CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2015-XXXX

NPDES NO. CAS083526

MONITORING AND REPORTING PROGRAM

CITY OF MODESTO
STORM WATER DISCHARGES FROM MUNICIPAL
SEPARATE STORM SEWER SYSTEM
STANISLAUS COUNTY

I. MONITORING AND REPORTING PROGRAM REQUIREMENTS

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code Section 13267. Because the Discharger operates facilities, which discharge waste, subject to storm water regulations, the MRP is necessary to ensure compliance with this Order No. R5-2015-XXXX.

The Discharger shall not implement any changes to this MRP unless and until the Regional Water Board or Executive Officer issues a revised MRP. **Attachment A** shows a map of the City of Modesto, the service area covered under this Order, Modesto Irrigation District (MID) laterals, existing and proposed detention basins, and existing and proposed discharges to MID Facilities. The Executive Officer may allow revisions appropriate to implement Regional Monitoring Programs and reduce local water quality monitoring requirements.

A. **Annual Work Plan:** By **1 April**, the Discharger shall submit an MRP Work Plan that supports the development, implementation, and effectiveness of the approved SWMP, and Order No. R5-2015-XXXX.The work plan must specifically identify any recommended changes to the program from the previous year's work plan.

B. **Annual Report:** The Discharger shall submit, in both <u>electronic and paper</u> formats and no later than **1 September** of each year, an Annual Report documenting the progress of the Discharger's implementation of the SWMP and the requirements of this Order. The Annual Report shall cover each fiscal year from **1 July through 30 June**. The status of compliance with the permit requirements including implementation dates for all time-specific deadlines should be included for each program area. If permit deadlines are not met, the Discharger shall report the reasons why the requirement was not met and how the requirements will be met in the future, including projected implementation dates. A comparison of

program implementation results to performance standards established in the SWMP and this Order shall be included for each program area.

Specific requirements that must be addressed in the Annual Reports are listed below.

1. An Executive Summary discussing the effectiveness of the SWMP to reduce storm water pollution to the MEP.

2. Summary of activities conducted by the Discharger;

3. Identification of BMPs and a discussion of their effectiveness at reducing urban runoff pollutants and flow;

4. Summary of the monitoring data and an assessment of each component of the MRP. To comply with Provisions D.1 and D.2 (Receiving Water Limitations) of this Order the Discharger shall compare receiving water and discharge data with applicable water quality standards. The lowest applicable standard from the Basin Plan, California Toxics Rule (CTR), and California Title 22 (Title 22), and constituent specific concentrations limits shall be used for comparison. When the data indicates that MS4 discharges are causing or contributing to exceedances of applicable water quality standards or constituent specific concentrations limits, the Discharger shall prepare a Report of Water Quality Exceedance and identify potential sources of the problems, and recommend future monitoring and BMP implementation measures to identify and address the sources.

   Raw data is required to be submitted in electronic format.

5. For each water quality program plan requirement (e.g., Pesticide Plan) the Annual Reports shall include the following results and information:

   a. all physical, chemical and biological data collected in the assessment;

   b. all graphs, charts, statistical analysis, modeling, and any other analytical analyses in support of the Discharger's evaluation of the data and conclusions derived from that analysis; and

   c. documentation of quality assurance and control procedures (QA/QC).

6. Effectiveness assessment for each program element, as defined in the SWMP, shall be conducted annually, shall be built upon each consecutive year, and shall identify any necessary modifications. The SWMP shall describe, in detail, the performance standards or goals to use to gauge the effectiveness of the storm water management program. The primary questions that must be assessed for each program element include the following:

   a. Level 1 Outcome: Was the Program Element implemented in accordance with the Permit Provisions, SWMP Control Measures and Performance Standards?

   b. Level 2 Outcome: Did the Program Element raise the target audience's awareness of an issue?

   c. Level 3 Outcome: Did the Program Element change a target audience's behavior, resulting in the implementation of recommended BMPs?

   d. Level 4 Outcome: Did the Program Element reduce the load of pollutants from the sources to the storm drain system?

   e. Level 5 Outcome: Did the Program Element enhance or change the urban runoff and discharge quality?

   f. Level 6 Outcome: Did the Program Element enhance or change receiving water quality?

