PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

September 23, 2021

GI-2021-05-WGS36-08

Mathieu Fournier, VP of Eng/Ops (<u>Mathieu.Fournier@rockpointgs.com</u>) Rockpoint Gas Storage 400, 607 – 8th Avenue S.W. Calgary, Alberta, Canada T2P 0A7

SUBJECT: General Order 112-F Transmission Integrity Management Program (TIMP) Closure Letter for Wild Goose Gas Storage

Dear Mr. Fournier:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (Commission) reviewed Wild Goose Gas Storage's (WGS's) response letter dated July 28, 2021, that addressed the findings identified during the General Order (GO) 112-F Transmission Integrity Management Program (TIMP) Inspection conducted May 24-28, 2021.

A summary of the inspection findings documented by SED, WGS's response to our findings, and SED's evaluation of WGS's response for each violation, concern and recommendation is attached to this letter.

This letter serves as the official closure of the 2021 Inspection of WGS's TIMP.

If you have any questions, please contact Paul Penney at (415) 703-1817 or by email at Paul.Penney@cpuc.ca.gov.

Sincerely,

Dennis Lee, P.E. Program and Project Supervisor Gas Safety and Reliability Branch Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Gary Theberge, WGS (<u>Gary.Theberge@rockpointgs.com</u>) Greg Clark, WGS (<u>Greg.Clark@rockpointgs.com</u>) Terence Eng, SED (<u>Terence.Eng@cpuc.ca.gov</u>) Claudia Almengor, SED (<u>Claudia.Almengor@cpuc.ca.gov</u>)

Post-Inspection Closure Letter

Date of Briefing: 05/28/2021 Dates of Inspection: 5/24→5/28/21 Operator: WILD GOOSE STORAGE LLC Operator ID: 31287 (primary) Inspection Systems: Wild Goose Storage Transmission System Assets (Unit IDs) with results in this report: WGS Transmission (88673) System Type: GT Inspection Name: (2021) Wild Goose Storage TIMP Audit Lead Inspector: Paul Penney Operator Representative: Gary Theberge, Greg Clark

Unsatisfactory Results

Assessment and Repair: In-Line Inspection (Smart Pigs) (AR.IL)

Question Title, ID IMP Assessment Methods, AR.IL.ASSESSMETHOD.R

Question 7. Do records demonstrate that the assessment methods shown in the baseline and/or continual assessment plan were appropriate for the pipeline specific integrity threats?

References 192.947(g) (192.919(b), 192.921(a), 192.937(c)) 192.917(b)

Assets Covered WGS Transmission (WGS)

Issue Summary VIOLATION:

192.917(b) Data gathering and integration.

To identify and evaluate the potential threats to a covered pipeline segment, an operator must gather and integrate existing data and information on the entire pipeline that could be relevant to the covered segment. In performing this data gathering and integration, an operator must follow the requirements in ASME/ANSI B31.8S, section 4. <u>At a minimum, an operator must gather and evaluate the set of data specified in Appendix A to ASME/ANSI B31.8S</u>, and consider both on the covered segment and similar non-covered segments, past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records and all other conditions specific to each pipeline.

WGS needs to gather and integrate data from American Society of Mechanical Engineers (ASME) B31.8S, Appendix A for each threat identified in the appendix as specified in the code section quoted above. WGS failed to gather and evaluate the set of data specified in 192.917(b). Therefore, WGS is in violation of 49 CFR 192.917(b).

WGS RESPONSE:

WGS agrees that despite having performed detailed annual risk assessments which involved gathering and integrating data related to the nine threat categories (WGS Integrity Management Plan Section 4.1.1, Table 2), past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records and all other conditions specific to the pipeline, WGS did not specifically follow ASME B31.8S, Appendix A guideline. WGS is confident that the nine threat categories have been addressed, but going forward will ensure to specifically follow requirements associated with ASME B31.8S Appendix A, and incorporate this process into the annual risk assessment.

SED's Conclusion:

WGS's response adequately addresses this finding.

Concerns

Assessment and Repair: In-Line Inspection (Smart Pigs) (AR.IL)

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Assets Covered WGS Transmission (WGS)

Issue Summary Appendix H, Section 2.8 (Contracting Logistics):

CONCERN:

WGS's Integrity Management Plan, Appendix H: Inline Inspection Procedure, Section 2.8(e) discusses acceptance criteria for the ILI tool run and provides several example criteria.

