



DEPARTMENT OF FORESTRY AND FIRE PROTECTION
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December 17, 2024

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SUBJECT: LETTER OF DECISION ON THE STATE WAIVER REQUEST FOR LIMITED EFFECTIVENESS OF CATHODIC PROTECTION ON THERMALLY INSULATED PIPELINE AND CORROSION OF OR ALONG A LONGITUDINAL SEAM WELD (CA-325A/B)

Operator: Sable Offshore Corp
OPID# 40851
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Pipeline: OSFM Line ID 0001 - 113.56 miles (Gaviota to Sisquoc to Pentland) of Sable Offshore Corp CA-325A/B (OSFM Line ID 0001) located in Santa Barbara County, San Luis Obispo County, and Kern County, California as described in the request of state waiver dated April 24, 2024

Dear Mr. Yearwood:

The Office of the State Fire Marshal (OSFM) received Sable Offshore Corp's (*Sable*) state waiver request (*Application*) on April 24, 2024, in accordance with the terms of the Consent Decree (CD) between Plains Pipeline, L.P. and the United States of America and the People of the State of California, DOJ Case REF. NO. 90-5-1-1-1130 (Appendix B, Article 1.1.D).

In addition, Sable requested a regulatory relief from Title 49 Code of Federal Regulations (49 C.F.R.), § 195.452(h)(4)(iii)(H) *Corrosion of or along a longitudinal seam weld* for Sable CA-325 A/B.

Sable explained that its goal is to appropriately manage the risk of corrosion under insulation that may occur as a result of inadequate cathodic protection due to the

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shielding effects of the polyurethane foam and the polyethylene tape wrap. Sable described the measures it has taken to address this risk and implemented and proposed a number of additional measures designed to mitigate the risk of corrosion under insulation that may result from potential ineffective cathodic protection (CP).

Sable provided the OSFM with its proposed measures to mitigate the risk of corrosion under insulation. Sable also provided the OSFM information from the completed in-line inspections and additional data requested by our office. The OSFM Pipeline Safety Engineers have reviewed the materials provided and have been in communication with the United States Department of Transportation (USDOT), Pipeline and Hazardous Materials Safety Administration (PHMSA) Engineering and Research Division to incorporate PHMSA's recommended conditions into the state waiver.

The OSFM has regulatory jurisdiction over the safety standards and practices of intrastate hazardous liquid pipeline transportation within California. As a Pipeline Safety Program that is certified under 49 USC § 60105, the OSFM may grant a state waiver with a pipeline safety regulation adopted by the state of California. Title 49 C.F.R., Part 195 was adopted by reference as it relates to hazardous liquid pipelines within Title 19 California Code of Regulations (19 CCR), Section 2000.

This state waiver applies to Sable's Line CA-325A/B (OSFM Line ID 0001) which consists of a 113.56 mile long, 30-inch outside diameter pipeline segment with the origin and termination points as described in the application. The pipeline is located in Santa Barbara County, San Luis Obispo County, and Kern County, California and shall be referred herein as CA-325A/B. CA-325A/B consists of two shorter pipeline segments, CA-325A and CA-325B. The pipeline segment CA-325A, located completely in Santa Barbara County, starts in Gaviota and ends at Sisquoc. CA-325A is approximately 38.72 miles long. The other pipeline segment, CA-325B, which is directly downstream of CA-325A, begins at Sisquoc and terminates in Pentland. CA-325B is approximately 74.84 miles long and traverses Santa Barbara County, San Luis Obispo County, and Kern County, California. The state waiver shall not become effective until (1) PHMSA issues an Order approving the waiver or stating it has no objection to the waiver or (2) PHMSA takes no action on the waiver within sixty (60) days after receiving the Letter of Decision from the OSFM.

The state waiver is limited to a term of no more than ten (10) years from the date it becomes effective, which shall be considered as the date of issuance. The OSFM may terminate the state waiver under conditions detailed below.