7. A summary of any Reports of Water Quality Exceedance (RWQEs) that have been completed during the year, and a status update for those in progress. The summary shall include the conclusions and recommendations of completed RWQEs and the status of any additional BMP implementation pursuant to RWQEs;

8. Pursuant to 40 CFR 122.42(c)(7), the Discharger shall identify water quality improvements in, or degradation of, urban storm water;

9. An estimation of total annual pollutant loads due to storm water/urban runoff for each sampling station.

10. For each monitoring component, photographs and maps of all monitoring station locations and descriptions of each location; and

11. Recommendations to improve the monitoring program, BMPs, Performance Standards, and the SWMP to address potential

receiving water quality exceedances and potential pollutant sources, and to meet the MEP standard.

12. Provide operating data from all city pump stations as an appendix in electronic format on an annual basis only to assist in calculating flow volumes, as applicable.

C. **Certification:** All work plans and reports submitted to the Regional Board shall be signed and certified pursuant to Federal regulations at 40 CFR 122.41 (k). Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations.

Executed on the ___ day of _____ , 20__,

at _____.

(Signature)_____(Title)_____";

The Discharger shall mail the original of each annual report to:

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD – CENTRAL VALLEY REGION
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

A copy of the annual report shall also be mailed to:

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105

II. Monitoring Program

The primary objectives of the Monitoring Program include, but are not limited to:

- Assessing compliance with this Order;
- Measuring and improving the effectiveness of the SWMP;
- Assessing the chemical, physical, and biological impacts of receiving waters resulting from urban runoff;
- Characterization of storm water discharges;
- Identifying sources of pollutants; and
- Assessing the overall health and evaluating long-term trends in receiving water quality.

Ultimately, the results of the monitoring requirements outlined below should be used to refine the SWMP to reduce pollutant loadings and protect and enhance the beneficial uses of the receiving waters in the Modesto Urbanized Area.

Regional Monitoring Program

The Permittee may elect to participate in a RMP and may request a reduction in some of the local water quality monitoring specified in the MRP of this Order. Participation in a RMP by a Permittee shall consist of providing funds and/or in-kind services to the RMP at least equivalent to discontinued individual monitoring and study efforts.

If the Permittee proposes to reduce the local water quality monitoring and instead participate in a RMP, the Permittee shall submit a letter signed by an authorized representative informing the Regional Water Board that the Permittee will participate in a RMP, the date on which local water quality monitoring required under the MRP for this Order, would cease, or be modified, and specific monitoring locations and constituent combinations that would no longer be conducted individually. To ensure consistency with this Order and this MRP, reductions in local water quality monitoring require the Executive Officer's prior written approval of the Permittee's request, including related SWMP modifications. Approval by the Executive Officer is not required prior to participating in the RMP.

If the Permittee is approved to participate in a RMP and reduce some local water quality monitoring, the Permittee shall continue to participate in a RMP until such time as the Permittee informs the Regional Water Board that participation in a RMP will cease and all local water quality monitoring will be reinstituted. To the extent approved by the Executive Officer, some local water quality monitoring under the Monitoring and Reporting Program, and related monitoring identified in the SWMP, will not be required under this Order so long as the Permittee adequately support a RMP. Data from the RMP may be utilized to characterize the receiving water in the permit renewal. Alternatively, the Permittee may

conduct any site-specific receiving water monitoring deemed appropriate by the Permittee and submit that monitoring data with this characterization monitoring. If the Permittee fails to adequately support the RMP, as defined by the RMP Steering Committee, the Permittee shall reinstitute local water quality monitoring pursuant to the Monitoring and Reporting Program, upon written notice from the Executive Officer. During participation in the RMP, the Permittee may conduct and submit any or part of the monitoring included in this Monitoring and Reporting Program that is deemed appropriate by the Permittee, provided the modified monitoring program approved by the Executive Officer is conducted at a minimum.

