

**California Regional Water Quality Control Board
Santa Ana Region**

March 14, 2014

Item: 14

Subject: Issuance of Order No. R8-2014-0026, Amending Time Schedule Order No. R8-2009-0070, as amended on October 4, 2013, and as further amended by Order No. R8-2013-0061 on December 6, 2013, for the City of Irvine, Groundwater Dewatering Facilities, Order No. R8-2005-0079, NPDES No. CA8000406, Irvine, Orange County

Discussion:

On December 6, 2013, the Regional Board adopted Order No. R8-2013-0061, amending Time Schedule Order (TSO) No. R8-2009-0070, as amended on October 4, 2013, for dewatering discharges to surface waters in the Newport Bay watershed by the City of Irvine. Order No. R8-2013-0061 extended the expiration date of the TSO for a maximum of two years, i.e., no later than December 10, 2016. The effect of Order No. R8-2013-0061 was to extend the schedule for compliance with selenium effluent limitations applicable to the dewatering discharges for a maximum of two years.

The staff report prepared for consideration of Order No. R8-2013-0061 provides a detailed review of the salient points concerning the rationale for issuance of the TSO in 2009, and the basis for Board staff's recommendation to amend the TSO to extend its expiration date.

At the January 31, 2014 Regional Board meeting, regulated dischargers in the Newport Bay watershed, including a representative of the City of Irvine, requested the opportunity to provide to the Board additional, more detailed information concerning the time expected to be needed to complete selenium-related tasks and to come into compliance with selenium limitations, which will likely be affected by those tasks. These tasks include the development and multi-agency approval process for selenium TMDLs (and site-specific objectives), implementation of selenium reduction projects by watershed stakeholders pursuant to an approved BMP Strategic Plan, and Regional Board issuance of revised permits necessary to implement the selenium TMDLs, once they are approved. Given the complexity of these tasks and the multiple levels of approval necessary to make TMDLs (and SSOs) effective for regulatory purposes, these parties expressed concern that the two year compliance extension provided by Order No. R8-2013-0061 would not suffice. The failure to comply with the selenium effluent limitations would subject regulated dischargers to enforcement remedies, including the imposition of mandatory minimum penalties.

Based on the request by regulated dischargers at the January 31 meeting, this item has been scheduled to allow them to present additional information and to give the Board the opportunity to reconsider the duration of the extension. In the draft Order No. R8-

2013-0061, Regional Board staff recommended an extension of the TSO of a maximum of five years, or no later than December 10, 2019. The maximum five year period proposed reflected Board staff's judgment of the time likely to be needed to complete and obtain requisite approvals of the selenium TMDLs, and to revise waste discharge permits accordingly. Board staff has prepared draft Order No. R8-2014-0026, which does not specify a termination end-date, in anticipation that the Regional Board will determine the appropriate extension, if any, based on the evidence to be presented by the City of Irvine and other watershed dischargers.

RECOMMENDATION

If the Board determines that a further extension of the TSO is appropriate, staff recommends adoption of Order No. R8-2014-0026, amending Time Schedule Order No. R8-2009-0070, as amended on October 4, 2013, and as further amended by Order No. R8-2013-0061, to extend the duration of the TSO from no later than December 10, 2016 to an appropriate revised date.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER NO. R8-2014-0026
AMENDING TIME SCHEDULE ORDER NO. R8-2009-0070
(As Amended on October 4, 2013 and by Order No. R8-2013-0061 on December 6,
2013)

For

CITY OF IRVINE, GROUNDWATER DEWATERING FACILITIES, ORDER NO. R8-
2005-0079, NPDES NO. CA8000406, IRVINE, ORANGE COUNTY

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board) finds that:

1. On December 10, 2009, the Board adopted Time Schedule Order (TSO) No. R8-2009-0070 for the City of Irvine groundwater dewatering facilities, discharges from which are regulated under Order No. R8-2005-0079, NPDES No. CA800406. Order No. R8-2005-0079 expired on November 1, 2010 but was administratively extended.
2. The TSO was amended on October 4, 2013 and by Order No. R8-2013-0061 on December 6, 2013. Order No. R8-2013-0061 extended the expiration date of the TSO by a maximum of two years, or no later than December 10, 2016. The effect of Order No. R8-2013-0061 was to extend the schedule for compliance with selenium effluent limitations applicable to the City's dewatering discharges for a maximum of two years, or no later than December 10, 2016.
3. The staff report prepared for Order No. R8-2013-0061 and the findings in Order No. R8-2013-0061 identify and describe relevant facts concerning the issuance of the TSO and the rationale for the extension of the expiration date of the TSO. The findings included in Order No. R8-2013-0061 are hereby incorporated by reference in this Order.
4. By letter dated January 28, 2014, and at the Regional Board meeting on January 31, 2014, the City of Irvine requested reconsideration of the duration of the extension of the expiration of the TSO. The City requested this reconsideration based on additional, more detailed information to be presented to the Board concerning the time expected to be necessary to complete selenium-related tasks and to come into compliance with selenium effluent limitations.
5. The City presented this additional information concerning the needed duration of the extension of the expiration date of the TSO at the March 14, 2014 Board hearing.