Applicable Regulations

The OSFM hereby grants this state waiver for CA-325 A/B, provided that Sable complies with the specific requirements in this state waiver and any additional conditions outlined by PHMSA. The pipeline must be operated and maintained in accordance with the CD, these

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state waiver conditions and 49 C.F.R. Part 195, with the exception of 49 C.F.R. §195.452(h)(4)(iii)(H). In event of a conflict between the state waiver conditions and the applicable requirements under 49 C.F.R. Part 195, the state waiver conditions control. Should additional federal or State statutory or regulatory requirements come into effect following the implementation of this state waiver, CA-325 A/B shall be subject to those requirements except where they are in conflict with the State Waiver or the safe operation of the pipeline.

General Conditions

1. The pipeline can only be used to transport crude oil as stated in the application.
2. The maximum operating pressure (MOP) cannot exceed:
 - a. 1000 pounds per square inch gauge (psig) for CA-325A.
 - b. 1292 psig for CA-325B.
3. The maximum operating temperature of the crude oil must not exceed:
 - a. 125 Fahrenheit for more than 12 consecutive hours for CA-325A.
Temperature transmitters must be installed on CA-325A at Gaviota station to monitor the temperature of CA-325A/B at this facility.
 - b. 110 Fahrenheit for more than 12 consecutive hours for CA-325B.
Temperature transmitters must be installed on CA-325A/B at Sisquoc station to monitor the temperature of CA-325A/B at this facility.
4. Prior to startup, Sable must develop and implement procedures for the conditions and requirements described in the state waiver.
5. This state waiver does not relieve Sable from other requirements under 49 C.F.R. Part 195 or the Elder California Pipeline Safety Act of 1981 other than contained herein.
6. This state waiver does not relieve Sable from any requirements imposed by the Consent Decree (United States District Court Central District of California Civil Action No. 2:20-cv-02415).
7. In-line inspection must include:
 - a. Use of a tool that is at least capable of reliably detecting and identifying cluster corrosion and general corrosion. Definition of cluster and general corrosion is as follows:
 - i. Cluster means two or more adjacent metal loss features in the wall of the pipe or weld that may interact based on interaction criteria.
 - ii. General corrosion means uniform or gradually varying loss of wall thickness over an area.
 - b. Use of a tool that is at least capable of reliably detecting and sizing corrosion at a 90 percent probability of detection (POD) and probability of identification (POI)
 - c. Use of a tool that is at least capable of reliably detecting and sizing crack or crack-like anomalies at a 90 percent POD and POI

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8. Prior to placing CA-325A/B in operation, Sable must perform fracture toughness tests on the existing 30" pipe from CA-325A/B in accordance with ASTM E1820-23B Standard Test Method for Measurement of Fracture Toughness. All of the test specimens must be from both of the two following predominant existing 30" pipe specifications:
 - a. API 5L X70 pipe with a nominal thickness of 0.281" that was manufactured by the various pipe mills in the 1980s.
 - b. API 5L X65 pipe with a nominal thickness of 0.344" that was manufactured by the various pipe mills in the 1980s.

At least three (3) separate tests must be performed from each pipe mill, for both of the two pipe specifications listed above, to obtain the fracture toughness values of the pipe body, heat affected zone (HAZ)¹, and the DSAW long seam weld on the pipe to represent the fracture toughness of CA-325A/B (i.e. three (3) samples for pipe body, three (3) samples for HAZ, and three (3) samples for the DSAW long seam weld). The lowest fracture toughness value must be applied to conditions 10, 31, 34, and 49. Sable may use pipe samples taken opportunistically during ongoing pipeline maintenance and repair efforts.²

9. All immediate and 180-day repair conditions that are listed in this state waiver must be evaluated and remediated prior to restarting CA-325A/B. Sable must utilize Ultrasonic Thickness Wall Measurement (UTWM) and Ultrasonic Shear Wave Crack Detection (USCD) in-line inspection (ILI) tools within seven (7) days of achieving initial steady state operation in accordance with an ILI survey schedule approved by the OSFM. Sable must utilize the most recent Ultrasonic Thickness Wall Measurement (UTWM) and Ultrasonic Shear Wave Crack Detection (USCD) in-line inspection (ILI) results when identifying these repair conditions.
10. Remaining strength of pipe calculation for all metal loss anomalies must be in accordance with the Modified B31G method as described in ASME B31G *Manual for Determining the Remaining Strength of Corroded Pipelines*. If ASME B31G 2012 Edition is used, then it must comply with the conditions in accordance with Section 1.2 and exclusions in accordance with Section 1.3 of ASME B31G 2012 Edition. However, if the metal loss anomaly intersects or is within one (1) inch (circumferentially) of the longitudinal seam weld, Sable must also calculate the predicted failure pressure of the anomaly by using the crack-like flaw evaluation method ASME FFS-1/API 579-1.
11. Sable must utilize cleaning pigs at regular intervals not to exceed a biweekly basis to maintain adequate cleanliness on the internal pipe wall of its CA-325A/B.