RMP data is not intended to be used directly to represent receiving water quality for purposes of determining if a discharge is causing or contributing to an exceedance of any applicable water quality standards. RMP monitoring stations are established generally as “integrator sites” to evaluate the combined impacts on water quality of multiple discharges; RMP monitoring stations would not normally be able to identify the source of any specific constituent, but would be used to identify water quality issues needing further evaluation. RMP monitoring data, along with local Permittee data, may be used to help establish ambient receiving water quality for a water quality data analysis after evaluation of the applicability of the data for that purpose. RMP data, as with all environmental monitoring data, can provide an assessment of water quality at a specific location and time that can be used in conjunction with other information, such as other receiving water monitoring data, spatial and temporal distribution and trends of receiving water data, point and non-point source discharges, receiving water flowrate and velocity, and to determine a potential source or sources of a constituent that contributed to an exceedance of any applicable water quality standards.

During the period of participation in the RMP, the Permittee shall continue to report any individually conducted local water quality monitoring data in the Annual Report consistent with Provision I.B.4, Monitoring and Reporting Program. In addition, with each submitted Annual Report, the Permittee’s shall include 1) a statement that the Permittee is participating in the RMP have reduced some of the local water quality monitoring program required by the permit, and 2) the Permittee shall continue to attach a copy of the letter originally submitted to the Regional Water Board describing the monitoring location(s) and constituents that will no longer be conducted individually.

At a minimum, the Discharger shall conduct the following monitoring over the term of this Order:

<u>Local Water Quality Monitoring</u>

- Baseline Monitoring
  - Urban Discharge Monitoring

- o Receiving Water Monitoring
- o Urban and Water Column Toxicity Monitoring
- o Dry Weather Characterization

- Sediment Toxicity Monitoring

- Water Quality Based Programs
  - o Pesticide Plan

The Discharger shall implement the Monitoring Program as follows:

Baseline Monitoring

A. The Discharger shall conduct water column monitoring in both receiving waters (see Section D – Receiving Water Monitoring) and urban discharge outfalls (see Section C – Urban Discharge Monitoring). Water monitoring will take place at each receiving water and urban discharge station. The water column monitoring shall include all storm water pollutants of concern (POCs) identified in Table 1 of this Order. The frequency of monitoring shall be in accordance with Table A.

B. **Sampling Protocol**

1. Samples from each receiving water and urban discharge station described below shall be analyzed for all constituents listed in Table 1. All sample collection and analyses shall follow standard U.S. Environmental Protection Agency (U.S. EPA) protocol.

2. In addition, samples from each receiving water and urban discharge station described below shall be analyzed for constituents in Table 2. The Table 2 constituents shall be monitored with the first storm event sampling for Table 1 constituents and shall be collected only once during the permit term. The results shall be submitted in the Annual report or with the new report of waste discharge application.

3. Grab samples shall be used for receiving water monitoring. For monitoring of urban discharge outfalls during wet weather, the Discharger shall use flow-composite sampling equipment when feasible and grab samples otherwise.

4. The Discharger shall collect flow data at the time of sampling for all monitoring stations sampled during a given year. Receiving water or urban discharge flow may be estimated using U.S. EPA

methods[1] at sites where flow measurement devices are not in place.

5. The Discharger shall perform an analysis, to be included in the Annual Report, of the correlation between pollutants of concern (aluminum, Fecal coliform, specific conductance, copper (total and dissolved), turbidity, pH, and zinc for the sampling events that are analyzed for the constituents in Table 1.

C. **Urban Discharge Monitoring**

Based on the land usage the Discharger has identified the following two locations for monitoring purposes:

(i) Scenic Drive--receives runoff from the Sonoma neighborhood, an entirely residential neighborhood; and

(ii) Bodem Street--receives runoff from the McHenry Avenue Corridor, a mixed residential/commercial land use.

