.2	2.3	2.7	1.5	1.3
Cyanide (Free)	µg/l	ND	ND	10	13	3	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclohexane - gamma (Lindane)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-ethylhexyl) phthalate	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	29	ND	ND
Endosulfan I	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	µg/l	2	1	1	1	1	0.4	3	1	1.8	1.0	1.5	ND
Fluoride	mg/L	0.39	0.20	0.28	0.38	0.38	0.42	0.4	0.4	0.3	0.3	0.3	0.5
Sulfate	mg/L	83.6	84.4	89.4	77.3	68.1	68.3	56	60	62	60	66	60
Total Hardness	mg/L	186	184	166	175	181	187	160	170	180	180	190	190
Total Inorganic Nitrogen	mg/L	10	13.7	14.3	5.9	3.8	2.7	1.8	2.3	2.4	2.8	1.7	1.4

Not Quantifiable

***Average results**

QUARTERLY INFLUENT MONITORING

Constituent	Units	Jan-05	Apr-05	Jul-05	Oct-05	Jan-06	Apr-06	Jul-06	Oct-06	Jan-07	Apr-07	Jul-07	Oct-07
Arsenic	µg/l	ND	ND	11	2.2	0.7	ND	3.2	2.2	2.5	ND	2.5	2.4
Cadmium	µg/l	ND	ND	ND	0.2	0.2	0.2	0.2	0.3	ND	ND	0.22	0.11
Total Chromium	µg/l	9	5	ND	4.8	8.3	5	4	5	5	5.6	6.1	4.9
Copper	µg/l	84	76	102	64	123	96	81	98	109	50	82	38
Iron	µg/l	4890	1540	1770	1670	2560	984	847	883	3570	599	480	470
Lead	µg/l	10	11	6	3.4	3.8	2.9	3.8	3.9	2.5	2	2.3	2.2
Mercury	µg/l	ND	0.2	0.4	ND	ND	0.1	ND	ND	ND	ND	0.087	ND
Nickel	µg/l	7	4	ND	6.6	6.6	6	6.7	8.8	4	5	6.3	3.8
Silver	µg/l	ND	ND	ND	0.6	0.5	ND	0.3	0.5	0.5	4	0.62	0.23
Zinc	µg/l	161	160	248	151	175	202	161	162	210	118	160	140
Selenium	µg/l	ND	13	1.5	1.8	1.8	1.4	3.0	2.3	1.8	3	2.9	2.4
Cyanide	µg/l	ND	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclohexane-gamma	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	2.4	ND	ND	4.4	4.2	2.0	1.3	3.6	ND	ND	1.3	0.81
Dibromochloromethane	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	µg/l	ND	12	22.5	12	19	20	22	ND	28	25	18	ND

Not Quantifiable

QUARTERLY EFFLUENT MONITORING

Constituent	Units	Jan-05	Apr-05	Jul-05	Oct-05	Jan-06	Apr-06	Jul-06	Oct-06	Jan-07	Apr-07	Jul-07	Oct-07
Arsenic	µg/l	ND	ND	27	1.5	ND	ND	2.4	1.8	ND	0.7	2.0	1.5
Barium	µg/l	15	13	12	14	11	14	18	17	9	14	29	30
Cadmium	µg/l	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND
Chromium (III)	µg/l	ND	ND	ND	2	ND	2	ND	ND	ND	ND	ND	ND
Chromium (VI)	µg/l	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	0.12
Cobalt	µg/l	ND	ND	1	0.6	1	ND	1	ND	ND	ND	0.37	ND
Iron	mg/l	0.192	0.228	0.065	0.063	0.384	0.301	2.69	54	0.128	0.447	0.021	0.022
Lead	µg/l	3	5	ND	0.2	0.1	0.8	0.2	0.4	0.2	0.4	0.21	0.42
Manganese	mg/l	0.011	0.005	0.004	0.003	0.004	0.005	ND	0.002	0.003	ND	0.0054	0.0047
Mercury	µg/l	ND	0.1	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	µg/l	6	ND	48	3.3	2.3	ND	3.8	6	2.9	3	3.0	2.1
Silver	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	mg/l	0.112	0.045	0.106	0.040	0.037	0.109	0.041	0.048	0.045	0.054	0.059	0.057
Aldrin	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4, 4' - DDE	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4, 4' - DDD	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha BHC (a-BHC)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta BHC (b-BHC)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0054
Toxaphene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1016 (Aroclor 1016)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221 (Aroclor 1221)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232 (Aroclor 1232)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242 (Aroclor 1242)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248 (Aroclor 1248)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254 (Aroclor 1254)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1260 (Aroclor 1260)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane (Dibromochloromethane)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane (Bromodichloromethane)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-Dichloroethene)	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzidine	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-Chloroethyl) Ether	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EFFLUENT MONITORING CONTINUED

Constituent	Units	Jan-05	Apr-05	Jul-05	Oct-05	Jan-06	Apr-06	Jul-06	Oct-06	Jan-07	Apr-07	Jul-07	Oct-07
Dibenzo (a,h) Anthracene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 Diphenylhydrazine	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) Pyrene	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-N-Propylamine	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2, 4, 6 - Trichlorophenol	µg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Not Quantifiable

ANNUAL PRIORITY POLLUTANT INFLUENT MONITORING

Constituent	2005 Results	RDL	MDL	2006 Results	RDL	MDL	2007 Results	RDL	MDL	Units	Type of Sample
Pesticides (method 608)											
Aldrin	ND	0.11	0.008	ND	0.11	0.008	ND	0.110	0.008	µg/l	24-hour Composite
Chlordane	ND	0.25	0.1	ND	0.25	0.1	0.52	0.25	0.1	µg/l	24-hour Composite
Dieldrin	ND	0.06	0.012	ND	0.06	0.012	ND	0.060	0.012	µg/l	24-hour Composite
4. 4' - DDT	ND	0.06	0.017	ND	0.06	0.017	ND	0.060	0.017	µg/l	24-hour Composite
4, 4' - DDE	ND	0.05	0.013	ND	0.05	0.013	ND	0.050	0.013	µg/l	24-hour Composite
4, 4' - DDD	ND	0.06	0.015	ND	0.06	0.015	ND	0.060	0.015	µg/l	24-hour Composite
Alpha Endosulfan (Endosulfan I)	ND	0.03	0.006	ND	0.03	0.006	ND	0.030	0.006	µg/l	24-hour Composite
Beta Endosulfan (Endosulfan II)	ND	0.06	0.011	ND	0.06	0.011	ND	0.060	0.011	µg/l	24-hour Composite
Endosulfan Sulfate	ND	0.06	0.012	ND	0.06	0.012	ND	0.060	0.012	µg/l	24-hour Composite
Endrin	ND	0.06	0.015	ND	0.06	0.015	ND	0.060	0.015	µg/l	24-hour Composite
Endrin Aldehyde	ND	0.13	0.012	ND	0.13	0.012	ND	0.130	0.012	µg/l	24-hour Composite
Heptachlor	ND	0.08	0.008	ND	0.08	0.008	ND	0.080	0.008	µg/l	24-hour Composite
Heptachlor Epoxide	ND	0.05	0.010	ND	0.05	0.010	ND	0.050	0.010	µg/l	24-hour Composite
Alpha BHC (a-BHC)	ND	0.04	0.005	ND	0.04	0.005	ND	0.040	0.005	µg/l	24-hour Composite
Beta BHC (b-BHC)	ND	0.03	0.005	ND	0.03	0.005	ND	0.030	0.005	µg/l	24-hour Composite
Gamma BHC (Lindane)	ND	0.03	0.005	ND	0.03	0.005	ND	0.030	0.005	µg/l	24-hour Composite
Delta BHC (d-BHC)	ND	0.03	0.006	ND	0.03	0.006	ND	0.030	0.006	µg/l	24-hour Composite
Toxaphene	ND	3.13	3.13	ND	3.13	3.13	ND	3.13	3.13	µg/l	24-hour Composite
PCB 1016 (Aroclor 1016)	ND	0.50	0.049	ND	0.5	0.049	ND	0.500	0.049	µg/l	24-hour Composite
PCB 1221 (Aroclor 1221)	ND	0.50	0.049	ND	0.5	0.049	ND	0.500	0.049	µg/l	24-hour Composite
PCB 1232 (Aroclor 1232)	ND	0.50	0.060	ND	0.5	0.060	ND	0.500	0.060	µg/l	24-hour Composite
PCB 1242 (Aroclor 1242)	ND	0.50	0.031	ND	0.5	0.031	ND	0.500	0.031	µg/l	24-hour Composite
PCB 1248 (Aroclor 1248)	ND	0.50	0.121	ND	0.5	0.121	ND	0.500	0.121	µg/l	24-hour Composite
PCB 1254 (Aroclor 1254)	ND	0.50	0.017	ND	0.5	0.017	ND	0.500	0.017	µg/l	24-hour Composite
PCB 1260 (Aroclor 1260)	ND	0.50	0.031	ND	0.5	0.031	ND	0.500	0.031	µg/l	24-hour Composite
Metals											
Beryllium	ND	5	0.2	ND	5	0.2	ND	1	0.1	µg/l	24-hour Composite
Chromium (III)	ND	10		ND	10		ND	10		µg/l	24-hour Composite
Chromium (VI)	ND	0.3	0.04	ND	0.3	0.04	ND	0.3	0.09	µg/l	24-hour Composite
Thallium	ND	1	0.100	ND	1	0.1	ND	1.0	0.1	µg/l	24-hour Composite
Antimony	3.2	2	0.2	1.1	2	0.2	4	2	0.4	µg/l	24-hour Composite
Miscellaneous											
2,3,7.8-Tetrachlorodibenzo-P-Dioxin (TCDD	ND	11		ND	12		ND	15		pg/l	24-hour Composite
Base/Neutral Extractibles (method 625)											
Acenaphthene	ND	10	0.17	ND	10	0.17	ND	10	0.17	µg/l	24-hour Composite
Acenaphthylene	ND	10	0.06	ND	10	0.06	ND	10	0.06	µg/l	24-hour Composite
Anthracene	ND	10	0.05	ND	10	0.05	ND	10	0.05	µg/l	24-hour Composite
Benzidine	ND	50	0.8	ND	50	44	ND	50	44	µg/l	24-hour Composite
Benzo (a) Anthracene	ND	10	0.05	ND	10	0.051	ND	10	0.051	µg/l	24-hour Composite
Benzo (a) Pyrene	ND	10	0.08	ND	10	0.08	ND	10	0.08	µg/l	24-hour Composite
Benzo (b) Fluoranthene	ND	10	0.18	ND	10	0.18	ND	10	0.18	µg/l	24-hour Composite
Benzo (g,h,i) Perylene	ND	10	0.11	ND	10	0.11	ND	10	0.11	µg/l	24-hour Composite
Benzo (k) Fluoranthene	ND	10	0.15	ND	10	0.15	ND	10	0.15	µg/l	24-hour Composite
Bis (2-Chloroethoxy) Methane	ND	10	0.05	ND	10	0.05	ND	10	0.05	µg/l	24-hour Composite
Bis (2-Chloroethyl) Ether	ND	10	0.1	ND	10	0.14	ND	10.00	0.14	µg/l	24-hour Composite
Bis (2-Chloroisopropyl) Ether	ND	10	0.14	ND	10	0.14	ND	10	0.14	µg/l	24-hour Composite
Bis (2-Ethylhexyl) Phthalate	103	10	0.18	9.7	10	0.18	2.5	10	0.18	µg/l	24-hour Composite
4-Bromophenyl Phenyl Ether	ND	10	0.24	ND	10	0.24	ND	10	0.24	µg/l	24-hour Composite
Butyl Benzyl Phthalate	ND	10	0.14	1.7	10	0.14	ND	10	0.14	µg/l	24-hour Composite

ANNUAL PRIMARY POLLUTANT INFLUENT MONITORING
(Cont')

