Response to Comments

Long Beach Generation, LLC
Long Beach Generating Station
Tentative Order R4-2016-XXXX
NPDES Permit No. CA0001171, CI No. 5764

This Table (matrix) summarizes comments received. Each comment presented has a corresponding Regional Water Board staff response and corresponding action taken, if any.
(Additions are underlined, and deletions are lined over.)

Agency/ Letter	#	Comment	Reply	Action Taken
Letter dated January 12, 2016 from Long Beach Generation, LLC (Discharger)				
Discharger	1	**Consistency in footnotes on TCDD equivalents.** Long Beach Generation LLC (LBG or Discharger) request the Water Board clarify and add the "minimum level" described in footnote 9 to Table 4. LBG believes that the Effluent Limitations, Section IV. A.1.a. footnote 9 in Table 4 should match Attachment E Monitoring and Reporting Program Section IV A.1 Table 2 footnote 8.	Regional Board staff noted that the minimum levels of congeners are missing in footnote 9 to Table 4 of the tentative Order. Footnote 9 to Table 4 has been revised to include the minimum level column to be consistent with that in Attachment E Monitoring and Reporting Program Section IV A.1 Table 2 footnote 8.	Changes have been incorporated into Table 4 of the tentative Order.
Discharger	2	**Bacteria monitoring frequency in receiving water.** The factsheet page F-34 Section VII. Rational For Monitoring and Reporting Requirements D.1. states "Receiving water monitoring requirements included Order R4-2009-0112 have been retained without modification." The current permit (Attachment E Section VIII A Table E-3) requires a minimum sampling frequency of fours (4) samples per quarter for bacteria (total coliform, fecal coliform, and enterococcus). The Tentative Order (TO) Attachment E Section VIII A. 1. Table E-4 shows the minimum sampling frequency of five (5) samples per quarter. Can the Regional Board please provide the rational for increasing the frequency by 20 percent? LBG requests the Regional Board consider the compliant historical receiving water monitoring data for bacteria and that the discharge location of LBGS is outside of the water body with a bacterial total maximum daily load (TMDL), and therefore requests that Table E-4 be revised to reflect four samples per quarter as stated in the factsheet.	The parameters for the receiving water monitoring in Order R4-2009-0112 were retained in the tentative permit. As specified in the Basin Plan, the geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period). Therefore, this tentative permit increases the bacteria monitoring frequency from four (4) to five (5) samples per quarter equally spaced over a 30-day period. However, in order to be consistent with the Basin Plan requirements, the following changes have been made in the Monitoring and Reporting Program (Attachment E): Footnote 11 to Table E-2 on Page E-8 11. Generally not less than ~~F~~five (5) samples should be taken equally spaced over a 30-day period … Footnote 3 to Table E-4 on Page E-13 3. Generally not less than ~~F~~five (5) samples should be taken equally spaced over a 30-day period….	Changes have been made on Pages E-8 and E-13.

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Discharger	3	**Clarification on bypass events to be monitored.** Monitoring requirements during bypass events have been added to the Effluent Monitoring Requirements, Attachment E, Section IV A. 1. LBG provides the following description of the wastewater treatment system and requests clarification on the bypass events to be monitored. It is our position that these events do not warrant specific monitoring beyond what is already performed to characterize LBGS's discharge including the storm water contribution to the facility discharge. LBGS' routine operation includes monitoring and discharge of wastewater that includes storm water amongst the wastewater streams. Bypass events may occur at different points in the wastewater treatment system. As described in Attachment F, Section II.A.3., in the event of extreme precipitation to avoid flooding, storm water may be diverted around the treatment system and discharged through Discharge Point 001. Storm water diversion is implemented after the retention basin (hence, all storm water receives initial treatment by settling), and prior to the waste water treatment system, which includes sodium hypochlorite addition system for ammonia removal, oil-water separation, filtration systems (sand filters and fine particulate filter bags), activated carbon for organic compound removal and residual chlorine removal, and ion exchange resins for metals removal. Diversions around the wastewater treatment system have been notified and reported as bypass events. It is worth noting that the bypassed storm water is initially settled in the retention basin at a minimum before discharge and that LBG continues to operate the waste water treatment system concurrently with the bypass during significant storm events to fully treat as much of the contributing storm water to the overall facility waste water. Hence the discharge during bypass events is a combination of fully treated waste water and water diverted around the waste water treatment system that has received settlement treatment. Storm events are difficult to predict and the decision to divert the treatment system is made only as a last resort decision to avoid facility flooding. Storm event diversion operations occur after the first flush has occurred and this first flush is amongst the fully treated waste water. The diversion is implemented just long enough to ensure that there	The bypass provisions are included in section I (Standard Provisions-Permit Compliance) G of Attachment D. These provisions dictate that during the bypass the Discharger is required to comply with effluent limitations (Item G.2.). The bypass may be allowed but it must not cause exceedances of effluent limitations. Monitoring requirements during a bypass are necessary for the evaluation of the discharge's ability to meet effluent limitations and the evaluation of any adverse impacts on the receiving water. Regional Board staff understands that the first flush of the storm water will be treated before it is discharged to the receiving water. In the event that a combination of the fully treated effluent and the bypass is discharged, additional effluent monitoring is required because the characteristics of the effluents have changed based on the inclusion of the portion of the discharge which has bypassed the treatment system.	None required.