The Discharger monitored the same stations during the third permit term. Use of the same location or at equivalent location further downstream will allow the Discharger to maintain consistency and compare the data obtained during the previous discharge monitoring studies. The Regional Water Board must approve any relocation of the stations. Urban discharge monitoring shall be consistent with Table 1. Each year,[2] samples shall be flow weighted and collected **during two storm events[3]** and **one dry weather monitoring event.[4]** The proposed monitoring will allow Modesto to continue to characterize storm water discharges and track water quality constituent levels.

The Discharger shall target for monitoring the first storm event of the year[2] preceded by at least 30 days of dry weather.[5] The second storm event to be monitored shall be preceded by at least three dry weather days. The two monitoring events shall be separated by at least 20 days.

[1]NPDES Storm Water Sampling Guidance Document, U.S. EPA 833-B-92-001, July 1992
[2] This refers to the permit year of July 1 to June 30.
[3] A qualifying storm event occurs when there is sufficient rainfall within a 24-hour period to monitor at least one drainage basin and one corresponding receiving water station; the Discharger shall target storm events with a predicted rainfall of at least 0.25 inches at a seventy percent probability of rainfall 72 hours prior to the event.
[4] Dry weather monitoring events shall be preceded by at least seven days of no rainfall.
[5] A day with a storm event too small to generate runoff (typically 0.1 inches or less) shall be considered a dry weather day.

If additional sample station locations are needed, they shall be established under the direction of the Regional Water Board staff, and a description of the location shall be attached to this MRP.

D. **Receiving Water Monitoring**

All receiving water samples shall be grab samples, collected at mid-depth, in mid-stream of the receiving water, and in a manner that measures the water quality impacts of corresponding urban discharge outfalls. Receiving water sampling may be postponed if hazardous weather and/or river flow conditions prevent safe access to sampling location. Receiving water monitoring shall be taken after discharges from upstream and downstream locations on the Tuolumne River and Dry Creek. **Attachment B** shows the approximate locations of the receiving water sampling stations. Each year, samples shall be collected **during two storm events** and **one monitoring event during the dry season**.

The receiving water chemistry monitoring will be performed in the Tuolumne River and Dry Creek, the two major water bodies, which receive Modesto urban runoff. Monitoring shall be conducted at two sites (upstream and downstream) for each receiving water location. If additional sample station locations are needed, they shall be established under the direction of the Regional Water Board staff, and a description of the location shall be attached to this MRP.

Receiving water monitoring shall include at least the following:

Station	**Description/Location/Type of Watershed**
Upstream Tuolumne River	Upstream Tuolumne River, upstream of Mitchell Road Bridge and east of the Modesto City Airport. (Commercial, Industrial, Residential Mixed, Agriculture)
Downstream Tuolumne River	Downstream Tuolumne River, Carpenter Road Bridge on the northern bank of the river. (Commercial, Industrial, Residential Mixed)
Upstream Dry Creek	Upstream Dry Creek, Claus Road Bridge, (Agriculture)
Downstream Dry Creek	Downstream Dry Creek, Beard Brook Park near the confluence of Tuolumne

River. (Commercial, Residential, Industrial, Mixed)

The upstream receiving locations shall be representative of what is entering each waterbody from upstream of the Modesto urban area boundary as shown on **Attachment B**.

E. **Urban and Water Column Toxicity Monitoring**

The Discharger shall conduct short-term chronic toxicity testing at Scenic Drive and Bodem Street urban discharge monitoring locations with their corresponding downstream receiving water monitoring station. Toxicity data collection allows for characterizing a range of hydrologic conditions that vary from year to year and more fully characterizes potential sources of contaminants and toxicity that may be contributing to the decline of fish populations in the Delta. Short-term chronic toxicity testing shall include (1) the analysis of samples from **two storm events, and one dry weather monitoring event** from each monitoring station once during the permit term; and (2) analysis of at least the following two freshwater test species for each storm event: Fathead minnow [*Pimephales promelas* (larval survival and growth test) and water flea [*Ceriodaphnia dubia* (survival and reproduction test)]. The testing shall be conducted in accordance with U.S. EPA's method (U.S. EPA 2002, 4th Edition). A minimum sample volume of 5 gallons for each test species shall be provided with a sample storage (holding time) not to exceed 36 hours.