Base/Neutral Extractibles (method 625) - Continued											
2-Chloronaphthalene	ND	10	0.14	ND	10	0.14	ND	10	0.14	µg/l	24-hour Composite
Chrysene	ND	10	0.08	ND	10	0.08	ND	10	0.08	µg/l	24-hour Composite
Dibenzo (a,h) Anthracene	ND	10	0.26	ND	10	0.26	ND	10	0.26	µg/l	24-hour Composite
4-Chlorophenyl Phenyl Ether	ND	10	0.16	ND	10	0.16	ND	10	0.16	µg/l	24-hour Composite
1,2-Dichlorobenzene	ND	10	0.15	ND	10	0.15	ND	10.00	0.15	µg/l	24-hour Composite
1,3-Dichlorobenzene	ND	10	0.23	ND	10	0.23	ND	10.00	0.23	µg/l	24-hour Composite
1,4-Dichlorobenzene	ND	10	0.28	ND	10	0.28	ND	10.00	0.28	µg/l	24-hour Composite
3,3'-Dichlorobenzidine	ND	10	3.4	ND	10	3.4	ND	10.0	3.4	µg/l	24-hour Composite
Diethyl phthalate	9.1	10	0.12	5	10	0.12	ND	10.00	0.12	µg/l	24-hour Composite
Dimethyl phthalate	ND	10	0.09	ND	10	0.09	ND	10.00	0.09	µg/l	24-hour Composite
Di-n-Butylphthalate	ND	10	0.09	1.6	10	0.09	ND	10.00	0.09	µg/l	24-hour Composite
2,4-Dinitrotoluene	ND	10	0.19	ND	10	0.19	ND	10.00	0.19	µg/l	24-hour Composite
2,6-Dinitrotoluene	ND	10	0.21	ND	10	0.21	ND	10.00	0.21	µg/l	24-hour Composite
1,2 Diphenylhydrazine	ND	10	7.0	ND	10	5.0	ND	10.0	5.0	µg/l	24-hour Composite
Di-n-octylphthalate	ND	10	0.15	ND	10	0.15	ND	10.00	0.15	µg/l	24-hour Composite
Fluoranthene	ND	10	0.11	ND	10	0.11	ND	10.00	0.11	µg/l	24-hour Composite
Fluorene	ND	10	0.10	ND	10	0.1	ND	10.0	0.1	µg/l	24-hour Composite
Hexachlorobenzene	ND	10	0.35	ND	10	0.35	ND	10.00	0.35	µg/l	24-hour Composite
Hexachlorobutadiene	ND	10	0.15	ND	10	0.15	ND	10.00	0.15	µg/l	24-hour Composite
Hexachlorocyclopentadiene	ND	10	0.80	ND	10	0.40	ND	10.00	0.40	µg/l	24-hour Composite
Hexachloroethane	ND	10	0.70	ND	10	0.70	ND	10.00	0.70	µg/l	24-hour Composite
Indeno(1,2,3-cd)pyrene	ND	10	0.64	ND	10	0.64	ND	10.00	0.64	µg/l	24-hour Composite
Isophorone	ND	10	0.10	ND	10	0.10	ND	10.00	0.10	µg/l	24-hour Composite
Naphthalene	ND	10	0.06	ND	10	0.06	ND	10.00	0.06	µg/l	24-hour Composite
Nitrobenzene	ND	10	0.19	ND	10	0.19	ND	10.00	0.19	µg/l	24-hour Composite
N-Nitrosodimethylamine	ND	0.002	0.0005	ND	10	0.40	ND	10.00	0.40	µg/l	24-hour Composite
n-Nitrosodi-n-propylamine	ND	10	0.8	ND	10	0.50	ND	10.00	0.50	µg/l	24-hour Composite
N-Nitrosodiphenylamine	ND	10	0.14	ND	10	0.14	ND	10.00	0.14	µg/l	24-hour Composite
Phenanthrene	ND	10	0.07	ND	10	0.07	ND	10.00	0.07	µg/l	24-hour Composite
Pyrene	ND	10	0.10	ND	10	0.10	ND	10.00	0.10	µg/l	24-hour Composite
1,2,4-Trichlorobenzene	ND	10	0.07	ND	10	0.07	ND	10.00	0.07	µg/l	24-hour Composite

ANNUAL PRIMARY POLLUTANT INFLUENT MONITORING (Cont')

Acid Extractibles (method 625)											
2-Chlorophenol	ND	10	0.26	ND	10	0.26	ND	10	0.26	µg/l	24-hour Composite
2,4-Dichlorophenol	ND	10	0.3	ND	10	0.32	ND	10.00	0.32	µg/l	24-hour Composite
2,4-Dimethylphenol	ND	10	0.8	ND	10	2.6	ND	10.0	2.6	µg/l	24-hour Composite
4,6-Dinitro-O-Cresol (2-Methyl-4,6-Dinitrophenol)	ND	50	0.3	ND	10	0.31	ND	10.00	0.31	µg/l	24-hour Composite
2,4-Dinitrophenol	ND	50	2.6	ND	50	0.8	ND	50	0.8	µg/l	24-hour Composite
2-Nitrophenol	ND	10	0.19	ND	10	0.19	ND	10	0.19	µg/l	24-hour Composite
4-Nitrophenol	ND	50	0.8	ND	50	0.40	ND	50.00	0.40	µg/l	24-hour Composite
P-Chloro-M-Cresol (4-Chloro-3-methylphenol)	ND	10	0.34	ND	20	0.34	ND	20.00	0.34	µg/l	24-hour Composite
Pentachlorophenol	ND	50	0.76	ND	50	0.76	ND	50.00	0.76	µg/l	24-hour Composite
2, 4, 6 - Trichlorophenol	ND	50	0.8	ND	10	0.40	ND	10.00	0.40	µg/l	24-hour Composite
Volatile Organics (method 601, 602 and 603 or 624)											
Acrolein	ND	10	5.7	ND	10	5.7	ND	10	5.7	µg/l	Grab
Acrylonitrile	ND	10	3.1	ND	10	3.1	ND	10	3.1	µg/l	Grab
Bromoform	ND	5	0.24	ND	5	0.24	ND	5	0.24	µg/l	Grab
Carbon Tetrachloride	ND	5	0.13	ND	5	0.13	ND	5	0.13	µg/l	Grab
Chlorobenzene	ND	5	0.34	ND	5	0.34	ND	5	0.34	µg/l	Grab
Chloroethane	ND	10	0.65	ND	10	0.65	ND	10.00	0.65	µg/l	Grab
2-Chloroethylvinyl Ether	ND	10	2.00	ND	10	2.00	ND	10.00	2.00	µg/l	Grab
l,l-Dichloroethane	ND	5	0.14	ND	5	0.14	ND	5	0.14	µg/l	Grab
1,2-Dichloroethane	ND	5	0.14	ND	5	0.14	ND	5	0.14	µg/l	Grab
1,1-Dichloroethylene (1,1-Dichloroethene)	ND	5	0.11	ND	5	0.11	ND	5	0.11	µg/l	Grab
1,2-Dichloropropane	ND	5	0.17	ND	5	0.17	ND	5.00	0.17	µg/l	Grab
1,3-Dichloropropylene (cis-1,3-Dichloropropene)	ND	5	0.13	ND	5	0.13	ND	5.00	0.13	µg/l	Grab
Ethylbenzene	ND	5	0.06	ND	5	0.06	ND	5.00	0.06	µg/l	Grab
Methyl Bromide (Bromomethane)	ND	10	0.32	ND	10	0.32	ND	10.00	0.32	µg/l	Grab
Methyl Chloride (Chloromethane)	ND	10	0.54	ND	10	0.54	ND	10.00	0.54	µg/l	Grab
Methylene Chloride	ND	5	0.15	ND	5	0.15	ND	5	0.15	µg/l	Grab
1,1,2,2-Tetrachloroethane	ND	5	0.14	ND	5	0.14	ND	5	0.14	µg/l	Grab
Tetrachloroethylene (Tetrachloroethene)	ND	5	0.11	ND	5	0.11	1	5	0.11	µg/l	Grab
Toluene	5.4	5	0.15	4.2	5	0.15	2.2	5	0.15	µg/l	Grab
1,2-Trans-Dichloroethylene (trans-1,2-dichlorothene)	ND	5	0.18	ND	5	0.18	ND	5.00	0.18	µg/l	Grab
1, 1, 1 -Trichloroethane	ND	5	0.13	ND	5	0.13	ND	5.00	0.13	µg/l	Grab
1, 1, 2-Trichloroethane	ND	5	0.30	ND	5	0.30	ND	5.00	0.30	µg/l	Grab
Trichloroethylene (Trichloroethene)	ND	5	0.13	ND	5	0.13	ND	5.00	0.13	µg/l	Grab
Vinyl Chloride	ND	10	0.21	ND	10	0.21	ND	10.00	0.21	µg/l	Grab
Not Quantifiable											

ANNUAL INFLUENT MONITORING - 2005

Constituent	Results	RDL	MDL	Units	Type of Sample	Frequency of Sampling
Sample Date 10/4/2005 Time 09:15						
Pesticides (method 608)						
Aldrin	ND	0.11	0.008	µg/l	24-hour Composite	Annual
Chlordane	ND	0.25	0.1	µg/l	24-hour Composite	Annual
Dieldrin	ND	0.06	0.012	µg/l	24-hour Composite	Annual
4. 4' - DDT	ND	0.06	0.017	µg/l	24-hour Composite	Annual
4, 4' - DDE	ND	0.05	0.013	µg/l	24-hour Composite	Annual
4, 4' - DDD	ND	0.06	0.015	µg/l	24-hour Composite	Annual
Alpha Endosulfan (Endosulfan I)	ND	0.03	0.006	µg/l	24-hour Composite	Annual
Beta Endosulfan (Endosulfan II)	ND	0.06	0.011	µg/l	24-hour Composite	Annual
Endosulfan Sulfate	ND	0.06	0.012	µg/l	24-hour Composite	Annual
Endrin	ND	0.06	0.015	µg/l	24-hour Composite	Annual
Endrin Aldehyde	ND	0.13	0.012	µg/l	24-hour Composite	Annual
Heptachlor	ND	0.08	0.008	µg/l	24-hour Composite	Annual
Heptachlor Epoxide	ND	0.05	0.010	µg/l	24-hour Composite	Annual
Alpha BHC (a-BHC)	ND	0.04	0.005	µg/l	24-hour Composite	Annual
Beta BHC (b-BHC)	ND	0.03	0.005	µg/l	24-hour Composite	Annual
Gamma BHC (Lindane)	ND	0.03	0.005	µg/l	24-hour Composite	Annual
Delta BHC (d-BHC)	ND	0.03	0.006	µg/l	24-hour Composite	Annual
Toxaphene	ND	3.13	3.13	µg/l	24-hour Composite	Annual
PCB 1016 (Aroclor 1016)	ND	0.50	0.049	µg/l	24-hour Composite	Annual
PCB 1221 (Aroclor 1221)	ND	0.50	0.049	µg/l	24-hour Composite	Annual
PCB 1232 (Aroclor 1232)	ND	0.50	0.060	µg/l	24-hour Composite	Annual
PCB 1242 (Aroclor 1242)	ND	0.50	0.031	µg/l	24-hour Composite	Annual
PCB 1248 (Aroclor 1248)	ND	0.50	0.121	µg/l	24-hour Composite	Annual
PCB 1254 (Aroclor 1254)	ND	0.50	0.017	µg/l	24-hour Composite	Annual
PCB 1260 (Aroclor 1260)	ND	0.50	0.031	µg/l	24-hour Composite	Annual
Metals						
Beryllium	ND	5	0.2	µg/l	24-hour Composite	Annual
Chromium (III)	ND	10		µg/l	24-hour Composite	Annual
Chromium (VI)	ND	0.3	0.04	µg/l	24-hour Composite	Annual
Thallium	ND	1	0.100	µg/l	24-hour Composite	Annual
Antimony	3.2	2	0.2	µg/l	24-hour Composite	Annual
Miscellaneous						
2,3,7.8-Tetrachlorodibenzo-P-Dioxin (TCDD	ND	11		pg/l	24-hour Composite	Annual
Base/Neutral Extractibles (method 625)						
Acenaphthene	ND	10	0.17	µg/l	24-hour Composite	Annual
Acenaphthylene	ND	10	0.06	µg/l	24-hour Composite	Annual
Anthracene	ND	10	0.05	µg/l	24-hour Composite	Annual
Benzidine	ND	50	0.8	µg/l	24-hour Composite	Annual
Benzo (a) Anthracene	ND	10	0.05	µg/l	24-hour Composite	Annual
Benzo (a) Pyrene	ND	10	0.08	µg/l	24-hour Composite	Annual
Benzo (b) Fluoranthene	ND	10	0.18	µg/l	24-hour Composite	Annual
Benzo (g,h,i) Perylene	ND	10	0.11	µg/l	24-hour Composite	Annual
Benzo (k) Fluoranthene	ND	10	0.15	µg/l	24-hour Composite	Annual
Bis (2-Chloroethoxy) Methane	ND	10	0.05	µg/l	24-hour Composite	Annual
Bis (2-Chloroethyl) Ether	ND	10	0.1	µg/l	24-hour Composite	Annual
Bis (2-Chloroisopropyl) Ether	ND	10	0.14	µg/l	24-hour Composite	Annual
Bis (2-Ethylhexyl) Phthalate	103	10	0.18	µg/l	24-hour Composite	Annual
4-Bromophenyl Phenyl Ether	ND	10	0.24	µg/l	24-hour Composite	Annual
Butyl Benzyl Phthalate	ND	10	0.14	µg/l	24-hour Composite	Annual