6. California Water Code (CWC) Section 13385(j)(3)(C)(ii)(II) provides that following a public hearing, and upon a showing that the discharger is making diligent progress towards bringing the waste discharge into compliance with the effluent limitation, the regional board may extend the time schedule specified in a time schedule order issued to that discharger for an additional period not exceeding five years, if the discharger demonstrates that the additional time is necessary to comply with the effluent limitation.
7. As described in detail in the staff report accompanying Order No. R8-2013-0061 and the findings in that Order, and as further described at the March 14, 2014 Board hearing, the City of Irvine is making diligent progress toward bringing waste discharges into compliance with selenium effluent limitations and has demonstrated that additional time beyond December 10, 2016 is necessary to achieve that compliance. Per CWC section 13385(j)(3)(C)(ii)(II), it is appropriate to extend the TSO by no more than three (3) years, i.e., to no later than December 10, 2019. The extension will allow the completion of work necessary to complete revised selenium TMDLs and to re-issue Order No. R8-2005-0079 to incorporate revised effluent limitations and other requirements necessary to implement the new TMDLs. No other changes to the TSO are necessary.
8. Issuance of this amendment to the TSO is exempt from the provision of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations.
9. Any person adversely affected by this action of the Regional Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request. Copies of the law and regulations applicable to filing petitions will be provided on request. Information regarding the petition process may also be found at the State Water Board website:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml.

IT IS HEREBY ORDERED THAT:

1. Time Schedule Order No. R8-2009-0070 shall be extended for up to an additional three (3) years, as set forth in Attachment 1, which includes the following amendment:

“7. This Order, as amended on October 4, 2013, and further amended by Order No. R8-2013-0061 on December 6, 2013 and by Order No. R8-2014-0026 on

March 14, 2014, shall remain in effect for a maximum of three (3) years from its current expiration date, or until December 10, 2019, or until such time as Order No. R8-2005-0079 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Board approved selenium TMDLs. "

2. All other terms and conditions of Time Schedule Order No. R8-2009-0070, as amended, remain in full force and effect.

This Order is effective upon the date of signature.


Kurt V. Berchtold, Executive Officer

March 14, 2014

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

TIME SCHEDULE ORDER NO. R8-2009-0070
(As Amended on October 4, 2013, by Order No. R8-2013-0061
on December 6, 2013 and by Order No. R8-2014-0026 on March 14, 2014)

For

CITY OF IRVINE, GROUNDWATER DEWATERING FACILITIES, ORDER NO. R8-
2005-0079, NPDES NO. CA8000406, IRVINE, ORANGE COUNTY

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board), finds that:

1. In May 2000, the United States Environmental Protection Agency (USEPA) promulgated what is known as the California Toxics Rule (CTR), which consists of numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California (State) (See 40 C.F.R. 131.38). USEPA promulgated the CTR based on a determination that the numeric criteria are necessary to protect human health and the environment. The CTR contains a numeric chronic aquatic life criterion for selenium in freshwater of 5 micrograms per liter (5 µg/L), as total recoverable selenium, and in saltwater of 71 µg/L, as total dissolved selenium (40 C.F.R. 131.38(b)(1).)
2. The CTR provides the State with discretion in how to implement the relevant criteria. Accordingly, in March 2000, the State Water Resources Control Board ("State Water Board") adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The State Water Board amended the SIP in February 2005 with Resolution No. 2005-0019. USEPA has approved the SIP for use as the State's implementation plan for CTR constituents.
3. On June 14, 2002, USEPA promulgated Total Maximum Daily Loads (TMDLs) for Toxic Pollutants in San Diego Creek and Newport Bay. TMDLs were established for organochlorine compounds, organophosphate pesticides, metals (chromium, cadmium, mercury, copper, lead and zinc) and selenium.
4. The USEPA TMDLs established waste load allocations (WLAs) for discharges of groundwater to surface water for selenium based on the CTR chronic criteria for selenium in freshwater and saltwater. However, USEPA's TMDLs are not self-executing, contain no implementation plan, and have not been incorporated into the Basin Plan for the Santa Ana Region. Neither the State nor Regional Water Board has developed an implementation plan for the USEPA TMDLs.