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		is sufficient free board in the retention basin to accommodate continued inflow. Alternately, bypass may also occur around specific components of the wastewater treatment system due to maintenance as described by Attachment D. Section I.G.2., and/or unanticipated equipment failure.		
Discharger	4	**Request to remove monitoring requirements during storm water bypass events.** Monitoring requirements during bypass events have been added to the Effluent Monitoring Requirements, Attachment E, Section IV A. 1. LBG disagrees with the added monitoring requirement for storm water diversion events which would be overly burdensome for events that are typically rare (El Nino-type circumstances),unplanned, and only last a few hours. LBG also has logistical concerns that it could not coordinate and execute an unanticipated sampling event during an unanticipated and unplanned bypass event of short duration. The bypass monitoring requirement in the TO from Table E-2 would require sampling for flow, temperature, pH, biological oxygen demand, oil and grease, total suspended solids, turbidity, settleable solids, salinity, methyl tertiary butyl ether (MTBE), total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as kerosene, bacteria (total coliform, fecal coliform, and enteroccus, ammonia, copper, lead, nickel, zinc, benzo (a) pyrene [B(a)P], chrysene, 4,4-DDT, PCBs, and the remaining Priority Pollutants. The only parameters monitored continuously or daily are flow, temperature, and pH. The rest of the parameters that would be monitored are already sampled either monthly, quarterly (coliform is currently sampled four times samples per quarter as discussed in comment #2 above), and annually; the results are characteristic of the facilities wastewater, including storm water during the wet seasons. Considering that the storm water diversions are only performed to protect property and the environment LBG requests that this requirement be removed for storm water bypass events. LBG also notes that storm water discharges subject to the Industrial General Permit NPDES No. CAS000001 (IGP) only requires monitoring of pH, total suspended solids, and oil and grease and compared to numeric action levels, not effluent limitations.	As mentioned in the previous response to comment #3, the effluent monitoring during a bypass is required. The storm water bypass is one type of bypass event. The effluent quality of storm water allowed to bypass the treatment system is not the same as that of the regular discharge of treated effluent which includes treated storm water. Therefore, it is necessary to monitor the bypass during storm water bypass events. The pollutants which are included for analysis include pollutants identified as pollutants of concern for the discharge. The monitored parameters included in the Industrial General Permit NPDES No. CAS00001 (pH, total suspended solids, and oil and grease) are not adequate to characterize the discharge or to ensure the protection of the receiving water. Considering that the storm water bypass event may occur during non-scheduled facility operating hours, the following has been added in section IV. A. 1. of the Monitoring and Reporting Program (Attachment E) on Page E-5: <u>Samples for storm water bypass shall be collected within one (1) hour of:</u> <u>a. The start of the bypass; or</u> <u>b. The start of facility operation if the bypass occurs within facility non-operating hours and continues to occur during the facility operating hours. The sampling shall be conducted when sampling conditions are safe.</u>	Changes have been made on Page E-5.