Base/Neutral Extractibles (method 625) - Continued						
2-Chloronaphthalene	ND	10	0.14	µg/l	24-hour Composite	Annual
Chrysene	ND	10	0.08	µg/l	24-hour Composite	Annual
Dibenzo (a,h) Anthracene	ND	10	0.26	µg/l	24-hour Composite	Annual
4-Chlorophenyl Phenyl Ether	ND	10	0.16	µg/l	24-hour Composite	Annual
1,2-Dichlorobenzene	ND	10	0.15	µg/l	24-hour Composite	Annual
1,3-Dichlorobenzene	ND	10	0.23	µg/l	24-hour Composite	Annual
1,4-Dichlorobenzene	ND	10	0.28	µg/l	24-hour Composite	Annual
3,3'-Dichlorobenzidine	ND	10	3.4	µg/l	24-hour Composite	Annual
Diethyl phthalate	9.1	10	0.12	µg/l	24-hour Composite	Annual
Dimethyl phthalate	ND	10	0.09	µg/l	24-hour Composite	Annual
Di-n-Butylphthalate	ND	10	0.09	µg/l	24-hour Composite	Annual
2,4-Dinitrotoluene	ND	10	0.19	µg/l	24-hour Composite	Annual
2,6-Dinitrotoluene	ND	10	0.21	µg/l	24-hour Composite	Annual
1,2 Diphenylhydrazine	ND	10	7.0	µg/l	24-hour Composite	Annual
Di-n-octylphthalate	ND	10	0.15	µg/l	24-hour Composite	Annual
Fluoranthene	ND	10	0.11	µg/l	24-hour Composite	Annual
Fluorene	ND	10	0.10	µg/l	24-hour Composite	Annual
Hexachlorobenzene	ND	10	0.35	µg/l	24-hour Composite	Annual
Hexachlorobutadiene	ND	10	0.15	µg/l	24-hour Composite	Annual
Hexachlorocyclopentadiene	ND	10	0.80	µg/l	24-hour Composite	Annual
Hexachloroethane	ND	10	0.70	µg/l	24-hour Composite	Annual
Indeno(1,2,3-cd)pyrene	ND	10	0.64	µg/l	24-hour Composite	Annual
Isophorone	ND	10	0.10	µg/l	24-hour Composite	Annual
Naphthalene	ND	10	0.06	µg/l	24-hour Composite	Annual
Nitrobenzene	ND	10	0.19	µg/l	24-hour Composite	Annual
N-Nitrosodimethylamine	ND	0.002	0.0005	µg/l	24-hour Composite	Annual
n-Nitrosodi-n-propylamine	ND	10	0.8	µg/l	24-hour Composite	Annual
N-Nitrosodiphenylamine	ND	10	0.14	µg/l	24-hour Composite	Annual
Phenanthrene	ND	10	0.07	µg/l	24-hour Composite	Annual
Pyrene	ND	10	0.10	µg/l	24-hour Composite	Annual
1,2,4-Trichlorobenzene	ND	10	0.07	µg/l	24-hour Composite	Annual
Acid Extractibles (method 625)						
2-Chlorophenol	ND	10	0.26	µg/l	24-hour Composite	Annual
2,4-Dichlorophenol	ND	10	0.3	µg/l	24-hour Composite	Annual
2,4-Dimethylphenol	ND	10	0.8	µg/l	24-hour Composite	Annual
4,6-Dinitro-O-Cresol (2-Methyl-4,6-Dinitrophenol)	ND	50	0.3	µg/l	24-hour Composite	Annual
2,4-Dinitrophenol	ND	50	2.6	µg/l	24-hour Composite	Annual
2-Nitrophenol	ND	10	0.19	µg/l	24-hour Composite	Annual
4-Nitrophenol	ND	50	0.8	µg/l	24-hour Composite	Annual
P-Chloro-M-Cresol (4-Chloro-3-methylphenol)	ND	10	0.34	µg/l	24-hour Composite	Annual
Pentachlorophenol	ND	50	0.76	µg/l	24-hour Composite	Annual
2, 4, 6 - Trichlorophenol	ND	50	0.8	µg/l	24-hour Composite	Annual
Volatile Organics (method 601, 602 and 603 or 624)						
Acrolein	ND	10	5.7	µg/l	Grab	Annual
Acrylonitrile	ND	10	3.1	µg/l	Grab	Annual
Bromoform	ND	5	0.24	µg/l	Grab	Annual
Carbon Tetrachloride	ND	5	0.13	µg/l	Grab	Annual
Chlorobenzene	ND	5	0.34	µg/l	Grab	Annual
Chloroethane	ND	10	0.65	µg/l	Grab	Annual
2-Chloroethylvinyl Ether	ND	10	2.00	µg/l	Grab	Annual
I,I-Dichloroethane	ND	5	0.14	µg/l	Grab	Annual
1,2-Dichloroethane	ND	5	0.14	µg/l	Grab	Annual
1,1-Dichloroethylene (1,1-Dichloroethene)	ND	5	0.11	µg/l	Grab	Annual
1,2-Dichloropropane	ND	5	0.17	µg/l	Grab	Annual
1,3-Dichloropropylene (cis-1,3-Dichloropropene)	ND	5	0.13	µg/l	Grab	Annual
Ethylbenzene	ND	5	0.06	µg/l	Grab	Annual
Methyl Bromide (Bromomethane)	ND	10	0.32	µg/l	Grab	Annual
Methyl Chloride (Chloromethane)	ND	10	0.54	µg/l	Grab	Annual
Methylene Chloride	ND	5	0.15	µg/l	Grab	Annual
1,1,2,2-Tetrachloroethane	ND	5	0.14	µg/l	Grab	Annual
Tetrachloroethylene (Tetrachloroethene)	ND	5	0.11	µg/l	Grab	Annual
Toluene	5.4	5	0.15	µg/l	Grab	Annual
1,2-Trans-Dichloroethylene (trans-1,2-dichlorothene)	ND	5	0.18	µg/l	Grab	Annual
1, 1, 1 -Trichloroethane	ND	5	0.13	µg/l	Grab	Annual
1, 1, 2-Trichloroethane	ND	5	0.30	µg/l	Grab	Annual
Trichloroethylene (Trichloroethene)	ND	5	0.13	µg/l	Grab	Annual
Vinyl Chloride	ND	10	0.21	µg/l	Grab	Annual

ANNUAL INFLUENT MONITORING - 2006

Constituent	Results	RDL	MDL	Units	Type of Sample	Frequency of Sampling
Sample Date 1/4/2006 Time 09:15						
Pesticides (method 608)						
Aldrin	ND	0.11	0.008	µg/l	24-hour Composite	Annual
Chlordane	ND	0.25	0.1	µg/l	24-hour Composite	Annual
Dieldrin	ND	0.06	0.012	µg/l	24-hour Composite	Annual
4. 4' - DDT	ND	0.06	0.017	µg/l	24-hour Composite	Annual
4, 4' - DDE	ND	0.05	0.013	µg/l	24-hour Composite	Annual
4, 4' - DDD	ND	0.06	0.015	µg/l	24-hour Composite	Annual
Alpha Endosulfan (Endosulfan I)	ND	0.03	0.006	µg/l	24-hour Composite	Annual
Beta Endosulfan (Endosulfan II)	ND	0.06	0.011	µg/l	24-hour Composite	Annual
Endosulfan Sulfate	ND	0.06	0.012	µg/l	24-hour Composite	Annual
Endrin	ND	0.06	0.015	µg/l	24-hour Composite	Annual
Endrin Aldehyde	ND	0.13	0.012	µg/l	24-hour Composite	Annual
Heptachlor	ND	0.08	0.008	µg/l	24-hour Composite	Annual
Heptachlor Epoxide	ND	0.05	0.010	µg/l	24-hour Composite	Annual
Alpha BHC (a-BHC)	ND	0.04	0.005	µg/l	24-hour Composite	Annual
Beta BHC (b-BHC)	ND	0.03	0.005	µg/l	24-hour Composite	Annual
Gamma BHC (Lindane)	ND	0.03	0.005	µg/l	24-hour Composite	Annual
Delta BHC (d-BHC)	ND	0.03	0.006	µg/l	24-hour Composite	Annual
Toxaphene	ND	3.13	3.13	µg/l	24-hour Composite	Annual
PCB 1016 (Aroclor 1016)	ND	0.5	0.049	µg/l	24-hour Composite	Annual
PCB 1221 (Aroclor 1221)	ND	0.5	0.049	µg/l	24-hour Composite	Annual
PCB 1232 (Aroclor 1232)	ND	0.5	0.060	µg/l	24-hour Composite	Annual
PCB 1242 (Aroclor 1242)	ND	0.5	0.031	µg/l	24-hour Composite	Annual
PCB 1248 (Aroclor 1248)	ND	0.5	0.121	µg/l	24-hour Composite	Annual
PCB 1254 (Aroclor 1254)	ND	0.5	0.017	µg/l	24-hour Composite	Annual
PCB 1260 (Aroclor 1260)	ND	0.5	0.031	µg/l	24-hour Composite	Annual
Metals						
Beryllium	ND	5	0.2	µg/l	24-hour Composite	Annual
Chromium (III)	ND	10		µg/l	24-hour Composite	Annual
Chromium (VI)	ND	0.3	0.04	µg/l	24-hour Composite	Annual
Thallium	ND	1	0.1	µg/l	24-hour Composite	Annual
Antimony	1.1	2	0.2	µg/l	24-hour Composite	Annual
Miscellaneous						
2,3,7.8-Tetrachlorodibenzo-P-Dioxin (TCDD)	ND	12		ηg/l	24-hour Composite	Annual
Base/Neutral Extractibles (method 625)						
Acenaphthene	ND	10	0.17	µg/l	24-hour Composite	Annual
Acenaphthylene	ND	10	0.06	µg/l	24-hour Composite	Annual
Anthracene	ND	10	0.05	µg/l	24-hour Composite	Annual
Benzidine	ND	50	44	µg/l	24-hour Composite	Annual
Benzo (a) Anthracene	ND	10	0.051	µg/l	24-hour Composite	Annual
Benzo (a) Pyrene	ND	10	0.08	µg/l	24-hour Composite	Annual
Benzo (b) Fluoranthene	ND	10	0.18	µg/l	24-hour Composite	Annual
Benzo (g,h,i) Perylene	ND	10	0.11	µg/l	24-hour Composite	Annual
Benzo (k) Fluoranthene	ND	10	0.15	µg/l	24-hour Composite	Annual
Bis (2-Chloroethoxy) Methane	ND	10	0.05	µg/l	24-hour Composite	Annual
Bis (2-Chloroethyl) Ether	ND	10	0.14	µg/l	24-hour Composite	Annual
Bis (2-Chloroisopropyl) Ether	ND	10	0.14	µg/l	24-hour Composite	Annual
Bis (2-Ethylhexyl) Phthalate	9.7	10	0.18	µg/l	24-hour Composite	Annual
4-Bromophenyl Phenyl Ether	ND	10	0.24	µg/l	24-hour Composite	Annual
Butyl Benzyl Phthalate	1.7	10	0.14	µg/l	24-hour Composite	Annual

Base/Neutral Extractibles (method 625) - Continued						
2-Chloronaphthalene	ND	10	0.14	µg/l	24-hour Composite	Annual
Chrysene	ND	10	0.08	µg/l	24-hour Composite	Annual
Dibenzo (a,h) Anthracene	ND	10	0.26	µg/l	24-hour Composite	Annual
4-Chlorophenyl Phenyl Ether	ND	10	0.16	µg/l	24-hour Composite	Annual
1,2-Dichlorobenzene	ND	10	0.15	µg/l	24-hour Composite	Annual
1,3-Dichlorobenzene	ND	10	0.23	µg/l	24-hour Composite	Annual
1,4-Dichlorobenzene	ND	10	0.28	µg/l	24-hour Composite	Annual
3,3'-Dichlorobenzidine	ND	10	3.4	µg/l	24-hour Composite	Annual
Diethyl phthalate	5	10	0.12	µg/l	24-hour Composite	Annual
Dimethyl phthalate	ND	10	0.09	µg/l	24-hour Composite	Annual
Di-n-Butylphthalate	1.6	10	0.09	µg/l	24-hour Composite	Annual
2,4-Dinitrotoluene	ND	10	0.19	µg/l	24-hour Composite	Annual
2,6-Dinitrotoluene	ND	10	0.21	µg/l	24-hour Composite	Annual
1,2 Diphenylhydrazine	ND	10	5.0	µg/l	24-hour Composite	Annual
Di-n-octylphthalate	ND	10	0.15	µg/l	24-hour Composite	Annual
Fluoranthene	ND	10	0.11	µg/l	24-hour Composite	Annual
Fluorene	ND	10	0.1	µg/l	24-hour Composite	Annual
Hexachlorobenzene	ND	10	0.35	µg/l	24-hour Composite	Annual
Hexachlorobutadiene	ND	10	0.15	µg/l	24-hour Composite	Annual
Hexachlorocyclopentadiene	ND	10	0.40	µg/l	24-hour Composite	Annual
Hexachloroethane	ND	10	0.70	µg/l	24-hour Composite	Annual
Indeno(1,2,3-cd)pyrene	ND	10	0.64	µg/l	24-hour Composite	Annual
Isophorone	ND	10	0.10	µg/l	24-hour Composite	Annual
Naphthalene	ND	10	0.06	µg/l	24-hour Composite	Annual
Nitrobenzene	ND	10	0.19	µg/l	24-hour Composite	Annual
N-Nitrosodimethylamine	ND	10	0.40	µg/l	24-hour Composite	Annual
n-Nitrosodi-n-propylamine	ND	10	0.50	µg/l	24-hour Composite	Annual
N-Nitrosodiphenylamine	ND	10	0.14	µg/l	24-hour Composite	Annual
Phenanthrene	ND	10	0.07	µg/l	24-hour Composite	Annual
Pyrene	ND	10	0.10	µg/l	24-hour Composite	Annual
1,2,4-Trichlorobenzene	ND	10	0.07	µg/l	24-hour Composite	Annual
Acid Extractibles (method 625)						
2-Chlorophenol	ND	10	0.26	µg/l	24-hour Composite	Annual
2,4-Dichlorophenol	ND	10	0.32	µg/l	24-hour Composite	Annual
2,4-Dimethylphenol	ND	10	2.6	µg/l	24-hour Composite	Annual
4,6-Dinitro-O-Cresol (2-Methyl-4,6-Dinitrophenol)	ND	10	0.31	µg/l	24-hour Composite	Annual
2,4-Dinitrophenol	ND	50	0.8	µg/l	24-hour Composite	Annual
2-Nitrophenol	ND	10	0.19	µg/l	24-hour Composite	Annual
4-Nitrophenol	ND	50	0.40	µg/l	24-hour Composite	Annual
P-Chloro-M-Cresol (4-Chloro-3-methylphenol)	ND	20	0.34	µg/l	24-hour Composite	Annual
Pentachlorophenol	ND	50	0.76	µg/l	24-hour Composite	Annual
2, 4, 6 - Trichlorophenol	ND	10	0.40	µg/l	24-hour Composite	Annual
Volatile Organics (method 601, 602 and 603 or 624)						
Acrolein	ND	10	5.7	µg/l	Grab	Annual
Acrylonitrile	ND	10	3.1	µg/l	Grab	Annual
Bromoform	ND	5	0.24	µg/l	Grab	Annual
Carbon Tetrachloride	ND	5	0.13	µg/l	Grab	Annual
Chlorobenzene	ND	5	0.34	µg/l	Grab	Annual
Chloroethane	ND	10	0.65	µg/l	Grab	Annual
2-Chloroethylvinyl Ether	ND	10	2.00	µg/l	Grab	Annual
I,I-Dichloroethane	ND	5	0.14	µg/l	Grab	Annual
1,2-Dichloroethane	ND	5	0.14	µg/l	Grab	Annual
1,1-Dichloroethylene (1,1-Dichloroethene)	ND	5	0.11	µg/l	Grab	Annual
1,2-Dichloropropane	ND	5	0.17	µg/l	Grab	Annual
1,3-Dichloropropylene (cis-1,3-Dichloropropene)	ND	5	0.13	µg/l	Grab	Annual
Ethylbenzene	ND	5	0.06	µg/l	Grab	Annual
Methyl Bromide (Bromomethane)	ND	10	0.32	µg/l	Grab	Annual
Methyl Chloride (Chloromethane)	ND	10	0.54	µg/l	Grab	Annual
Methylene Chloride	ND	5	0.15	µg/l	Grab	Annual
1,1,2,2-Tetrachloroethane	ND	5	0.14	µg/l	Grab	Annual
Tetrachloroethylene (Tetrachloroethene)	ND	5	0.11	µg/l	Grab	Annual
Toluene	4.2	5	0.15	µg/l	Grab	Annual
1,2-Trans-Dichloroethylene (trans-1,2-dichlorothene)	ND	5	0.18	µg/l	Grab	Annual
1, 1, 1 -Trichloroethane	ND	5	0.13	µg/l	Grab	Annual
1, 1, 2-Trichloroethane	ND	5	0.30	µg/l	Grab	Annual
Trichloroethylene (Trichloroethene)	ND	5	0.13	µg/l	Grab	Annual
Vinyl Chloride	ND	10	0.21	µg/l	Grab	Annual