¹ The heat affected zone (HAZ), as used in the state waiver, is defined as a 1-inch-wide area on either side of the longitudinal weld seam.

² Sable must submit all fracture toughness results to the OSFM prior to restarting the pipeline.

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Pressure Testing

12. Prior to placing the pipeline in operation, Sable must conduct a spike hydrostatic pressure test of the state waiver pipeline segment CA-325A at a minimum pressure that is at least 1.39 times the MOP, for a minimum of 15 minutes after the spike test pressure is stabilized. Sable must ensure that the spike hydrostatic pressure at the highest elevation of each testable segment is at least 1.39 times the MOP. Sable must field evaluate and remediate the following anomalies before performing the spike hydrostatic test on CA-325A:
 - a. All metal loss anomalies that have an ILI reported depth of 40% and greater wall loss.
 - b. All anomalies that have a predicted failure pressure less than or equal to 1.5 times MOP.
13. Immediately following the spike hydrostatic pressure test, Sable must conduct an 8-hour hydrostatic pressure test of the state waiver pipeline segment CA-325A at a minimum of 1.25 times the MOP.
14. Prior to placing the pipeline in operation, Sable must conduct a hydrostatic pressure test of the state waiver pipeline segment CA-325B at a minimum pressure of 1.25 times the MOP, for a minimum of 8 hours. Sable must ensure that the hydrostatic pressure at the highest elevation of each testable segment is at least 1.25 times the MOP. Sable must field evaluate and remediate the following anomalies before performing the hydrostatic test on CA-325B:
 - a. All metal loss anomalies that have an ILI reported depth of 40% and greater wall loss.
 - b. All anomalies that have a predicted failure pressure less than or equal to 1.4 times MOP.
15. Sable must obtain the Test ID from the OSFM for each hydrostatic pressure test segment and have the approved independent testing firm forward the certified test results to the OSFM.
16. Each hydrostatic pressure test must be performed in accordance with the applicable requirements of 49 C.F.R., Part 195 E – Pressure Testing and monitored by an independent testing firm listed under the OSFM approved hydrostatic testing companies.
17. Failures resulting from the spike hydrostatic pressure test or the 8-hour strength test shall be immediately reported³ to the OSFM via email at PipelineNotification@fire.ca.gov
Subject: OSFM State Waiver - Hydrotest Failure.
18. Section(s) of the state waiver pipeline segments that failed during the required hydrotesting must be repaired by removing and replacing the failed section. The OSFM reserves the right to revoke the state waiver if failure(s) raise the concern that the pipeline cannot be safely operated.

³ In addition to the OSFM reporting, Sable shall follow all additional state reporting requirements.

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In-Line Inspection (ILI) Assessment and Frequency