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

5. On November 18, 2005, the Regional Water Board adopted Order No. R8-2005-0079, NPDES No. CA8000406 for groundwater dewatering discharges by the City of Irvine ("City" or "Discharger"). Pursuant to the SIP, the Regional Water Board incorporated numeric selenium effluent limits based on the CTR chronic freshwater and saltwater aquatic life criteria into Order No. R8-2005-0079, with a compliance schedule requiring compliance with the final effluent limits to be achieved no later than December 21, 2009. As interim compliance measures, Order No. R8-2005-0079 allowed for compliance with the selenium effluent limitations through either an approved offset program, which offset was to be completed no later than December 21, 2009, or by participation in the Nitrogen and Selenium Management Program [NSMP] prior to the December 21, 2009 date.
6. Section IV.A.1.a of Order No. R8-2005-0079 contains final effluent limitations based on CTR criteria for total recoverable selenium for discharges to San Diego Creek and its tributaries at the following levels: (1) the maximum daily concentration limit ($\mu\text{g/L}$) is 8.4; and (2) the average monthly concentration limit ($\mu\text{g/L}$) is 4.0.
7. Section IV.A.1.b of Order No. R8-2005-0079 provides that compliance with the selenium effluent limitations specified in Section IV.A.1.a shall be achieved as soon as possible but no later than December 21, 2009.
8. On December 20, 2004, the Regional Water Board adopted Order No. R8-2004-0021, NPDES No. CAG998002, General Waste Discharge Requirements for Short-Term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters within the San Diego Creek/Newport Bay Watershed. Order No. R8-2004-0021 specified selenium effluent limitations and other requirements substantially similar to those specified in Order No. R8-2005-0079. In response to the issuance of Order No. R8-2004-0021, many of the San Diego Creek/Newport Bay watershed stakeholders/dischargers established a voluntary Nitrogen and Selenium Management Program (NSMP) Working Group. The NSMP Working Group includes representatives from local governments and agencies, developers and other private entities, water districts, State agencies including the Regional Water Board, and environmental groups. The City of Irvine is a member of the NSMP Working Group.
9. Order No. R8-2004-0021 permitted, among other things, the dischargers thereunder to achieve interim compliance with the selenium limits set forth in such Order by the efforts of the NSMP Working Group in developing and implementing a work plan to assist in identifying a comprehensive management plan for selenium and nitrogen and, in particular, to identify an approach to address rising groundwater, the largest source of selenium in the watershed. The NSMP Work Plan and Compliance Strategy (Work Plan) was approved by the Executive Officer of the Regional Water Board in July 2005. The Working Group, including the City of Irvine, has been implementing the approved Work Plan since July 2005.

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

10. On November 30, 2007, the Regional Water Board adopted Order No. R8-2007-0041, NPDES No. CAG918002. Order No. R8-2007-0041 is a general permit that regulates discharges of treated wastewater from groundwater dewatering and/or groundwater remediation activities at sites polluted by petroleum hydrocarbons, solvents, metals and/or salts within the San Diego Creek/Newport Bay watershed. Consistent with Order No. R8-2004-0021, Order No. R8-2007-0041 required compliance with final effluent limits based on the CTR chronic criteria for selenium by no later than December 20, 2009. Order No. R8-2007-0041 has replaced Order No. R8-2004-0021, and Order No. R8-2004-0021 has now been rescinded. Order No. R8-2007-0041 was later amended by Order No. R8-2009-0045, which was adopted by the Regional Water Board on July 20, 2009. Order No. R8-2009-0045 amended Order No. R8-2007-0041 by expanding and clarifying the nature of the discharges allowed under Order No. R8-2007-0041.
11. The NSMP Work Plan included a number of selenium-related tasks for the Newport Bay watershed that were designed to inform review and refinement of the USEPA selenium TMDLs and adoption of selenium TMDLs, including an implementation plan, by the Regional Water Board. These tasks included the development of a conceptual model for selenium, an evaluation of selenium sources and loads, an assessment of the bioavailability and impacts of selenium on beneficial uses in the watershed, an evaluation of selenium speciation analytical methods, an evaluation and selection of potentially viable Best Management Practices (BMPs) and treatment technologies for selenium, pilot testing of the most promising BMPs/treatment technologies, and, if necessary and/or appropriate, the development of site-specific objectives (SSOs) for selenium. The results of these efforts provide the basis for a comprehensive selenium management strategy for the Newport Bay watershed that is identified in the implementation plan for the Regional Water Board's proposed selenium TMDLs. The Working Group efforts include the development of a draft BMP Strategic Plan that is a central part of the recommended TMDL implementation plan.
12. Controlling sources of selenium in the Newport Bay watershed poses extraordinary challenges given the watershed-wide scale of the selenium problem, its diffuse origin (largely rising groundwater) and the limited land available for placement of treatment facilities and BMPs because of the high degree of urbanization in the watershed. In addition, there is currently no readily available, conventional treatment technology that can be implemented in a reasonably practicable manner for point source discharges. In the Newport Bay watershed, approximately 85% of the existing selenium loads in surface waters originates from groundwater, and much of this load (about 78%) results from diffuse rising groundwater, which enters surface waters via springs and seeps in the unlined portions of the channels, and cracks and weepholes in storm drains and the concrete-lined portions of the channels. Discrete, groundwater-related discharges (e.g., groundwater dewatering and cleanup) and other regulated discharges (e.g., urban runoff) account for a