ANNUAL PRIORITY POLLUTANT EFFLUENT MONITORING

Constituent	2005 Results	2006 Results	2007 Results	RDL	MDL	Units	Type of Sample
Metals							
Antimony	2.3	ND	ND	2	0.2	µg/l	24-hour Composite
Beryllium	ND	ND	ND	5	0.2	µg/l	24-hour Composite
Chromium (III)	2	ND	ND	10		µg/l	24-hour Composite
Copper	3.9	3.5	3	5	0.1	µg/l	24-hour Composite
Thallium	ND	ND	ND	1	0.1	µg/l	24-hour Composite
Pesticides (method 608)							
Beta Endosulfan (Endosulfan II)	ND	ND	ND	0.06	0.011	µg/l	24-hour Composite
Endosulfan Sulfate	ND	ND	ND	0.06	0.012	µg/l	24-hour Composite
Endrin Aldehyde	ND	ND	ND	0.13	0.012	µg/l	24-hour Composite
Gamma BHC (Lindane)	ND	ND	ND	0.03	0.005	µg/l	24-hour Composite
Delta BHC (d-BHC)	ND	ND	ND	0.03	0.006	µg/l	24-hour Composite
Volatile Organics (method 601, 602 and 603 or 624)							
Acrolein	ND	ND	ND	10	5.7	µg/l	Grab
Acrylonitrile	ND	ND	ND	10	3.1	µg/l	Grab
Benzene	ND	ND	ND	5	0.10	µg/l	Grab
Bromoform	ND	ND	ND	5	0.24	µg/l	Grab
Carbon Tetrachloride	ND	ND	ND	5	0.13	µg/l	Grab
Chlorobenzene	ND	ND	ND	5	0.34	µg/l	Grab
Chlorodibromomethane (Dibromochloromethane)	ND	ND	ND	5	0.22	µg/l	Grab
Chloroethane	ND	ND	ND	10	0.65	µg/l	Grab
2-Chloroethylvinyl Ether	ND	ND	ND	10	2.00	µg/l	Grab
Chloroform	ND	ND	ND	5	0.10	µg/l	Grab
Dichlorobromomethane (Bromodichloromethane)	ND	ND	ND	5	0.11	µg/l	Grab
1,1-Dichloroethane	ND	ND	ND	5	0.14	µg/l	Grab
1,2-Dichloroethane	ND	ND	ND	5	0.14	µg/l	Grab
1,1-Dichloroethylene (1,1-Dichloroethene)	ND	ND	ND	5	0.11	µg/l	Grab
1,2-Dichloropropane	ND	ND	ND	5	0.17	µg/l	Grab
1,3-Dichloropropylene (cis-1,3-Dichloropropene)	ND	ND	ND	5	0.13	µg/l	Grab
Ethylbenzene	ND	ND	ND	5	0.06	µg/l	Grab
Methyl Bromide (Bromomethane)	ND	ND	ND	10	0.32	µg/l	Grab
Methyl Chloride (Chloromethane)	ND	ND	ND	10	0.54	µg/l	Grab
Methylene Chloride	ND	ND	ND	5	0.15	µg/l	Grab
1,1,2,2-Tetrachloroethane	ND	ND	ND	5	0.14	µg/l	Grab
Toluene	ND	ND	ND	5	0.15	µg/l	Grab
1,2-Trans-Dichloroethylene (Trans-1,2-Dichlorothene)	ND	ND	ND	5	0.18	µg/l	Grab
1, 1, 1 -Trichloroethane	ND	ND	ND	5	0.13	µg/l	Grab
1, 1, 2-Trichloroethane	ND	ND	ND	5	0.30	µg/l	Grab
Trichloroethylene (Trichloroethene)	ND	ND	ND	5	0.13	µg/l	Grab
Vinyl Chloride	ND	ND	ND	10	0.21	µg/l	Grab

ANNUAL PRIORITY POLLUTANT EFFLUENT MONITORING (Continued)

Base/Neutral Extractibles (method 625)							
Acenaphthene	ND	ND	ND	10	0.17	µg/l	24-hour Composite
Acenaphthylene	ND	ND	ND	10	0.06	µg/l	24-hour Composite
Anthracene	ND	ND	ND	10	0.05	µg/l	24-hour Composite
Benzo (g,h,i) Perylene	ND	ND	ND	10	0.11	µg/l	24-hour Composite
Bis (2-Chloroethyl) Ether	ND	ND	ND	10	0.14	µg/l	24-hour Composite
Bis (2-Chloroisopropyl) Ether	ND	ND	ND	10	0.14	µg/l	24-hour Composite
Bis (2-Ethylhexyl) Phthalate	3.2	6.3	ND	10	0.18	µg/l	24-hour Composite
4-Bromophenyl Phenyl Ether	ND	ND	ND	10	0.24	µg/l	24-hour Composite
Benzyl Butyl Phthalate	ND	ND	ND	10	0.14	µg/l	24-hour Composite
2-Chloronaphthalene	ND	ND	ND	10	0.14	µg/l	24-hour Composite
4-Chlorophenyl Phenyl Ether	ND	ND	ND	10	0.16	µg/l	24-hour Composite
1,2-Dichlorobenzene	ND	ND	ND	10	0.15	µg/l	24-hour Composite
1,3-Dichlorobenzene	ND	ND	ND	10	0.23	µg/l	24-hour Composite
1,4-Dichlorobenzene	ND	ND	ND	10	0.28	µg/l	24-hour Composite
Diethyl Phthalate	ND	ND	ND	10	0.12	µg/l	24-hour Composite
Dimethyl Phthalate	ND	ND	ND	10	0.09	µg/l	24-hour Composite
Di-N-Butyl Phthalate	ND	ND	ND	10	0.09	µg/l	24-hour Composite
2,6-Dinitrotoluene	ND	ND	ND	10	0.21	µg/l	24-hour Composite
Di-N-Octyl Phthalate	ND	ND	ND	10	0.15	µg/l	24-hour Composite
Fluoranthene	ND	ND	ND	10	0.11	µg/l	24-hour Composite
Fluorene	ND	ND	ND	10	0.10	µg/l	24-hour Composite
Hexachlorobutadiene	ND	ND	ND	10	0.15	µg/l	24-hour Composite
Hexachlorocyclopentadiene	ND	ND	ND	10	0.8	µg/l	24-hour Composite
Isophorone	ND	ND	ND	10	0.10	µg/l	24-hour Composite
Naphthalene	ND	ND	ND	10	0.06	µg/l	24-hour Composite
Nitrobenzene	ND	ND	ND	10	0.19	µg/l	24-hour Composite
N-Nitrosodiphenylamine	ND	ND	ND	10	0.14	µg/l	24-hour Composite
Phenanthrene	ND	ND	ND	10	0.07	µg/l	24-hour Composite
Pyrene	ND	ND	ND	10	0.10	µg/l	24-hour Composite
1,2,4-Trichlorobenzene	ND	ND	ND	10	0.07	µg/l	24-hour Composite
Acid Extractibles (method 625)							
2-Chlorophenol	ND	ND	ND	10	0.26	µg/l	24-hour Composite
2,4-Dichlorophenol	ND	ND	ND	10	0.32	µg/l	24-hour Composite
2,4-Dimethylphenol	ND	ND	ND	10	0.8	µg/l	24-hour Composite
4,6-Dinitro-O-Cresol (2-Methyl-4,6-Dinitrophenol)	ND	ND	ND	50	0.31	µg/l	24-hour Composite
2,4-Dinitrophenol	ND	ND	ND	50	2.6	µg/l	24-hour Composite
2-Nitrophenol	ND	ND	ND	10	0.19	µg/l	24-hour Composite
4-Nitrophenol	ND	ND	ND	50	0.8	µg/l	24-hour Composite
P-Chloro-M-Cresol (4-Chloro-3-Methylphenol)	ND	ND	ND	10	0.34	µg/l	24-hour Composite

Not Quantifiable

Sludge Monitoring

Constituent	Jan-05	Apr-05	Jul-05	Oct-05	RDL	Jan-06	May-06	Jul-06	Oct-06	RDL	Jan-07	Apr-07	Jul-07	RDL	Units
Metals															
Antimony	ND	ND	ND	ND	3.0	ND	ND	ND	ND	3.0	ND	ND	ND	3.0	mg/Kg
Arsenic	ND	0.724	5.01	10.2	1.0	3.3	15.7	18.8	ND	1.0	7.51	8.5	6.8	0.3	mg/Kg
Beryllium	ND	ND	ND	ND	0.5	0.18	ND	ND	0.03	0.5	0.295	ND	ND	0.5	mg/Kg
Cadmium	0.153	0.197	1.5	1.71	0.5	1.04	ND	2.3	0.164	0.5	0.93	ND	ND	0.5	mg/Kg
Chromium (III)	5.66	35.3	30.3	33.7	0.37	25.8	28.23	34.0	26.9	0.37	29.8	28.8	34.0	0.37	mg/Kg
Chromium (VI)	ND	ND	ND	ND	10	ND	0.63	0.276	0.080	0.01	0.123	0.058	ND	0.020	mg/Kg
Copper	72.5	73	492	679	1.0	627	540	550	106	1.0	568	526	250	1.0	mg/Kg
Lead	3.5	3.93	23.1	26.5	0.5	24.6	24.0	29.0	4.19	0.5	21.2	20.8	49	0.5	mg/Kg
Mercury	0.20	0.74	1.08	1.44	0.14	6.05	0.92	0.18	0.91	0.14	0.89	0.82	2.7	0.14	mg/Kg
Molybdenum	2.9	3.09	ND	ND	1.0	7.9	7.40	9.3	12.1	1.0	12.2	10.5	4.8	1.0	mg/Kg
Nickel	3.5	4.85	26	30.5	1.5	40.7	21.3	24.6	4.51	1.5	17.9	16.0	19	1.5	mg/Kg
Selenium	0.6	1.6	10.8	2.0	1.0	7.8	23	10.7	3.27	1.0	10.7	ND	8.4	1.0	mg/Kg
Silver	1.1	1.61	6.47	6.8	0.5	ND	3.90	3.7	0.614	0.5	6.73	4.9	4.3	0.5	mg/Kg
Thallium	ND	ND	ND	ND	1.0	ND	ND	ND	ND	1.0	ND	ND	ND	1.0	mg/Kg
Zinc	97.0	110.0	680	840	5.0	693	650	720	130	5.0	757	705	350	5.0	mg/Kg
Miscellaneous															
Cyanide	ND	ND	1.84	ND	0.5	93.5	3.4	ND	ND	0.5	ND	ND	ND	0.5	mg/Kg
2,3,7.8-Tetrachlorodibenzo-P-Dioxin (TCDD)	ND	ND	ND	ND	0.5	ND	ND	ND	0.49	0.38	ND	ND	ND	1.0	PPT
Moisture Content (% solids)	20.2	19.0	26.0	23.8	0.10	21.0	17.5	16.0	18.65	0.10	18.0	17.0	19	0.10	%
Pesticides (method 608)															
Aldrin	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Chlordane	ND	432	221	107	25	ND	ND	ND	ND	25	ND	ND	ND	25	µg/Kg
Dieldrin	ND	ND	ND	ND	3	ND	ND	ND	ND	3	ND	ND	ND	3	µg/Kg
4. 4' - DDT	ND	ND	ND	ND	5	ND	ND	3.4	ND	5	ND	ND	ND	5	µg/Kg
4, 4' - DDE	6	21	ND	12	4	33	ND	2.5	ND	4	ND	24	ND	4	µg/Kg
4, 4' - DDD	ND	ND	ND	ND	5	ND	ND	ND	ND	5	ND	ND	ND	5	µg/Kg
Alpha Endosulfan (Endosulfan I)	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Beta Endosulfan (Endosulfan II)	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Endosulfan Sulfate	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Endrin	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Endrin Aldehyde	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Heptachlor	ND	ND	ND	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	µg/Kg
Heptachlor Epoxide	ND	ND	ND	ND	3	ND	ND	ND	ND	3	ND	ND	ND	3	µg/Kg
Alpha BHC (a-BHC)	ND	ND	ND	ND	2	ND	ND	ND	ND	2	ND	ND	ND	2	µg/Kg
Beta BHC (b-BHC)	ND	ND	ND	ND	3	ND	ND	ND	ND	3	ND	ND	ND	3	µg/Kg
Gamma BHC (Lindane)	ND	ND	ND	ND	3	ND	ND	ND	ND	3	ND	ND	ND	3	µg/Kg
Delta BHC (d-BHC)	ND	ND	ND	ND	5	ND	ND	ND	ND	5	ND	ND	ND	5	µg/Kg
Toxaphene	ND	ND	ND	ND	250	ND	ND	ND	ND	250	ND	ND	ND	250	µg/Kg
PCB 1016 (Aroclor 1016)	ND	ND	ND	ND	30	ND	ND	ND	ND	30	ND	ND	ND	30	µg/Kg
PCB 1221 (Aroclor 1221)	ND	ND	ND	ND	60	ND	ND	ND	ND	60	ND	ND	ND	60	µg/Kg
PCB 1232 (Aroclor 1232)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	50	µg/Kg
PCB 1242 (Aroclor 1242)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	50	µg/Kg
PCB 1248 (Aroclor 1248)	ND	ND	ND	ND	80	ND	ND	ND	ND	80	ND	ND	ND	80	µg/Kg
PCB 1254 (Aroclor 1254)	ND	ND	ND	ND	30	ND	ND	ND	ND	30	ND	ND	ND	30	µg/Kg

