



**Los Angeles Regional Water Quality Control Board**

September 24, 2015

Mr. Thomas A. Di Ciolli  
Plant Manager  
NRG California South LP  
393 North Harbor Blvd.  
Oxnard, CA 93035

Dear Mr. Di Ciolli:

**REVISED TENTATIVE WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT, AND RESPONSE TO COMMENTS FOR NRG CALIFORNIA SOUTH LP MANDALAY GENERATING STATION, OXNARD, CA. (NPDES NO. CA0001180, CI NO. 2093).**

Our letter dated August 17, 2015, transmitted the tentative Waste Discharge Requirements (WDRs) to NRG California South LP (hereinafter, Discharger) for discharges of once-through cooling water, metal cleaning wastes and low volume wastes to the Pacific Ocean at Mandalay Beach, a water of the United States. We received your comments on September 17, 2015, via email, regarding the tentative WDRs. Staff also received comments from Wishtoyo Foundation on September 17, 2015. Regional Water Board staff evaluated the comments and, as appropriate, have incorporated responses to them in the revised tentative WDRs. Enclosed please find the Response to Comments, and revised pages of the WDRs.

In accordance with administrative procedures, this Board at a public hearing to be held on October 8, 2015, at 9:00 A.M., at Metropolitan Water District of Southern California Board Room, 700 North Alameda Street, Los Angeles, California, will consider the enclosed revised tentative requirements and comments submitted in writing regarding the tentative WDRs. The Board members will hear any testimony pertinent to this discharge and the revised tentative requirements. It is expected that the Board will take action at the hearing; however, as testimony indicates, the Board, at its discretion, may order further investigation.

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,

Cassandra D. Owens, Chief  
Industrial Permitting Unit

Enclosures

cc: See mailing list

**Mailing List (Via Email Only)**

Mr. David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)  
Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)  
Ms. Becky Mitschele, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)  
Mr. Kenneth Wong, U.S. Army Corps of Engineers  
Ms. Crystal Marquez, U.S. Army Corps of Engineers  
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service  
Mr. Renan Jauregui, State Water Resources Control Board, Division of Water Quality  
Ms. Marylou Taylor, California Energy Commission  
Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service  
Mr. William Paznokas, Department of Fish and Wildlife, Region 5  
Ms. Sutida Bergquist, State Water Resources Control Board, Drinking Water Division  
Ms. Teresa, Henry, California Coastal Commission, South Coast Region  
Mr. Theodore Johnson, Water Replenishment District of Southern California  
Mr. Tim Smith, Los Angeles County, Department of Public Works, Waste Management  
Division  
Mr. Angelo Bellomo, Los Angeles County, Department of Public Health  
Mr. Gerhardt Hubner, County of Ventura, Flood Control District  
Ventura Port District Harbor Patrol  
Ms. Elena Brokaw, City of San Buenaventura  
City of San Buenaventura, Parks and Recreation  
Sierra Club, Southern Coastal Coordinator  
Mr. Mati Waiya, Ventura CoastKeeper  
Mr. Jason Weiner, Ventura Coastkeeper  
Mr. Al Wagner, California Coastal Commission, South Coast Region  
Friends of the Ventura River  
Mr. Paul Jenkin, Surfrider Foundation, Ventura County Chapter  
Ms. Jessica Altstatt, Santa Barbara Channel Keeper  
Ms. Betsy Weber, Environmental Defense Center  
Mr. Greg Nyhoff, City of Oxnard  
Ms. Rita Kampalath, Heal the Bay  
Mr. Bruce Reznik Los Angeles WaterKeeper  
Ms. Johanna Dryer, Natural Resources Defense Council  
Mr. Damon Wing, Ventura County  
Mr. Daniel Cooper, Lawyers for Clean Water  
Ms. Kristy Allen, Tetra Tech  
Mr. Scott Warnock, NRG California South LP, Ormond Beach Generating Station  
Mr. William Probasco, NRG California South, LP  
Ms. Julie Babcock, NRG California South, LP  
Mr. George Piantka, NRG California South, LP  
Ms. Mary Welch, PG Environmental, LLC  
Mr. Matthew Reusswig, PG Environmental, LLC

NRG California South LP  
Mandalay Generating Station  
(NPDES NO. CA0001180)

**RESPONSE TO COMMENTS**

**RESPONSE TO COMMENTS ON THE TENTATIVE NPDES PERMIT  
NRG California South, LP  
Mandalay Generating Station  
NPDES Permit No. CA0001180**

This Table described the comments received from interested parties with regard to the above-mentioned tentative permit. Each comment has a corresponding response and action taken.

Commenter	No.	Comment	Response	Action Taken
<b>Comments received from NRG California South LP on September 17, 2015</b>				
NRG California South, LP	1	The Tentative Permit has incorporated pH limit ranges Tables 5 and 6 (page 7) on low volume, intermittent discharges which were not in Order No. 01-057. MGS does not anticipate we will meet these permit limits upon adoption of this Tentative Permit. We have documented in our Self-Monitoring Reports the respective pH of the boiler blowdown discharge stream. We respectfully request additional time (6 months following the proposed adoption of the permit) to make infrastructure changes and pH treatment/controls to ensure that MGS can meet the new permit conditions on INT-001A and INT-001B. Mandalay Generating Station (MGS) is considering a re-route of the boiler blowdown discharge to the north and/or south retention basins and conduct the necessary pH management within the respective retention basin that would receive the boiler blowdown. This modification will require design, permitting and construction to direct the boiler blowdown to the respective retention basin. Also within this	Staff agrees. The proposed Order included effluent limitations for pH for low volume wastes based on the Effluent Limitation Guidelines and Standards (40 CFR part 423). The limitations for pH for low volume wastes including the boiler blowdown are new for the Mandalay Generating Station (MGS). However, Order No. 01-057 required MGS to monitor pH for the low volume wastes at the in-plant monitoring locations. Based on the monitoring data for pH (ranges from 9.21 to 9.9) during the period of January 2010 to June 2015, for boiler blowdown, MGS may not be able to immediately comply with the pH limits of 6 to 9. Accordingly, pursuant to Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates or will violate the new effluent limitations for pH prescribed by the Regional Water Board.  MGS requested 6 months to make infrastructure changes and to select pH treatment/controls to ensure that MGS can meet the new permit conditions at the monitoring location at INT-001B (for Boiler Blowdown)	A TSO has been prepared that establishes a time schedule for bringing the waste discharge into compliance with the final effluent limitations for pH for boiler blowdown.

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 Mandalay Generating Station

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		<p>requested 6-month period, we would design, install and test pH monitoring and controls within the respective retention basin to ensure compliance the pH limit at the INT-001A monitoring location. One pH control system being considered is a carbon dioxide (CO<sub>2</sub>) injection system to ensure the pH range of 6-9 would be maintained. We have deployed this method at another power plant location in the Los Angeles Basin.</p>	<p>and at monitoring location at INT-001A (Retention Basins). Therefore, a time schedule order (TSO) has been prepared that establishes a time schedule for bringing the waste discharge into compliance with the final effluent limitations for pH in as short amount of time (6 months) as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary for compliance. Staff developed the tentative TSO and will be providing an opportunity for interested parties to submit written comments and recommendations. The TSO is scheduled to be considered at a Board hearing to be held on December 10, 2015, or it may be issued with Executive Officer approval on that date. The effective date of the permit has been revised to January 1, 2016.</p>	
NRG California South, LP	2	<p>As a point of general clarification, we respectfully request LARWQCB to confirm that grab water sampling referenced in Attachment E Monitoring and Reporting Program Tables E-3 and E-4 may continue where 24-hour composite sampling cannot be collected due to intermittent nature of a discharge.</p>	<p>Staff agrees. The tentative Monitoring and Reporting Program (MRP), Tables E-3 and E-4 included Footnote 7 which reads "Where a composite sample for the parameter is not appropriate as specified in the respective analytical method in 40 C.F.R. Part 136 or in other EPA methods, a grab sample shall be obtained in lieu of the 24-hour composite sample for that parameter." Since the Mandalay Generating Station does not operate continuously it may not be feasible to collect a 24-hour composite sampling. The "Sample Type" column in Tables E-3 and E-4 have been revised to include "Grab" and footnote "7".</p>	<p>Tables E-3 and E-4 of the MRP have been revised to include the changes.</p>

