

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

TIME SCHEDULE ORDER NO. R4-2013-0022

**REQUIRING PLAINS EXPLORATION & PRODUCTION COMPANY,
(INGLEWOOD OIL FIELD)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R4-2013-0021
(NPDES PERMIT NO. CA0057827)**

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) finds:

1. Plains Exploration & Production Company (hereinafter PXP or Discharger) owns and operates the Inglewood Oil Field (hereinafter Facility or Field), an actively producing oil and gas field located in the Baldwin Hills area of Los Angeles, California.
2. PXP discharges storm water from the Inglewood Oil Field under waste discharge requirements (WDRs) contained in Order No. R4-2013-0021 adopted by the Regional Water Board on February 7, 2013. Order No. R4-2013-0021 serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0057827) and it expires on January 10, 2018.
3. Order No. R4-2013-0021 authorizes the Field to discharge up to 7.55 million gallons per day (MGD) of storm water runoff. Storm water runoff including construction storm water within the Field flows via natural drainage areas to six retention basins. The retention basins and their corresponding discharge points are:

Discharge Point No.	Discharge Point Latitude	Discharge Point Longitude	Retention Basin Name	Maximum Rainfall Runoff Flow (mgd)
001	34°00'02" N	118°22'10" W	LAI Last Chance Basin	0.666
002	34°00'38" N	118°22'23" W	Dabney-Lloyd Basin	3.06
003	34°00'02" N	118°21'33" W	Stocker Basin	0.634
004	34°00'26" N	118°22'52" W	Vickers – I Basin	1.58
005	34°00'38" N	118°22'50" W	Lower Vickers- II Basin	1.01
006	34°00'37" N	118°23'11" W	Upper Vickers- II Basin	0.60

Runoff from these basins is discharged to the Los Angeles County Department of Public Works storm drain system. Two of the basins, Stocker and LAI Last Chance, discharge through the storm drain system into Centinela Creek that drains directly to Ballona Creek Estuary just below the boundary with Ballona Creek (Reach 2). The

other four basins, Dabney-Lloyd, Vickers - I, Lower Vickers - II and Upper Vickers - II, discharge through the storm drain system to Ballona Creek (Reach 2).

4. On July 7, 2005, the Regional Water Board adopted the Total Maximum Daily Load (TMDL) for metals in Ballona Creek (Resolution NO. R05-007). The State Water Board approved the TMDL on October 20, 2005; Office of Administrative Law (OAL) and USEPA approvals were received on December 9, 2005 and December 22, 2005, respectively. A revised metals TMDL was adopted by the Regional Water Board on September 6, 2007 (Resolution No. 2007-015). State Water Board, OAL, and USEPA approval occurred on June 17, 2008, October 6, 2008, and October 29, 2009, respectively. This metals TMDL designates Waste Load Allocations (WLAs) for point sources discharging into Ballona Creek, including those regulated through minor NPDES permits. For minor NPDES permits, the TMDL states, "Permit writers may translate applicable waste load allocations into effluent limits for the minor and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the State Water Resources Control Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California or other applicable engineering practices authorized under federal regulations."

The discharge from the Inglewood Oil Field has been classified as a major discharge because the permitted discharge flow (7.55 MGD) exceeds the threshold of one (1) MGD. The Ballona Creek Metals TMDL includes specific WLAs for some of the major dischargers, the MS4 permittees and CalTrans but no specific WLA has been designated for the Inglewood Oil Fields in the TMDL. Since the Inglewood Oil Field is a point source to Ballona Creek, concentration-based WLAs for dry-weather and wet-weather developed in the TMDL for other point sources are used for developing effluent limitations for discharges from the Inglewood Oil Field. However, the Metals TMDL for Ballona Creek is not applicable to the discharges from Discharge Point Nos. 001 and 003 to Centinela Creek because Centinela Creek is not listed as impaired for metals and it drains to Ballona Creek Estuary, not Ballona Creek.