Sludge Monitoring CONTINUED

Constituent	Jan-05	Apr-05	Jul-05	Oct-05	RDL	Jan-06	May-06	Jul-06	Oct-06	RDL	Jan-07	Apr-07	Jul-07	RDL	Units
PCB 1260 (Aroclor 1260)	ND	ND	ND	ND	30	ND	ND	ND	ND	30	ND	ND	ND	30	µg/Kg
Volatile Organics (method 601, 602 and 603 or 624)															
Acrolein	ND	ND	ND	ND	50	ND	ND	ND	ND	2000	ND	ND	ND	5	µg/Kg
Acrylonitrile	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Benzene	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Bromoform	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Carbon Tetrachloride	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Chlorobenzene	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Chlorodibromomethane (Dibromochloromethane)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Chloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
2-Chloroethylvinyl Ether	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Chloroform	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Dichlorobromomethane (Bromodichloromethane)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
l,l-Dichloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1,2-Dichloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1,1-Dichloroethylene (1,1-Dichloroethene)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1,2-Dichloropropane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1,3-Dichloropropylene (cis-1,3-Dichloropropene)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Ethylbenzene	19	ND	22	ND	50	ND	10.9	72	ND	50	ND	ND	ND	5	µg/Kg
Methyl Bromide (Bromomethane)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Methyl Chloride (Chloromethane)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Methylene Chloride	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Tetrachloroethylene (Tetrachloroethene)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Toluene	ND	ND	ND	ND	50	ND	ND	22	ND	50	ND	ND	ND	5	µg/Kg
1,2-Trans-Dichloroethylene (Trans-1,2-Dichlorethene)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1, 1, 1 -Trichloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
1, 1, 2-Trichloroethane	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Trichloroethylene (Trichloroethene)	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Vinyl Chloride	ND	ND	ND	ND	50	ND	ND	ND	ND	50	ND	ND	ND	5	µg/Kg
Acid Extractibles (method 625)															
2-Chlorophenol	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2,4-Dichlorophenol	ND	ND	ND	ND	600	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2,4-Dimethylphenol	ND	ND	ND	ND	400	ND	ND	ND	ND	300	ND	ND	ND	600.0	µg/Kg
4,6-Dinitro-O-Cresol (4,6-Methyl-2-Dinitrophenol)	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2,4-Dinitrophenol	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2-Nitrophenol	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
4-Nitrophenol	ND	ND	ND	ND	3330	ND	ND	ND	ND	1665	ND	ND	ND	3330.0	µg/Kg
P-Chloro-M-Cresol (4-Chloro-3-Methylphenol)	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Pentachlorophenol	ND	ND	ND	ND	401	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Phenol	ND	ND	28000	15	400	ND	ND	ND	2180	200	ND	ND	ND	400.0	µg/Kg
2, 4, 6 - Trichlorophenol	ND	ND	ND	ND	3330	ND	ND	ND	ND	1665	ND	ND	ND	3330.0	µg/Kg

Sludge Monitoring CONTINUED

Base/Neutral Extractibles (method 625)

Constituent	Jan-05	Apr-05	Jul-05	Oct-05	RDL	Jan-06	May-06	Jul-06	Oct-06	RDL	Jan-07	Apr-07	Jul-07	RDL	Units
Acenaphthene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Acenaphthylene	ND	ND	ND	ND	600	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Anthracene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzidine	ND	ND	ND	ND	400	ND	ND	ND	ND	300	ND	ND	ND	600.0	µg/Kg
Benzo (a) Anthracene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzo (a) Pyrene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzo (b) Fluoranthene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzo (g,h,i) Perylene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzo (k) Fluoranthene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Bis (2-Chloroethoxy) Methane	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Bis (2-Chloroethyl) Ether	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Bis (2-Chloroisopropyl) Ether	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Bis (2-Ethylhexyl) Phthalate	984	586	7510	7000	400	8850	ND	ND	361	200	4900	ND	17000	400.0	µg/Kg
4-Bromophenyl Phenyl Ether	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Benzyl Butyl Phthalate	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2-Chloronaphthalene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Chrysene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Dibenzo (a,h) Anthracene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
4-Chlorophenyl Phenyl Ether	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
1,2-Dichlorobenzene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	666.0	µg/Kg
1,3-Dichlorobenzene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
1,4-Dichlorobenzene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
3,3-Dichlorobenzidine	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Diethyl Phthalate	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Dimethyl Phthalate	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Di-N-Butyl Phthalate	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2,4-Dinitrotoluene	ND	ND	ND	ND	666	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
2,6-Dinitrotoluene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
1,2 Diphenylhydrazine	ND	ND	ND	ND	400	ND	ND	ND	ND	333	ND	ND	ND	400.0	µg/Kg
Di-N-Octyl Phthalate	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Fluoranthene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Fluorene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Hexachlorobenzene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Hexachlorobutadiene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Hexachlorocyclopentadiene	ND	ND	ND	ND	600	ND	ND	ND	ND	300	ND	ND	ND	600.0	µg/Kg
Hexachloroethane	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Indeno (1,2,3-cd) Pyrene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Isophorone	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Naphthalene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Nitrobenzene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
N-Nitrosodimethylamine	ND	ND	ND	ND	13	ND	ND	ND	ND	333	ND	ND	ND	666.0	µg/Kg
N-Nitrosodi-N-Propylamine	ND	ND	ND	ND	600	ND	ND	ND	ND	300	ND	ND	ND	600.0	µg/Kg
N-Nitrosodiphenylamine	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Phenanthrene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
Pyrene	ND	ND	ND	ND	400	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg
1,2,4-Trichlorobenzene	ND	ND	ND	ND	50	ND	ND	ND	ND	200	ND	ND	ND	400.0	µg/Kg

Not Quantifiable

Appendix B
Domestic Data

River Road Lift Station (Domestic) Data
2007

Date	Flow (MGD)	BOD (mg/L)	BOD (lbs)	TSS (mg/L)	TSS (lbs)	TDS (mg/L)	TDS (lbs)
4/25/2007	1.970	240	3943	290	4765	560	9201
4/26/2007	1.947	340	5521	310	5034	570	9256
4/27/2007	1.918	400	6398	280	4479	680	10877
5/30/2007	2.1	260	4554	240	4203	580	10158
6/5/2007	2.132	240	4267	270	4801	580	10313
7/3/2007	2.2	280	5137	230	4220	590	10825
8/1/2007	2.159	400	7202	420	7563	490	8823
8/2/2007	2.099	330	5777	320	5602	540	9453
8/3/2007	2.174	300	5439	170	3082	570	10335
8/4/2007	1.982	350	5785	320	5290	790	13059
8/5/2007	1.95	370	6017	190	3090	590	9595
8/6/2007	2.394	340	6788	240	4792	570	11381
8/7/2007	2.16	270	4864	260	4684	710	12790
8/8/2007	2.182	280	5095	340	6187	550	10009
9/6/2007	2.176	260	4718	230	4174	570	10344
10/4/2007	2.225	490	9093	220	4082	580	10763
10/12/2007	2.056	220	3772	220	3772	460	7888
11/20/2007	2.319	260	5029	42	812	590	11411
Average	2.119	313	5522	255	4480	587	10360
Minimum	1.918	220	3772	42	812	460	7888
Maximum	2.394	490	9093	420	7563	790	13059

River Road Lift Station (Domestic) Data
2007

				2007							
Constituent	Unit	Apr	Apr	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Sample Date	Date	4/25	4/26	4/27	5/30	6/5	7/3	8/8	9/6	10/12	11/20
Ammonia Nitrogen	mg/l	40	41		40	52	40	48	54	37	37
Boron	ug/L	320	300	330	330	330	370	300	320	340	370
Calcium	mg/l	73	68	71	66	64	64	67	68	67	68
Chloride	mg/L	150	150	170	150	140	150	140	160	150	
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2
Hardness (Total)	mg/L	230	220	230	210	200	210	210	220	220	220
Kjeldahl Nitrogen	mg/L			61	59						
Magnesium	mg/l	12	11	12	11	10	11	11	13	13	11
Nitrate as N	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrite as N	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen (Total)	mg/L			61	59						
Oil and Grease	mg/l	40	43	51	35	43	51	53	37	44	28
Oil and Grease (Non-polar)	mg/L	ND			ND						
pH	pH units	7.7	7.8	8.1	7.7	7.9	7.4	7.7	7.9	7.7	8
Sodium	mg/L		78	88	89	87	85	86	91	97	93
Specific Conductance	umhos/cm	1500		1300		1100	1100		1100		1200
Sulfate	mg/L	21	22	21	23	22	23	23	22	20	23
Total Inorganic Nitrogen	mg/L	40	41			37	35	35	36	37	37
Total Organic Carbon	mg/l	58	66		56	38	32	62	78	63	74

River Road Lift Station (Domestic) Data
2007

Constituent	Units	2nd Quarter	3rd Quarter	4th Quarter
Sample Date	Date	4/25/2007	7/3/2007	10/12/2007
Arsenic	ug/L	ND	ND	ND
Benzene	ug/L	ND	ND	ND
Bromodichloromethane	ug/L	ND	ND	ND
Cadmium	ug/L	ND	ND	ND
Chloroform	ug/L	ND	ND	ND
Copper	ug/L	110	79	68
Chromium	ug/L	ND	ND	ND
Cyanide (Free)	ug/L	ND	ND	ND
Dibromochloromethane	ug/L	ND	ND	ND
Iron	ug/L	570	530	310
Lead	ug/L	28	ND	ND
Lindane	ug/L	ND	ND	ND
Mercury	ug/L	ND	ND	ND
Nickel	ug/L	ND	ND	ND
Phenol	ug/L	51	240	61
Selenium	ug/L	ND	ND	ND
Silver	ug/L	ND	ND	ND
Zinc	ug/L	220	160	170

River Road Lift Station (Domestic) Data
2007

Metals	Units	Result
Antimony	ug/L	N.D.
Beryllium	ug/L	N.D.
Manganese	ug/L	36
Thallium	ug/L	N.D.

Volatile Organics	Units	Result
Cyanide	ug/L	N.D.

Volatile Organics	Units	Result
Acrolein	ug/L	N.D.
Acrylonitrile	ug/L	N.D.
Benzene	ug/L	N.D.
Bromoform	ug/L	N.D.
Chlorobenzene	ug/L	N.D.
Chlorodibromomethane	ug/L	N.D.
Chloroethane	ug/L	N.D.
2-Chloroethyl Vinyl Ether	ug/L	N.D.
Chloroform	ug/L	N.D.
Dichlorobromomethane	ug/L	N.D.
1,1-Dichloroethane	ug/L	N.D.
1,2-Dichloroethane	ug/L	N.D.
1,1-Dichloroethylene	ug/L	N.D.
1,2-Dichloropropane	ug/L	N.D.
1,3-Dichloropropylene	ug/L	N.D.
Ethylbenzene	ug/L	N.D.
Methyl Bromide	ug/L	N.D.
Methyl Chloride	ug/L	N.D.
Methylene Chloride	ug/L	N.D.
1,1,2,2-Tetrachloroethane	ug/L	N.D.
Tetrachloroethylene	ug/L	N.D.
Toluene	ug/L	N.D.
1,2-Trans-Dichlorethylene	ug/L	N.D.
1,1,1-Trichloroethane	ug/L	N.D.
1,1,2-Trichloroethane	ug/L	N.D.
Trichloroethylene	ug/L	N.D.
Vinyl Chloride	ug/L	N.D.

