

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2015-____

FOR

CITY OF LATHROP
LATHROP CONSOLIDATED TREATMENT FACILITY
SAN JOAQUIN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring influent wastewater, treated effluent, effluent storage ponds, recycled water Use Areas, groundwater, sludge, and water supply at the City of Lathrop's Consolidated Treatment Facility (CTF). This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Regional Water Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

Analytical procedures shall comply with the methods and holding times specified in the following: *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA); *Test Methods for Evaluating Solid Waste* (EPA); *Methods for Chemical Analysis of Water and Wastes* (EPA); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA); *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

INFLUENT MONITORING

Influent monitoring shall be performed at the headworks. Time of collection of the grab sample shall be recorded. Grab samples are considered adequately composited to represent the influent. Influent monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow ¹	gpd	Continuous Meter	Daily	Monthly
BOD ₅ ²	mg/L	Grab	Weekly	Monthly
Total Suspended Solids ³	mg/L	Grab	Weekly	Monthly

¹ Flow represents the daily flow rate.

² Five-day, 20° Celsius biochemical oxygen demand

³ Total Suspended Solids shall be performed using a Whatman glass fiber filter with a nominal pore size of about 1.58 µm or equivalent.

EFFLUENT MONITORING

Effluent samples shall be collected at a location downstream of the disinfection system and upstream of any effluent storage pond and shall be representative of the volume and nature of the discharge. Analytical methods shall be selected to provide reporting limits below Water Quality Objectives for each constituent. Grab samples are considered adequately composited to represent the tertiary effluent.

Because recycled water is used for irrigation of public landscape areas¹, priority pollutant monitoring is required at the CTF. Priority pollutants are listed in Appendix A of 40 Code of Federal Regulations (CFR) Part 423. The frequency of monitoring corresponds to the flow rate of the recycled water use. Effluent monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
BOD ₅ ¹	mg/L	Grab	Weekly	Monthly
Total Coliform Organisms	MPN/100 ml ²	Grab	Daily	Monthly
Turbidity	NTU ³	Meter	Continuous	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Nitrogen (as N)	mg/L	Grab	Monthly	Monthly
Total Suspended Solids ⁴	mg/L	Grab	Monthly	Monthly
pH	Standard	Grab	Monthly	Monthly
Priority Pollutants ⁵	mg/L	Grab	Annually ⁶	Annually

¹ Five-day, 20° Celsius biochemical oxygen demand.

² Using a minimum of 10 tubes or two dilutions.

³ NTU denotes Nephelometric Turbidity Units.

⁴ Total Suspended Solids shall be performed using a Whatman glass fiber filter with a nominal pore size of about 1.58 µm or equivalent.

⁵ Priority pollutants are listed in Appendix A of 40 Code of Federal Regulations (CFR) Part 423. Monitoring shall include, at a minimum, the constituents listed in Table 1 of this MRP.

⁶ Analysis for priority pollutants shall be performed once every five years if the flow rate is less than or equal to 1.0 MGY, otherwise the analysis shall be performed annually.

¹ Landscape areas are defined as parks; greenbelts; playgrounds; school yards; athletic fields; golf courses; cemeteries; residential landscaping; common areas; commercial landscaping (except eating areas); industrial landscaping (except eating areas); freeway, highway, and street landscaping.

EFFLUENT STORAGE POND MONITORING

The Discharger shall monitor all effluent storage ponds in accordance with the following. Sampling will be conducted from permanent monitoring locations that will provide samples representative of the wastewater in the effluent equalization and storage ponds. Freeboard shall be measured vertically from the water surface to the lowest elevation of pond berm (or spillway/ overflow pipe invert), and shall be measured to the nearest 0.10 feet. Pond monitoring shall include, at a minimum, as specified below:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard	0.1 feet	Measurement	Weekly	Monthly
Odors	--	Observation	Weekly	Monthly
Liner condition	--	Observation	Quarterly	Monthly
Berm condition	--	Observation	Quarterly	Monthly

¹ Samples shall be collected opposite the inlet at a depth of one foot from each pond in use. Samples shall be collected between 0700 and 0900 hours.