5. Order No. R4-2013-0021 prescribes effluent limitations for copper, lead, selenium and zinc for each of six basins, respectively. The final effluent limitations are as follows:

Constituents	Units	Discharge Limitations Daily maximum				Rationale
		Discharge Point No. 002	Discharge Point No. 004	Discharge Point No. 005	Discharge Point No. 006	
Copper, (Dry-weather) ³	µg/L	39	39	39	39	TMDL ²
	lbs/day ¹	1.0	0.51	0.33	0.20	

Constituents	Units	Discharge Limitations Daily maximum				Rationale
		Discharge Point No. 002	Discharge Point No. 004	Discharge Point No. 005	Discharge Point No. 006	
Lead, (Dry-weather) ³	µg/L	21	21	21	21	TMDL ²
	lbs/day ¹	0.54	0.28	0.18	0.11	
Selenium, (Dry-weather) ³	µg/L	8.2	8.2	8.2	8.2	TMDL ²
	lbs/day ¹	0.21	0.11	0.069	0.041	
Zinc, (Dry-weather) ³	µg/L	498	498	498	498	TMDL ²
	lbs/day ¹	12.7	6.56	4.19	2.49	
Copper, (Wet-weather) ³	µg/L	18	18	18	18	TMDL ²
	lbs/day ¹	0.46	0.24	0.15	0.090	
Lead, (Wet-weather) ³	µg/L	59	59	59	59	TMDL ²
	lbs/day ¹	1.5	0.78	0.50	0.30	
Selenium, (Wet-weather) ³	µg/L	5.0	5.0	5.0	5.0	TMDL ²
	lbs/day ¹	0.13	0.066	0.042	0.025	
Zinc, (Wet-weather) ³	µg/L	119	119	119	119	TMDL ²
	lbs/day ¹	3.04	1.57	1.00	0.60	
		Discharge Point No. 001		Discharge Point No. 003		
Copper, (All-weather)	µg/L	23		23		CTR ²
	lbs/day ¹	0.13		0.12		
Lead, (All-weather)	µg/L	9.9		9.9		CTR ²
	lbs/day ¹	0.055		0.052		
Selenium, (All-weather)	µg/L	8.2		8.2		CTR ²
	lbs/day ¹	0.046		0.043		
Zinc, (All-weather)	µg/L	184		--		CTR ²
	lbs/day ¹	1.02		--		

1. The mass emission rates are based on the maximum permitted flow rate of each basin and are calculated using the following formula:

$$\text{Mass (lbs/day)} = \text{flow rate (MGD)} \times \text{effluent limitation (mg/L)} \times 8.34$$

2. TMDL – Total Maximum Daily Load for Metals in Ballona Creek. CTR – California Toxics Rule.

3. Dry-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek as measured at Stream Gage No. F38C-R is less than 40 cubic feet per second (cfs). Wet-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs.

The final effluent limitations prescribed are the result of an evaluation for reasonable potential for these contaminants to exist in the discharge. For Discharge Point Nos. 002, 004, 005, and 006, the final effluent limitations for copper, lead, selenium and

zinc were based on WLAs in the Ballona Creek Metals TMDL. The final effluent limitations for copper, lead, selenium and zinc for Discharge Point Nos. 001 and 003 were based on California Toxics Rule (CTR) criteria to protect the beneficial uses of the receiving water using a hardness value of 166 mg/L as CaCO₃. The USEPA promulgated the CTR criteria to protect the general population at an incremental cancer risk level of one in a million (10⁻⁶), for all priority toxic pollutants regulated as carcinogens. Since the discharge from the Facility is storm water only and it is not continuous as defined in 40 CFR section 122.2, only maximum daily effluent limitations (MDELs) are established in Order No. R4-2013-0021.

6. Based on historical analysis, the Facility cannot consistently comply with the final effluent limitations for copper, lead, selenium and zinc, which are newly prescribed in Order No. R4-2013-0021. New or modified control measures are necessary for the Facility to comply with the final effluent limitations for these constituents. Such control measures cannot be designed, installed, and put into operation within 30 calendar days.
7. On August 20, 2012, the Discharger requested that the Regional Water Board issue a Time Schedule Order (TSO) with interim effluent limitations for copper, lead, selenium and zinc because the discharge from the Facility cannot consistently meet the final effluent limitations for these metals. With the request letter, the Discharger also included a Work Plan that indicated the actions to be taken to achieve full compliance with the final effluent limitations in Order No. R4- 2013-0021. The tasks in Phase 1 include improving the storm water sampling and analysis, assessing modifications to the discharge infrastructure to minimize sediment release, improving water management by conducting releases during non-rainfall events, and evaluation of areas of potential metals accumulation. If compliance cannot be achieved by the Phase 1 measures, the Discharger will implement Phase 2 efforts. The scope of Phase 2 activities consist of two actions: redesign of the basins including the intakes and the outlet works as well as evaluation of best management practices to further reduce entrained sediments affecting the metals concentrations in the discharge from basins. Adoption of this Order allows the Discharger until September 15, 2016 to achieve compliance with the final effluent limits for copper, lead, selenium, and zinc set forth in Order No. R4-2013-0021.
8. During the past six years, the number of discharges per year on average ranges from 1.0 to 3.3 for six basins. Due to the infrequent discharges from the basins and the need to collect a representative suite of samples to demonstrate the ability to reliably comply with the final effluent limitations, the Discharger requested a four-year period for the Phase 1 activities and a total of nine (9) years for the full implementation of Phase 1 and Phase 2 measures.

