

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

**TIME SCHEDULE ORDER NO. R4-2018-0021-A1**

**REQUIRING SENTINEL PEAK RESOURCES CALIFORNIA, LLC  
(INGLEWOOD OIL FIELD)  
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN  
ORDER NUMBER R4-2018-0020  
(NPDES PERMIT NO. CA0057827)**

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

1. Sentinel Peak Resources California, LLC (hereinafter Discharger or Permittee) 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. The Facility discharges storm water under waste discharge requirements (WDRs) contained in Order Number R4-2018-0020, adopted by the Regional Water Board on February 8, 2018. Order Number R4-2018-0020 serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0057827) and it expires on March 31, 2023.
2. Order Number R4-2018-0020 authorizes the Field to discharge up to 7.55 million gallons per day (MGD) of storm water runoff. Storm water runoff including storm water from construction sites within the Field flows to six retention basins via natural drainage areas. The retention basin names, and their corresponding discharge points, are as follows.

**Table 1: Retention Basin Characteristics**

<b>Discharge Point</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Retention Basin Name</b>	<b>Maximum Rainfall Runoff Flow (MGD)</b>
001	33.9894°	-118.3692°	L A I Last Chance Basin	0.666
002	34.0144°	-118.3747°	Dabney-Lloyd Basin	3.06
003	34.9908°	-118.3611°	Stocker Basin	0.634
004	34.0008°	-118.3842°	Vickers - I Basin	1.58
005	34.0081°	-118.3867°	Lower Vickers - II Basin	1.01
006	34.0100°	-118.3867°	Upper Vickers - II Basin	0.60

Storm water runoff from these basins is discharged to the Los Angeles County Flood Control District storm drain system. Two of the basins, L A I Last Chance and Stocker, 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.

3. On February 8, 2018, the Regional Water Board adopted Order Number R4-2018-0020, which became effective on April 1, 2018. Order Number R4-2018-0020 established for the first time effluent limitations for total petroleum hydrocarbons (TPH) because the Facility is an active oil and gas production facility and monitoring data indicated the presence of TPH in the effluent. The effluent limitations are based on the taste and odor threshold of 100 micrograms per liter for diesel identified in "SNARL for Fuel Oil #2 or Kerosene" published by U.S. EPA in 1980.<sup>1</sup> The daily maximum effluent limitation for TPH at the six discharge points in Order Number R4-2018-0020 is 100 micrograms per liter. The corresponding mass effluent limitations at each of the basins is calculated based on the permitted flow limit. The discharge from the Facility is storm water only and it is not continuous as defined in 40 C.F.R. section 122.2; therefore, only maximum daily effluent limitations were established.
4. A time schedule order (TSO) was issued concurrently with the NPDES permit (TSO No. R4-2018-0021), which included interim limits of 1,000 micrograms per liter for TPH and corresponding mass limits calculated based on the maximum permitted flow from the respective basin. The interim effluent limits were effective for 16 months and seven days; they expired on August 7, 2019. TSO No. R4-2018-0021 also included interim effluent limitations with a time schedule for copper, lead and zinc (metals) at the retention basins where discharge concentrations were exceeding applicable final effluent limitations included in the NPDES permit.
5. This TSO amendment is only for TPH. The interim limits for the metals included in TSO Number R4-2018-0021 expired and the Discharger has implemented the treatment systems designed to treat metals at each of the retention basins.
6. Due to the infrequent discharges (ranging from 1.0 to 3.3 times per year on average) 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 needs additional time in which to comply with the final effluent limitations for TPH in Order Number R4-2018-0020. On April 17, 2019 the Discharger submitted a request for additional time to come into compliance with the final effluent limitations for TPH. On July 1, 2019 an updated request was submitted requesting that the

---

<sup>1</sup> SNARL means "Suggested No Adverse Response Level."

compliance period end on March 31, 2023, which is the date on which the NPDES permit Order Number R4-2018-0020 expires. On May 28, 2019, the TPH data collected from December 2018 through February 2019 was submitted to the Regional Water Board.

7. During the 2018-2019 storm season there was only one discharge event from the Stocker and Upper Vickers - II Basins, two discharge events from the L A I Last Chance Basin and three from the Dabney-Lloyd Basin. The detected effluent concentrations for TPH were as follows.