AGRICULTURAL RECYCLED WATER USE AREA MONITORING

Monitoring of the agricultural recycled water Use Areas shall be conducted during the irrigation season on days when irrigation occurs. The results shall be included in the monthly monitoring reports. Effluent monitoring results shall be used in calculations to determine loading rates at the Use Areas. Monitoring of each agricultural recycled water Use Area shall include the following:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u> ¹
Recycled Water Flow	Gal/day and Inches	Continuous	Daily	Monthly
Supplemental Irrigation Water Flow	Gal/day and Inches	Continuous	Daily	Monthly
Rainfall	Inches	Observation	Daily	Monthly
Acreage Applied	Acres	Calculated	Daily	Monthly
Total Water Application Rate	Gal/acre and Inches	Calculated	Daily	Monthly
Total Nitrogen Loading Rate	lbs/ac	Calculated	Monthly	Monthly

¹ Quarterly observations shall be submitted in the monthly monitoring report for the month during which the quarterly observation was made.

In addition, the Discharger shall inspect each agricultural Use Area as needed following irrigation events to identify any equipment malfunction or other circumstance that might allow recycled water to runoff the land application area and/or create ponding conditions that violate the Waste Discharge Requirements. Evidence of erosion, field saturation, irrigation runoff, or the presence of nuisance conditions (if any) shall be noted. A log of these inspections shall be kept at the facility and made available for review upon request.

LANDSCAPE RECYCLED WATER USE AREA MONITORING

Monitoring of the landscape recycled water Use Areas shall be conducted during the irrigation season on days when irrigation occurs. The results shall be included in the monthly monitoring reports. Monitoring of the landscape recycled water Use Area shall include the following and the results for all Use Areas may be reported as aggregated totals:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Recycled Water Flow	Gals/day and Inches	Continuous	Monthly	Monthly
Rainfall	Inches	Observation	Monthly	Monthly
Acreage Applied	Acres	Calculated	Monthly	Monthly
Water Application Rate	Gal/acre	Calculated	Monthly	Monthly

In addition, the Discharger shall inspect landscape Use Areas following irrigation events as needed to identify any equipment malfunction or other circumstance that might allow recycled water to runoff the land application area and/or create ponding conditions that violate the Waste Discharge Requirements. Evidence of erosion, field saturation, irrigation runoff, or the presence of nuisance conditions (if any) shall be noted. A log of these inspections shall be kept at the facility and made available for review upon request.

GROUNDWATER MONITORING

The groundwater monitoring program applies to groundwater monitoring wells tabulated below and any wells subsequently installed under direction of the Central Valley Water Board. The following table lists all existing monitoring wells and designates the purpose of each well:

Land Development Area	Water Level Monitoring	Water Quality Monitoring	
		Compliance Wells	Other Wells ¹
Mossdale	MWM-1, MWM-2, MWM-3, MWM-4, MWM-5, MWM-6, MWM-7, MWM-8, MWM-9, MWM-11, MWM-12, MWM-13, MWM-15, MWM-17, MWM-19, MWM-20, MWM-21, MWM-22, MWM-23, MWM-24, MWM-25, MWM-27	MWM-12	MWM-13
River Islands	MWR-3, MWR-4, MWR-5, MWR-6, MWR-7, MWR-8, MWR-9, MWR-10, MWR-11, MWR-12, MWR-23, MWR-24, MWR-25, MWR-26, MWR-27, MWR-28, MWR-29, MWR-30, MWR-31, MWR-32	MWR-24, MWR-28, MWR-32	---
CTF/MBR Facility	MBRMW-1, MBRMW-2, MBRMW-3, MBRMW-4	---	---
Pond S6	RMW-1, RMW-2, RMW-3, RMW-4, RMW-5	---	---

Land Development Area	Water Level Monitoring	Water Quality Monitoring	
		Compliance Wells	Other Wells ¹
Northern Lathrop ²	MW-N1, MW-N3, MW-N4, MW-N5, MW-N6	---	MW-N1, MW-N3, MW-N4, MW-N5, MW-N6
Central Lathrop Specific Plan ²	CLSP-1, CLSP-2, CLS-3, CLSP-4, CLSP-8, CLSP-9, CLSP-10	CLSP-1	CLSP-2, CLS-3, CLSP-4, CLSP-8, CLSP-9, CLSP-10

¹ Other wells are either background wells (MWM-13) or wells that will be used as compliance wells prior to initiation of recycled water use.