If 100% mortality to *Pimephales promelas* or *Ceriodaphnia dubia* is detected within 24 hours of test initiation, then a dilution series shall be initiated (0.5x steps) ranging from the undiluted sample (or the highest concentration that can be tested within the limitations of the test methods or sample type) to less than or equal to 6.25 percent of the sample. Further, if statistically significant toxicity is detected and a greater than or equal to 50% increase in *Pimephales promelas* or *Ceriodaphnia dubia* mortality, or reduction in *Ceriodaphnia dubia* reproduction compared to the laboratory control is observed, then TIEs shall be conducted on the initial sample that caused toxicity.

1. Toxicity Identification Evaluations (TIE)

The Discharger shall begin a Phase I TIE immediately on all samples that are substantially toxic to either test species. If mortality of both test species exceeds the 50% trigger, then TIEs shall be conducted using both species. TIEs are required until the cause of toxicity is determined. The Discharger shall indicate the person who will conduct the TIE (in-house expert or outside contractor), which shall

be identified in the SWMP and Annual Reports.

2. Toxicity Reduction Evaluations (TRE)

a. BMPs shall be identified and implemented whenever a toxicant is successfully identified through the TIE process. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. Once the source of toxicity and appropriate BMPs are identified, the Discharger shall submit the TRE Corrective Action Plan as part of the Annual Report to the Executive Officer for approval. At a minimum, the TRE shall include a discussion of the following items:

i. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity;

ii. The potential sources of pollutant(s) causing toxicity;

iii. A list of dischargers having jurisdiction over sources of pollutant(s) causing toxicity;

iv. Recommended BMPs to reduce the pollutant(s) causing toxicity;

v. Proposed changes to the SWMP to reduce the pollutant(s) causing toxicity; and

vi. Suggested follow-up monitoring to demonstrate that toxicity has been removed.

b. If TRE implementation for a specific pollutant coincides with Total Maximum Daily Load (TMDL) implementation for that pollutant, the efforts may be coordinated.

c. Upon approval by the Executive Officer, the Discharger having jurisdiction over sources causing or contributing to toxicity shall implement the recommended BMPs and take all reasonable steps necessary to eliminate toxicity.

d. The Discharger shall develop a maximum of two TREs per year. If applicable, the Discharger may use the same TRE for the same toxic pollutant or pollutant class in different watersheds or basins. The TRE process shall be coordinated with TMDL development and implementation to

avoid overlap.

The Discharger shall include a monitoring plan, which shall include a sampling and analysis plan, all data (electronic format), assessment of the data, conclusions, proposed BMPs to be implemented, program effectiveness, and an implementation schedule in the SWMP for approval by the Executive Officer. Subsequent information shall be included in the Annual Reports as required in this Order.

F. **Dry Weather Characterization**

The Discharger shall conduct dry weather field monitoring to characterize the dry weather urban discharge entering the storm drain system, rock wells and retention/detention basins. The following shall be completed during this Permit term.

a. To characterize the impact of dry weather flows on surface waters, the Discharger shall monitor 20% of the storm drain outfalls a year so that during the Permit term all outfalls will be monitored at least once. Dry weather sampling sites for the positive storm drain system will be located at storm drain outfalls greater than 24 inches in diameter or at the nearest manhole upstream of the outfall.

b. To characterize the impact of dry weather flows on groundwater, the Discharger shall monitor at least 20 representative rock wells and/or retention/detention basins (residential, industrial, commercial, and/or mixed use) during this Permit term.

c. Sites with sufficient flow will be analyzed in the field for temperature, pH, specific conductance (EC), dissolved oxygen, chlorine, and turbidity. Grab samples shall be collected and analyzed by a certified laboratory for total dissolved solids, methyl blue activated substances (MBAS, which are detergents/ surfactants), oil and grease, fecal coliform, Escherichia coli, phenols, total copper, lead, iron and aluminum.