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Commenter	No.	Comment	Response	Action Taken
NRG California South, LP	3	MGS respectfully requests LARWQCB's attention on Footnote 4 of Attachment E Monitoring and Reporting Program Table E-2. This footnote states "For each quarterly monitoring event, weekly sampling and analysis shall be conducted until a geometric mean can be obtain for each parameter (using the five most recent sample results). If the sample exceeds densities of 1,000 MPN/100 mL, 200 MPN/100 mL, or 104 MPN/100 mL of total coliform, fecal coliform, or enterococcus, respectively, then the Discharger shall collect and retest samples of the receiving water near the terminus of the diffuser at a depth of 10 feet." It should be noted that MGS does not have a diffuser and during low tide our outfall water depth may be as low as 2 feet rising to a depth of 6~7 feet during high tide. Due to these operational constraints, MGS cannot comply with this specific sampling requirement. This condition may be associated with another discharger whose configuration can support this sampling approach.	Staff concurs. The Footnote 4 of Attachment E Monitoring and Reporting Program, Table E-2 has been revised to conform to the associated operational configuration of the Facility. Footnote 4 now reads: "For each quarterly monitoring event, weekly sampling and analysis shall be conducted until a geometric mean can be obtain for each parameter (using the five most recent sample results)."	Footnote 4 of Table E-2 in the MRP has been revised.
<b>Comments received from the Wishtoyo Foundation on September 17, 2015</b>				
Wishtoyo Foundation	1	Please accept the comments from Wishtoyo Foundation and its Ventura Coastkeeper Program (Wishtoyo) concerning the NPDES permit for the Mandalay Generating Station, and ensure that the concerns raised by Wishtoyo for the Ormond Beach Generating Station in the attached comment letters are investigated and adequately	Regional Water Board staff evaluated the concerns raised by Wishtoyo for the Ormond Beach Generating Station tentative NPDES permit that may be similar for the Mandalay Generating Station tentative NPDES permit and, as appropriate, have addressed them in the revised tentative WDRs. The proposed revised tentative Order includes appropriate provisions and	None required.

Response to Comments  
 NRG California South LP  
 Mandalay Generating Station

Commenter	No.	Comment	Response	Action Taken
		<p>addressed by the Regional Water Board in the NPDES Permit for the Mandalay Generating Station. We have concerns that there are similarities in the deficiencies in the Mandalay Generating Station NPDES permit up for comment to the deficiencies Wishtoyo identified during the comment period concerning the Ormond Beach Generating Station NPDES permit, and fear that without substantive modifications to the NPDES Permit for the Mandalay facility, that the marine life could be harmed by the Mandalay Generating Station's discharges and that Ocean Plan Water Quality Objectives will be violated.</p>	<p>limitations for Mandalay Generating Station (Facility) to attain and maintain applicable technology-based requirements and numeric and narrative water quality criteria to protect the beneficial uses of the Pacific Ocean (receiving water), as per the requirements of 40 Code of Federal Regulations (C.F.R.) section 122.44. The language incorporated in the Monitoring and Reporting Program (MRP) section of the proposed permit specifies all internal and external monitoring and sampling requirements that are necessary to ensure compliance with the effluent limitations for the internal and the final combined effluent discharged from the Facility into the Pacific Ocean.</p> <p>Please refer to the responses to concerns raised for the Ormond Beach permit that may be similar for Mandalay permit.</p> <p>Please see attached Response to Comments for Ormond Beach Generating Station permit.</p>	
<b>Wishtoyo's concerns raised for Ormond Beach Permit that may be similar for Mandalay Permit</b>				
Wishtoyo Foundation		<p><b>The following summarizes Wishtoyo's concerns:</b></p> <ol style="list-style-type: none"> <li>1. The monitoring locations of the final combined effluent and internal low volume waste streams be changed as the locations currently identified by the existing Order and proposed Order are</li> </ol>	<p>The proposed Order for Mandalay includes specific representative monitoring locations for final combined effluent (EFF-001) and each of the low volume waste streams, including the discharge from the retention</p>	None necessary.

Commenter	No.	Comment	Response	Action Taken
		<p>not representative of those discharges.</p> <p>2. The effluent limitations and monthly monitoring requirements (both at the final combined effluent as well as at the internal waste streams) for arsenic, cadmium, copper, lead, nickel, selenium, and zinc be incorporated into the proposed Order, with the contention that the monitoring data obtained at Monitoring Location EFF-001 used to conduct the reasonable potential analysis (RPA) were not representative of the discharge.</p>	<p>basins (INT-001A), boiler blowdown (INT-001B), and chemical metal cleaning wastes<sup>1</sup> (INT-001C), with associated monitoring requirements and effluent limitations at each monitoring location. Table E-1 in the MRP of the proposed Order provides the monitoring locations as well as a description for each location, with specific provisions that representative samples be obtained “prior to commingling with other internal process waste streams or once-through cooling water” for the internal waste streams; the description for the final combined effluent Monitoring Location EFF-001 specifically requires a location “where a representative sample of the commingled wastewater can be obtained after treatment but prior to discharge to the Pacific Ocean.”</p> <p>Utilizing representative data sets from January 2009 through May 2014, antimony, arsenic, cadmium, lead, nickel, selenium, silver, and zinc were determined to have no reasonable potential in the final combined effluent as monitored at Monitoring Location EFF-001, and therefore, no effluent limitations were prescribed for these parameters. As such, semi-annual monitoring requirements are prescribed for these parameters at the final combined effluent (EFF-001) and each of the low volume waste streams, including the discharge from the retention basins (INT-001A), boiler blowdown</p>	<p>None necessary.</p>

<sup>1</sup> The chemical metal cleaning wastes are transported to an approved disposal site and no discharges of these wastes have occurred since 2001. However, the Discharger would like to retain the ability to discharge the chemical metal cleaning wastes.

Commenter	No.	Comment	Response	Action Taken
		<p>3. If low volume waste stream at EFF-001a and the OTC discharges occur concurrently, please request evidence that sampling occurs while the low volume waste discharge from EFF-001a was occurring. Because of the seemingly much longer duration of OTC waste discharges, it seems likely that the Generating Station could have taken samples after the discharges of low volume wastes from EFF-001a were complete.</p> <p>If condensate overboard low volume waste stream and the OTC discharges occur concurrently, please request evidence that sampling occurs at EFF-001 while the condensate overboard low volume waste discharge was occurring. Because of the seemingly much longer duration of OTC waste discharges, it seems likely that the Generating Station could have taken samples after the discharges of condensate overboard low volume wastes were complete.</p>	<p>(INT-001B), and chemical metal cleaning wastes (INT-001C), for tracking and control of the contribution of pollutants to the final combined effluent stream. The data will be used for future reasonable potential analysis (RPA).</p> <p>Staff recognize the concern that elevated pollutant concentrations may be discharged from the Facility if the low volume waste, boiler blowdown, and chemical metal cleaning waste streams are discharged without the discharge of once-through cooling water, and has, therefore, added the following prohibition to section III of the Limitations and Discharge Requirements in the proposed Order:</p> <p><u>J. The discharge of any in-plant waste streams from the Facility, specifically including the discharge of low volume wastes and storm water, is prohibited unless coincident with circulating water pump flows related to power generation or critical system maintenance. This prohibition is effective until the Facility achieves final compliance with the OTC Policy, prior to which the terms and provisions of this Order shall be reconsidered to account for the change of operation at the Facility.</u></p> <p>The prohibition is consistent with the prohibition included in the Ormond Beach Generating Station permit in response to a similar inquiry.</p>	<p>Prohibition is included in section III in the Limitations and Discharge Requirements of the proposed Order.</p>

Commenter	No.	Comment	Response	Action Taken
		<p>4. The monitoring data provided by the Discharger is not representative of the discharge as the additional waste sources identified by the proposed Order (storm water and reverse osmosis waste water) will cause a significant degradation of the final effluent quality to cause an excursion above water quality standards as included in the Ocean Plan.</p>	<p>For the Mandalay, the reverse osmosis reject water (0.003 MGD) and the storm water collected in the yard drains combined with other wastes collected in the waste water sump (0.07 MGD) flows to the retention basins prior to the wastes commingled with the once-through cooling water. The facility is permitted to discharge 254.2 MGD of once through cooling water. Given the small amount of flow from the low volume waste streams (0.073) relative to the once-through cooling water flow in the final combined effluent, the Table 1 parameter concentrations of the low volume wastes as presented are not large enough to significantly affect the quality of the final combined effluent once the low volume waste streams are commingled with the once-through cooling water, to an extent that will cause the final combined effluent to exceed the water quality objectives of the Ocean Plan Table 1 parameters. Staff recognizes the concern that if the final combined effluent samples are not always taken during the discharge of low volume wastes, then the highest concentrations of the pollutants may not be captured. Staff addressed this concern with an additional footnote to Table E-2 of the monitoring requirements for Monitoring Location EFF-001:</p> <p><sup>15</sup> <u>If a discharge of low volume wastes from the retention basins (to be monitored in Monitoring</u></p>	<p>A footnote to Table E-2 of the monitoring requirements for Monitoring Location EFF-001 was added.</p>

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			<u>Location INT-001A), boiler blowdown (Monitoring Location INT-001B), and chemical metal cleaning wastes (Monitoring Location INT-001C) occurs during a discharge event, then the Discharger must sample for the final combined effluent at Monitoring Location EFF-001 during the duration of such discharge, and state so under penalty of perjury in the corresponding monitoring report.</u>	

NRG California South LP  
Ormond Beach Generating Station  
(NPDES NO. CA0001198)

**RESPONSE TO COMMENTS**

**RESPONSE TO COMMENTS ON THE TENTATIVE NPDES PERMIT  
NRG California South LP  
Ormond Beach Generating Station  
NPDES Permit No. CA0001198**

This Table describes all significant comments received from interested parties with regard to the above-mentioned tentative permit. Each comment has a corresponding response and action taken.