19. At least 90 days prior to performing in-line inspections of the state waiver segment, Sable shall provide the OSFM with a written notification to PipelineNotification@fire.ca.gov describing its assessment plan with the following information:
 - a) Dates for integrity assessment
 - b) In-line inspection tool(s) selected, in accordance with API Standard 1163 Section 5 and NACE SP0102⁴ to assess the integrity of the subject pipe segment(s) in which ILIs must be capable to detect and size wall loss, dents, internal corrosion, external corrosion, cracks and crack-like indications
 - c) In-line inspection tool vendor(s)
 - d) Required tool specifications including operational specifications and anomaly sizing tolerances
 - e) Tool validation methodology
 - f) Anomaly feature identification criteria and reporting thresholds – wall loss, dents, internal corrosion, external corrosion, cracks, and crack-like indications
 - g) Criteria used to identify locations for excavation and field verification
 - h) Non-destructive examination
20. Within seven (7) days prior to any anticipated ILI tool run, Sable must utilize extensive brush pigs and solvents (xylene or other chemicals) to ensure that the internal pipe wall does not have any corrosive products, wax, and bacteria buildup that may affect the ILI tool performance.
21. Metal Loss Tool(s)
 - a. Initial ILI tool runs – Each year, during the first two (2) years of operating CA-325 A/B, Sable shall conduct at least two (2) ILIs using a UTWM tool with an inertial measurement unit (IMU). Sable shall compare both runs and evaluate all available information, including these tool runs and corresponding IMU data. Sable shall perform the UTWM tool run every six (6) months not to exceed nine (9) months. If a UTWM tool run is unsuccessful, Sable shall identify the limitations that prevented the UTWM tool run from being successful, consider changes to increase the likelihood of a successful UTWM tool run, and use best efforts to rerun the UTWM tool within 30 days.
 - b. Subsequent ILI tool runs – After the first two (2) years of operating CA-325 A/B, Sable shall conduct at least one (1) Ultrasonic Wall Measurement tool (UTWM) each calendar year, not to exceed 15 months or the ILI assessment must be assessed at more frequent intervals if the remaining Failure Pressure Ratio will be less than 1.39 times MOP prior to the next ILI assessment, based upon anomaly growth estimates and pressure cycling. If,

⁴ Industry standards that are referenced in this state waiver must utilize the editions that are incorporated by referenced in Title 49 Part 195.3 unless another edition was explicitly specified.

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- any UTWM tool run is deemed to be unsuccessful, Sable shall document the reasons why the UTWM tool was unsuccessful, consider changes to increase the likelihood of a successful UTWM tool run, and must reassess the pipeline within 30 days after it was deemed to be unsuccessful. All metal loss tool runs must also utilize an Inertial Measurement Unit (IMU).
22. Crack Detection Tools - Sable must run at least one (1) Ultrasonic Shear Wave Crack Detection (USCD) tool each calendar year, not to exceed 15 months⁵ or the ILI assessment must be assessed at more frequent intervals if Condition 49 determined a shorter assessment interval.
- a. These crack tool runs must utilize an Inertial Measurement Unit (IMU) and must be able to detect and size axial and circumferential cracks.
 - b. USCD Performance Specification Requirements
 - i. The USCD tools must have a probability of detection that is $\geq 90\%$ for axial and circumferential cracks.
 - ii. The minimum crack depth that can be detected must be at least 1 mm for axial and circumferential cracks that are located in the base material.
 - iii. The minimum crack depth that can be detected must be at least 2 mm for axial and circumferential cracks that are located in the weld.
 - iv. The depth sizing accuracy for cracks must be ± 0.8 mm for axial cracks and ± 1 mm for circumferential cracks.
23. Dents and Pipe Deformation: Sable shall conduct a high-resolution deformation ILI tool with each UTWM.
24. Where any ILI tool fails to record data for 5% or more of the external and/or internal surface area of the inspected segment, reassess with the ILI tool to cover the area that is deemed to be inadequate data of the inspected segment. In addition, if the ILI tool travels at a speed that is outside the range of the tool velocity listed in the tool specification for 2% or more of the length of the inspected segment, Sable must rerun the ILI tool to reassess the pipeline segment in which the ILI tool velocity was outside of the specified tool velocity range.
25. All ILI tool runs must obtain the Test ID from the OSFM prior to run.
26. Sable must require its ILI tool vendor(s) to include in the vendor's inspection report all metal loss indications of 10% or greater, based on raw data, prior to adding in any correction for tool tolerance.
27. Sable must incorporate ILI tool accuracy by ensuring that each ILI tool service provider determines the tolerance of each tool, in accordance with API Standard 1163 Second Edition and includes that tolerance in determining the size of each indication reported to Sable.

⁵ Sable may petition the OSFM to revise the reassessment interval for Crack Detection Tool(s) when sufficient evidence is available to determine if crack growth rates could support a longer reassessment interval. Changes to the reassessment interval are subject to the OSFM and PHMSA approval.