² Groundwater monitoring shall be conducted prior to recycled water discharge begins in accordance with Provision H.1.f

Prior to construction of any additional groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Board for review and approval. Once installed, all new monitoring wells shall be added to the MRP, and shall be monitored on a quarterly basis for a minimum of eight consecutive quarters.

Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Monitoring wells to be sampled shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u>
Depth to Groundwater	0.01 feet	Measurement	Semi-Annual
Groundwater Elevation ¹	0.01 feet	Calculated	Semi-Annual
Gradient	feet/feet	Calculated	Semi-Annual
Gradient Direction	degrees	Calculated	Semi-Annual
Total Dissolved Solids	mg/L	Grab	Semi-Annual ^{2, 3}
Nitrate as Nitrogen	mg/L	Grab	Semi-Annual ^{2, 3}
Total Coliform Organisms	MPN/100ml	Grab	Semi-Annual ^{2, 3}
Chloride	mg/L	Grab	Semi-Annual ^{2, 3}
Sodium	mg/L	Grab	Semi-Annual ^{2, 3}
Standard Minerals ⁴	mg/L	Grab	Annually

¹ Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.

² Sample analyses from existing monitoring wells to be conducted on a semi-annual basis for a minimum of eight consecutive monitoring events before a reduction in monitoring frequency can be considered.

- ³ Sample analyses from all new monitoring wells installed or included in the monitoring program after adoption of this order to be conducted on a quarterly basis for eight consecutive monitoring events before a reduction in monitoring frequency can be considered.
- ⁴ Standard minerals shall include, at a minimum, the following elements/compounds: boron, calcium, magnesium, iron (dissolved), manganese (dissolved), potassium, sulfate, total alkalinity (including alkalinity series), and hardness.

APPLICABILITY OF GROUNDWATER LIMITATIONS

The Groundwater Limitations set forth in Section E of the WDRs shall apply to the specific compliance monitoring wells tabulated below. This table is subject to revision by the Executive Officer following construction of any new compliance monitoring wells.

Constituent	Groundwater Limitation	Wells to which Limitation Applies
Total Dissolved Solids	Current groundwater quality ¹	MWM-12, MWM-13, MWR-24, MWR-28, MWR-32
Total Dissolved Solids	1,000 mg/L	CLSP-1
Nitrate nitrogen	10 mg/L ²	MWM-12, MWR-24, MWR-28, MWR-32, CLSP-1, CLSP-3, CLSP-8, CLSP-9, CLSP-10
Nitrate nitrogen	Current Groundwater Quality ²	MW-N1, MW-N3, MW-N4, MW-N5, MW-N6, CLSP-2, CLSP-4

¹ "Current groundwater quality" means the quality of groundwater as evidenced by monitoring completed as of the date of this Order for each of the specified compliance monitoring wells listed above

² "Current groundwater quality" means the quality of groundwater in the well as evidenced by monitoring completed in accordance with Provision H.1.f.

SLUDGE MONITORING

The Discharger shall keep documentation regarding the quantity of biosolids generated by the treatment processes; any sampling and analytical data; the quantity of biosolids stored on site; and the quantity removed for disposal. If biosolids are transported off-site for disposal, then the Discharger shall submit documentation identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the location of disposal, and copies of all analytical data required by the entity accepting the waste.

A composite sample of digested sludge shall be collected at least once per year in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989; and analyzed for cadmium, copper, nickel, chromium, lead, and zinc when sludge is removed from the wastewater treatment system for disposal.

A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report. Documentation shall also indicate that steps taken to reduce odor and other nuisance conditions. All records shall be stored onsite and available for review during inspections and submitted as part of the Annual Monitoring Report. Sampling records shall be retained for a minimum of five years.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Alternatively, the Discharger may submit a current Consumer Confidence Report for municipal supply water. Water supply monitoring shall include at least the following for each water source used during the previous year:

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/L	Annually
pH	Std. Unit	Annually
Standard Minerals ¹	mg/L	Annually

¹ Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, magnesium, sodium, potassium, chloride, nitrogen, sulfate, iron, manganese, total alkalinity (including alkalinity series), and hardness.