**Table 2: TPH Effluent Concentrations in Micrograms per Liter During 2018-2019 Storm Season**

Discharge Point	Name	Sample Date	TPH	Result	J-Flag	Method Detection Limit	Reporting Limit
EFF-001	L A I Last Chance Basin	1/14/2019	C4 to C12	ND <sup>1</sup>	NA <sup>2</sup>	50	100
EFF-001	L A I Last Chance Basin	1/14/2019	C13 to C22	ND	NA	100	500
EFF-001	L A I Last Chance Basin	1/14/2019	C23 to C36	ND	NA	250	1,250
EFF-001	L A I Last Chance Basin	2/14/2019	C4 to C12	ND	NA	50	100
EFF-001	L A I Last Chance Basin	2/14/2019	C13 to C22	ND	NA	100	500
EFF-001	L A I Last Chance Basin	2/14/2019	C23 to C36	1,850	J	500	2,500
EFF-002	Dabney-Lloyd Basin	12/6/2018	C4 to C12	ND	NA	100	500
EFF-002	Dabney-Lloyd Basin	12/6/2018	C13 to C22	276	J	100	500
EFF-002	Dabney-Lloyd Basin	12/6/2018	C23 to C36	749	J	500	2,500
EFF-002	Dabney-Lloyd Basin	2/5/2019	C4 to C12	ND	NA	50	100
EFF-002	Dabney-Lloyd Basin	2/5/2019	C13 to C22	ND	NA	100	500

<sup>1</sup> ND means non-detected.

<sup>2</sup> NA means not available.

Discharge Point	Name	Sample Date	TPH	Result	J-Flag	Method Detection Limit	Reporting Limit
EFF-002	Dabney-Lloyd Basin	2/5/2019	C23 to C36	ND	NA	500	2,500
EFF-002	Dabney-Lloyd Basin	2/14/2019	C4 to C12	ND	NA	50	100
EFF-002	Dabney-Lloyd Basin	2/14/2019	C13 to C22	ND	NA	100	500
EFF-002	Dabney-Lloyd Basin	2/14/2019	C23 to C36	ND	NA	500	2,500
EFF-003	Stocker Basin	2/14/2019	C4 to C12	ND	NA	50	100
EFF-003	Stocker Basin	2/14/2019	C13 to C22	ND	NA	100	500
EFF-003	Stocker Basin	2/14/2019	C23 to C36	929	J	500	2,500
EFF-006	Upper Vickers-II Basin	2/14/2019	C4 to C12	ND	NA	50	100
EFF-006	Upper Vickers-II Basin	2/14/2019	C13 to C22	ND	NA	50	250
EFF-006	Upper Vickers-II Basin	2/14/2019	C23 to C36	ND	NA	250	1,250

8. Because of the nature of the sediment (i.e., very fine grained), only field trials during or immediately after rainfall events can provide the necessary data such as the required treatment system residence time during extended storm events and the proper dosage of applied chemicals required for the optimization of a treatment system to remove TPH. However, the number of rainfall events fell short of what is required to conduct comprehensive treatment system testing and specification of a final system design that would provide repeatable results for TPH. Therefore, additional time is required for additional performance tests during actual rainfall events in order to finalize the design parameters of the treatment system.
9. TSO Number R4-2018-0021 expired on August 7, 2019. The Discharger has only had sixteen months to determine if the current treatment technologies implemented to address exceedances of permit limits for metals have also been able to address elevated concentrations of TPH in the discharges from the site.
10. California Water Code (Water Code) 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.”

11. The monitoring data from the 2018 to 2019 storm season indicated that the Facility’s discharge exceeded the effluent limitation for TPH in Order Number R4-2018-0020. As such, the Facility may not be able to consistently comply with the final effluent limitation in Order Number R4-2018-0020. Accordingly, pursuant to the 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.
12. 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. Subsection 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). Applicable requirements are set forth below.
13. Water Code section 13385, subsection (j)(3)(B)(i), allows a TSO to issue for a period of time not to exceed five years for a particular constituent if the “regional board finds that... the discharger is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements” if the “effluent limitation is a *new*, more stringent, or modified regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.” (emphasis added). Similarly, Water Code section 13385, subsection (j)(3)(B)(ii) allows a TSO to issue if “[n]ew methods for detecting or measuring a pollutant in the waste discharge demonstrate that new or modified control measures are necessary in order to comply with the effluent limitation and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.”
14. Prerequisites to issuing a TSO for this pollutant include those set forth in Water Code section 13385 subdivisions (j)(3)(C)(i) and (j)(3)(C)(iii):

The TSO must establish “a time schedule for bringing the waste discharge into compliance with the effluent limitation that is as short as possible, taking into account the technological, operational, and economic factors that affect design, development and implementation of the control measures that are necessary to comply with the effluent limitation,” (Water Code section 13385(j)(3)(C)(i); and if the time schedule

exceeds one year from the effective date of the order, the schedule shall include interim requirements and the dates for their achievement. The interim requirements shall include both .... (I) Effluent limitations for the pollutant or pollutants of concern. (II) Actions and milestones leading to compliance with the effluent limitation. (Water Code section 13385(j)(3)(C)(iii).)