Sampling Schedule

The Baseline Monitoring Program shall implement the monitoring schedule shown in Table A:

Table A. 2015-2017 Schedule for Baseline Monitoring Program

	2015/2016			**2016/2017**		
Baseline Monitoring Program Element	**E[a]**	**L[b]**	**D[c]**	**E**	**L**	**D**
Urban Discharge						
Water Quality Parameters (Table 1)	X	X	X	X	X	X
Urban and Water Column Toxicity	X	X	X			
Receiving Water						
Water Quality Parameters (Table 1)	X	X	X	X	X	X
Urban and Water Column Toxicity	X	X	X			
Dry Weather Characterization [d]			X			X
Table 2 Constituent Monitoring [e]	X					

Notes:

a. Early season storm event

b. Mid-to-late season storm event

c. Dry weather event

d. Field monitoring is conducted during one event per dry season. Approximately 20% of the City outfalls and at least 20 representative rock wells and/or retention/detention basins (residential, industrial, commercial and/or mixed use) are to be monitored under this Order.

e. Table 2 constituents shall be monitored with the first storm event sampling for Table 1 constituents.

G. **Sediment Toxicity Monitoring**

The Discharger shall conduct short-term sediment toxicity testing once during the permit term, which shall include (1) the analysis of sediment samples from **one post first flush[6] storm event, and one dry weather monitoring event**; and (2) analysis of at least the following freshwater sediment test species: Amphipod [*Hyalella azteca* (10-day survival and growth test)]; and (3) analysis of sediment organic carbon and grain size. The testing shall be conducted in accordance with U.S. EPA's method (U.S. EPA 2000)[7]. Sample sites for sediment toxicity testing shall be conducted on urban receiving water sites. Sediment Total Organic Carbon (TOC) and grain size shall be reported with each sediment toxicity testing.

If toxicity is detected in a sediment sample, follow up actions shall be implemented and shall include chemical analysis for chlorpyrifos and pyrethroids – including bifenthrin, cyfluthrin, deltamethrin, esfenvalerate, lambda cyhalothrin, permethrin or other constituents until the nature and cause(s) of the toxicity are defined.

H. **Water Quality Based Program**

1. Pesticide monitoring, which is described in more detail as part of the Pesticides Plan of this Order, shall be conducted as part of the receiving water and urban runoff monitoring efforts. The purpose of pesticide monitoring is to:

   a. Monitor trends in the levels of diazinon and chlorpyrifos in all 303(d) listed waters within the Discharger's jurisdictions. Sampling must take place, at a minimum, in one storm event during the dormant spray application season, one storm event following the dormant spray application season, and once during dry season;

   b. Monitor potential sources of diazinon and chlorpyrifos outside residential and commercial land areas, including discharges from agricultural areas and nurseries upstream or within the Discharger's jurisdictional boundaries; and

[6] Post first flush timeframe is within two weeks of the qualifying storm event.
[7] U.S. EPA. 2000. Methods for measuring the toxicity and bioaccumulation of sediment-associated contaminants with freshwater invertebrates. EPA 600/R-99/064. Office of Research and Development. Washington, DC.

c. Monitor toxicity in storm water through the use of bioassay tests. Any toxicity found shall be evaluated by using TIE procedures, or as otherwise appropriate.

III. Standard Monitoring Provisions

All monitoring activities shall meet the following requirements:

A. Monitoring and Records [40 CFR 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

B. Monitoring and Records [40 CFR 122.41(j)(2)] [California Water Code §13383(a)]

The Discharger shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or U.S. EPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge.

C. Monitoring and Records [40 CFR 122.21(j)(3)]. Records of monitoring information shall include:

1. Date, location, and time of sampling or measurements;
2. Individual(s) who performed the sampling or measurements;
3. Date analyses were performed;
4. Individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. Results of such analyses.

D. Monitoring and Records [40 CFR 122.21(j)(4)]

All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Order.

E. Monitoring and Records [40 CFR 122.21(j)(5)]

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to

be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by both.

F. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.