Commenter	No.	Comment	Response	Action Taken
<b>Comments received from NRG California South LP on August 18, 2015</b>				
NRG California South, LP	1	NRG California South LP has thoroughly reviewed the Tentative WDRS and NPDES Permit for OBGS and is supportive of Los Angeles Regional Water Quality Control Board staff's analysis and the resulting permit conditions. We recommend approval of this Tentative Permit and the associated Monitoring and Reporting Program.	Thank you for your comment in support of this proposed Order.	None necessary.
<b>Comments received from the Wishtoyo Foundation on August 17, 2015</b>				
Wishtoyo Foundation	1	We object to the Los Angeles Regional Water Quality Control Board's ("Regional Board's") adoption of the Tentative Waste Discharge Requirements ("WDRS") and National Pollutant Discharge Elimination System ("NPDES") Permit for NRG California South LP, Ormond Beach Generating Station ("Generating Station"), Oxnard, California (NPDES No. CA0001198, CI No. 5619) ("Ormond Generating Station WDRS/NPDES Permit" or "Permit") unless:	Staff believe that the proposed revised tentative Order includes appropriate provisions and limitations for this Facility to attain and maintain applicable technology-based requirements and numeric and narrative water quality criteria to protect the beneficial uses of the Pacific Ocean (receiving water), as per the requirements of 40 Code of Federal Regulations (C.F.R.) section 122.44. The language incorporated in the Monitoring and Reporting Program (MRP) section of the proposed permit explicitly and effectively locates and specifies all internal and external monitoring locations and sampling requirements that are necessary to ensure accurate compliance assessments of the final combined effluent discharged from the Facility into the Pacific Ocean.	None necessary.

Commenter	No.	Comment	Response	Action Taken
		<p>1) The Permit is modified with specific provisions detailing the locations and methods of sample collection that guarantee samples are taken from the end of pipe for Monitoring Locations EFF-001a and EFF-001b (See Diagrams 1 &amp; 2) to measure compliance for Discharge Point 001 as required by the Clean Water Act, Permit, and the Monitoring and Reporting Plan ("MRP") for the Generating Station.</p> <p>2) For samples taken from Monitoring Locations EFF-001a and EFF-001b (See Diagrams 1 &amp; 2), the Permit contains the numeric water quality objectives for metals in Chapter II, Table 1 of the 2012 California Ocean Plan (See Exhibit 3), including those objectives for arsenic, cadmium, copper, lead, nickel, selenium, and zinc, all of which are constituents with effluent limitations in Regional Board Order No. 01-092 (the presently effective WDRS/NPDES Permit) for the Generating Station.</p>	<p>Please refer to subsequent responses to Comments as noted below.</p> <p>The proposed Order specifies discreet sampling locations for the final combined effluent (EFF-001) and each of the low volume waste streams, including the discharge from the retention basins (INT-001A), condensate overboard (INT-001B), and seal water (INT-001C), with associated monitoring requirements and effluent limitations at each of these monitoring locations. Sampling at the locations specified in the permit will result in representative samples of the targeted waste streams. Please refer to Comment 2.</p> <p>Staff disagree. Based on the reasonable potential analysis performed in accordance to the State Water Resources Control Board's (State Water Board) 2012 Ocean Plan (Ocean Plan) using representative effluent monitoring data, staff prescribed effluent limitations for metal parameters included in Table 1 only if they displayed reasonable potential to cause or contribute to an excursion above the respective water quality standards, or if the parameter has an existing limitation and there is not enough information to determine reasonable potential for that parameter. Utilizing data sets with a minimum of twelve data points, arsenic, cadmium, copper, lead, nickel, selenium, and zinc were determined to have no reasonable potential in the final discharged effluent, and therefore, no effluent limitations were prescribed for these parameters. Please refer to Comment 6.</p>	<p>None necessary.</p> <p>None necessary.</p>

Commenter	No.	Comment	Response	Action Taken
		<p>3) The Permit's MRP is modified to require that the monitoring requirements for EFF-001a are equivalent to the monitoring requirements for EFF-001 in the tentative permit, except that it shall also be required that total recoverable arsenic, cadmium, copper, lead, nickel, selenium, and zinc are sampled once per month.</p> <p>4) The Permit's MRP is modified to require that the monitoring requirements for EFF-001b are equivalent to the monitoring requirements for EFF-001 in the tentative permit, except that it shall also be required that total recoverable arsenic, cadmium, copper, lead, nickel, selenium, and zinc are sampled once per month.</p>	<p>Staff disagree. Monitoring Location EFF-001 targets a representative sample of the commingled internal waste streams with the once-through cooling water. There is no monitoring location designated as EFF-001A in the proposed Order. Monitoring Location INT-001A targets a representative sample of the low volume waste stream from the retention basins prior to commingling with other waste streams. Pollutant concentrations reported at EFF-001 for arsenic, cadmium, copper, lead, nickel, selenium, and zinc, did not demonstrate reasonable potential. Therefore, they do not have effluent limits and they have semi-annual monitoring requirements in the proposed Order. Please refer to Comments 2 and 5.</p> <p>Staff disagree. There is no reasonable potential for arsenic, cadmium, copper, lead, nickel, selenium, and zinc in the final effluent (once-through cooling water mixed with the low volume wastes from the retention basins, condensate overboard, and the seal water (designated as INT-001A, INT-001B, INT-001C, respectively)). Therefore, semi-annual monitoring requirements are included in the proposed Order. Please refer to Comments 2 and 5.</p>	<p>None necessary.</p> <p>None necessary.</p>
Wishtoyo Foundation	2	Our first of two significant concerns with the Tentative Permit is that as written, it will not ensure samples are taken from the necessary locations that will allow the Regional Board and the public to determine the Generating Station's compliance with the WDRS/NPDES Permit for	Staff disagree. The existing permit (Order No. 01-092), as well as the proposed Order, contain provisions explicit and specific enough such that representative samples of the low volume wastes (before they are commingled with the once-through cooling water waste stream), as well as of the final combined effluent, can be	None necessary.

Commenter	No.	Comment	Response	Action Taken
		<p>Discharge Point 001, and thus the impact of the Generating Station's discharges to the Pacific Ocean and its marine life. This is because historically, and as would continue if the Tentative Permit were adopted as written, EFF-001 samples have not been taken at the end of pipe for discharges of low volume wastes and discharges of once-through cooling water waste, but instead</p> <p>a.) taken with an extended hose/tube attached to a pump after mixing with, and dilution from, unpolluted ocean water in the tunnel to the Generating Station where rivers of ocean water with swift currents rise and recede with the ebb and flow of the tide, and b.) taken with the hose in a location very close to the bottom of this stream of ocean water where it is likely the contaminants from low volume wastes and once-through cooling waste discharges may often not mix with unpolluted ocean water because of mixing in the upper portion of the ocean water column where the mixed water with wastes is subsequently swept away by ocean currents.</p>	<p>obtained and assessed for compliance purposes.</p> <p>The existing Order required monitoring locations for each of the Facility's effluent streams with associated effluent monitoring requirements and limitations. Section II.A (under the Effluent Monitoring Requirement Section) in the Monitoring and Reporting Program (MRP) of the existing Order stated, "sampling station(s) shall be established for the point of discharge and shall be located where representative samples of that effluent can be obtained." Section IV.C (under the Effluent Monitoring Program for In-Plant Waste Streams section) explicitly defined the parameters as well as monitoring frequencies required for low volume wastes discharges. Furthermore, section I.A.7.b (under the Effluent Limitations for In-Plant Waste Streams section) in the Waste Discharge Requirement (WDRs) of the existing Order enumerated the effluent limitations associated with the low volume waste discharge. The monitoring location and effluent limitations for the low volume wastes as prescribed in the existing Order are separate entities from those prescribed for the final combined effluent from the Facility, which are assessed at Monitoring Location EFF-001, with its own set of monitoring requirements and effluent limitations.</p> <p>The proposed Order explicitly defines discreet sampling locations for the final combined effluent (EFF-001) and each of the low volume waste streams, including the discharge from the retention basins (INT-001A), condensate overboard (INT-001B), and seal water (INT-001C), with associated monitoring requirements and</p>	