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Discharger	5	**Requests to only require monitoring of bypass events (excluding storm water bypass events) for parameters with discharge limitations.** Monitoring requirements during bypass events have been added to the Effluent Monitoring Requirements, Attachment E, Section IV A. 1. LBG requests a change to the parameters to be monitored during bypass of treatment system components. The parameters listed in Table E-2 include parameters with effluent limitations and parameters that are only collected as data for evaluating reasonable potential for the new discharge to cause or contribute to an exceedance of applicable water quality objectives contained in the SIP during future permit reissuances. LBG requests that the Regional Board consider only requiring monitoring of bypass events (excluding storm water bypass events) for parameters with discharge limitations. Considering that all nonpermit limit parameters are collected for informational purposes and are collected routinely either monthly, quarterly, or annually, LBG believes that bypass event monitoring would not be characteristic of the treatment system discharge and hence of little value to characterizing the discharge for future permitting. Bypass events historically have included bypasses of only portions of the treatment system for maintenance procedures or breakdown repairs. In these cases the potential risk to discharge would be for parameters subject to the portion of the treatment system being bypassed and not all the parameters listed in Table E-2.	The parameters included in the monitoring requirements are those with effluent limitations and pollutants of concern with respect to this type of discharge. Parameters with effluent limitations were based on the results of reasonable potential analyses using monitoring results of fully treated effluents. Since a bypass will include a portion of the effluent that has not been treated prior to discharging it into the receiving water, more comprehensive monitoring requirements including parameters with effluent limitations and pollutants of concern are necessary. Regional Board staff agrees that the monitored parameters for the bypass shall focus on parameters with effluent limitations. Therefore, the following changes have been made in section IV. A. 1. of the Monitoring and Reporting Program (Attachment E) on Page E-5 "<u>During the first storm water bypass event of the year that occurs within operating hours, monitoring of all priority pollutants and the parameters mentioned below for a bypass event is required.</u> If a bypass occurs, monitoring <u>using grab samples</u> is required for the parameters listed in Table E-2 except total residual chlorine, MBAS, ~~chronic toxicity~~, TCDD equivalents, <u>remaining priority pollutant</u>s and radioactivity. During prolonged bypass discharges, only one sample per week is required. …."	Changes have been made on Page E-5.
Discharger	6	**Request a Time Schedule Order (TSO) to establish a new monitoring point for proposed bypass monitoring requirements.** Monitoring requirements during bypass events have been proposed in the Effluent Monitoring Requirements, Attachment E, Section IV A. 1. Although we have provided comments, requesting these proposed monitoring be removed from consideration in this TO, LBG will request a Time Schedule Order (TSO) to establish a new monitoring point for bypass events that occur from the discharge side of the retention basin	During a bypass event, grab samples will be collected for analyses. Grab samples shall be collected at the current Discharge Point 001 before discharging into the receiving water. Regional Board staff conducted a site visit on January 29, 2016 and confirmed that taking a grab sample during the storm water bypass event is feasible under the existing facility configuration. Therefore, a Time Schedule Order to establish a new monitoring point is not warranted. Using grab samples for bypass monitoring has been included in the changes indicated in response to comment	Change has been made.

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		directly the outfall discharge point 001, if these requirement are included in new NPDES permit. Currently all monitoring is performed at the discharge side of the wastewater treatment system as shown in Attachment C, Wastewater Flow Schematic. LBG will require time to evaluate where and how a sampling point should be installed and develop safe procedures for monitoring at the outfall point. The new discharge location will also require a power source and instrumentation to be installed for continuous monitoring of parameters. LBG estimates that engineering evaluation, procurement, installation and training will require at a minimum 20 to 24 weeks to accomplish. LBG requests a TSO of 6 months to implement the new monitoring point.	#5.	
Discharger	7	**Rationale for turbidity limitation.** LBG request rationale for the inclusion of the turbidity limitation as described in Attachment F, Section IV.C.5.f., in particular since turbidity is not evaluated in the receiving water.	The Basin Plan includes a narrative water quality objective for turbidity in the receiving water. Turbidity should be evaluated in the receiving water and staff has modified Table E-4 (Receiving Water Monitoring Requirements) to include quarterly monitoring. Elevated turbidity can result in a variety of water impairments. Turbid water interferes with recreational use and aesthetic enjoyment. Turbid water can reduce the growth rate and resistance to disease of fish as well as cause the fish to modify their natural movement and migration pattern. The Discharger has indicated that during severe storm events discharges bypass the treatment system. Since there is the potential for untreated or partially untreated discharges to occur, this tentative permit includes limitations and monitoring requirements for turbidity in the effluent and receiving water.	Changes have been made to Table E-4.