REPORTING

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
 ECM Mailroom
 11020 Sun Center Drive, Suite 200
 Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

City of Lathrop Consolidated Treatment Facility, San Joaquin County		
Program: Non-15	Order: R5-2015-XXXX	CIWQS Place ID: 271781

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Central Valley Water Board.

As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Professional Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in the monthly monitoring report. Monthly reports shall be submitted to the Central Valley Water Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

- 1 Tabulated influent wastewater flow monitoring data for each month of the calendar year, including average daily flow, cumulative flow to date, and comparison to the Flow Limitations of the WDRs;
- 2 Tabulated effluent monitoring data;
- 3 Tabulated recycled water storage pond monitoring data;
- 4 A comparison of monitoring data to the flow limitations, effluent limitations, and discharge specifications and an explanation of any violation of those requirements;
- 5 A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program; and
- 6 Copies of the laboratory analytical data reports shall be maintained by the Discharger and provided upon request by the Regional Water Board.

B. Semi-Annual Monitoring Reports

A Semi-Annual Monitoring Report shall be submitted to the Regional Water Board by the **1st day of the second month following the second and fourth calendar quarter** (i.e. the January-June report is due by August 1st) and shall include the following:

1. A narrative description of all preparatory, groundwater monitoring, sampling, and analytical testing activities. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged. Low or no-purge sampling methods are acceptable if described in an approved Sampling and Analysis Plan;

2. A groundwater elevation map;
 3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison with previous flow direction and gradient data, and discussion of seasonal trends if any;
 4. Cumulative data tables containing the water quality analytical results and depth to groundwater;
 5. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and
6. Copies of the laboratory analytical data reports shall be maintained by the Discharger and provided upon request by the Regional Water Board.

The Discharger shall establish a quarterly sampling schedule for newly installed groundwater monitoring wells such that samples are obtained approximately every three months.

C. Annual Monitoring Report

An Annual Monitoring Report shall be submitted to the Central Valley Water Board by **1 February** each year and shall include the following:

1. Total annual influent flow and average dry weather flow for the calendar year;
2. Total precipitation for each month of the calendar year and annual total for the calendar year;
3. Tabulated recycled water Use Area monitoring for the calendar year including:
 - a. Summary tables of all recycled water, supplemental water, and total hydraulic loading for each recycled water Use Area for the calendar year with supporting data and calculations;
 - b. A map identifying all Use Areas. Newly permitted recycled water Users and Use Areas shall be identified;
 - c. Tabulated total annual flow of recycled water discharged to each discrete Use Area for the calendar year; and
 - d. A summary of all inspections and enforcement activities initiated by the Discharger.
4. An evaluation of the performance of the CTF, including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year. The evaluation shall include the following:

- a. Waste constituent reduction efforts implemented in accordance with any required workplan;
 - b. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order;
 - c. A discussion of anticipated pond sludge removal in the coming year, and if so, include anticipated schedule for cleaning, drying, and disposal; and
 - d. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.
 - e. Waste constituent reduction efforts implemented in accordance with any required workplan;
 - f. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order;
 - g. A discussion of anticipated pond sludge removal in the coming year, and if so, include anticipated schedule for cleaning, drying, and disposal; and
 - h. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.
5. An evaluation of the groundwater quality beneath the site and determination of compliance with the Groundwater Limitations of the WDRs based on statistical analysis for each constituent monitored for each compliance well in accordance with the approved Groundwater Limitations Compliance Assessment Plan. Include all calculations and data input/analysis tables derived from use of statistical software, as applicable;
6. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
7. A discussion of the following:
- a. Waste constituent reduction efforts implemented in accordance with any required workplan;
 - b. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order;
 - c. A discussion of anticipated pond sludge removal in the coming year, and if so, include anticipated schedule for cleaning, drying, and disposal; and
 - d. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.