15. The Regional Water Board issues this TSO amendment with interim effluent limitations for TPH based on all of the findings set forth herein, and the following:

- (a) The effluent limitation of 100 micrograms per liter for TPH is a new regulatory requirement that became applicable to the Facility's waste discharge in Order No. R4-2018-0020, which was adopted on February 8, 2018 and became effective April 1, 2018.
- (b) The interim effluent limitation for TPH of 1,000 micrograms per liter was proposed by the Discharger and included in the prior TSO No. R4-2018-0021 and in this TSO amendment.
- (c) New control measures may be necessary in order to comply with the effluent limitation, and the new control measures cannot be designed, installed or put into operation within 30 calendar days. The Discharger needs time to complete final design, installation and optimization of the storm water treatment system to remove TPH for each of six basins.
- (d) The time schedule for TPH set forth herein ends on March 31, 2023. The time schedule in TSO No. R4-2018-0021 for TPH began on April 1, 2018 and extended through August 7, 2019. The time limits set forth in this TSO amendment for TPH combined with that in the prior TSO do not exceed 5 years.
- (e) The Discharger is making diligent progress toward bringing its discharges into compliance with the final TPH effluent limitation in Order No. R4-2018-0020. As set forth above in paragraphs 6 through 9, the Discharger has demonstrated that the additional time in this TSO is necessary to comply with the effluent limitation for TPH. Specifically, 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 limitation for TPH.

16. 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 amendment, this TSO amendment includes interim requirements and dates for their achievement. The interim requirements include both an interim effluent limitation for

TPH and actions with milestones leading to compliance with the final effluent limitations for the pollutant.

17. Additionally, the Regional Water Board finds that the temporary exceedances of TPH allowed by this TSO are in the public interest because it allows the Discharger time to calibrate and install its treatment system for TPH, which will provide significant environmental benefits associated with achieving compliance with the final effluent limitation for the pollutant and the associated net decrease in the mass of the pollutant discharged from the Facility. A TSO is appropriate in these circumstances to allow time for the Permittee to complete necessary field testing of treatment technologies and facility modifications that will bring the Facility into compliance with the final effluent limitation for TPH included in Order No. R4-2018-0020.
18. This TSO continues to require that discharges comply with the interim effluent limitation of 1,000 micrograms per liter for TPH and the associated mass effluent limitations at each basin consistent with the requirement included in TSO No. R4-2018-0021. 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 may be necessary to comply with the final effluent limitations for the pollutant and to test the efficacy of the selected technology.
19. Pursuant to the Water Code section 13385(j)(3), full compliance with the requirements of this TSO exempts the Permittee from mandatory minimum penalties (MMPs) only for violations of the final effluent limitations for TPH at all Discharge Points in Order No. R4-2018-0020 that occur after the effective date and until the expiration date of this TSO. If an interim effluent limitation contained in this TSO is exceeded, the Discharger is subject to MMP for that particular exceedance as the waste discharge is not in compliance with a TSO pursuant to Water Code section 13385, subdivision (j)(3). It is the intent of the Regional Water Board that a violation of an interim effluent limitation subjects the Discharger to one MMP for the day in which the sample was collected for that pollutant.
20. The issuance of this TSO is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15301 because the TSO pertains to an existing facility and involves negligible or no expansion of an existing use. In addition, the issuance of this TSO is categorically exempt from C E Q A pursuant to California Code of Regulations, title 14, sections 15307, 15308, and 15321, subdivision (a)(2). The issuance of this TSO is an action to assure the maintenance, restoration, enhancement and protection of the environment and a natural resource and is also an enforcement order issued by the Regional Water Board.