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 NRG California South LP  
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Commenter	No.	Comment	Response	Action Taken
			<p>effluent limitations at each monitoring location. Table E-1 in the MRP of the proposed Order provides a table of the monitoring locations as well as description for each location. Staff believe the language incorporated in each description is appropriate and specific enough to ensure that sampling be conducted at a location that can provide representative characterization of the quality of each waste stream before it is commingled with another waste stream. The descriptions for the internal Monitoring Locations INT-001A, INT-001B, and INT-001C specifically requires a representative sample be obtained for each individual internal waste stream "prior to commingling with other internal process waste streams or once-through cooling water". The description for the final combined effluent Monitoring Location EFF-001 specifically requires a location "where a representative sample of the commingled wastewater can be obtained after treatment but prior to discharge to the Pacific Ocean."</p> <p>Staff noted the commenter's concern that the current final effluent and low volume waste sampling locations may not provide representative sampling of the final combined effluent and low volume wastes from the Facility due to the configuration of the discharge structure. However, based on the clarifications provided by the Discharger on 8/19/2015 by phone and on 8/21/2015 by letter regarding the configuration of the vault and discharge tunnel, the Facility's operational practices, and self-monitoring reports submitted under penalty of perjury, staff determined that the monitoring data submitted for the final combined effluent and the</p>	

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			<p>low volume wastes from the retention basins are valid and representative of these discharges.</p> <p>The discharge structure, as depicted in diagram 1 and 2 in the letter submitted by Wishtoyo Foundation on August 17, 2015, consists of a vault (where the low volume waste from the retention basins is discharged) that is connected to the discharge tunnel (carrying the once-through cooling water flow that leads to the final discharge point in the Pacific Ocean). The Discharger stated that the low volume wastes end of pipe location (sampling location for the low volume wastes) has been designed to maintain a 2 to 3 feet clearance from the ocean water even during high tide; therefore, samples for the low volume waste, as per the Discharger, is collected prior to the low volume wastes mixing with any water that may be present in the vault, and is representative of the low volume wastes discharge.</p> <p>The Discharger stated on 8/19/2015 by phone and in a letter dated 8/21/2015 provided documentation that there has not been discharges of low volume waste absent the discharge of once-through cooling water, a practice that was reflected in the Facility's monthly self-monitoring reports submitted to the Regional Water Board under penalty of perjury. Staff agree that there will be some level of dilution from the ocean water sitting in the vault and the discharge tunnel during the initial moments of discharge. However, the dilution effect as a result of the ocean water in the vault and discharge tunnel will become negligible within seconds, as the ocean water will be carried out of the discharge structure along with</p>	

Response to Comments  
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 Ormond Beach Generating Station

Commenter	No.	Comment	Response	Action Taken
			<p>the combined discharge <u>of once-through cooling water and low volume wastes</u> to the Pacific Ocean in a very short amount of time. The Discharger stated that it is their practice to sample at least 30 minutes after the initial startup of a circulator pump unit (beginning of discharge) for every discharge event. Therefore, the dilution effect created by the ocean water residing in the discharge structure at the time of sampling should not be large enough to cause any significant deviation of the true concentration of the combined effluent at Monitoring Location EFF-001. Additionally, given the amount of flow coming out of the pipe at Discharge Point 001, staff determined that it is highly unlikely, if not impossible, that there can be a continual influx of ocean water into the discharge tunnel during discharge. The turbulence in the discharge structure created by the flow of the once-through cooling water (a minimum of 119,000 gallons/min when the low volume waste stream from the retention basins is discharged) should provide enough mixing to the content in the discharge structure such that a representative sample of the final combined effluent can be obtained at EFF-001. Therefore, monitoring data from samples obtained at EFF-001 are representative samples of the final effluent from the Facility, rendering the reasonable potential analysis and the resulting effluent limitations valid.</p>	

Response to Comments  
 NRG California South LP  
 Ormond Beach Generating Station

Commenter	No.	Comment	Response	Action Taken
Wishtoyo Foundation	3	Furthermore, under the Tentative Permit and currently effective permit, samples of low volume waste are not taken at EFF-001a as displayed in Diagrams 1 and 2 when discharges of low volume waste occur in isolation of discharges of once-through cooling waste at EFF-001b.	<p>Staff disagree. The existing Order, as well as the proposed Order, has provisions specific enough to ensure the discreet sampling of low volume wastes and the final combined effluent. Please refer to response to Comment 2. Furthermore, the Discharger confirmed with Regional Water Board staff on 8/19/2015 by phone and by letter on 8/21/2015 provided documentation to support their statement that no discharge of low volume waste has occurred without the discharge of once-through cooling water waste. Staff has not received any substantial evidence to determine otherwise.</p> <p>Discharges of low volume wastes absent the discharge of once-through cooling water will result in a totally different effluent and the conditions modelled do not account for this scenario. Hence, staff will include a prohibition in the permit to ensure that low volume wastes is not discharged absent the discharge of once-through cooling water. Please refer to response to Comment 9.</p>	Prohibition has been included in section III in the Limitations and Discharge Requirements of the proposed Order to ensure that the discharge of low volume waste does not occur absent the once-through cooling water discharge.
Wishtoyo Foundation	4	The Tentative Permit thus must ensure samples of discharges from the Generating Station are taken before, and not after, the Generating Station's discharges come into contact and or mix with ocean water in the sub-surface tunnel from the Generating Station to the Ocean that contains a continual stream of ocean flows that rise and recede with the ebb and flow of the tide.	As explained in detail in staff's response to Comment 2, the proposed Order provides language specific enough to ensure the discreet and representative sampling of low volume wastes and the final combined effluent discharged from the Facility. Furthermore, as explained in response to Comment 2, the dilution from the ocean water that resides in the discharge structure during times of no discharge only affects the discharge quality during the initial moments of discharge, and due to the turbulence created by the large volume of once-through	None necessary.

Commenter	No.	Comment	Response	Action Taken
			<p>cooling water discharge (in the magnitude of millions gallons per day), this dilution factor will become negligible in seconds. Since the Discharger does not conduct any monitoring within seconds of beginning the discharge, staff determines that the volume of ocean water residing in the discharge structure during no discharge does not result in any additional dilution or misrepresentation of the true effluent quality of the final combined effluent discharged from the Facility.</p>	
Wishtoyo Foundation	5	<p>The MRP must thus contain specific QA/QC that ensures proper field sampling protocols are implemented that provides for</p> <p>a.) a sample that is representative of the highest concentrations of metals and other pollutants in low volume wastes discharged at EFF-001a, and</p> <p>b.) a separate sample that is representative of the highest concentrations of metals and other pollutants in once-through cooling waste discharges at EFF-001b.</p>	<p>The MRP as proposed is appropriate for the following reasons:</p> <p>The low volume waste from the retention basins is treated and left stagnant for a period of time before being discharged from the Facility. The quality of the effluent from the retention basins is measured at Monitoring Location INT-001A. The majority of the final combined effluent is composed of once-through cooling water. Once-through cooling water is non-contact cooling water and historically has not yielded high concentrations for metals, as shown by the monitoring data at Monitoring Station EFF-001 (taken after the once-through cooling water is commingled with low volume wastes) during the term of the existing Order. Furthermore, the once-through cooling water is withdrawn from the ocean for cooling purposes only, and does not undergo any processes where significant amounts of metals or other pollutants will be introduced.</p> <p>The proposed Order prescribes discreet monitoring requirements and effluent limitations for the individual</p>	<p>Revision was made to Table E-2 in the MRP.</p>

Commenter	No.	Comment	Response	Action Taken
			<p>low volume waste streams and the final combined effluent. For the final combined effluent (at Monitoring Location EFF-001) and individually for the discharge from the retention basins (INT-001A), condensate overboard (INT-001B), and seal water (INT-001C), monitoring frequencies of at least once a month are required for parameters with effluent limitations; monitoring frequencies of twice per year are required for all other Ocean Plan Table 1 pollutants that did not display reasonable potential. Therefore, staff determined that the MRP as proposed presents a monitoring program such that the quality of each type of discharge can be adequately assessed for compliance with the provisions of the proposed Order and the Ocean Plan, and the contribution of pollutants from the individual internal waste stream to the final combined effluent can be assessed in the future.</p> <p>Staff noted the commenter's concern that if the final combined effluent samples are not always taken during the discharge of low volume wastes, then the highest concentrations of pollutant may not be captured. Staff addressed this concern with an additional footnote to Table E-2 of the monitoring requirements for Monitoring Location EFF-001:</p> <p><u><sup>15</sup> If a discharge of low volume wastes from the retention basins (to be monitored in Monitoring Location INT-001A) occurs during a discharge event, then the Discharger must sample for the final combined effluent at Monitoring Location EFF-001 during the duration of such discharge, and state so under penalty of perjury in</u></p>	