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

relatively small part of the selenium load to surface waters. Therefore, selenium reductions needed to protect beneficial uses are best achieved on a regional, watershed-wide scale, addressing both non-point and point sources.

13. At this time, Regional Water Board staff, in collaboration with the NSMP Working Group, including the City of Irvine, is developing TMDLs and SSOs for selenium in the Newport Bay watershed¹ to be presented for consideration by the Regional Water Board in the spring of 2010 (the "Board TMDLs/SSOs"). Once approved, the SSOs will replace the CTR criteria for the relevant water bodies. As currently designed, implementation of the Board TMDLs/SSOs will involve, in large part, a collaborative watershed-based approach coordinated by and through the NSMP Working Group, as well as individual compliance plans to allow individual dischargers the ability to meet their assigned waste load allocations through separate compliance plans.
14. Through development of the Board TMDLs/SSOs and the NSMP, considerable new information has been, and continues to be, developed, including scientific and technical information related to the sources of selenium and its potential adverse impacts on beneficial uses in the Newport Bay watershed. This information was not available at the time Order No. R8-2004-0021 was issued, and much of it has been developed since Order No. R8-2005-0079 was issued. This new information indicates that the final CTR-based effluent limitations may not adequately protect beneficial uses within the Newport Bay watershed. Upon final approval of the Board TMDLs/SSOs, Order No. R8-2005-0079 will be revised to incorporate revised selenium effluent limitations and/or receiving water limitations consistent with the assumptions and requirements of the WLAs contained in the Board TMDLs/SSOs, and this Order will be rescinded. These revised limitations will be (and the interim limitations in this Order are) consistent with anti-backsliding requirements of the Clean Water Act.
15. As noted in Findings 8 and 9, the City is a member of the NSMP Working Group and has been working with other members to implement the approved Work Plan. In addition, the City has implemented, in conjunction with the Irvine Ranch Water District (IRWD), an approved offset program, namely, the Cienega Field Demonstration Project. The Cienega Field Demonstration Project entails

¹ The Newport Bay watershed encompasses both upper and lower Newport Bay and its tributaries, San Diego Creek, Santa Ana Delhi, and Big Canyon subwatersheds, and the Costa Mesa and Santa Isabel channels. To date, NPDES permits, TMDLs and amendments to the Basin Plan for the Santa Ana Region have referred to the watershed as the "San Diego Creek/Newport Bay" watershed. However, the County of Orange recently performed a comprehensive evaluation of all the watersheds located within their boundaries with the intent of verifying watershed divisions and nomenclature. The County decided that the San Diego Creek/Newport Bay watershed would simply be referred to as the Newport Bay watershed. All of the County programs, including the NPDES program, and all County documents now refer to the Newport Bay watershed. For consistency with the new nomenclature, these TMDLs/SSOs will also refer to the watershed as the Newport Bay watershed. Similarly, future NPDES permits will employ this nomenclature.

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

subsurface treatment to remove selenium from surface water flows diverted to the facility. The Cienega Project is included in the NSMP Working Group draft Strategic Plan and will be considered for full-scale implementation if its selenium removal efficacy and cost-effectiveness are demonstrated. The City has indicated its interest in continuing to support the Cienega Project, both as a means to provide ongoing selenium offsets and as part of the comprehensive strategy, developed by the Regional Water Board in collaboration with the NSMP Working Group, to accomplish selenium reductions needed to meet water quality standards.