21. The Regional Water Board has notified the Discharger, interested agencies, and interested persons of its intent to issue this TSO amendment concerning compliance with waste discharge requirements. The Regional Water Board considered all comments pertinent to this prior to issuing this Order.
22. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with the Water Code section 13320 and the 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](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 Sentinel Peak Resources California, LLC 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 TPH contained in Order No. R4-2018-0020:

1. Comply immediately with the following interim effluent limitations at the discharge points.

**Table 3: Interim Effluent Limitations**

Constituent	Outfalls	Units	Interim Effluent Limitations Daily Maximum
Total Petroleum Hydrocarbons (TPH) <sup>1</sup>	001-006	micrograms per liter	1,000 <sup>2</sup>
	001	pounds per day <sup>3</sup>	5.6
	002	pounds per day	25
	003	pounds per day	5.2
	004	pounds per day	13
	005	pounds per day	8.4
	006	pounds per day	5.0

<sup>1</sup> TPH equals the sum of gasoline (C4 - C12), diesel (C13 - C22), and waste oil (C23+).

<sup>2</sup> The interim effluent limitation for TPH was proposed by the Discharger, which is less than the 99th percentile value derived from all TPH data reported during the term of Order No. R4-2013-0021.

<sup>3</sup> The mass limitations in pounds per day were calculated using the concentration limits and the maximum flow rate of the individual basin as identified in Table 1.

The foregoing interim effluent limitations for TPH are in effect from September 2, 2019 through March 31, 2023. During this time, the Discharger shall investigate and implement any required upgrades to ensure compliance with the final effluent limitations for TPH contained in Order No. R4-2018-0020.

2. The Permittee must comply with the following schedule, which is based on the Discharger's Work Plan dated July 17, 2019:
  - Complete source identification analysis of TPH concentrations in stormwater entering the site from adjacent properties.
  - Prepare and submit 2019/2020 rainy season basin/stormwater system site plans, piping and instrument diagrams and proposed stormwater process systems including equipment to be used for TPH removal 30 days after the effective date of the TSO amendment.
  - Installation of 2019/2020 updated storm water treatment process systems at each basin, if applicable by October 1, 2019.
  - Evaluation of various activated carbon products presented by vendors who have credible data showing TPH removal efficacies. Verification sampling and testing for TPH at activated carbon system inlet and outlet points during discharge events during the 2019/2020 storm season. Include monitoring results in semiannual reports.
  - Prepare and submit 2020/2021 rainy season basin/stormwater system site plans, piping and instrument diagrams for proposed stormwater process systems including equipment to be used for TPH removal by August 15, 2020.
  - Installation of 2021/2022 updated storm water treatment process systems at each basin, if applicable by October 1, 2021.
  - Side-by-side testing during the 2021-2022 storm season of two granular activated carbon or GAC filters at one basin. The two filter trains, each containing different GAC types shall be those that are most promising based on their ability to consistently achieve low levels of TPH in the effluent.
  - Verification sampling and testing for TPH at activated carbon system inlet and outlet points when discharging during the 2020/2021 storm season. Test efficacy of activated carbon filters at varying flow rates including maximum discharge rate permitted by the NPDES permit at the filter inlet at discharge basins. Include monitoring results in semiannual reports.
  - Collect and provide data associated with the cost of compliance with the TPH effluent limitation.
3. Achieve full compliance with the final effluent limitations for TPH in Order No. R4-2018-0020 no later than March 31, 2023.

4. Submit semiannual progress reports of efforts taken towards compliance with the final effluent limitations. 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 15<sup>th</sup> for the period of July 1<sup>st</sup> through December 31<sup>st</sup> and August 15<sup>th</sup> for the period for January 1<sup>st</sup> through June 30<sup>th</sup>, and include milestones completed and any new pertinent updates. The first semiannual progress report is due on February 15, 2020.
5. Submit a Pollution Prevention Plan (PPP) workplan, with the time schedule for implementation, for approval of the Executive Officer within 90 days after the adoption of this TSO amendment, pursuant to California Water Code section 13263.3.
6. Submit a final report on the results of the implementation of the selected treatment system at each of the basins where discharges will occur by May 15, 2023. The report shall include: a) a description of the selected treatment system, b) the monitoring data collected after the implementation of the selected treatment system, c) an evaluation of the effectiveness of the selected treatment system, (d) TPH source identification study results, and (e) cost of compliance data.
7. All technical and monitoring reports required under this TSO amendment 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. R4-2018-0020. 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.
8. Any person signing a document submitted under this TSO amendment 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.”
9. If the Discharger fails to comply with any provisions of this TSO amendment, 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

Sentinel Peak Resources California, LLC  
(Inglewood Oil Field)  
Time Schedule Order No. R4-2018-0021-A1

CA0057827

13385. The Regional Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.

10. This Time Schedule Order amendment is effective on September 2, 2019 and expires on March 31, 2023.

SO ORDERED.



Renee Purdy, Executive Officer