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28. Sable must account for ILI tool tolerance and anomaly growth rates in scheduled response times, repairs, and future reassessment intervals. Sable must document and justify the values used. Sable must demonstrate ILI tool tolerance accuracy for each ILI tool run by using calibration, excavations, and unity plots⁶ that demonstrate ILI tool accuracy to meet the tool accuracy specification provided by the vendor (typical for depth within +10% accuracy for 80% of the time). Sable must compare previous indications to current indications that are significantly different. If a trend is identified where the tool has been consistently over-calling or under-calling, the remaining ILI features must be re-graded accordingly.
29. Prior to the ILI final report being received, Sable must perform at least four (4) separate validation digs that do not interact with each other. At a minimum, Sable must perform validation digs in accordance with Level 2 of API Standard 1163, "In-line Inspection System Qualification" (Second Edition, April 2013).

Discovery of Condition

30. The discovery date must be within 180 days of any ILI tool run for each type of ILI tool.

Immediate Repair Conditions⁷

31. A crack or crack-like anomaly that meets any of the following criteria:
 - a. Crack or crack-like anomaly that is equal to or greater than 50% of pipe wall thickness.
 - b. Crack or crack-like anomaly that has predicted failure pressure of less than 1.39 times the MOP as calculated using crack-like flaw evaluation method ASME FFS-1/API 579-1.
32. Internal or external metal loss anomalies where the remaining strength of pipe shows a predicted failure pressure less than 1.39 times the MOP.
33. Any external cluster corrosion or external general corrosion that is located on the bottom half of the pipeline (below the 3 and 9 o'clock positions) where the remaining strength of pipe shows a predicted failure pressure less than 1.5 times the MOP.⁸

⁶ A minimum of four (4) independent direct examination excavations must be used for unity plots.

⁷ The criteria outlined in the state waiver is supplemental to the requirements set forth in §195.452(h)(4)(i) *Immediate repair conditions* and does not relieve Sable from complying with §195.452(h)(4)(i). All immediate repair conditions must be remediated with a permanent repair method.

⁸ Cluster means two or more adjacent metal loss features in the wall of the pipe or weld that may interact based on interaction criteria. General corrosion means uniform or gradually varying loss of wall thickness over an area.

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180-Day Repair Conditions⁹

34. A crack or crack-like anomaly that has predicted failure pressure of less than 1.5 times the MOP.
35. Internal or external metal loss anomalies where the remaining strength of pipe shows a predicted failure pressure less than 1.5 times the MOP.
36. All internal or external metal loss anomalies that have an ILI reported depth of 40% or greater wall loss, including tool sizing tolerance for depth.¹⁰
37. For any crack (likely crack or possible crack) or crack-like anomaly, regardless of its dimensions, that interacts with metal loss anomalies and are within one (1) inch (circumferentially) of the longitudinal seam weld, Sable must integrate the ILI results from the most recent crack tool run and the most recent metal loss tool run before the discovery date deadline.

Corrosion Growth Rate Analysis (CGRA)

38. Sable must develop a CGRA procedure to annually calculate corrosion growth rates between successive ILI's (using most recent ILI compared to prior ILI) and perform pipeline remediations needed to assure the integrity of the pipeline is maintained.¹¹ The timing of pipeline remediations under this condition shall be based on the most recent calculation of short-term corrosion rates.
39. The CGRA procedure must include ILI data matching methods¹² to analyze data from successive ILI's, methodologies for growth rate calculations and errors from comparing ILI data.
40. Sable must identify the projected date when remaining metal loss indications will reach a depth of 70% or greater wall loss.
41. When determining the projected date when remaining metal loss indications will reach a depth of 70% or greater wall loss, Sable must account for reported ILI depth, tool tolerance and corrosion growth rates¹³.

⁹ The criteria outlined in the state waiver is supplemental to the requirements set forth in §195.452(h)(4)(iii) *180-day conditions* and does not relieve Sable from complying with §195.452(h)(4)(iii). All 180-day repair conditions must be remediated with a permanent repair method.

