



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



MAY 15 2014

Mr. Kawika Tupou  
Shell Pipeline Company LP  
20945 S Wilmington  
Carson, CA 90810-1039

**Re: Notice of Final Action - Significant Title V Permit Modification  
District Facility # S-83  
Project # S-1140301**

Dear Mr. Tupou:

The Air Pollution Control Officer has modified the Title V permit for Shell Pipeline Company LP at Emidio Pumping Station near Mettler, CA incorporating S-83-12-8). The modification involves assigning a maximum throughput of an external floating roof petroleum storage tank to 100,000 barrels per day and allowing a maximum true vapor pressure of products stored of 11.0 psia.

Enclosed is the modified Title V permit. The application and proposal were sent to CARB and US EPA Region IX on March 20, 2014. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

  
Arnaud Marjollet  
Director of Permit Services

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email  
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin  
Executive Director/Air Pollution Control Officer

Northern Region  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

  
**HEALTHY AIR LIVING™**

## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-83-12-8

**ISSUANCE DATE:** 05/12/2014

**LEGAL OWNER OR OPERATOR:** SHELL PIPELINE COMPANY LP  
**MAILING ADDRESS:** 20945 S WILMINGTON AVE  
CARSON, CA 90810-1039

**LOCATION:** EMIDIO STATION  
METTLER, CA

**SECTION:** SE 7 **TOWNSHIP:** 11N **RANGE:** 20W

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 4,200,000 GALLON (100,000 BBL) WELDED EXTERNAL FLOATING ROOF PETROLEUM STORAGE TANK # 100GK6 WITH METALLIC SHOE PRIMARY SEAL AND ROOF MOUNTED WIPER TYPE SECONDARY SEAL: AUTHORIZE THROUGHPUT OF 100,000 BBL/DAY AND MAXIMUM TVP OF 11 PSIA

## CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 5,118 lb, 2nd quarter - 5,118 lb, 3rd quarter - 5,118 lb, and fourth quarter - 5,118 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERCs specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers N-474-1, S-1807-1, S-3158-1, S-4222-1, S-4225-1, and S-4226-1 (or a certificate split from the listed certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO



Claude Marjollet, Director of Permit Services

S-83-12-8 May 12 2014 11:11AM - LEONARDS Joint Inspection NOT Required

5. Vapor control requirements of NSPS Subpart Kb and Rule 4623, included in Conditions #10 through #43 below, are not applicable when the tank stores, places, or holds organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4001 and 4623] Federally Enforceable Through Title V Permit
6. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Kb references. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods of District Rule 4623 Section 6.4 (Amended May 19, 2005) or an equivalent method approved by the APCO, ARB, and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
8. Tank shall be equipped with operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Throughput shall not exceed 100,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC emission rate shall not exceed 84.1 lb/day on a monthly average daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The True Vapor Pressure (TVP) of any liquid introduced, placed, or stored shall be less than 11.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal. [District Rule 2201; District Rule 4623, 5.3.1.2 and 40 CFR 60.112b(a)(2)(i)] Federally Enforceable Through Title V Permit
13. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40 CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit
14. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 40 CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
15. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 40 CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
16. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 40 CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
17. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 40 CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
18. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2, 6.1 and 40 CFR 60.113b(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit
19. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 40 CFR 60.113b(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit
20. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 40 CFR 60.113b(b)(4)(i)(A)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit
22. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. Except for gaps meeting permit requirements, the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. [District Rule 4623, 5.3.2.1.5; 40 CFR 60.112b(a)(2)(i)(A), 40 CFR 60.113b(b)(4)(i)(B) and 60.113b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit
23. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit
24. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. Except for gaps meeting permit requirements, the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [District Rule 4623, 5.3.2.1.7; 40 CFR 60.112b(a)(2)(i)(B) and 40 CFR 60.113b(b)(4)(ii)(A)] Federally Enforceable Through Title V Permit
25. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623, 5.2 & 5.5.1] Federally Enforceable Through Title V Permit
26. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.10 and 6.4.8] Federally Enforceable Through Title V Permit
27. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1, and 40 CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit
28. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2, and 40 CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit
29. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, and 40 CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit
30. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4, and 40 CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit
31. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5, and 40 CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit
32. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit
33. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit
34. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

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35. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit
36. The slotted guidepole well on a external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit
37. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit
38. The permittee of external floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1] Federally Enforceable Through Title V Permit
39. Measurements of gaps between the tank wall and the primary and secondary seal shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with a volatile organic liquid. [40 CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit
40. If any source ceases to store volatile organic liquid for a period of 1 year or more, subsequent introduction of volatile organic liquid into the vessel shall be considered an initial fill. [40 CFR 60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit
41. The permittee shall inspect all floating roof tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. Permittee shall measure seal gaps, at one or more floating roof levels when the roof is floating off the roof leg supports, around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1; 40 CFR 60.113b(b)(1)(i) & (ii); and 40 CFR 60.113b(b)(2)(i) & (ii)] Federally Enforceable Through Title V Permit
42. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary before filling or refilling the storage vessel. The owner or operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling. [District Rule 4623, 6.1.3.2 and 40 CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit
43. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of Rule 4623. [District Rule 4623, 6.3.5 and 40 CFR 60.115b(b)] Federally Enforceable Through Title V Permit
44. Permittee shall notify District at least 30 days prior to the date when unobstructed primary and secondary seal/gap measurements will occur to afford the APCO the opportunity to have an observer present. [40 CFR 60.113b(b)(5)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4)(i) and (ii). If necessary repairs cannot be made within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO. Such an extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit
46. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rules 2520, 9.3.2 and 4623, 6.2] Federally Enforceable Through Title V Permit
47. The owner or operator of each storage vessel shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Such records shall be retained for the life of the source. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
48. Permittee shall maintain records of average daily throughput. [District Rule 2201 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
49. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
50. Permittee shall maintain a record of the liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [District Rule 2201 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
51. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3 and 40 CFR 60.116b(a)] Federally Enforceable Through Title V Permit
52. Compliance with permit conditions in the Title V permit shall be deemed compliance with District Rule 4623 (amended May 19, 2005) and 40CFR60 Subpart Kb. A permit shield is granted from this requirement. [District Rule 2520, 13.2]