9. Section 13300 of the California Water Code 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.”

10. The Discharger cannot consistently achieve compliance with the final effluent limitations for copper, lead, selenium and zinc in Order No. R4-2013-0021. Accordingly, pursuant to Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates requirements prescribed by the Regional Water Board.
11. Water Code section 13385, subdivisions (h) and (i), require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met.*" (emphasis added).
12. Therefore, this TSO establishes interim effluent limitations for copper, lead, selenium, and zinc based on performance. This TSO provides the required time for the Discharger to investigate and implement any required upgrades to bring the Inglewood Oil Field into compliance with the final effluent limitations for copper, lead, selenium and zinc. The established time schedule is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the final effluent limitations for these metals.
13. Water Code section 13385, subdivision (i)(2)(C), states that the time schedule may not exceed five years in length. Therefore, only the Phase 1 activities with a four-year implementation period are included in this TSO.
14. Since the time schedule for completion of the actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO, this TSO includes interim requirements and the dates for their achievement. The interim requirements include both interim effluent limitations for copper, lead, selenium, and

zinc and actions and milestones leading to compliance with the final effluent limitations for these metals.

15. Full compliance with the requirements of this TSO exempts the Discharger from mandatory minimum penalties only for violations of the final effluent limitations for copper, lead, selenium, and zinc in Order No. R4-2013-0021 pursuant to Water Code section 13385(j)(3).
16. The Regional Water Board has notified the Discharger, interested agencies, and interested persons of its intent to issue this TSO concerning compliance with waste discharge requirements. The Regional Water Board heard and considered all testimony pertinent to this matter in a public hearing.
17. Issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with section 15321(a)(2), title 14 of the California Code of Regulations.
18. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to the California Water Code section 13300, the Plains Exploration & Production Company, as owner and operator of the Inglewood Oil Field, shall comply with the requirements listed below to ensure compliance with the final effluent limitations for copper, lead, selenium, and zinc contained in Order No. R4-2013-0021:

1. Comply immediately with the following interim effluent limitations:

<u>Constituents</u>	<u>Units</u>	<u>Interim Effluent Limitations</u> <u>Daily Maximum^[1]</u>
Discharge Point No. 001 (LAI Last Chance Basin)		
Copper, Total Recoverable (All-weather)	µg/L	41 ^[1]
	lbs/day ^[2]	0.23

<u>Constituents</u>	<u>Units</u>	<u>Interim Effluent Limitations</u> <u>Daily Maximum^[1]</u>
Lead, Total Recoverable (All-weather)	µg/L	26 ^[1]
	lbs/day ^[2]	0.14
Selenium, Total Recoverable (All-weather)	µg/L	29 ^[1]
	lbs/day ^[2]	0.16
Zinc, Total Recoverable (All-weather)	µg/L	420 ^[1]
	lbs/day ^[2]	2.33
Discharge Point No. 002 (Dabney-Lloyd Basin)		
Copper, Total Recoverable (Wet-weather) ^[3]	µg/L	30 ^[1]
	lbs/day ^[2]	0.77
Discharge Point No. 003 (Stocker Basin)		
Copper, Total Recoverable (All-weather)	µg/L	30 ^[1]
	lbs/day ^[2]	0.16
Lead, Total Recoverable (All-weather)	µg/L	23 ^[1]
	lbs/day ^[2]	0.12
Selenium, Total Recoverable (All-weather)	µg/L	46 ^[1]
	lbs/day ^[2]	0.24
Discharge Point No. 004 (Vickers I Basin)		
Selenium, Total Recoverable (Dry-weather and Wet-weather)	µg/L	26 ^[1]
	lbs/day ^[2]	0.34
Discharge Point No. 005 (Lower Vickers II Basin)		
Copper, Total Recoverable (Wet-weather) ^[3]	µg/L	33 ^[1]
	lbs/day ^[2]	0.28
Selenium, Total Recoverable (Dry-weather and Wet-weather)	µg/L	10 ^[1]
	lbs/day ^[2]	0.084
Discharge Point No. 006 (Upper Vickers II Basin)		
Copper, Total Recoverable (Dry-weather and Wet-weather)	µg/L	61 ^[1]
	lbs/day ^[2]	0.31
Lead, Total Recoverable (Dry-weather) ^[3]	µg/L	49 ^[1]
	lbs/day ^[2]	0.25
Selenium, Total Recoverable (Dry-weather and Wet-weather)	µg/L	25 ^[1]
	lbs/day ^[2]	0.13
Zinc, Total Recoverable (Wet-weather) ^[3]	µg/L	190 ^[1]
	lbs/day ^[2]	0.95