¹⁰ For example, if the ILI tool reports a 31% metal loss anomaly and the tool sizing tolerance is ± 10 for depth, then this anomaly is a 180-day repair condition since it can be considered as an external metal loss anomaly with 41% metal loss depth. If Sable is unable to remediate such indications within 180 days of discovery, Sable must notify OSFM, temporarily reduce the operating pressure, and take further remedial action in accordance with 49 C.F.R. §195.452 until the indication is remediated or until otherwise authorized by the OSFM.

¹¹ At a minimum, Sable must include signal matching between ILI data sets.

¹² If there are several matching techniques that can be used, Sable must utilize the most accurate method of comparing ILI data sets.

¹³ Growth projections must use corrosion rates determined in accordance with the CGRA procedure. A default corrosion rate of 32 mpy must be used in determining projections, if corrosion rates determined by CGRA are less than the default value.

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42. All metal loss indications that are projected to reach a depth of 70% or greater wall loss prior to the next ILI, will become actionable and must be remediated before the next ILI.

Pressure Reduction

43. If Sable is unable to perform field evaluation and remediation of any required conditions within the time limit conditions specified in the state waiver, Sable must temporarily implement a minimum 20 percent or greater operating pressure reduction, based on actual operating pressure for two (2) months prior to the date of inspection, until the anomaly is repaired.

In Field Direct Examination of Pipe

44. Direct examinations¹⁴ of pipe must include appropriate non-destructive examination methods for cracking such as magnetic particle inspection (MPI), shear wave technology or phased array ultrasonic testing (PAUT).¹⁵ PAUT must be used for sizing any crack or crack-like anomaly lengths and depths.
45. Permanent repairs of metal loss anomalies are required for any section of pipe with wall loss equal to or greater than 40% in accordance with repair method 1, 4b, or 5 of Table 451.6.2(b)-1 of ASME B31.4 2006 Edition. However, the following additional conditions are applied if Sable chooses repair method 5 for metal loss anomalies:
 - a. Method 5 must not be used on metal loss anomalies that are in the HAZ, girth weld, or longitudinal seam weld.
 - b. Sable must increase the metal loss anomaly's depth by 20% when they input it into the formula for calculating the number of wraps needed for repair method 5.
 - c. After the anomaly is repaired via repair method 5, Sable must monitor the anomaly's wall loss depth in subsequent UTWM tool runs. If the anomaly's wall loss depth increases by more than 15% of the wall thickness in the subsequent UTWM tool runs, Sable must repair this anomaly via repair method 1 or 4b of Table 451.6.2(b)-1 of ASME B31.4 2006 Edition.
46. Permanent repairs are required for all cracks and/or crack-like anomalies discovered during direct examination, regardless of crack depth or crack length in accordance with repair method 1 or 4b of Table 451.6.2(b)-1 of ASME B31.4 2006 Edition.

¹⁴ Any time the pipeline is exposed for direct examination of an indication or to perform a repair, Sable must document the condition of the coating and carrier pipe (including anomalies) with photographs.

¹⁵ Direct examinations for ILI reported crack or crack-like indications must include a magnetic particle inspection complimented by shear wave technology or inspection by phased array ultrasonic testing.

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47. Sable must develop a coating repair procedure for excavated or remediated corrosion anomalies that prevents further external corrosion and seals transition areas from currently insulated pipe to newly coated sections. Any time a shrink sleeve or coating is exposed, remove the shrink sleeve and coating, investigate circumferentially and longitudinally along the pipe for external corrosion and coating deterioration, and recoat with two-part epoxy. Sable must recoat in accordance with their coating repair procedure.¹⁶
48. All external polyurethane foam and the polyethylene tape wrap on buried pipe that are exposed during the field evaluation must not be replaced with new insulation or polyethylene tape wrap.