16. On October 4, 2013, the Regional Board's Executive Officer approved a second offset program, the Peters Canyon Wash ("PCW") Pipeline Project pursuant to the terms and conditions of Order No. R8-2005-0079. The PCW Pipeline Project will intercept and divert to the Orange County Sanitation District ("OCSD") flows including discharges from the California Department of Transportation ("Caltrans") Caltrans Groundwater Treatment Facility, and flows from Como Channel, Edinger Circular Drain, and Valencia Drain. The PCW Pipeline Project is expected to result in approximately 229 lbs/year of selenium reductions and 67,800 lbs/yr of nitrogen reductions, including Caltrans' discharge of 100 lbs of selenium/year and 44,300 lbs/yr of nitrogen, which are currently being sewered by the Irvine Ranch Water District on a temporary basis, and the City's discharge of approximately 15 lbs/year of selenium and 6,000 lbs/year of nitrogen. Operation of the PCW Pipeline Project is anticipated to more than offset the selenium and nitrogen loads from the City's dewatering discharges, and is expected to provide a general benefit to the greater watershed by further reducing selenium and nitrogen loads.
17. Given the complexity of the selenium problem and the limited practicable treatment technologies, a collaborative watershed-based approach to reducing selenium provides the best opportunity to achieve water quality objectives for selenium and to assure the protection of beneficial uses. Accordingly, this Order provides the option for the City to continue to participate in the NSMP Working Group to ensure that waste discharges containing selenium are brought into compliance with the CTR-based selenium effluent limitations in Order No. R8-2005-0079 in as short of a time period as possible. Alternatively, this Order provides the option for the City to continue to rely on selenium reductions provided by the City's (and IRWD's) operation of the Cienega Field Demonstration Project and/or the PCW Pipeline Project to offset selenium discharges during the pendency of this Order. As stated in Finding 14, once the Regional Water Board TMDLs/SSOs are approved, including the implementation plan, Order No. R8-2005-0079 will be revised to include limitations and other requirements necessary to implement the TMDLs/SSOs. This will include requirements consistent with the collaborative, watershed-wide approach that is anticipated in the proposed TMDL implementation plan.
18. The following is a schedule of tasks submitted by the NSMP Working Group, which will be completed within the next five years under Time Schedule Order No. R8-

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

2009-0069 for Order No. R8-2007-0041. (For the purposes of this table, references to “Discharger” are to dischargers authorized under Order No. R8-2007-0041 and who elect to continue to participate in the NSMP Working Group through the execution of a Cooperative Watershed Program Funding Agreement).

Task No.	Description of Activity	Compliance Date
1.	Discharger to elect to participate in the Nitrogen and Selenium Management Program (NSMP). (The Discharger’s participation in the NSMP will be deemed to fulfill the general requirements outlined below that are not particular discharger tasks, so long as the discharger remains in material compliance with the terms of an executed NSMP Cooperative Watershed Program Funding Agreement.)	By the later of December 20, 2009 or the commencement of any discharge under Order No. R8-2007-0041.
2.	NSMP Working Group to develop and submit a Funding Agreement, including funding for offset, mitigation or trading provisions, to provide a consistent source of funding to address point source and nonpoint source discharges of selenium and nitrogen within the watershed.	
	a. Submit Funding Agreement and then current list of Dischargers participating therein to Regional Water Board	a. July 1, 2010
	b. Execute Funding Agreement	b. Participating dischargers seeking coverage under TSO R8-2009-0069 to execute Funding Agreement within 180 days of the Discharger’s approval of the terms of the submitted Funding Agreement
3.	All dischargers are required to submit documentation with their notice of intent (NOI) to discharge that the feasibility of eliminating or reducing the volume of the discharge has been evaluated. The feasibility evaluation options will consist of (1) discharge to land; (2) discharge to sewer; and (3) offsite transport and disposal. Specifications and limitations of the three methods were listed in the NSMP report <i>Volume Reducing Best Management Practices for Short-Term Groundwater Related Discharges within Orange County – August 2005</i>	Ongoing
4.	NSMP Working Group to develop Method of Compliance Workplan/Schedule (BMP Strategic Plan)	