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Commenter	No.	Comment	Response	Action Taken
			<p><u>the corresponding monitoring report.</u></p>	
<p>Wishtoyo Foundation</p>	<p>6</p>	<p>The WDRS/NPDES Permit must include effluent limits for arsenic, cadmium, copper, lead, nickel, selenium, and zinc that mirror the water quality objectives in Table 1 of the 2012 California Ocean Plan (See Exhibit 3) at Monitoring Locations EFF-001a and EFF-001b (See Diagrams 1 &amp; 2), because:</p> <ol style="list-style-type: none"> <li>1) The Regional Board has no basis to exclude these contaminants using a reasonable potential analysis because the samples the Regional Board used to conduct its reasonable potential analysis for the Tentative Permit have never been taken from Monitoring Location EFF-001 in a manner that would provide the Regional Board with accurate or reliable data from which to conduct a reasonable potential analysis or in the manner required by the Clean Water Act and the Permit. This is because EFF-001 samples were not taken at the end of pipe for discharges of low volume wastes and once-through cooling water waste, but instead were taken with an extended hose/tube attached to a pump a.) in a location after mixing with, and dilution from, unpolluted ocean water in the tunnel to the Generating Station where rivers of ocean water with swift currents</li> </ol>	<p>The effluent limitations as included in the proposed Order are appropriate for reasons as follows:</p> <p>The effluent limitations for 2012 California Ocean Plan (Ocean Plan) Table 1 parameters were developed following the procedures outlined in the Ocean Plan. Reasonable potentials analyses (RPA) were performed for all Ocean Plan Table 1 water quality criteria following the steps outlined in Appendix VI of the Ocean Plan and using the RPhcalc program developed by the State Water Resources Control Board (State Water Board), based on representative data as reported by the Discharger under penalty of perjury. For parameters that displayed reasonable potential (RP) to cause or contribute to an exceedance of the water quality standards as set forth in the Ocean Plan or parameters that have existing limitations and not enough information was provided to assess their reasonable potential, effluent limitations were developed and prescribed in accordance with the instructions in section III.C of the Ocean Plan. Detailed explanation of the effluent limitation development process can be found in section IV of the Fact Sheet in the proposed Order.</p> <p>Arsenic, cadmium, copper, lead, nickel, selenium, and zinc did not display RP in the RPA. Therefore, staff determined that it is appropriate to not include effluent limitations for these parameters in the proposed permit.</p>	<p>None necessary.</p>

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Commenter	No.	Comment	Response	Action Taken
		<p>rise and recede with the ebb and flow of the tide, and b.) in a location very close to the bottom of this stream of ocean water where it is likely the contaminants from low volume wastes and or once-through cooling waste discharges never mixed with unpolluted ocean water because of mixing of waste streams and ocean water in the upper portion of the ocean water column that were subsequently swept away before reaching depths where samples representative of the waste streams could be collected through the hose. Furthermore, as displayed in Diagrams 1 and 2, samples of low volume waste were not taken at EFF-001a when discharges of low volume waste occurred in isolation of discharges of once-through cooling waste at EFF-001b.</p> <p>2) The Regional Board has no basis to exclude these contaminants using a reasonable potential analysis because the samples the Regional Board used to conduct its reasonable potential analysis for the Tentative Permit have never been taken from Monitoring Location EFF-001 in the manner required by Regional Board Order No. 01-092 because contrary to the General Monitoring Provisions and Table E-1 in Permit Attachment E, the Generating Station did not locate effluent sampling locations where representative</p>	<p>However, the proposed Order has requirements for the Discharger to monitor these parameters twice a year, individually at the final combined effluent (Monitoring Location EFF-001) and at each low volume waste streams (Monitoring Locations: INT-001A, INT-001B, INT-001C), for future RPA.</p> <p>Staff noted the concern from the commenter that if the monitoring data were based on samples that are not representative of the discharge, then the reasonable potential analysis and the effluent limitations contained in the proposed Order are not valid. However, as explained in staff's response to Comment 2, after discussion with the Discharger to clarify the configuration of the discharge structure, staff determined that the monitoring data used to conduct the RPA are valid and representative of the final combined effluent discharge from the Facility. Therefore, the RPA and the resulting effluent limitations as included in the proposed Order are appropriate. Please refer to response to Comment 2.</p>	

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Commenter	No.	Comment	Response	Action Taken
		<p>samples of that effluent stream can be obtained and did not locate EFF-001 at a location where a representative sample of the commingled wastewater can be obtained after treatment but prior to discharge to the Pacific Ocean.</p> <p>3) These metals are contaminants of concern in the Generating Station's low volume waste and stormwater discharges from Locations EFF-001a and or EFF-001b (See Diagrams 1 &amp; 2), which at certain times of the year, can discharge in high quantities and in the absence of once-through cooling water waste discharges.</p>	<p>Staff also noted the concern that the discharge of low volume wastes without the discharge of once-through cooling water may cause discharges with elevated pollutant levels that can potentially cause violations of the effluent limits and adversely affect the beneficial uses of the receiving water. Staff addressed this concern by incorporating an additional prohibition in section III in the Limitations and Discharge Requirements of the Proposed Order. Please refer to response to Comment 9.</p>	<p>Prohibition included in section III in the Limitations and Discharge Requirements of the proposed Order.</p>
Wishtoyo Foundation	7	<p>In-plant waste stream data reported to Wishtoyo and its Ventura Coastkeeper Program for stormwater discharges (see Exhibit 2: GenOn Consent Decree Action Plans and Stormwater Discharge Data submitted to Wishtoyo and its Ventura Coastkeeper Program), indicates that presence of high and toxic levels of arsenic, cadmium, copper, lead, nickel, selenium, and zinc in the Generating Station's low volume waste stream that exceed the 2012 California Ocean Plan's water quality objectives (See Exhibit 2 data documenting Generating Station sampled and</p>	<p>Staff reviewed the data presented by the commenter regarding the quality of storm water from the Facility, as well as the quality of the effluent from the retention basins based on the monitoring data submitted by the Discharger during the term of the existing Order. The Facility begun discharging waste from its reverse osmosis (RO) unit and storm water to the retention basins in 1992 and 2013, respectively. Therefore, the monitoring data reported by the Discharger for the low volume wastes in its monthly self-monitoring reports submitted to the Regional Water Board in the past are representative. The last numerical final effluent limitation</p>	<p>None necessary.</p>

Commenter	No.	Comment	Response	Action Taken
		<p>reported concentrations of copper and zinc in stormwater after treatment). Although the Consent Decree stormwater discharge data reports the concentrations of metals discharged after treatment into the Generating Station's reverse osmosis treatment system where stormwater is recycled, to our knowledge and belief, the residual metals left over as a concentrated waste stream contain metals of even higher concentrations after reverse osmosis treatment and are discharged through the low volume waste discharge point displayed at EFF-001a in Diagrams 1 and 2).</p>	<p>exceedances occurred in 2004 for chlorine and oil and grease, and there are no other subsequent numerical effluent limitation exceedances during the term of the existing Order. Staff noted the concentrations of several metal parameters (mainly copper and zinc) in the retention basins effluent and storm water that, if low volume wastes were discharged alone, could result in exceedances of the Ocean Plan Table 1 water quality standards (within 1 or 2 orders of magnitude). However, as noted in response to Comment 6, the Discharger stated that the Facility had never discharged low volume wastes without the discharge of once-through cooling water, and staff has not been presented with any evidence to determine otherwise. Based on past monitoring data, the low volume waste flow contribute less than 1% of the total flow of the final combined effluent flow when a discharge of low volume wastes occurs. Additionally, in the Discharger's letter submitted to the Regional Water Board staff on 8/21/2015, the Discharger stated that the discharge of low volume wastes only occurs when at least one of the four circulating water pumps (once-through cooling water pumps) is operational, in which case the flow rate will be in the range of approximately 119,000 gallons per minute or 171 MGD (with one pump operating) to 2,061,190 gallons per minute or 685 MGD (with all four pumps operating). Therefore, due to the small volume of the low volume waste stream relative to the combined effluent flow including the once-through cooling water, the Table 1 parameter concentrations of the low volume wastes as presented are not large enough to affect the quality of the final combined effluent once it is</p>	