Integrity Management

49. A fracture mechanics and pressure cycling evaluation is required for un-remediated cracks and crack-like indications detected by ILI or indirect inspection tools.
 - a. Sable must determine the predicted failure pressure, failure stress pressure and crack growth of un-remediated cracks and crack-like anomalies in accordance with 49 C.F.R. §192.712(d)(1).
 - b. Sable must perform a fatigue analysis using an applicable fatigue crack growth law or other technically appropriate engineering methodology in accordance with 49 C.F.R. §192.712(d)(2).
50. Sable must analyze a sample of additional indications of varying amounts of metal loss between 10% and 40% for validation. The sample size shall be at least ten (10), unless fewer than ten (10) indications are reported within that range, in which case Sable would examine the number of indications called.
51. When sizing metal loss indications, apply interaction/clustering criteria of 6t by 6t for applicable ILI tool(s).
52. Sable must send all field measurements to the ILI tool vendor within 90 days of completing direct examinations and require the ILI vendor to validate the accuracy of the tool. Sable must conduct annual meetings with the ILI tool vendor to discuss tool performance and incorporate lessons learned.
53. Sable must utilize a third-party expert to review all ILI reports, verification of digs, data integration, ILI tool tolerances, development of unity plots, measured field findings, failure pressure ratios and any other finding that could affect the integrity of the pipeline. The review must be conducted within six (6) months of each ILI assessment. The third-party expert must be approved by the OSFM prior to being selected.
54. Within one (1) year from date of issuance, Sable must use a NACE-certified expert to conduct an evaluation and determine if alternating current (AC)

¹⁶ The coating procedure must be submitted to the OSFM prior to the prior to the effective date of the state waiver.

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interference or direct current (DC) interference or shorting that could contribute to external corrosion is occurring. The expert must recommend the frequency of subsequent interference surveys. All evaluations must be approved and signed by the NACE-certified expert.

Data Requirements for Predicted Failure Analysis

55. Unless the defect dimensions have been verified using a direct examination measurements, Sable must explicitly analyze uncertainties in reported assessment results including but not limited to tool tolerance, detection threshold, probability of detection, probability of identification, sizing accuracy, conservative anomaly, interaction criteria, location accuracy, anomaly findings, and unity chart plots or equivalent for determining uncertainties and verifying tool performance, in identifying and characterizing the type and dimensions of anomalies or defects used in the analyses.
56. The analyses performed in accordance with this state waiver must utilize pipe and material properties of the pipe body and longitudinal weld seam that are documented in *traceable, verifiable, and complete* records.

Recordkeeping

57. Procedures, records of investigations, data, analyses, and other actions made in accordance with the requirements of this state waiver shall be kept for the life of the pipeline and must be submitted to the OSFM, in the manner requested (electronic, hardcopy, or other format) within 30 days.
58. Sable must maintain the following records:
 - a. Technical approach used for the analysis
 - b. All data used and analyzed
 - c. Pipe and longitudinal weld seam properties
 - d. Procedures used to implement state waiver conditions
 - e. Evaluation methodology used
 - f. Models used
 - g. Direct in situ examination data
 - h. All in-line inspection tool assessments information evaluated
 - i. Pressure test data and results
 - j. All in-the-ditch assessments performed on the pipeline segments
 - k. All measurement tool, assessment, and evaluation accuracy specifications and tolerances used in technical and operations results
 - l. All finite element analysis results
 - m. The number of pressure cycles to failure, the equivalent number of annual pressure cycles, and the pressure cycle counting methodology

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- n. The predicted fatigue life and predicted failure pressure from the required fatigue life models and fracture mechanics evaluation methods
- o. Safety factors used for fatigue life and/or predicted failure pressure calculations
- p. Reassessment time interval and safety factors
- q. The date of the review
- r. Confirmation of the results by qualified technical subject matter expert(s)
- s. Approval by responsible Sable management personnel
- t. Records of additional preventive and mitigative (P&M) measures performed
- u. Reports required by this State Waiver.