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

Task No.	Description of Activity	Compliance Date
	<p>a. A proposed BMP Strategic Plan and BMP Effectiveness Monitoring Plan will be developed by the NSMP Working Group for submittal to the Regional Water Board.</p> <p>The BMP Strategic Plan is to include the following elements:</p> <ol style="list-style-type: none"> 1. A description of an approach to implement pollution prevention, source control and treatment control BMPs to meet TMDL targets for selenium; 2. Identification of BMP implementation priority areas that consider the level of biological significance and selenium concerns; 3. Identification of candidate source and/or treatment controls believed important to meet operative TMDL targets, including: <ol style="list-style-type: none"> a. type and approximate locations of controls; b. timing for implementation; c. treatment capacity; d. cost of implementation; and e. anticipated removal rates and/or load reductions 4. Early Action Tasks anticipated to be completed within 5 years from the date of this Order may include: <ol style="list-style-type: none"> a. type and approximate locations of controls; b. timing for implementation; c. treatment capacity; d. anticipated removal rates and/or load reductions; and e. study goals and relevance to future projects 5. A BMP Effectiveness Monitoring Program; 6. Milestones for Plan review, progress assessment and final selection of source and/or technology controls; 7. Final Control Technology Implementation Outline (Phase II) 	a. January 1, 2011
	b. NSMP Working Group to commence implementation of BMP Strategic Plan	b. Within 90 days of Regional Water Board approval.
	c. NSMP Working Group to submit Annual BMP Strategic Plan implementation progress reports with corresponding decision tree schedule dependent on implementation success and subsequent development of selenium reduction technologies with the goal of implementing BMPs which are reasonably feasible to implement and which have been proven to be effective.	c. Annually after Regional Water Board Approval of BMP Strategic Plan
5.	Irrigation Reduction and Control Program Municipal dischargers seeking coverage under this TSO shall adopt an updated Model Water Efficient Landscape Ordinance (A.B. 1881) or one that is "at least as effective as" that Ordinance.	By the later of January 1, 2010 or as required by A.B 1881.
6.	NSMP Working Group to submit and implement Regional Monitoring Program as follows:	

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

Task No.	Description of Activity	Compliance Date
	a. Regional monitoring program (RMP) for selenium to be submitted to Regional Water Board for approval	a. January 1, 2011
	b. Commence implementation of monitoring program	b. Within 90 days of Regional Water Board approval of RMP
	c. Submit annual monitoring reports	c. Annually after Regional Water Board Approval of RMP

The NSMP Working Group, which may continue to include the City of Irvine, will submit to the Regional Water Board on/or before each compliance date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance will be stated, and will include an estimate of the date when the NSMP will be in compliance. The NSMP will notify the Regional Water Board by letter when it returns to compliance with the time schedule.

19. This Order provides interim selenium effluent limitations in lieu of the effluent limitations set forth in Order No. R8-2005-0079. Without these interim limitations, the Discharger's waste discharges after December 21, 2009 threaten to exceed the effluent limitations set forth in Finding 6 of this Order and, thus, threaten to violate Order No. R8-2005-0079.
20. California Water Code (CWC) Section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."
21. This Order is issued in accordance with CWC Section 13300 and establishes a time schedule for compliance.
22. In accordance with CWC Section 13385(j)(3), the Regional Water Board further finds that the Discharger may not be able to consistently comply with the final effluent limitations for selenium set forth in Order No. R8-2005-0079. These

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

limitations are new requirements that became applicable to Order No. R8-2005-0079 after the effective date of adoption of the waste discharge requirements, and after July 1, 2000, for which new or modified control measures are necessary in order to comply with the limitations, and the new or modified control measures cannot be designed, tested, installed, and put into operation within 30 calendar days.

23. CWC Section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. However, CWC Section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC Section 13385(j)(3) exempts a discharge from mandatory minimum penalties “where the waste discharge is in compliance with either a cease and desist order issued pursuant to CWC Section 13301 or a time schedule order issued pursuant to CWC Section 13300, if all the [specified] requirements are met.”
24. Compliance with this Order exempts the Discharger from mandatory penalties for violations of the effluent limitation for Total Recoverable Selenium, as set forth in section IV.A.1.a of Order No. R8-2005-0079 in accordance with CWC Section 13385(j)(3).
25. CWC Section 13385(j)(3)(A) requires this Order to specify the actions that the Discharger is required to take in order to address the potential violations that may otherwise be subject to mandatory minimum penalties. This Order requires the Discharger to develop and implement new or modified control measures designed to achieve compliance with the effluent limitations as set forth in Finding 6 of this Order.
26. CWC Section 13385(j)(3)(D) requires the preparation and implementation of a pollution prevention plan pursuant to CWC Section 13263.3. The Discharger was required to demonstrate and has demonstrated that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium. The reduction/elimination of selenium discharges may be accomplished through volume reduction, including sewerage. Potential volume reduction measures were evaluated by the NSMP Working Group and three volume reduction BMPs, including sewerage, were deemed feasible. Selenium occurs in the groundwater-related discharges regulated under Order No. 2005-0079 as the result of additions from natural processes not subject to the control of the Discharger. Therefore, with respect to the selenium discharges addressed by Order No. 2005-0079, the evaluation and implementation of reasonably feasible discharge volume reduction measures, and the evaluation of and adherence to project design features or other practices that result in discharge avoidance fulfill the requirements of a Pollution Prevention Plan.

