

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 the significant comments received on the draft permit that were timely raised during the public written comment period. Each comment presented has a corresponding Regional Water Board response and corresponding action taken, if any. (For permit language, additions are underlined, and deletions are lined over.)

Commenter	#	Comment	Response	Action Taken
Letter dated January 12, 2016 from Long Beach Generation, LLC (Discharger)				
Long Beach Generation LLC	1	<p>Consistency in footnotes on TCDD equivalents.</p> <p>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.</p>	<p>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.</p>	<p>Changes have been incorporated into Table 4 of the tentative Order.</p>
Long Beach Generation LLC	2	<p>Bacteria monitoring frequency in receiving water.</p> <p>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.</p>	<p>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 for bacteria 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):</p> <p>Footnote 11 to Table E-2 on Page E-8 11. <u>Generally not less than F</u>five (5) samples should be taken equally spaced over a 30-day period ...</p> <p>Footnote 3 to Table E-4 on Page E-13 3. <u>Generally not less than F</u>five (5) samples should be taken equally spaced over a 30-day period....</p>	<p>Changes have been made to Attachment E on Pages E-8 and E-13.</p>

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Long Beach Generation LLC	3	<p>Clarification on bypass events to be monitored.</p> <p>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 is sufficient free board in the retention basin to accommodate</p>	<p>The bypass provisions are included in Section I.G (Bypass) of Attachment D (Standard Provisions) of the tentative permit. These provisions state that the "Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation." (Section I.G.2.) All other bypass events are prohibited, including emergency bypass events to prevent loss of life, personal injury, or severe property damage. (Section I.G.3) While prohibited, if such an event meets the conditions of Section I.G.3, the Regional Board is precluded from taking an enforcement action for that bypass event.</p> <p>All stormwater from the facility and from the Southern California Edison switchyards and the Plains All American Pipeline LP tank farm (pursuant to a 1998 asset sale agreement) is conveyed to the retention basin and then treated in the wastewater treatment system prior to discharge through Discharge Point 001. In the event of extreme precipitation to avoid flooding at the facility, the Discharger has, in the past, diverted storm water around the wastewater treatment system and discharged through Discharge Point 001. This winter, the Discharger has diverted storm water in two heavy storm events. The existing permit, Order No. R4-2009-0112, does not include effluent monitoring requirements for any bypass event. As such, monitoring data are unavailable to characterize the discharge that has bypassed treatment.</p> <p>In the case of emergency bypass events, as described above, while the Regional Board is precluded from taking an enforcement action, the Regional Board retains the authority to impose monitoring and reporting requirements on these bypass events pursuant to federal and state law. The effluent quality of stormwater that bypasses the treatment system is not the same as that of the regular discharge of treated effluent at the facility, which includes treated stormwater. Monitoring during a bypass event is necessary for the Regional Board to determine whether untreated discharges are meeting effluent limitations for Discharge Point 001, to evaluate whether possible future untreated discharges are expected to meet effluent</p>	None required.

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		<p>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.</p>	<p>limitations, to evaluate whether untreated discharges have any adverse impacts on the receiving water (including causing or contributing to violations of water quality standards), and to determine whether modifications to the permit (including whether additional effluent limitations are needed based on a Reasonable Potential Analysis) or additional actions at the facility need to occur.</p> <p>This is especially relevant given the facility's close proximity to Long Beach Harbor and its acceptance of stormwater from adjacent industrial facilities. The Regional Board is entitled to know what is being discharged to waters within its jurisdiction. As such, the Regional Board has determined that monitoring of effluent that has bypassed treatment is appropriate.</p> <p>Further, the Regional Board understands from the Discharger that the first flush of the storm water will be treated before discharging 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 that has bypassed the treatment.</p> <p>Lastly, in the case of authorized bypass events for essential maintenance (Section I.G.2), discharges during such bypass events must meet effluent limitations. Accordingly, monitoring during such bypass events are necessary and appropriate to determine compliance with effluent limitations.</p>	
Long Beach Generation LLC	4	<p>Request to remove monitoring requirements during storm water bypass events.</p> <p>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</p>	<p>See response to comment #3. As described above, the Regional Board has determined that monitoring of effluent that has bypassed treatment is appropriate.</p> <p>The pollutants that are included for analysis during bypass events include those with effluent limitations and pollutants of concern with respect to this type of 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.</p>	Changes have been made on Page E-5.

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		<p>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 enterococcus, 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.</p>	<p>Considering that an emergency 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:</p> <p><u>“Samples for emergency bypass events shall be collected within one (1) hour of:</u></p> <p><u>a. The start of the bypass; or</u></p> <p><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></p>	
Long Beach Generation LLC	5	<p>Requests to only require monitoring of bypass events (excluding storm water bypass events) for parameters with discharge limitations.</p> <p>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</p>	<p>See response to comment #4. The parameters included in the monitoring requirements for bypass events 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.</p> <p>The Regional Board, however, agrees that the monitored parameters for bypass events 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:</p>	Changes have been made on Page E-5.

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		<p>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.</p>	<p><u>"If an emergency bypass (such as a storm water bypass to avoid facility flooding) occurs, monitoring using grab samples is required for the parameters listed in Table E-2 except total residual chlorine, MBAS, chronic toxicity, TCDD equivalents, remaining priority pollutants and radioactivity. During a prolonged emergency bypass discharges that occurs continuously or intermittently for more than a week, only one sample per week is required. During the first emergency bypass event of the year that occurs within operating hours, monitoring of all priority pollutants and parameters mentioned above is required.</u></p> <p><u>During a maintenance bypass event that discharges into the receiving water, monitoring for Table E-2 parameters is required"</u></p>	
Long Beach Generation LLC	6	<p>Request a Time Schedule Order (TSO) to establish a new monitoring point for proposed bypass monitoring requirements.</p> <p>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 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</p>	<p>Pursuant to Water Code section 13300, a Time Schedule Order (TSO) is only warranted when the Regional Board finds that a discharge of waste is taking place or threatening to take place that violates or will violate Regional Board requirements. Given the lack of monitoring data during past bypass events, the Regional Board lacks evidence that future bypass events at the facility will exceed effluent limitations. Further, a TSO must include a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements. A TSO for the purposes of installing a new monitoring point is not designed to correct or prevent a violation, but rather to determine whether a violation is taking place. Therefore, a TSO to establish a new monitoring point is not warranted.</p> <p>Further, installation of a new monitoring point is not required by the Regional Board. As provided in response to comment #5, 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</p>	None taken (change was previously made in response to comment #5)

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		point.	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.	
Long Beach Generation LLC	7	<p>Rationale for turbidity limitation.</p> <p>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.</p>	<p>The Basin Plan includes a narrative water quality objective for turbidity in the receiving water. Turbidity should be evaluated in the receiving water and Regional Board staff has modified Table E-4 (Receiving Water Monitoring Requirements) of Attachment E to include annual 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.</p> <p>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.</p>	Changes have been made to Attachment E, Table E-4.