^[1] Interim effluent limitations were established as the 99 percentile of the individual basin's monitoring data obtained between October 2004 and March 2012.

- ^[2] The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of the individual basin as shown in Finding 3.
- ^[3] Dry-weather interim effluent limitations are applicable when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs). Wet-weather interim effluent limitations are applicable when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs. Flow data can be obtained by contacting Mr. Arthur Gotingco (Tel: 626-458-6379; Email: agoting@dwp.lacounty.gov) at LACDPW.

The foregoing interim effluent limitations for copper, lead, selenium, and zinc are in effect from February 7, 2013 through February 7, 2017. During this time, the Discharger shall investigate and implement any required upgrades to ensure compliance with the final effluent limitations contained in NPDES Order No. R4-2013-0021.

2. Comply with the following schedule that is based on the Discharger's proposed Work Plan for the Phase 1 activities:

Task	Deadline
Work Plan for Sampling Methods and Non Rainfall Discharge Management	April 15, 2013
Implement Non Rainfall Discharge Management and Improved Storm Water Sampling and Analysis	May 15, 2013
Verification Sampling	February 15, 2013 – September 15, 2016
Prepare Work Plan for Discharge Structure Modification, as necessary	April 15, 2015
Implement Work Plan for Discharge Structure Modification, as necessary	April 15, 2016
Non Rainfall Discharge Management	September 15, 2016
Evaluation of Areas of Potential Metals Accumulation	September 15, 2016
Submit Semiannual Report	February 15 and August 15 of each year

3. Achieve full compliance with the final effluent limitations for copper, lead, selenium, and zinc in Order No. R4-2013-0021 no later than September 15, 2016.
2. Submit semiannual progress reports of efforts taken towards compliance with the final effluent limitations and/or diversion of the discharge. The reports shall summarize the progress to date, activities conducted during the reporting period, and the activities planned for the upcoming period. Each report shall be submitted to this Regional Water Board by February 15th and August 15th for the second half of the previous reporting year and the first half of the reporting year, respectively, and include milestones completed and any new pertinent updates. The first semiannual progress report is due on August 15, 2013.
3. Submit a Pollution Prevention Plan (PPP) workplan, with the time schedule for implementation, for approval of the Executive Officer within 180 days after the adoption of this TSO, pursuant to California Water Code section 13263.3.
4. Submit a final report on the results of the implementation and evaluation of the selected actions/measures by December 15, 2016. The report shall include: a) a description of the actions/measures selected, b) the monitoring data collected after the implementation of the selected actions/measures including treatment process, if any, and c) an evaluation of the effectiveness of the selected actions/ measures.
5. All technical and monitoring reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Regional Water Board needs the required information in order to determine compliance with this TSO and Order No. R4-2013-0021. The Regional Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
6. Any person signing a document submitted under this TSO shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. If the Discharger fails to comply with any provisions of this TSO, the Regional Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate administrative enforcement action pursuant, but not limited to, Water Code sections 13350 and 13385. The Regional Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.
8. All other provisions of NPDES Order No. R4-2013-0021 not in conflict with this TSO are in full force and effect.
9. This Time Schedule Order expires on September 15, 2016.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on February 7, 2013.



Samuel Unger, P.E.
Executive Officer