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

27. The interim effluent limitations established by this Order for the Discharger shall be performance-based and set at the lowest reasonably feasible historical discharge levels, taking into account precipitation-driven and other sources of variation in selenium concentrations.
28. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000, et seq.), in accordance with Section 1532(a)(2), Title 14, California Code of Regulations.
29. Any person adversely affected by this action of the Regional Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.
30. The Regional Board recognizes that the City disagrees with the rationale behind and need for this Order. The City maintains that it is and will continue to be in compliance with the final effluent limitations set forth in Section IV.A.1.a of Order No. R8-2005-0079 after December 21, 2009 through the continued operation of an approved offset (the Cienega Field Demonstration Project and/or the PCW Pipeline Project) pursuant to Section IV.A.1.c of Order No. R8-2005-0079. Accordingly, the City accepts this Order without conceding this argument.

IT IS HEREBY ORDERED THAT pursuant to CWC Section 13300 and 13385, the Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for selenium contained in Order No. R8-2005-0079, and as set forth in Finding 6 herein.

1. Throughout the term of this Order, the Discharger shall either (a) continue to implement the Cienega Field Demonstration Project, as approved by the Executive Officer on April 26, 2007, and/or the PCW Pipeline Project, as approved by the Executive Officer on October 4, 2013, and in accordance with the conditions of those approvals set forth by the Executive Officer therein, or (b) continue to participate in the Nitrogen and Selenium Management Program (NSMP). The Discharger shall notify the Executive Officer of its election in this regard within thirty (30) days of the effective date of this Order, and within thirty (30) days of any decision of the Discharger to change its election hereunder. If the Discharger, at any time, elects compliance with this Order through participation with the NSMP, then the Discharger shall provide to the Executive Officer of the Regional Water Board a copy of the Memorandum of Procedure, as amended, or Cooperative Watershed Program Funding Agreement, as applicable, showing the Discharger's membership in the Working Group.

December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

2. The Discharger shall re-certify that they have documented and made all practicable attempts to avoid, reduce or eliminate the discharge of selenium within 60 days from the date of this Order, or prior to any discharge under Order No. R8-2005-0079, whichever date is later.
3. If the Discharger elects compliance with this Order through its continued participation with the NSMP, then the Discharger shall comply with the following interim effluent limitation for Total Recoverable Selenium during the pendency of this Order and if so, the Discharger shall be deemed to be in compliance with this Order, provided the Discharger, as a member of the NSMP Working Group, is complying with the tasks and process described in Finding 17 during the period of discharge (as established by the Discharger to the satisfaction of the Executive Officer):
 - a. The Discharger shall submit to the Executive Officer for approval, no later than 60 days following the adoption of this Order, a performance-based effluent limitation for selenium that is based on historical selenium discharge concentrations (e.g., the lowest reasonably feasible concentration based on their historical selenium discharges). Upon approval by the Executive Officer, the Discharger must not exceed this interim effluent limitation during the pendency of this Order.
4. If the Discharger elects compliance with this Order by providing selenium offsets through its continued operation of the Cienega Field Demonstration Project and/or the PCW Pipeline Project, then the Discharger shall continue to comply with the offset monitoring and reporting requirements included in Order No. R8-2005-0079 to demonstrate that requisite selenium offsets have been achieved.
5. If, in the opinion of the Regional Water Board Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the State Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability. If compliance with this Order is not achieved, the Discharger would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and may be subject to the issuance of a Cease and Desist Order in accordance with CWC Section 13301.
6. Any person signing a document submitted under this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are

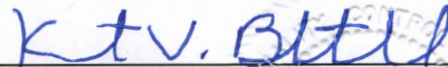
December 10, 2009

Amended on October 4, 2013, December 6, 2013 and March 14, 2014

significant penalties for submitting false information, including the possibility of fine and imprisonment.”

7. This Order, as amended on October 4, 2013, and further amended by Order No. R8-2013-0061 on December 6, 2013 and by Order No. R8-2014-0026 on March 14, 2014, shall remain in effect for a maximum of three (3) years, or until December 10, 2019, or until such time as Order No. R8-2005-0079 is re-issued to incorporate revised selenium effluent limitations and other requirements necessary to implement Board approved selenium TMDLs.

This Order is effective upon the date of signature.