Acid Extractibles	Units	Result
2-Chlorophenol	ug/L	N.D.
2,4-Dichlorophenol	ug/L	N.D.
2,4-Dimethylphenol	ug/L	N.D.
2-Methyl-4,6-Dinitrophenol	ug/L	N.D.
2,4-Dinitrophenol	ug/L	N.D.
2-Nitrophenol	ug/L	N.D.
4-Nitrophenol	ug/L	N.D.
3-Methyl-4-Chlorophenol	ug/L	N.D.
Pentachlorophenol	ug/L	N.D.
Phenol	ug/L	51
2,3,6-Trichlorophenol	ug/L	N.D.

Base/Neutral Extractibles	Units	Result
Acenaphthene	ug/L	N.D.
Acenapthylene	ug/L	N.D.
Anthracene	ug/L	N.D.
Benzidine	ug/L	N.D.
Benzo (a) Anthracene	ug/L	N.D.
Benzo (a) Pyrene	ug/L	N.D.
Benzo (b) Fluoranthene	ug/L	N.D.
Benzo (g,h,I) Perylene	ug/L	N.D.
Benzo (k) Fluoranthene	ug/L	N.D.
Bis (2-Chlorethoxy) Methane	ug/L	N.D.
Bis (2-Chloroethyl) Ether	ug/L	N.D.
Bis (2-Chloroisopropyl) Ether	ug/L	N.D.
Bis (2-Ethylhexyl) Phthalate	ug/L	14
4-Bromophenyl Phenyl Ether	ug/L	N.D.
Butylbenzyl Phthalate	ug/L	N.D.
2-Chloronaphthalene	ug/L	N.D.
4-Chlorophenyl Phenyl Ether	ug/L	N.D.
Chrysene	ug/L	N.D.
Dibenzo (a,h) Anthracene	ug/L	N.D.
1,2-Dichlorobenzene	ug/L	N.D.
1,3-Dichlorobenzene	ug/L	N.D.
1,4-Dichlorobenzene	ug/L	N.D.
3,3'-Dichlorobenzidine	ug/L	N.D.
Diethyl Phthalate	ug/L	11
Dimethyl Phthalate	ug/L	N.D.
Di-n-Butyl Phthalate	ug/L	N.D.
2,4-Dinitrotoluene	ug/L	N.D.
2,6-Dinitrotoluene	ug/L	N.D.
Di-n-Octyl Phthalate	ug/L	N.D.
1,2-Dipenylhydrazine	ug/L	N.D.
Fluoranthene	ug/L	N.D.
Fluorene	ug/L	N.D.
Hexachlorobenzene	ug/L	N.D.
Hexachlorobutadiene	ug/L	N.D.
Hexachlorocyclopentadiene	ug/L	N.D.
Hexachlrorethane	ug/L	N.D.
Indeno (1,2,3-cd) Pyrene	ug/L	N.D.
Isophorone	ug/L	N.D.
Naphthalene	ug/L	N.D.
Nitrobenzene	ug/L	N.D.
N-Nitrosodimethylamine	ug/L	N.D.
N-Nitrosodi-N-Propylamine	ug/L	N.D.
N-Nitrosodiphenylamine	ug/L	N.D.
Phenanthrene	ug/L	N.D.
Pyrene	ug/L	N.D.
1,2,4-Trichlorobenzene	ug/L	N.D.

Pesticides	Units	Result
Aldrin	ug/L	N.D.
Alpha BHC	ug/L	N.D.
Beta BHC	ug/L	N.D.
Delta BHC	ug/L	N.D.
Gamma BHC	ug/L	N.D.
Chlordane	ug/L	N.D.
4,4'-DDT	ug/L	N.D.
4,4'-DDE	ug/L	N.D.
4,4'-DDD	ug/L	N.D.
Dieldrin	ug/L	N.D.
Alpha Endosulfan	ug/L	N.D.
Beta Endosulfan	ug/L	N.D.
Endosulfan Sulfate	ug/L	N.D.
Endrin	ug/L	N.D.
Endrin Aldehyde	ug/L	N.D.
Heptachlor	ug/L	N.D.
Heptachlor Epoxide	ug/L	N.D.
PCB 1016	ug/L	N.D.
PCB 1221	ug/L	N.D.
PCB 1232	ug/L	N.D.
PCB 1242	ug/L	N.D.
PCB 1248	ug/L	N.D.
PCB 1254	ug/L	N.D.
PCB 1260	ug/L	N.D.
Toxaphene	ug/L	N.D.

Appendix C
Literature Values for Domestic & Commercial Wastewater, Removal Rates and Inhibition Values

DOMESTIC POLLUTANT LOADINGS

Residential/Commercial Trunkline Monitoring Data

Pollutant	Number of Detections	Number of Samples	Minimum Concentration (mg/L)	Maximum Concentration (mg/L)	Average Concentration (mg/L)
INORGANICS					
Arsenic	140	205	0.0004	0.088	0.007
Barium	3	3	0.04	0.216	0.115
Boron	4	4	0.1	0.42	0.3
Cadmium	361	538	0.00076	0.11	0.008
Chromium (III)	1	2	< 0.005	0.007	0.006
Chromium (T)	311	522	< 0.001	1.2	0.034
Copper	603	607	0.005	0.74	0.14
Cyanide	7	7	0.01	0.37	0.082
Fluoride	2	2	0.24	0.27	0.255
Iron	18	18	0.0002	3.4	0.989
Lead	433	540	0.001	2.04	0.058
Lithium	2	2	0.03	0.031	0.031
Manganese	3	3	0.04	0.161	0.087
Mercury	218	235	< 0.0001	0.054	0.002
Nickel	313	540	< 0.001	1.6	0.047
Phosphate	2	2	27.4	30.2	28.8
Total Phosphorous	1	1	0.7	0.7	0.7
Silver	181	224	0.0007	1.052	0.019
Zinc	636	638	0.01	1.28	0.231
ORGANICS					
Chloroform	21	30	<0.002	0.069	0.009
1,1-Dichloroethene	2	29	0.005	0.008	0.007
1,1-Dichloroethane	1	28	0.026	0.026	0.026
Trans-1,2-Dichloroethene	1	28	0.013	0.013	0.013
Fluoranthene	2	5	0.00001	<0.001	0.001
Methylene Chloride	7	30	0.00008	0.055	0.027
Phenols	2	2	0.00002	0.00003	0.000025
Bis (2-ethylhexyl) Phthalate	5	5	0.00002	0.022	0.006
Pyrene	2	3	0.00001	<0.005	0.0002
Tetrachloroethene	5	29	0.00001	0.037	0.014
1,2,4-Trichlorobenzene	1	3	<0.002	0.035	0.013
PESTICIDES					
Total BHC	3	3	0.001	0.001	0.001
4,4-DDD	3	3	0.00026	0.0004	0.0003
Total Endosulfan	3	3	0.002	0.002	0.002

COMMERCIAL USER STRENGTH CHARACTERISTICS[1]

STANDARD CLASSIFICATIONS	BOD_5(mg/L)	TSS(mg/L)
Residential (average varies depending on average water usage to toper capita)	175 250	175 - 250
Auto Steam Cleaning	1,150	1,250
Bakery, wholesale	1,000	600
Bars without dining facilities	200	200
Car Wash	20	150
Department and Retail Store	150	150
Hospital and Convalescent	250	100
Hotel with dining facilities	500	600
Hotel/Motel without dining	310	120
Industrial Laundry	670	680
Laundromat	150	110
Laundry, commercial	450	240
Market with garbage grinders	800	800
Mortuary	800	800
Professional Office	130	80
Repair Shop and Service Station	180	280
Restaurant	1,000	600
School and College	130	100
Septage	5,400	12,000
Soft Water Service	3	55

[1] Revenue Program Guidelines, Appendix G, March 1998 – Cal EPA State Water Resources Control Board

PRIORITY POLLUTANT REMOVAL EFFICIENCIES

Priority Pollutant Removal Efficiencies (%) Through Primary Treatment*

Priority Pollutant	Median	Number of POTWs with Removal Data**
	METAL/NONMETAL INORGANICS	
Cadmium	15	6 of 40
Chromium	27	12 of 40
Copper	22	12 of 40
Cyanide	27	12 of 40
Lead	57	1 of 40
Mercury	10	8 of 40
Nickel	14	9 of 40
Silver	20	4 of 40
Zinc	27	12 of 40
	ORGANICS	
Benzene	25	8 of 40
Chloroform	14	11 of 40
1,2-trans-Dichloroethylene	36	9 of 40
Ethylbenzene	13	12 of 40
Naphthalene	44	4 of 40
Phenol	8	11 of 40
Butyl benzyl phthalate	62	4 of 40
Di-n-butyl phthalate	36	3 of 40
Diethyl phthalate	56	1 of 40
Tetrachloroethylene	4	12 of 40
1,1,1-Trichloroethane	40	10 of 40
Trichloroethylene	20	12 of 40

* Pollutant removals between POTW influent and primary effluent. From Fate of Priority Pollutants in Publicly Owned Treatment Works, Volume I (EPA 440/1-82/303), U.S. Environmental Protection Agency, Washington, D.C., September 1982, p. 61.

** Median removal efficiencies from a data base of removal efficiencies for 40 POTWs. Only POTWs with average influent concentrations exceeding three times each pollutant's detection limit were considered.
Source: U.S. EPA's Guidance Manual on the Development and Implementation of Local Discharger Limitations under the Pretreatment Program, December 1987, p. 3-55.

Priority Pollutant Percent Removal Efficiencies (%) Through Activated Sludge Treatment*

Priority Pollutant	Range	Second Decile	Median	Eight Decile	Number of POTWs with Removal Data
METALS/NONMETAL INORGANICS**					
Arsenic	11-78	31	45	53	5 of 26
Cadmium	25-99	33	67	91	19 of 26
Chromium	25-97	68	82	91	25 of 26
Copper	2-99	67	86	95	26 of 26
Cyanide	3-99	41	69	84	25 of 26
Lead	1-92	39	61	76	23 of 26
Mercury	1-95	50	60	79	20 of 26
Nickel	2-99	25	42	62	23 of 26
Selenium	25-89	33	50	67	4 of 26
Silver	17-95	50	75	88	24 of 26
Zinc	23-99	64	79	88	26 of 26
ORGANICS**					
Anthracene	29-99	44	67	91	5 of 26
Benzene	25-99	50	80	96	18 of 26
Chloroform	17-99	50	67	83	24 of 26
1,2-trans-Dichloroethylene	17-99	50	67	91	17 of 26
Ethylbenzene	25-99	67	86	97	25 of 26
Methylene chloride	2-99	36	62	77	26 of 26
Naphthalene	25-98	40	78	90	16 of 26
Phenanthrene	29-99	37	68	86	6 of 26
Phenol	3-99	75	90	98	19 of 26
Bis (2-ethylhexyl) phthalate	17-99	47	72	87	25 of 26
Butyl benzyl phthalate	25-99	50	67	92	16 of 26
Di-n-butyl phthalate	11-97	39	64	87	19 of 26
Diethyl phthalate	17-98	39	62	90	15 of 26
Pyrene	73-95	76	86	95	2 of 26
Tetrachloroethylene	15-99	50	80	93	26 of 26
Toluene	25-99	80	93	98	26 of 26
1,1,1-Trichloroethane	18-99	75	85	94	23 of 26
Trichloroethylene	20-99	75	89	98	25 of 26

* Pollutant removals between POTW influent and secondary effluent (including secondary clarification). Based on a computer analysis of POTW removal efficiency data (derived from actual POTW influent and effluent sampling data) provided in U.S. EPA's *Fate of Priority Pollutants in Publicly Owned Treatment Works, Volume II* (EPA 440/1-82/303), September 1982.

** For the purpose of deriving removal efficiencies, effluent levels reported as below detection were set equal to the reported detection limits. All secondary activated sludge treatment plants sampled as part of the study were considered.

Source: U.S. EPA's *Guidance Manual on the Development and Implementation of Local Discharger Limitations*

Priority Pollutant Removal Efficiencies (%) Through Tertiary Treatment*

Priority Pollutant	Range	Second Decile	Median	Eighth Decile	Number of POTWs with Removal Data
METALS/NONMETAL INORGANICS**					
Cadmium	33-81	50	50	73	3 of 4
Chromium	22-93	62	72	89	4 of 4
Copper	8-99	58	85	98	4 of 4
Cyanide	20-93	32	66	83	4 of 4
Lead	4-86	9	52	77	3 of 4
Mercury	33-79	43	67	75	4 of 4
Nickel	4-78	17	17	57	3 of 4
Silver	27-87	55	62	82	3 of 4
Zinc	1-90	50	78	88	4 of 4
ORGANICS**					
Benzene	5-67	40	50	54	2 of 4
Chloroform	16-75	32	53	64	3 of 4
1,2-trans-Dichloroethylene	50-96	50	83	93	2 of 4
Ethylbenzene	65-95	80	89	94	3 of 4
Methylene Chloride	11-96	31	57	78	4 of 4
Naphthalene	25-94	33	73	86	3 of 4
Phenol	33-98	80	88	96	4 of 4
Bis (2-ethylhexyl) phthalate	45-98	59	76	94	4 of 4
Butyl benzyl phthalate	25-94	50	63	85	4 of 4
Di-n-butyl phthalate	14-84	27	50	70	4 of 4
Diethyl phthalate	20-57	29	38	50	3 of 4
Tetrachloroethylene	67-98	80	91	97	4 of 4
Toluene	50-99	83	94	97	4 of 4
1,1,1-Trichloroethane	50-98	79	94	97	4 of 4
Trichloroethylene	50-99	62	93	98	4 of 4

* Pollutant removals between POTW influent and tertiary effluent (including final clarification). Based on a computer analysis of POTW removal efficiency data (derived from actual POTW influent and effluent sampling data) provided in U.S. EPA's *Fate of Priority Pollutants in Publicly Owned Treatment Works, Volume II* (EPA 440/1-82/303), September 1982. Tertiary treatment was taken to include POTWs with effluent microscreening, mixed media filtration, post aeration, and/or nitrification/denitrification.