8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring network or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by:

PAMELA C. CREEDON, Executive Officer

(Date)

SAA: 1/16/2015

Table 1 Priority Pollutant Scan

<u>Inorganics</u> ¹	<u>Organics</u>	3-Methyl-4-Chlorophenol	Hexachlorobenzene
Antimony	Acrolein	Pentachlorophenol	Hexachlorobutadiene
Arsenic	Acrylonitrile	Phenol	Hexachlorocyclopentadiene
Beryllium	Benzene	2,4,6-Trichlorophenol	Hexachloroethane
Cadmium	Bromoform	Acenaphthene	Indeno(1,2,3-c,d)pyrene
Chromium (III)	Carbon tetrachloride	Acenaphthylene	Isophorone
Chromium (VI)	Chlorobenzene	Anthracene	Naphthalene
Copper	Chlorodibromomethane	Benzidine	Nitrobenzene
Lead	Chloroethane	Benzo(a)Anthracene	N-Nitrosodimethylamine
Mercury	2-Chloroethylvinyl Ether	Benzo(a)pyrene	N-Nitrosodi-n-Propylamine
Nickel	Chloroform	Benzo(b)fluoranthene	N-Nitrosodiphenylamine
Selenium	Dichlorobromomethane	Benzo(g,h,i)perylene	Phenanthrene
Silver	1,1-Dichloroethane	Benzo(k)fluoranthene	Pyrene
Thallium	1,2-Dichloroethane	Bis(2-chloroethoxy) methane	1,2,4-Trichlorobenzene
Zinc	1,1-Dichloroethylene	Bis(2-chloroethyl) ether	
Cyanide	1,2-Dichloropropane	Bis(2-chloroisopropyl) ether	<u>Pesticides</u>
Asbestos	1,3-Dichloropropylene	Bis(2-Ethylhexyl)phthalate	Aldrin
	Ethylbenzene	4-Bromophenyl phenyl ether	alpha-BHC
	Methyl Bromide	Butylbenzyl Phthalate	beta-BHC
<u>Dioxin Congeners</u>	Methyl Chloride	2-Chloronaphthalene	gamma-BHC (Lindane)
2,3,7,8-TCDD	Methylene Chloride	4-Chlorophenyl Phenyl Ether	delta-BHC
1,2,3,7,8-PentaCDD	1,1,2,2-Tetrachloroethane	Chrysene	Chlordane
1,2,3,4,7,8-HexaCDD	Tetrachloroethylene (PCE)	Dibenzo(a,h)Anthracene	4,4'-DDT
1,2,3,6,7,8-HexaCDD	Toluene	1,2-Dichlorobenzene	4,4'-DDE
1,2,3,7,8,9-HexaCDD	1,2-Trans-Dichloroethylene	1,3-Dichlorobenzene	4,4'-DDD
1,2,3,4,6,7,8-HeptaCDD	1,1,1-Trichloroethane	1,4-Dichlorobenzene	Dieldrin
OctaCDD	1,1,2-Trichloroethane	3,3'-Dichlorobenzidine	alpha-Endosulfan
1,2,3,7,8-PentaCDF	Trichloroethylene (TCE)	Diethyl phthalate	beta-Endosulfan
2,3,4,7,8-PentaCDF	Vinyl chloride	Dimethyl phthalate	Endosulfan Sulfate
1,2,3,4,7,8-HexaCDF	2-Chlorophenol	Di-n-Butyl Phthalate	Endrin
1,2,3,6,7,8-HexaCDF	2,4-Dichlorophenol	2,4-Dinitrotoluene	Endrin Aldehyde
1,2,3,7,8,9-HexaCDF	2,4-Dimethylphenol	2,6-Dinitrotoluene	Heptachlor
2,3,4,6,7,8-HexaCDF	2-Methyl-4,6-Dinitrophenol	Di-n-Octyl Phthalate	Heptachlor epoxide
1,2,3,4,6,7,8-HeptaCDF	2,4-Dinitrophenol	1,2-Diphenylhydrazine	Polychlorinated biphenyls
1,2,3,4,7,8,9-HeptaCDF	2-Nitrophenol	Fluoranthene	Toxaphene
OctaCDF	4-Nitrophenol	Fluorene	

¹ With the exception of wastewater samples, samples for metals analysis must first be filtered. If filtering in the field is not feasible, samples shall be collected in unpreserved containers and submitted to the laboratory within 24 hours with a request (on the chain of custody form) to immediately filter then preserve the sample.

² Samples to be analyzed for volatile compounds and phthalate esters shall be grab samples; the remainder shall be 24-hour composite samples.