Reporting

59. Any release on the pipeline shall be reported to the OSFM at the earliest practicable moment following discovery but no later than 24 hours from the time of discovery via email at PipelineNotification@fire.ca.gov, *Subject: OSFM State Waiver – Accident Notification*.¹⁷
60. An email notification shall be made at least three (3) days prior to the pipeline being exposed for non-emergency purposes of field evaluation and repair via email at PipelineNotification@fire.ca.gov, *Subject: OSFM State Waiver – Pipeline Repair CA-325 A/B*. The email notification shall include, if applicable:
- d. Tool type and run date
 - e. Unique identifier (e.g. Dig Number, Joint Number, Flaw ID, Condition Type)
 - f. Dig sheets
 - g. Field contact information for Sable
 - h. Time and location of the field evaluation and repair.
61. Sable shall provide a Summary of Conditions Report within 210 days of the last date of an ILI run via email at PipelineNotification@fire.ca.gov, *Subject: OSFM State Waiver – Summary of Conditions CA-325 A/B* and include:
- i. Tool type
 - j. Run date
 - k. Summary of Conditions Report¹⁸
 - l. Final Vendor Report and Pipe Tally
62. Sable shall provide a report to the OSFM by June 15th of every year for the duration of the state waiver. The report shall be addressed to the OSFM Assistant Deputy Director, Chief of Pipeline Safety via email at PipelineNotification@fire.ca.gov, *Subject: OSFM State Waiver – Annual Report*

¹⁷ This requirement does not relieve Sable from spill reporting requirements that might exist under local, state or federal regulations.

¹⁸ The OSFM may stipulate specific formatting or other information (e.g. Condition Type, Anomaly Details, Remaining Strength Calculation Method, Failure Pressure, CGRA, etc.) to be included in the Summary of Conditions Reports, Closure Report and Annual Reports if information provided is not deemed sufficient.

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CA-325 A/B. At a minimum, the annual report shall contain the following, if applicable:

- a. A Closure Report for the previous calendar (CY) which contains:
 - i. Features that were remediated in previous CY
 1. Provide documentation for the in-the-ditch assessments and repairs
 - ii. Identify features that remain to be assessed
 - iii. Unity Plots for previous ILI runs
- b. Fracture mechanics and pressure cycling analyses in accordance with Condition 49
- c. The third-party ILI expert reviews in accordance with Condition 53
- d. AC and DC Interference surveys that are due in accordance with Condition 54
- e. A copy of the CGRA for prior year including:
 - i. Mean corrosion growth rate for the pipeline
 - ii. Distribution graph of the corrosion growth rate for the pipeline (e.g. occurrences (#) vs. corrosion rate (mpy))

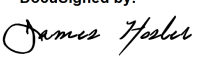
Limitations

63. This state waiver is limited to a term of no more than ten (10) years from the date of issuance. If Sable elects to seek renewal of this state waiver, it must submit a renewal request to the OSFM at least 180 days prior to the expiration date, including a justification for continuation of the waiver.
64. Should Sable fail to comply with any conditions of this state waiver or should the OSFM determine that this state waiver is no longer appropriate or is inconsistent with pipeline safety, the OSFM may revoke the state waiver and require Sable to comply with all appropriate regulatory requirements.
65. The OSFM may order the pipeline shutdown at any time.
66. The OSFM may issue a compliance order or may initiate proceedings to determine the nature and extent of the violations and appropriate civil penalty for failure to comply with this state waiver. The terms and conditions of any compliance order shall take precedence over the terms of the state waiver.
67. In the event of conflict between the state waiver conditions and industry standards, the state waiver conditions shall prevail.
68. If Sable sells, merges, transfers or otherwise disposes of all or part of the assets covered by the state waiver, Sable must provide the OSFM written notice of the change within 30 days of the consummation date. In the event of such transfer, the OSFM reserves the right to revoke, suspend, or modify the state waiver.

Lance Yearwood
December 17, 2024
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Should you have any questions, please contact Alin Podoreanu, Supervising Pipeline Safety Engineer at (916) 212-8891.

Sincerely,

DocuSigned by:

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JAMES HOSLER
Assistant Deputy Director
Chief of Pipeline a Safety and CUPA Programs

Enclosure(s): (1) Pacific Pipeline Company State Waiver Application for CA-325 A/B

cc: Doug Allen, Supervising Pipeline Safety Engineer, OSFM
Andy Chau, Supervising Pipeline Safety Engineer, OSFM
Brendan Feery, Supervising Pipeline Safety Engineer, OSFM
Huy Nguyen, Supervising Pipeline Safety Engineer, OSFM
Alin Podoreanu, Supervising Pipeline Safety Engineer, OSFM
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