KURT V. BERCHTOLD, Executive Officer

Originally issued on December 10, 2009

Amended on October 4, 2013

Amended on December 6, 2013 (Order No. R8-2013-0061)

Amended on March 14, 2014 (Order No. R8-2014-0026)



Community Development

www.cityofirvine.org

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575

(949) 724-6000

February 28, 2014

Mr. William Ruh
Chair
Regional Water Quality Control Board, Santa Ana
3737 Main Street, Suite 500
Riverside, CA 92501-3339

SUBJECT: Time Schedule Orders for Compliance with Selenium in the Newport Bay Watershed

Dear Mr. Ruh:

On January 31, 2013, the Santa Ana Regional Water Quality Control Board (Board) agreed to hear additional information regarding Order No. RB-2013-0060 and Order No. RB-2013-0061 amending Time Schedule Orders for groundwater dewatering operations in the San Diego Creek-Newport Bay Watershed. At issue is the appropriate compliance timeframe for the design, permitting, construction and evaluation of the \$8.7 million Peters Canyon Wash Channel Capture and Reuse project (Project) proposed by the City of Tustin, County of Orange, Orange County Flood Control District, the Irvine Water District, and Caltrans (Project Partners). We appreciate the opportunity to present more detailed and current information to the Board on this important project to improve water quality in the San Diego Creek Watershed.

The Project Partners have been working diligently on the conceptual development and funding of the Project throughout 2012 and 2013, culminating in a fully funded project in late 2013 when two grants and a funding agreement between the Project Partners was executed. With financing secured, contracts for project design and environmental evaluation were issued in early January 2014. The City of Irvine sent a letter to the Board in late January outlining the estimated Project schedule based on information from a Concept Feasibility Study completed by the Project Partners in 2013 and used as the basis to secure funding commitments for the Project. Since then, the Project Partners held their first meeting with the Project design team, at which a detailed overview of the pipeline alignment and updated design and construction schedule was presented. Based on this more detailed schedule, the City of Irvine requests the Board reconsider the original Regional Board staff recommendation to extend Order No. RB-2013-0060 and Order No. RB-2013-0061 to December 10, 2019.

The extension until 2016 that the Board granted in December may not be sufficient to ensure the successful completion and operation of the Project. Below is a comparison of the schedule from our January 28 letter and the recent information from the design team.

Project Element	1/28/14 Letter Estimated Timeframe	2/6/14 Design Team Meeting Estimated Timeframe	1/28/14 Cumulative Timeframe	Revised Cumulative Timeframe
Project Design and Environmental Review	11 months	10 Months		
Construction Bidding and Contract Award	3 months	6 months	14 months	16 months
Project Construction	6-9 months	20 months	20-23 months	36 months
Start-up and Testing	1 month	1 month	21-24 months	37 months
Environmental Assessment	36-60 months	36-60 months	57-84 months	78-102 months

The updated construction schedule reflects the anticipated challenges and complexities of the construction of the Project. The pipeline will require five channel crossings, five roadway crossings and one railway crossing. Three diversion structures and accompanying wet wells will be built in close proximity to residential homes requiring easements from private property owners. The majority of work will be done alongside a flood control channel where access may be limited by storm events, as well as requiring coordination with the planned construction of a new bridge crossing and widening of the channel by other parties. Based these factors, the design team anticipates a realistic construction period from February 2015 through October 2016.

As reflected in the chart, the construction and start-up of the Project, assuming no unforeseen delays in permitting, right-of-way finalization or construction, is anticipated to closely approach the current expiration date for Order No. RB-2013-0060 and Order No. RB-2013-0061 of December 10, 2016. As such, the current expiration date does not allow for any data collection to assess the impact of selenium reductions in receiving waters on bird egg and fish tissue samples to measure the beneficial use improvement from the Project.

More importantly, once the current Orders expire, we will not have permit authority to operate the Project. This lack of regulatory certainty regarding the operation of the Project is extremely problematic and weakens the compliance justification for this large capital improvement investment by the Project Partners.

Mr. William Ruh
February 28, 2014
Page 3 of 3

We appreciate this opportunity to share the most up-to-date Project information with the Board. The Project Partners are committed to completing this crucial water quality improvement project as soon as possible, but are realistic in assessing the construction challenges we face as we move from conceptual project plans to final project design and eventual construction. Extension of the expiration date for Order No. RB-2013-0060 and Order No. RB-2013-0061 of December 10, 2019 would provide necessary regulatory certainty for the Project Partners as we undertake this significant investment of public funds.

Sincerely,

A handwritten signature in blue ink that reads "Eric M. Tolles". The signature is fluid and cursive, with a large initial "E" and "T".

Eric M. Tolles
Director of Community Development

cc: Kurt Berchtold, SARWQCB Executive Officer
Joanne Schneider, SARWQCB
Selenium Program Partners