Commenter	No.	Comment	Response	Action Taken
			<p>commingled with the once-through cooling water, to an extent that will cause the final combined effluent to exceed the water quality objectives of the Ocean Plan Table 1 parameters.</p> <p>Furthermore, effluents from the retention basins or other internal waste streams are internal effluents and do not represent the quality of the final combined effluent discharged from the Facility to the receiving water. Compliance with the final combined effluent limitations for the Table 1 parameters (which are prescribed to hold discharges from the Facility to a level that will ensure compliance with the Table 1 water quality objectives at the receiving water) are assessed based on the quality of the final combined effluent from the Facility, not the individual internal waste streams. Arsenic, cadmium, copper, lead, nickel, selenium, and zinc did not display reasonable potential in the final effluent, and therefore the proposed Order include semiannual monitoring requirements and not effluent limitations for these pollutants at Monitoring Location EFF-001 (final combined effluent stream). The proposed Order also includes semi-annual internal monitoring requirements for these pollutants to continually track and control the contribution of these pollutants into the Facility's final combined effluent stream.</p>	
Wishtoyo Foundation	8	Stormwater that falls on the Generating Station's highly galvanized power block, that because of coastal weathering contains high concentrations	As noted in staff's response to Comment 7, the effect of the discharge of storm water and RO wastes into the retention basins have been monitored and assessed	None necessary.

Response to Comments  
 NRG California South LP  
 Ormond Beach Generating Station

Commenter	No.	Comment	Response	Action Taken
		<p>of dissolved zinc, flows to the floor drains and out EFF-001a or EFF-001b as a low volume waste. In addition, without evidence to demonstrate otherwise, it is reasonably likely that significant concentrations of metals in toxic concentrations from the Generating Station's Reverse Osmosis waste, the Seal Water, Condensate Overboard, Condensate Tank Drain, Condensate Demineralizer Regeneration, wastewaters from wet scrubber air pollution control systems, ion exchange water treatment system, water treatment evaporator blowdown, laboratory and sampling streams, auxiliary boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems will discharge as low volume wastes from EFF- 001a. These processes all involve significant contact with old and weathered Generating Station infrastructure containing Table 1 Ocean Plan Metals or direct discharge of Table 1 Ocean Plan Metals into the low volume waste stream.</p>	<p>through the self-monitoring reports submitted by the Discharger under penalty of perjury, since the beginning of discharge of the RO wastes (1992) and storm water (fall 2013) into the retention basins. Staff agree that the additional types of discharge may affect the quality of the effluent from the retention basins. However, based on existing data and the relatively small amount of low volume waste flow from the Facility, measured concentrations of arsenic, cadmium, copper, lead, nickel, selenium, and zinc in the final effluent did not demonstrate reasonable potential. Hence, the proposed permit does not include effluent limits for these pollutants in the final effluent stream. Please refer to response to Comment 7.</p>	
Wishtoyo Foundation	9	<p>Furthermore, these low volume waste streams can discharge, and have discharged at different times of the year in significant volumes absent the discharge of once-through cooling wastes, thus warranting separate monitoring and the inclusion of effluent limits that apply to these discharges at the end of their pipes before mixing with ocean water. For instance, according to information obtained by Wishtoyo and its Ventura Coastkeeper Program during settlement</p>	<p>The Discharger confirmed with Regional Water Board staff on 8/19/2015 by phone and on 8/21/2015 by mail that no discharge of low volume waste had ever occurred from the Facility without the discharge of once-through cooling water waste.</p> <p>Staff noted and agree with the commenter's concern regarding the elevated contaminant levels that can potentially be discharged from the Facility if the discharge of low volume wastes occurs without the</p>	<p>Revision was made to section III in the Limitations and Discharge Requirement of the proposed</p>

Response to Comments  
 NRG California South LP  
 Ormond Beach Generating Station

Commenter	No.	Comment	Response	Action Taken
		<p>communications with the Generating Station: in March of 2010 there were 8 discharges of low volume wastes into the Pacific Ocean from the Generating Station totaling 1.82 million gallons; in October 2010 there were 11 discharges of low volume wastes into the Pacific Ocean the Generating Station totaling 1.31 million gallons; in April 2012 there were 7 discharges of low volume wastes into the Pacific Ocean the Generating Station totaling 1.16 million gallons; and in October 2012 there were 5 discharges of low volume wastes into the Pacific Ocean the Generating Station totaling 1.09 million gallons. These volumes of low volume waste streams are now are higher as they contain metals in the Generating Station's storm water discharges left over after Reverse Osmosis Treatment generated from a 5 year 24 hour event (3.68 inches) at the 35 acre Generating Station. This significant increase in magnitude of the Generating Station's discharges of its low volume waste stream attributed to stormwater containing metals at concentrations above the 2012 California Ocean Plan's water quality objectives, warrants sampling from, and effluent limits for, discharges of the Generating Station's low volume wastes before contact with ocean water in the Generating Station tunnel.</p>	<p>simultaneous discharge of once-through cooling water. Therefore, staff provide the following addition in section III (Discharge Prohibitions) in the Limitations and Discharge Requirements of the proposed Order to address this concern:</p> <p><u>J. The discharge of any in-plant waste streams from the Facility, specifically including the discharge of low volume wastes and storm water, is prohibited unless coincident with circulating water pump flows related to power generation or critical system maintenance. This prohibition is effective until the Facility achieves final compliance with the OTC Policy, prior to which the terms and provisions of this Order shall be reconsidered to account for the change of operation at the Facility.</u></p>	<p>Order.</p>

NRG California South LP  
Mandalay Generating Station  
(NPDES NO. CA0001180)

**REVISED TENTATIVE  
WASTE DISCHARGE REQUIREMENTS  
(Pages 1 and 5)**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 • Fax (213) 576-6640  
<http://www.waterboards.ca.gov>

**ORDER R4-2015-XXXX  
NPDES NO. CA0001180**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE NRG CALIFORNIA SOUTH LP  
MANDALAY GENERATING STATION**

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

**Table 1. Discharger Information**

<b>Discharger</b>	NRG California South LP
<b>Name of Facility</b>	Mandalay Generating Station
<b>Facility Address</b>	393 North Harbor Boulevard
	Oxnard, CA 93035
	Ventura County

**Table 2. Discharge Location**

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Once-through cooling water, metal cleaning wastes, and low volume wastes, waters, and storm water	34.60639°	-119.25002°	Pacific Ocean

**Table 3. Administrative Information**

This Order was adopted on:	October 8, 2015
This Order shall become effective on:	<del>December 1, 2015</del> January 1, 2016
This Order shall expire on:	<del>November 30</del> December 31, 2020
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date.
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major discharge

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on the date indicated above.

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Samuel Unger, P.E., Executive Officer

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- B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Pacific Ocean, or other waters of the State, are prohibited.
- C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or create a nuisance as defined by Section 13050 of the Water Code.
- D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- F. Discharge of oil or any residuary product of petroleum to waters of the State, except in accordance with waste discharge requirements or other provisions of Division 7 of the CWC, is prohibited.
- G. The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is prohibited under Water Code section 13375.
- H. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
- I. There shall be no discharge of polychlorinated biphenyl (PCB) compounds.
- I.J. The discharge of any in-plant waste streams from the Facility, specifically including the discharge of low volume wastes and storm water, is prohibited unless coincident with circulating water pump flows related to power generation or critical system maintenance. This prohibition is effective until the Facility achieves final compliance with the OTC Policy, prior to which the terms and provisions of this Order shall be reconsidered to account for the change of operation at the Facility.