G. For priority toxic pollutants that are identified in the CTR (65 Fed. Reg. 31682), the MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California - 2000 (SIP) shall be used for all analyses, unless otherwise specified. Appendix 4 of the SIP is included as Table 1. For pollutants not contained in Appendix 4 of the SIP, the test method and method detection limit (MDL) listed in Table 1 shall be used for all analyses, and the ML for these parameters shall be lower than or equal to the lowest applicable water quality criteria from the Basin Plan and/or the SIP.

H. The Monitoring Report shall specify the analytical method used, the MDL and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML;

2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used; or

3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

I. For priority toxic pollutants, if the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the

SIP. The Discharger must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.

J. Monitoring Reports [40 CFR 122.41(I)(4)(ii)]

If the Discharger monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, unless otherwise specified in the Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the annual Monitoring Reports.

K. Monitoring Reports [40 CFR 122.41(I)(4)(iii)]

Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.

L. If no flow occurred during the reporting period, the Monitoring Report shall so state.

M. The Executive Officer or the Regional Water Board, consistent with 40 CFR 122.41, may approve changes to the Monitoring Program, after providing the opportunity for public comment, either:

1. By petition of the Discharger or by petition of interested parties after the submittal of the Annual Report. Such petition shall be filed not later than 60 days after the Annual Report submittal date, or

2. As deemed necessary by the Executive Officer following notice to the Discharger.

Ordered by_____
PAMELA C. CREEDON, Executive Officer

_____
Date

Table 1: List of Constituents and Associated Minimum Levels (MLs) for the Storm Water and Urban Discharge Monitoring Program
Table 2: Additional Constituents and Associated Minimum Levels (MLs) for the Storm Water and Urban Discharge Monitoring Program

TABLE 1

LIST OF CONSTITUENTS AND ASSOCIATED MINIMUM LEVELS (MLs)[1] FOR THE STORM WATER AND URBAN DISCHARGE MONITORING PROGRAM

CONSTITUENTS	MLs
FIELD/LAB MEASUREMENTS	
Date	mm/dd/yyyy
Sample Time	hr:min (regular time)
Weather	degrees F
Water Temperature	degrees C
pH	0 - 14
Dissolved Oxygen	Sensitivity to 5 mg/L
Turbidity	0.1 NTU
Electrical Conductivity (EC)	1 µmhos/sec
BACTERIA	
Fecal coliform	<20mpn/100ml
E. coli (fresh waters)	<20mpn/100ml
GENERAL	**mg/L**
Oil and Grease	5
Total Suspended Solids	2
Total Dissolved Solids	2
Total Organic Carbon	1
Biochemical Oxygen Demand	2
Chemical Oxygen Demand	20-900
Total Kjeldahl Nitrogen	0.1
Alkalinity	2
Total Ammonia-Nitrogen	0.1
Nitrate-Nitrite	0.1
Total Phosphorus	0.05
Total Hardness	2

[1] For Priority Pollutants, the MLs represent the lowest value listed in Appendix 4 of SIP. Method Detection Limit (MDLs) must be lower than or equal to the ML value. If a particular ML is not attainable in accordance with procedures set for in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.

CONSTITUENTS	MLs
Methylmercury	0.05 ng/L
METALS	**µg/L**
Aluminum, Dissolved	50
Aluminum, Total	50
Copper, Dissolved	0.5
Copper, Total	0.5
Iron, Total	100
Lead, Dissolved	0.5
Lead, Total	0.5
Mercury	0.5 ng/L
Zinc	1
ORGANOPHOSPHATE PESTICIDES	**µg/L**
Chlorpyrifos	0.01
Diazinon	0.05
PYRETHROIDS/PYRETHRINS PESTICIDES IN SEDIMENT	**Target Reporting Limit (ng/g)[2]**
Bifenthrin	1
Cyfluthrin	4
Cypermethrin	4
Deltamethrin/Tralomethrin	4
Esfenvalerate/Fenvalerate	2
Fenpropathrin	4
Lambda-cyhalothrin	4
Permethrin	8