** For the purpose of deriving removal efficiencies, effluent levels reported as below detection were set equal to the reported detection limits. All tertiary treatment plants sampled as part of the study were considered.

Source: U.S. EPA's *Guidance Manual on the Development and Implementation of Local Discharger Limitations Under the Pretreatment Program*, December 1987, p. 3-58.

APPENDIX G - LITERATURE INHIBITION VALUES

Pollutant	Reported Range of Activated Sludge Inhibition Threshold Levels, mg/L	References*
METALS/NONMETAL INORGANICS		
Ammonia	480	(4)
Arsenic	0.1	(1), (2), (3)
Cadmium	1 - 10	(2), (3)
Chromium (VI)	1	(2), (3)
Chromium (III)	10 - 50	(2), (3)
Chromium (Total)	1 - 100	(1)
Copper	1	(2), (1), (3)
Cyanide	0.1 - 5 5	(1), (2), (3) (1)
Iodine	10	(4)
Lead	1.0 - 5.0 10 - 100	(3) (1)
Mercury	0.1 - 1 2.5 as Hg (II)	(2), (3) (1)
Nickel	1.0 - 2.5 5	(2), (3) (1)
Sulfide	25 -30	(4)
Zinc	0.3 - 5 5 - 10	(3) (1)
ORGANICS		
Anthracene	500	(1)
Benzene	100 - 500 125 - 500	(3) (1)
2-Chlorophenol	5 20 - 200	(2) (3)
1,2 Dichlorobenzene	5	(2)
1,3 Dichlorobenzene	5	(2)
1,4 Dichlorobenzene	5	(2)
2,4-Dichlorophenol	64	(3)
2,4 Dimethylphenol	40 - 200	(3)
2,4 Dinitrotoluene	5	(2)
1,2-Diphenylhydrazine	5	(2)
Ethylbenzene	200	(3)
Hexachlorobenzene	5	(2)
Naphthalene	500 500 500	(1) (2) (3)
Nitrobenzene	30 - 500 500 500	(3) (1) (2)

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Pollutant	Reported Range of Activated Sludge Inhibition Threshold Levels, mg/L	References*
Pentachlorophenol	0.95 50 75 - 150	(2) (3) (1)
Phenanthrene	500 500	(1) (2)
Phenol	50 - 200 200 200	(3) (2) (1)
Toluene	200	(3)
2,4,6 Trichlorophenol	50 - 100	(1)
Surfactants	100 - 500	(4)

Pollutant	Reported Range of Trickling Filter Inhibition Threshold Levels, mg/L	References*
Chromium (III)	3.5 - 67.6	(1)
Cyanide	30	(1)

Pollutant	Reported Range of Nitrification Inhibition Threshold Levels, mg/L	References*
METALS/NONMETAL INORGANICS		
Arsenic	1.5	(2)
Cadmium	5.2	(1), (2)
Chloride	180	(4)
Chromium (VI)	1 - 10 [as $(CrO_4)^{2-}$]	(1)
Chromium (T)	0.25 - 1.9 1 - 100 (trickling filter)	(1), (2), (3) (1)
Copper	0.05 - 0.48	(2), (3)
Cyanide	0.34 - 0.5	(2), (3)
Lead	0.5	(2), (3)
Nickel	0.25 - 0.5 5	(2), (3) (1)
Zinc	0.08 - 0.5	(2), (3)
ORGANICS		
Chloroform	10	(2)
2,4-Dichlorophenol	64	(3)
2,4-Dinitrophenol	150	(2)
Phenol	4 4 - 10	(2) (3)

Appendix D
Local Limit Calculation – Spreadsheets

TABLE 1

Local Limits Determination Based on NPDES Daily Effluent Limits

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Daily Limit (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	43		0.0010	5.29	-	0.04	-	-	30
Cadmium	0.108	5.395	70		0.0001	5.29	-	0.00	-	-	30
Chromium	0.108	5.395	62		0.03	5.29	-	1.32	-	-	30
Hex. Chrome	0.108	5.395	62		0.002	5.29	-	0.09	-	-	30
Copper	0.108	5.395	95		0.08	5.29	-	3.53	-	-	30
Cyanide	0.108	5.395	66	0.0085	0.0025	5.29	1.12	0.11	0.79	0.88	20
Iron	0.108	5.395	96		1.3	5.29	-	57.32	-	-	30
Lead	0.108	5.395	61		0.025	5.29	-	1.10	-	-	30
Mercury	0.108	5.395	67		0.0002	5.29	-	0.01	-	-	30
Manganese	0.108	5.395	60		0.087	5.29	-	3.84	-	-	30
Nickel	0.108	5.395	62		0.0026	5.29	-	0.11	-	-	30
Selenium	0.108	5.395	50		0.0018	5.29	-	0.08	-	-	30
Silver	0.108	5.395	77		0.0032	5.29	-	0.14	-	-	30
Zinc	0.108	5.395	82		0.231	5.29	-	10.19	-	-	30
BOD*	0.108	5.395	96	30	302	5.29	33745.73	13316.51	10305.49	11452	30
TSS*	0.108	5.395	96	30	285	5.29	33745.73	12566.91	11055.10	12285	30
TIN	0.108	5.395	85	10	35	5.29	2999.62	1543.30	556.43	618	30
Ammonia	0.108	5.395	97		39	5.29	-	1719.68	-	-	40
Sulfate	0.108	5.395	0		76	5.29	-	3351.18	-	-	40
Bis 2-(ethylhexyl) phthalate	0.108	5.395	76	0.012	0.007	5.29	2.25	0.31	1.27	1.41	30
Hardness	0.108	5.395	0		209	5.29	-	9215.73	-	-	30
Molybdenum	0.108	5.395	82		0.002	5.29	-				30
TDS	0.108	5.395	0		607	5.29	-	26765.31	-	-	2.5

*	Average Weekly limit
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant (assumed to be approx. 5%).
(Qpotw)	POTW's average influent flow in MGD.
(Rpotw)	Removal efficiency across POTW as percent.
(Ccrit)	NPDES daily maximum permit limit for a particular pollutant in mg/l.
(Qdom)	Domestic/commercial background flow in MGD.
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.
(SF)	Safety factor as a percent.
8.34	Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

Note: All Non-Detect Values listed at 1/2 of the MDL

TABLE 2

Local Limits Determination Based on NPDES Monthly Effluent Limits

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Monthly Limit (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	43		0.0010	5.29	-	0.04	-	-	30
Cadmium	0.108	5.395	70		0.0001	5.29	-	0.00	-	-	30
Chromium	0.108	5.395	62		0.03	5.29	-	1.32	-	-	30
Hex Chrome	0.108	5.395	62		0.002	5.29	-	0.09	-	-	30
Copper	0.108	5.395	95		0.08	5.29	-	3.53	-	-	30
Cyanide	0.108	5.395	70	0.0042	0.0025	5.29	0.63	0.11	0.33	0.37	30
Iron	0.108	5.395	96		1.3	5.29	-	57.32	-	-	30
Lead	0.108	5.395	61		0.025	5.29	-	1.10	-	-	30
Mercury	0.108	5.395	67		0.0002	5.29	-	0.01	-	-	30
Manganese	0.108	5.395	50		0.087	5.29	-	3.84	-	-	30
Nickel	0.108	5.395	62		0.0026	5.29	-	0.11	-	-	30
Selenium	0.108	5.395	50		0.0018	5.29	-	0.08	-	-	30
Silver	0.108	5.395	77		0.0032	5.29	-	0.14	-	-	30
Zinc	0.108	5.395	82		0.231	5.29	-	10.19	-	-	30
BOD*	0.108	5.395	96	20	302	5.29	22497.15	13316.51	2431.49	2702	30
TSS*	0.108	5.395	96	20	285	5.29	22497.15	12566.91	2056.24	2285	35
TIN	0.108	5.395	85	10.00	35	5.29	2446.40	1543.30	541.86	120.43	30
Ammonia	0.108	5.395	97	5	39	5.29	7499.05	1719.68	2779.75	3089	40
Bis 2-(ethylhexyl) phthalate	0.108	5.395	76	0.0059	0.007	5.29	1.11	0.31	0.47	0.52	30
TDS	0.108	5.395	0.00	625	607	5.29	28121.44	26765.31	653.09	726	2.5

*	Monthly Average Limit
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw)	POTW's average influent flow in MGD.
(Rpotw)	Removal efficiency across POTW as percent.
(Ccrit)	NPDES monthly maximum permit limit for a particular pollutant in mg/l.
(Qdom)	Domestic/commercial background flow in MGD.
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.
(SF)	Safety factor as a percent.
8.34	Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

TABLE 3

Local Limits Determination Based on Activated Sludge Inhibition Level

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	10	0.1	0.0010	5.2871	4.999366667	0.04409441	3.46	3.84	30
Cadmium	0.108	5.395	15	2	0.0001	5.2871	105.8689412	0.00440944	74.10	82.35	30
Chromium	0.108	5.395	27	20	0.03	5.2871	1232.720548	1.32283242	861.58	957.43	30
Hex. Chrom.	0.108	5.395	27	1	0.002	5.2871	61.6360274	0.08818883	43.06	47.85	30
Copper	0.108	5.395	20	1	0.08	5.2871	56.242875	3.52755312	35.84	39.83	30
Cyanide	0.108	5.395	27	2	0.0025	5.2871	123.2720548	0.11023604	86.18	95.77	30
Iron	0.108	5.395	45	10	1.3	5.2871	818.0781818	57.3227382	515.33	572.66	30
Lead	0.108	5.395	57	2.5	0.025	5.2871	261.5947674	1.10236035	182.01	202.26	30
Mercury	0.108	5.395	10	0.25	0.0002	5.2871	12.49841667	0.00881888	8.74	9.71	30
Molybdenum	0.108	5.395	27	1	0.002	5.2871	61.6360274	0.08818883	43.06	47.85	30
Nickel	0.108	5.395	14	1	0.026	5.2871	52.31895349	1.14645476	35.48	39.42	30
Selenium	0.108	5.395	-	-	0.0018	5.2871	-	0.07936995	-	-	30
Silver	0.108	5.395	20	-	0.0032	5.2871	-	0.14110212	-	-	30
Zinc	0.108	5.395	27	5	0.231	5.2871	308.180137	10.1858096	205.54	228.41	30
Ammonia	0.108	5.395	0	480	39	5.2871	21597.264	1719.68215	15558.13	17289.00	20

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Rprim) Removal efficiency across across primary treatment as percent.
(Ccrit) Activated sludge threshold inhibition level, mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rprim}$$

TABLE 4

Local Limits Determination Based on Nitrification Inhibition Level

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rsec)	Nitrification Inhibition Level (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	43	1.5	0.0010	5.2871	118.4060526	0.04409441	82.84	92.06	30
Cadmium	0.108	5.395	67	5.2	0.0001	5.2871	709.0010909	0.00440944	496.30	551.51	30
Chromium	0.108	5.395	62	1	0.03	5.2871	118.4060526	1.32283242	81.56	90.64	30
Hex. Chrom.	0.108	5.395	62	0.5	0.002	5.2871	59.20302632	0.08818883	41.35	45.95	30
Chloride	0.108	5.395	9	180	149	5.2871	8899.971429	6570.06769	371.91	413.29	22
Copper	0.108	5.395	75	0.05	0.08	5.2871	8.99886	3.52755312	2.77	3.08	30
Cyanide	0.108	5.395	69	0.34	0.0025	5.2871	49.3485871	0.11023604	34.43	38.26	30
Iron	0.108	5.395	88		1.3	5.2871	-	57.3227382	-	-	30
Lead	0.108	5.395	61	0.5	0.025	5.2871	57.685	1.10236035	39.28	43.65	30
Mercury	0.108	5.395	60	-	0.0002	5.2871	-	0.00881888	-	-	30
Molybdenum	0.108	5.395	62	-	0.002	5.2871	-	0.08818883	-	-	30
Nickel	0.108	5.395	42	0.25	0.0026	5.2871	19.39409483	0.11464548	13.46	14.96	30
Selenium	0.108	5.395	50	-	0.0018	5.2871	-	0.07936995	-	-	30
Silver	0.108	5.395	75	-	0.0032	5.2871	-	0.14110212	-	-	30
Zinc	0.108	5.395	82	0.08	0.231	5.2871	19.99746667	10.1858096	3.81	4.24	30

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Rsec) Removal efficiency across primary treatment and secodary treatment as percent.
(Ccrit) Nitrification threshold inhibition level, mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rsec}$$