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**IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

**A. Effluent Limitations – Discharge Point 001**

**1. Final Effluent Limitations – Combined Effluent Through Discharge Point 001**

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program, Attachment E:

**Table 4. Effluent Limitations at Discharge Point 001 (Monitoring Location EFF-001)**

Parameter	Units	Effluent Limitations				
		Six-Month Median	Average Concentration	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	--	--	6.0	9.0
Chronic Toxicity <sup>1</sup>	Pass or Fail, % Effect (for the TST approach)	--		Pass or % Effect <50	--	--

NRG California South LP  
NRG California South LP, Facility , Newbury Park  
(NPDES NO. CA0001180)

**REVISED TENTATIVE  
MONITORING AND REPORTING PROGRAM  
(Pages E-7, E-8, E-9, E-10, E-21, and E-22)**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Nitrate (as N)	µg/L as N	24-hour Composite	1/Year	2
Total Coliform <sup>4</sup>	MPN/ 100 mL	Grab	1/Quarter <sup>4</sup>	2
Fecal Coliform <sup>4</sup>	MPN/ 100 mL	Grab	1/Quarter <sup>4</sup>	2
Enterococcus <sup>4</sup>	MPN/ 100 mL	Grab	1/Quarter <sup>4</sup>	2
Chronic Toxicity <sup>6</sup>	Pass or Fail, % effect	24-hour Composite	1/Quarter <sup>7</sup>	2
Total Residual Chlorine	mg/L	Grab	1/Day <sup>8</sup>	2
Free Available Chlorine	mg/L	Grab	1/Day <sup>8</sup>	2
Chromium (VI) <sup>9,10</sup>	µg/L	Grab	1/Month	2
Copper, Total Recoverable <sup>10</sup>	µg/L	24-hour Composite	1/Month	2
Mercury, Total Recoverable <sup>10</sup>	µg/L	24-hour Composite	1/Month	2
PCBs (as Aroclors) <sup>11</sup>	µg/L	24-hour Composite	1/Monthr	2
Remaining Ocean Plan Table 1 Pollutants	µg/L	Grab/24-hour Composite <sup>5</sup>	2/Year <sup>14</sup>	2
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	pCi/L	Grab/24-hour Composite <sup>5</sup>	1/Year	12
TCDD Equivalents <sup>13</sup>	µg/L	24-hour Composite	2/Year <sup>14</sup>	2

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1. When continuous monitoring is required, the total daily flow (24-hour basis) shall be reported. If no discharge occurs during the month, the report shall so state.
2. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136. For priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan (2012) that is required to demonstrate compliance. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.
3. Only the maximum temperature for each calendar day shall be reported, except when the temperature exceeds 106°F, in which case the reason(s), duration, and time of day of the events of elevated temperature shall be reported.
4. For each quarterly monitoring event, weekly sampling and analysis shall be conducted until a geometric mean can be obtain for each parameter (using the five most recent sample results).  
If the sample exceeds densities of 1,000 MPN/100 mL, 200 MPN/100 mL, or 104 MPN/100 mL of total coliform, fecal coliform, or enterococcus, respectively, then the Discharger shall collect and retest samples of the **receiving water** near the terminus of the diffuser at a depth of 10 feet.
5. Where a composite sample for the parameter is not appropriate as specified in the respective analytical method in 40 C.F.R. Part 136 or in other EPA methods, a grab sample shall be obtained in lieu of the 24-hour composite sample for that parameter.
6. Refer to section V, Whole Effluent Toxicity Testing Requirements. "Pass" or "Fail" and "% effect" for maximum daily effluent limitation (MDEL).
7. Monthly sampling is required in the first three months of this Order. Species sensitivity screening shall be conducted during first three monthly monitorings. The species that exhibit the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for the routine quarterly monitoring.

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8. Monitoring is only applicable during periods of chlorine addition. A statement certifying that chlorination did not occur during the day may be submitted in lieu of an analysis.
9. The Discharger may at their option meet this requirement as total chromium.
10. The mass emission (lbs/day) for the discharge shall be calculated and reported using the actual concentration and the actual flow rate measured at the time of discharge, using the formula:

$$M \text{ (lb/day)} = C \times Q \times 0.00834$$

Where:

- M = mass discharge for a pollutant, lbs/day
- C = actual concentration for a pollutant, µg/L
- Q = actual discharge flow rate, MGD

11. The results of PCB analyses using Method 608 shall be reported in Discharge Monitoring Reports and used for assessing compliance with effluent limitations. Using USEPA Method 608, PCBs (as Aroclors) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. Non-detected and/or estimated values shall be treated as zeros in the summation of PCBs as Aroclor.
12. Analyze these radiochemicals by the following USEPA methods:
  - Method 900.0 for gross alpha and gross beta;      Method 903.0 or 903.1 for radium-226;
  - Method 904.0 for radium-228;                              Method 906.0 for tritium;
  - Method 905.0 for strontium-90;                              Method 908.0 for uranium.
 Analysis for combined radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If radium-226 & 228 exceeds 5 pCi/L, analyze for tritium, strontium-90 and uranium.  
 A statement certifying that radioactive pollutants were not added to the discharge may be submitted in lieu of monitoring.
13. TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD Equivalents)} = \sum (C_x \times \text{TEF}_x)$$

Where:

- $C_x$  = concentration of dioxin or furan congener x
- $\text{TEF}_x$  = TEF for congener x

**Toxicity Equivalence Factors**

Isomer Group	Toxicity Equivalence Factor (TEF)
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
Octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01

14. Monitoring once per semiannual period (January – June, July – December).
15. If a discharge of low volume wastes from the retention basins (to be monitored in Monitoring Location INT-001A), boiler blowdown (Monitoring Location INT-001B), and chemical metal cleaning wastes (Monitoring Location INT-001C) occurs during a discharge event, then the Discharger must sample for the final combined effluent at Monitoring Location EFF-001 during the duration of such discharge, and state so under penalty of perjury in the corresponding monitoring report.

**B. Monitoring Location INT-001A and INT-001B**

1. The Discharger shall monitor low volume wastes<sup>6</sup> at Monitoring Location INT-001A and boiler blowdown at Monitoring Location INT-001B as follows.

**Table E-3. Low Volume Wastes (Monitoring Location INT-001A and INT-001B)**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	MGD	--	1/Month	1, 2
pH	standard units	Grab	1/Month	1, 2
Total Suspended Solids <sup>3</sup>	mg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
Oil and Grease <sup>3</sup>	mg/L	Grab	1/Month	1, 2
Chromium (VI) <sup>3,4</sup>	µg/L	Grab	1/Month	1, 2
Copper, Total Recoverable <sup>3</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
Mercury, Total Recoverable <sup>3</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
PCBs(as Aroclors) <sup>5</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	2/Year <sup>8</sup>	1, 2
Ocean Plan Table 1 Pollutants (excluding Toxicity)	µg/L	Grab/24-hour Composite <sup>7</sup>	2/Year <sup>8</sup>	1

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan that is required to demonstrate compliance. Where no methods are specified for a given pollutant, the methods utilized must be approved by this Regional Water Board or the State Water Board.
2. If no discharge occurred during the month, the report shall so state.
3. The mass emission (lbs/day) for the discharge shall be calculated and reported using the actual concentration and the actual flow rate measured at the time of discharge, using the formula:  

$$M \text{ (lb/day)} = C \times Q_m \times 0.00834$$
 Where:  
 M = mass discharge for a pollutant, lbs/day  
 C = actual concentration for a pollutant, µg/L  
 Q<sub>m</sub> = actual discharge flow rate, MGD
4. The Discharger may at their option meet this limitation as a total chromium limitation
5. The results of PCB analyses using Method 608 shall be reported in Discharge Monitoring Reports and used for assessing compliance with effluent limitations. Using USEPA Method 608, PCBs (as Aroclors) shall mean the sum of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. Non-detected and/or estimated values shall be treated as zeros in the summation of PCBs as Aroclor.
6. Low volume wastes collectively treated in the north and south retention basins, that includes boiler condensated overboard, reverse osmosis reject water, softener regeneration wastes, wastewater from north and west yard drains, equipment wash water collected in floor drains, and storm water collected in yard drains.
7. Where a composite sample for the parameter is not appropriate as specified in the respective analytical method in 40 C.F.R. Part 136 or in other EPA methods, a grab sample shall be obtained in lieu of the 24-hour composite sample for that parameter.
8. Monitoring once per semiannual period (January – June, July – December).

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**C. Monitoring Locations INT-001C**

- The Discharger shall monitor chemical metal cleaning wastes<sup>6</sup> at Monitoring Location INT-001C as follows.