[2] US EPA 1660 by GC-ECD

TABLE 2

ADDITIONAL CONSTITUENTS AND ASSOCIATED MINIMUM LEVELS (MLs)[1] FOR THE STORM WATER AND URBAN DISCHARGE MONITORING PROGRAM

CONSTITUENTS	MLs
CONVENTIONAL POLLUTANTS	**mg/L**
Total Phenols	0.1
Cyanide	0.005
GENERAL	**mg/L**
Volatile Suspended Solids	2
Total Petroleum Hydrocarbon	5
MBAS	0.5
Chloride	2
Fluoride	0.1
METALS	**µg/L**
Antimony	0.5
Arsenic	1
Beryllium	0.5
Cadmium	0.25
Chromium (total)	0.5
Hex. Chromium	5
Nickel	1
Selenium	1
Silver	0.25
Thallium	1
SEMIVOLATILE ORGANIC COMPOUNDS	**µg/L**
ACIDS	
2-Chlorophenol	2
2, 4-Dichlorophenol	1
2,4-Dimethylphenol	2
2, 4-Dinitrophenol	5

[1] For Priority Pollutants, the MLs represent the lowest value listed in Appendix 4 of SIP. Method Detection Limit (MDLs) must be lower than or equal to the ML value. If a particular ML is not attainable in accordance with procedures set for in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.

2-Nitrophenol	10
4-Nitrophenol	5
4-Chloro-3-methylphenol	1
Pentachlorophenol	2
Phenol	1
2,4,6-Trichlorophenol	10
BASE/NEUTRAL	**µg/L**
Acenaphthene	1
Acenaphthylene	2
Anthracene	2
Benzidine	5
1,2 Benzanthracene	5
Benzo(a)pyrene	2
Benzo(g,h,i)perylene	5
3,4 Benzoflouranthene	10
Benzo(k)flouranthene	2
Bis(2-Chloroethoxy) methane	5
Bis(2-Chloroisopropyl) ether	2
Bis(2-Chloroethyl) ether	1
Bis(2-Ethylhexl) phthalate	5
4-Bromophenyl phenyl ether	5
Butyl benzyl phthalate	10
2-Chloroethyl vinyl ether	1
2-Chloronaphthalene	10
4-Chlorophenyl phenyl ether	5
Chrysene	5
Dibenzo(a,h)anthracene	0.1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
1,2-Dichlorobenzene	1
3,3-Dichlorobenzidine	5
Diethyl phthalate	2
Dimethyl phthalate	2
di-n-Butyl phthalate	10
2,4-Dinitrotoluene	5
2,6-Dinitrotoluene	5
4,6 Dinitro-2-methylphenol	5
1,2-Diphenylhydrazine	1
di-n-Octyl phthalate	10
Fluoranthene	0.05
Fluorene	0.1
Hexachlorobenzene	1

Hexachlorobutadiene	1
Hexachloro-cyclopentadiene	5
Hexachloroethane	1
Indeno(1,2,3-cd)pyrene	0.05
Isophorone	1
Naphthalene	0.2
Nitrobenzene	1
N-Nitroso-dimethyl amine	5
N-Nitroso-diphenyl amine	1
N-Nitroso-di-n-propyl amine	5
Phenanthrene	0.05
Pyrene	0.05
1,2,4-Trichlorobenzene	1
CHLORINATED PESTICIDES	**µg/L**
Aldrin	0.005
alpha-BHC	0.01
beta-BHC	0.005
delta-BHC	0.005
gamma-BHC (lindane)	0.02
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
Dieldrin	0.01
alpha-Endosulfan	0.02
beta-Endosulfan	0.01
Endosulfan sulfate	0.05
Endrin	0.01
Endrin aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Toxaphene	0.5
ORGANOPHOSPHATE PESTICIDES	**µg/L**
Prometryn	2
Atrazine	2
Simazine	2
Cyanazine	2
Malathion	1

HERBICIDES	**µg/L**
Glyphosate	5
2,4-D	0.02
2,4,5-TP-SILVEX	0.2