TABLE 5

Local Limits Determination Based on USEPA 503 Sludge Regulations

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	503 Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	0.0584	19.3	43	41	0.001	5.2871	8.962963088	0.04409441	6.23	6.92	30
Cadmium	0.108	5.395	0.0584	19.3	70	39	0.0001	5.2871	5.237243589	0.00440944	3.66	4.07	30
Chromium	0.108	5.395	0.0584	19.3	62	600	0.03	5.2871	90.96949161	1.32283242	62.36	69.29	30
Hex. Chrom.	0.108	5.395	0.0584	19.3	62		0.002	5.2871	-	0.08818883	-	-	30
Copper	0.108	5.395	0.0584	19.3	95	1500	0.08	5.2871	148.4239074	3.52755312	100.37	111.54	30
Cyanide	0.108	5.395	0.0584	19.3	70		0.0025	5.2871	-	0.11023604	-	-	30
Iron	0.108	5.395	0.0584	19.3	96		1.3	5.2871	-	57.3227382	-	-	30
Lead	0.108	5.395	0.0584	19.3	52	300	0.025	5.2871	54.23181231	1.10236035	36.86	40.96	30
Mercury	0.108	5.395	0.0584	19.3	67	17	0.0002	5.2871	2.385120501	0.00881888	2.14	2.38	10
Molybdenum	0.108	5.395	0.0584	19.3	82	75	0.002	5.2871	8.597726341	0.08818883	6.79	7.55	20
Nickel	0.108	5.395	0.0584	19.3	62	420	0.0026	5.2871	63.67864413	0.11464548	50.83	56.48	20
Selenium	0.108	5.395	0.0584	19.3	50	100	0.0018	5.2871	18.8003616	0.07936995	14.96	16.63	20
Silver	0.108	5.395	0.0584	19.3	77		0.0032	5.2871	-	0.14110212	-	-	20
Zinc	0.108	5.395	0.0584	19.3	71	2800	0.231	5.2871	370.7113555	10.1858096	286.38	318.24	20

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Qsldg) Sludge flow to disposal in MGD.
(PS) Percent solids of sludge to disposal.
(Rpotw) Removal efficiency across POTW as a percent.
(Cslcrit) 503 sludge criteria in mg/kg dry sludge.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Cslcrit * (PS/100) * Qsldg}{Rpotw}$$

TABLE 6

Local Limits Determination Based on State Sludge Criteria

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	State Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	0.0584	19.3	43	41	0.001	5.2871	8.962963088	0.04409441	6.23	6.92	30
Cadmium	0.108	5.395	0.0584	19.3	70	39	0.0001	5.2871	5.237243589	0.00440944	3.66	4.07	30
Chromium	0.108	5.395	0.0584	19.3	62	600	0.03	5.2871	90.96949161	1.32283242	62.36	69.29	30
Hex. Chrom.	0.108	5.395	0.0584	19.3	62		0.002	5.2871	-	0.08818883	-	-	30
Copper	0.108	5.395	0.0584	19.3	95	1500	0.08	5.2871	148.4239074	3.52755312	100.37	111.54	30
Cyanide	0.108	5.395	0.0584	19.3	70		0.0025	5.2871	-	0.11023604	-	-	30
Iron	0.108	5.395	0.0584	19.3	96		1.3	5.2871	-	57.3227382	-	-	30
Lead	0.108	5.395	0.0584	19.3	61	300	0.025	5.2871	46.23039738	1.10236035	31.26	34.74	30
Mercury	0.108	5.395	0.0584	19.3	67	17	0.0002	5.2871	2.385120501	0.00881888	2.14	2.38	10
Molybdenum	0.108	5.395	0.0584	19.3	82	75	0.002	5.2871	8.597726341	0.08818883	6.79	7.55	20
Nickel	0.108	5.395	0.0584	19.3	62	420	0.0026	5.2871	63.67864413	0.11464548	50.83	56.48	20
Selenium	0.108	5.395	0.0584	19.3	50	100	0.0018	5.2871	18.8003616	0.07936995	14.96	16.63	20
Silver	0.108	5.395	0.0584	19.3	77		0.0032	5.2871	-	0.14110212	-	-	20
Zinc	0.108	5.395	0.0584	19.3	82	2800	0.231	5.2871	320.9817834	10.1858096	246.60	274.03	20
Manganese	0.108	5.395	0.0584	20				5.2871	-	0	-	-	10
Antimony	0.108	5.395	0.0584	20				5.2871	-	0	-	-	10

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Qsldg) Sludge flow to disposal in MGD.
(PS) Percent solids of sludge to disposal.
(Rpotw) Removal efficiency across POTW as a percent.
(Cslcrit) State sludge criteria in mg/kg dry sludge.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Cslcrit * (PS/100) * Qsldg}{Rpotw}$$

TABLE 7

Local Limits Determination Based on Chronic Water Quality Standards

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Chronic WQS (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395			43	0.15	0.001	5.287	11.84060526	0.04409441	8.24	9.16	30
Cadmium	0.108	5.395			70	0.0022	0.0001	5.287	0.3299582	0.00440944	0.23	0.25	30
Chromium	0.108	5.395			62	0.074	0.03	5.287	8.762047895	1.32283242	2.18	2.42	60
Hex. Chrom.	0.108	5.395			62	0.011	0.002	5.287	1.302466579	0.08818883	0.82	0.92	30
Copper	0.108	5.395			95	0.009	0.08	5.287	8.098974	3.52755312	2.14	2.38	30
Cyanide	0.108	5.395			70	0.0052	0.0025	5.287	0.7799012	0.11023604	0.44	0.48	30
Iron	0.108	5.395			96		1.3	5.287	-	57.3227382	-	-	30
Lead	0.108	5.395			95	0.0025	0.025	5.287	2.249715	1.10236035	0.47	0.52	30
Mercury	0.108	5.395			67	0.00077	0.0002	5.287	0.1049867	0.00881888	0.09	0.10	10
Molybdenum	0.108	5.395			60		0.002	5.287	-	0.08818883	-	-	20
Nickel	0.108	5.395			62	0.052	0.0026	5.287	6.157114737	0.11464548	4.81	5.35	20
Selenium	0.108	5.395			50	0.005	0.0018	5.287	0.449943	0.07936995	0.28	0.31	20
Silver	0.108	5.395			77	0.0034	0.0032	5.287	0.66513313	0.14110212	0.39	0.43	20
Zinc	0.108	5.395			82	0.12	0.231	5.287	29.9962	10.1858096	13.81	15.35	20

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Qstr) Receiving stream (upstream) 7Q10 flow in MGD.
(Cstr) Receiving stream background level in mg/l.
(Rpotw) Removal efficiency across POTW as percent.
(Ccrit) State chronic water quality standard for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))}{1 - Rpotw}$$

TABLE 8

Local Limits Determination Based on Acute Water Quality Standards

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Acute WQS (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395		0	43	1.3	0.001	5.2871	102.6185789	0.04409441	71.79	79.78	30
Cadmium	0.108	5.395		0	70		0.0001	5.2871	-	0.00440944	-	-	30
Chromium	0.108	5.395		0	62	0.57	0.03	5.2871	67.49145	1.32283242	45.92	51.03	30
Hex. Chrom.	0.108	5.395		0	62	0.016	0.002	5.2871	1.894496842	0.08818883	1.24	1.38	30
Copper	0.108	5.395		0	95	0.037	0.08	5.2871	33.295782	3.52755312	19.78	21.98	30
Cyanide	0.108	5.395		0	70	0.022	0.0025	5.2871	3.299582	0.11023604	2.20	2.44	30
Iron	0.108	5.395		0	96		1.3	5.2871	-	57.3227382	-	-	30
Lead	0.108	5.395		0	61	0.065	0.025	5.2871	7.49905	1.10236035	4.15	4.61	30
Mercury	0.108	5.395		0	67	0.014	0.0002	5.2871	1.908849091	0.00881888	1.71	1.90	10
Molybdenum	0.108	5.395		0	60		0.002	5.2871	-	0.08818883	-	-	20
Nickel	0.108	5.395		0	62	0.47	0.0026	5.2871	55.65084474	0.11464548	44.41	49.35	20
Selenium	0.108	5.395		0	50		0.0018	5.2871	-	0.07936995	-	-	20
Silver	0.108	5.395		0	77		0.0032	5.2871	-	0.14110212	-	-	20
Zinc	0.108	5.395		0	82	0.12	0.231	5.2871	29.9962	10.1858096	13.81	15.35	20

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Qstr) Receiving stream (upstream) 1Q10 flow in MGD.
(Cstr) Receiving stream background level in mg/l.
(Rpotw) Removal efficiency across POTW as percent.
(Ccrit) State acute water quality standard for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))}{1 - Rpotw}$$

TABLE 9

Local Limits Determination Based on Digester Inhibition Level

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow to Digester (MGD) (Qdig)	Removal Efficiency (%) (Rpotw)	Digester Inhibition Level (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Domestic and Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Arsenic	0.108	5.395	0.0584	43	1.6	0.001	5.2871	1.8123014	0.044094414	1.22	1.36	30
Cadmium	0.108	5.395	0.0584	70	20	0.0001	5.2871	13.9158857	0.004409441	9.74	10.82	30
Chromium	0.108	5.395	0.0584	62	130	0.03	5.2871	102.124645	1.32283242	70.16	77.97	30
Hex. Chrom.	0.108	5.395	0.0584	62	110	0.002	5.2871	86.4131613	0.088188828	60.40	67.12	30
Copper	0.108	5.395	0.0584	95	40	0.08	5.2871	20.5076211	3.52755312	10.83	12.03	30
Cyanide	0.108	5.395	0.0584	70	25	0.0025	5.2871	17.3948571	0.110236035	12.07	13.41	30
Iron	0.108	5.395	0.0584	96	400	1.3	5.2871	202.94	57.3227382	84.74	94.16	30
Lead	0.108	5.395	0.0584	61	340	0.01	5.2871	271.473836	0.44094414	189.59	210.68	30
Ammonia	0.108	5.395	0.0584	94	5000	39	5.2871	2590.7234	1719.682146	93.82	104.26	30
Molybdenum	0.108	5.395	0.0584	60	-	0.002	5.2871	-	0.088188828	-	-	20
Nickel	0.108	5.395	0.0584	62	10	0.0026	5.2871	7.85574194	0.114645476	5.38	5.98	30
Selenium	0.108	5.395	0.0584	50	-	0.0018	5.2871	-	0.079369945	-	-	20
Silver	0.108	5.395	0.0584	77	20	0.0032	5.2871	12.6508052	0.141102125	8.71	9.68	30
Zinc	0.108	5.395	0.0584	82	400	0.231	5.2871	237.588293	10.18580963	156.13	173.50	30

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw) POTW's average influent flow in MGD.
(Qdig) Sludge flow to digester in MGD.
(Rpotw) Removal efficiency across POTW as percent.
(Ccrit) Anaerobic digester threshold inhibition level in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qdig}{Rpotw}$$

TABLE 10
Proposed Local Limits - Based on Most Limiting Factor

Pollutant	Special Notes	Limiting Criteria	Calculated Local Limit (mg/l) (Cind)
Arsenic		Digester Inhibition	1.36
Cadmium		Chronic WQ Standards	0.25
Chromium		Chronic WQ Standards	2.42
Hex. Chrom.	No limit proposed for $Cr^{6.}$ Total chromium limit will be used to control chromium.	Chronic WQ Standards	0.92
Copper		Chronic WQ Standards	2.38
Cyanide		Monthly Avg. - NPDES Permit	0.37
Iron		Digester Inhibition	94
Lead		Chronic WQ Standards	0.52
Mercury		Chronic WQ Standards	0.10
Molybdenum	No limit proposed for molybdenum at this time because average sludge quality concentration is less than 13% of limit.	State and Federal Sludge Regs	7.55
Nickel		Chronic WQ Standards	5.35
Selenium		Chronic WQ Standards	0.31
Silver	Best Management Practices (BMP) treatment limit of 2 mg/L is recommended for "end of pipe" determination of compliance	Chronic WQ Standards	0.43
Zinc		Nirtification Inhibition	4.24
BOD		Monthly Avg. - NPDES Permit	2,702.00
TSS		Monthly Avg. - NPDES Permit	2,285.00
Ammonia		Digester Inhibition	104
TDS		12-Month Avg. - NPDES Permit	726
Chloride	Calculated limit of 413 mg/L. Average plant influent is 150 mg/L. Recommend using TDS to limit to control loading. Consistent with NPDES Permit strategy.	Nitrification Inhibition	413
TIN		12-Month Avg. - NPDES Permit	120
Bis 2-(ethylhexyl) phthalate	No limit proposed. Use TTO limit to control all toxic organics.	Monthly Avg. - NPDES Permit	0.52
Total Toxic Organics (TTOs)	End of process (BMP) limit based upon Best Available Technology (BAT)		0.58
TPH		BMP	100
FOG		BMP	500.00
Surfactants (MBAS)	Recommend removal of limit. Issues caused by surfactants can be regulated using prohibited standards and general limitations	Protect recycle water use	-
pH	Current local limits are overly restrictive	corrosion, inhibition	5-11
Fluoride	Use TDS to limit to control loading - no limit proposed	No limiting criteria	-
Hardness	Use TDS to limit to control loading - no limit proposed	No limiting criteria	-
Sodium	Use TDS to limit to control loading - no limit proposed	Protect recycle water use	-
Boron	Use TDS to limit to control loading - no limit proposed	Protect recycle water use	-
Sulfate	Use TDS to limit to control loading - no limit proposed	Protect recycle water use	-