**Table E-4. Chemical Metal Cleaning Wastes (Monitoring Locations INT-001C)**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	MGD	--	1/Month	1, 2
pH	standard units	Grab	1/Month	1, 2
Total Suspended Solids <sup>3</sup>	mg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
Oil and Grease <sup>3</sup>	mg/L	Grab	1/Month	1, 2
Chromium (VI) <sup>3,4</sup>	µg/L	Grab	1/Month	1, 2
Copper, Total Recoverable <sup>3</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
Iron, Total Recoverable <sup>3</sup>	mg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
Mercury, Total Recoverable <sup>3</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	1/Month	1, 2
PCBs <sup>5</sup>	µg/L	Grab/24-hour Composite <sup>7</sup>	2/Year <sup>8</sup>	1, 2
Ocean Plan Table 1 Pollutants (excluding Toxicity)	µg/L	Grab/24-hour Composite <sup>7</sup>	2Year <sup>8</sup>	1

- Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan that is required to demonstrate compliance. Where no methods are specified for a given pollutant, the methods utilized must be approved by this Regional Water Board or the State Water Board.
- If no discharge occurred during the month, the report shall so state.
- The mass emission (lbs/day) for the discharge shall be calculated and reported using the actual concentration and the actual flow rate measured at the time of discharge, using the formula:  

$$M \text{ (lb/day)} = C \times Q_m \times 0.00834$$

Where:  
M = mass discharge for a pollutant, lbs/day  
C = actual concentration for a pollutant, µg/L  
Q<sub>m</sub> = actual discharge flow rate, MGD
- The Discharger may at their option meet this limitation as a total chromium limitation.
- The results of PCB analyses using Method 608 shall be reported in Discharge Monitoring Reports and used for assessing compliance with effluent limitations. Using USEPA Method 608, PCBs (as Aroclors) shall mean the sum of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. Non-detected and/or estimated values shall be treated as zeros in the summation of PCBs as Aroclor.
- Chemical metal cleaning wastes are generated when Facility equipment require chemical-based cleanings to remove scale, rust, and corrosion accumulated during normal operation and generate chemical metal cleaning wastes.
- Where a composite sample for the parameter is not appropriate as specified in the respective analytical method in 40 C.F.R. Part 136 or in other EPA methods, a grab sample shall be obtained in lieu of the 24-hour composite sample for that parameter.
- Monitoring once per semiannual period (January – June, July – December).

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**F. Receiving Water Monitoring at Zone of Initial Dilution**

The Discharger shall monitor the receiving water (Pacific Ocean) outside of the zone of initial dilution (ZID) within the waste field at Monitoring Locations ZID-001 as follows:

**Table E-11. Compliance Monitoring at the Zone of Initial Dilution at Monitoring Location ZID-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
All Table 1 Parameters in the Ocean Plan (Including toxicity)	--	Grab	1/Permit Term <sup>1</sup>	<sup>2</sup>

- <sup>1</sup> The Discharger shall conduct compliance monitoring at Monitoring Location ZID-001 at least once during the term of this Order at a time of discharge from Discharge Point 001.
- <sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136. For priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan (2012) that is required to demonstrate compliance. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

**G. Regional Monitoring Program**

The Discharger shall participate in regional monitoring activities coordinated by the Southern California Coastal Water Research Project (SCCWRP), and other appropriate agencies approved by the Regional Water Board and USEPA. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated monitoring efforts, the Discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of wastewater discharges to the Southern California Bight; however, certain core elements shall remain unchanged. Thus, revisions to the routine compliance monitoring program may be made under the direction of the USEPA and Regional Water Board as necessary to accomplish the goal of assessing regional impacts from all contaminant sources; and may include resource exchanges. The most recent bightwide regional monitoring program was conducted in 2013. The next bightwide regional monitoring survey is expected to occur in 2018. The Discharger is expected to participate at levels commensurate with participation in previous surveys.

**VIII. OTHER MONITORING REQUIREMENTS**

**A. Storm Water Monitoring at Monitoring Location EFF-001**

For discharges of storm water other than at yard drains that flows to the retention basins and to Discharge Point 001, the Discharger shall implement the Monitoring and Reporting Requirements for individual dischargers contained in the general permit for Dischargers of Storm Water Associated with Industrial Activities (State Board Order No. 2014-0057-DWQ, NPDES No. CAS000001, adopted on April 1, 2014). monitor for all Table 1 pollutants from the Ocean Plan. The report must note whether once through cooling water is being discharged when the storm water is released.

**Table E-12. Storm Water Monitoring at Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	1/Day <sup>1</sup>	<sup>3</sup>
All Table 1 Parameters in the Ocean Plan (Including toxicity)	--	Grab	1/Discharge Event <sup>2</sup>	<sup>3</sup>

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1. Flow shall be recorded during each period of discharge. Periods of no discharge shall also be reported.
2. During periods of extended rainfall, no more than one sample per week (or 7-day period) is required to be collected. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. If there is no discharge to surface waters, then no monitoring is required. In that event, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136. For priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan (2012) that is required to demonstrate compliance. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

**B. Monitoring for Discharges of Calcareous Material**

1. During the discharge of calcareous material (excluding heat treatment discharge) to the receiving waters, the following observations or measurements shall be recorded and reported in the next monitoring report:
  - a. Date and times of discharge(s).
  - b. Estimate of the volume and weight of discharge(s).
  - c. Composition of discharge(s).
  - d. General water conditions and weather conditions.
  - e. Appearance and extent of any oil films or grease, floatable materials or odors.
  - f. Appearance and extent of visible turbidity or color patches.
  - g. Presence of marine life.
  - h. Presence and activity of the California least turn and the California brown pelican.

**C. Outfall Inspection**

The Discharger shall, at least once during the term of this permit, inspect the integrity of and perform maintenance on the ocean outfall structure to prevent restriction of flow or change in flow conditions that may cause deviation from the conditions used to model the mixing zone of the final discharge from the Facility

**IX. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Quarterly analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of May and November. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule.

NRG California South LP  
Mandalay Generating Station  
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**REVISED TENTATIVE FACT SHEET**  
**(Page F-8, and F-47)**

schematic diagram submitted by the Discharger on March 20, 2015. This permit does not include the waste streams for non-chemical metal cleaning wastes. No effluent limitations nor monitoring requirements were included in this Order.

Chemical metal cleaning wastes are generated when Facility equipment require chemical-based cleanings to remove scale, rust, and corrosion accumulated during normal operation and generate chemical metal cleaning wastes. Chemical metal cleaning wastes are treated with lime in portable baker tanks using a mobile treatment unit. Sludge generated during this process is dewatered with a belt filter press and disposed at an off-site facility. The wastewater is pumped to the north retention basin. Commingled effluent in the north retention basin is discharged to the main stream line, combined with other process water and cooling water then flows to the receiving water at Discharge Point 001. Since 2001, the chemical metal cleaning wastes are collected and transferred off-site for treatment and disposal. However, the Facility retains the capacity to discharge these wastes to the receiving water in the future.

- c. **Storm Water.** All precipitation that falls on the paved portions of the Facility is collected in the yard drains, conveyed to the retention basins for treatment (settling and stabilization) prior to discharge to the main stream line, combined with other process water and cooling water then flows through Discharge Point 001 into the receiving water. The discharges of storm water combined with other process water and cooling water through Discharge Point 001 is covered under this Order.

~~For discharges of storm water other than at yard drains that flows to the retention basins and to Discharge Point 001 is regulated under the general permit for Dischargers of Storm Water Associated with Industrial Activities (State Board Order No. 2014-0057-DWQ, NPDES No. CAS000001, adopted on April 1, 2014). The Discharger shall monitor for all Table 1 pollutants from the Ocean Plan. The report must note whether once through cooling water is being discharged when the storm water is released.~~

**B. Discharge Points and Receiving Waters**

The Facility discharges once-through cooling water, other in-plant wastes, and storm water at Discharge Point 001—a concrete- and rock-vetted discharge structure on Mandalay Beach west of the main Facility site and to the Pacific Ocean. Discharge Point 001 is a shallow water discharge location.

Order 01-057 established an initial dilution ratio of 2.6 to 1 (receiving water to effluent) at Discharge Point 001 which has been retained in this Order (refer to Section IV.C.4 of the Fact Sheet for further discussion of the Facility's mixing zone and dilution credit).

**C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

1. Effluent limitations contained in Order 01-057 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the Order are as follows:

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from being discharged directly into the receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 CFR section 122.44(k).

- ii. **Best Management Practices Plan (BMPP).** This Order requires the Discharger to develop and implement a BMPP. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility. The BMPP shall incorporate the requirements contained in Appendix G. Appendix G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
- iii. **Spill Contingency Plan (SCP).** This Order requires the Discharger to develop and implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

**4. Construction, Operation, and Maintenance Specifications**

- a. This provision is based on the requirements of 40 C.F.R. section 122.41(e).

**5. Special Provisions for Municipal Facilities (POTW's Only) – Not Applicable**

**6. Other Special Provisions**

**a. Discharges of Storm Water**

~~The Discharger shall maintain coverage under General Permit No. CAS000001 and, except as otherwise authorized by this Order, shall meet the requirements of that general permit for the control of storm water discharges from the Facility.~~

For discharges of storm water to Discharge Point 001, the Discharger shall monitor for all Table 1 pollutants from the Ocean Plan. The report must note whether once through cooling water is being discharged when the storm water is released.

**b. Once-Through Cooling Water Compliance Schedule**

Under Track 1 of the OTC Policy, an existing power plant must reduce the intake flow rate to a level commensurate with closed-cycle wet cooling such that the through-screen intake velocity does not exceed 0.5 feet per second.

This Order requires the Discharger to provide annual progress reports to the Regional Water Board to document the Facility's progress towards compliance with the OTC Policy:

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