To assure the survey acceptance criteria are fulfilled and documented, Gas Safety and Reliability Branch (GSRB) staff recommends that WGS should create a form for documenting the acceptance of an ILI run. See API 1163 (In-line Inspection System Qualification), Section 7.5.1 and Annex B.

WGS RESPONSE:

WGS agrees that having a document such as this will help ensure that the desired acceptance criteria and ILI run results are achieved. WGS will incorporate such a document into their Integrity Management Plan, Appendix H: Inline Inspection Procedure, Section 2.8(e), and utilize this during future ILI runs.

SED's Conclusion:

WGS's response adequately addresses this concern.

Assessment and Repair: Repair Criteria (HCA) (AR.RC)

Question Title, ID Definition of Discovery, AR.RC.DISCOVERY.P

Question 2. Does the integrity assessment process properly define discovery and the required time frame?

References 192.933(b)

Assets Covered WGS Transmission (WGS)

Issue Summary IMP, Section 5.4 defines discovery consistent with 192.933(b).

CONCERN:

Part 192.933(d)(3) states in part:

...(ii) A dent located between the 8 o'clock and 4 o'clock positions (upper 2/3 of the pipe) with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12), and engineering analyses of the dent demonstrate critical strain levels are not exceeded.

(iii) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld, and engineering analyses of the dent and girth or seam weld <u>demonstrate critical strain levels are not exceeded</u>. These analyses must consider weld properties.

WGS already includes a reference to ASME B31.8 2007 in its Integrity Management Plan, on pgs. 30-31. GSRB staff recommends WGS edit the reference for ASME B31.8-2007 to include Appendix R, which is the appendix for estimating critical strain.

WGS RESPONSE:

WGS agrees with GSRB staff's recommendation, and will edit the reference to ASME B31.8 2007 in its Integrity Management Plan, on pgs. 30-31, to include Appendix R, for estimating critical strain.

SED's Conclusion:

WGS's response adequately addresses this recommendation.

Assessment and Repair: Repair Methods and Practices (AR.RMP)

Question Title, ID Non-Destructive Testing of Pipeline for Cracking and/or SCC When Exposed for Repair, AR.RMP.CRACKNDT.P

Question 26. Does the process require that when a pipeline segment that meets the conditions for cracking and/or possible SCC is exposed (i.e., the coating is removed), an NDE method (e.g., MPI, UT) is employed to evaluate for cracking?

References 192.929(b) (ASME B31.8S-2004 Appendix A3.4)

Assets Covered WGS Transmission (WGS)

Issue Summary IMP, Appendix B.2 discusses the screening criteria.

CONCERN:

WGS should note in Appendix B.2 that the screening criteria identified in ASME B31.8S-2004, Appendix A3, for the High pH Stress Corrosion Cracking (SCC) threat is not absolute. These criteria do not account for approximately 25-35% of historical SCC failures. As noted in the National Association of Corrosion Engineers (NACE) RP0204-2004 (Stress Corrosion Cracking Direct Assessment Methodology), Section 1.2.1, "...It is recognized that these screening factors will identify a substantial portion of the susceptible locations, but not all of them."

Therefore, while all screening criteria listed in B31.8S-2004, Appendix A3.3 might not be met (i.e., Operating Stress>60% SMYS, Operating Temperature>100°F, etc.), GSRB staff recommends that WGS conduct magnetic particle inspections whenever digs that expose the transmission line pipe are done. GSRB staff recommends this be done on an opportunity basis when the transmission line pipe is exposed for other reasons. This will ensure a higher probability that high pH Stress Corrosion is found if SCC is found outside of the screening criteria identified in Section A3.3.

WGS RESPONSE:

WGS agrees with GSRB staff recommendation, and will edit the Integrity Management Plan Appendix B.2 to note that ASME B31.8S-2004, Appendix A3, for the High pH Stress Corrosion Cracking (SCC) threat is not absolute, and that Magnetic Particle Inspection will be performed whenever the pipeline is exposed during a dig, and the Fusion Bond Epoxy coating has been stripped from the piping. WGS's response adequately addresses this recommendation.

Integrity Management: Continual Evaluation and Assessment (IM.CA)

Question Title, ID Waiver from Reassessment Interval in Limited Situations, IM.CA.REASSESSWAIVER.P

Question 9. Does the process include requirements for reassessment interval waivers (special permit per 190.341)?

References 192.943(a) (192.943(b))

Assets Covered WGS Transmission (WGS)

Issue Summary CONCERN:

WGS already includes waiver language in its Integrity Management Plan, Section 5.3.6, page 28. However, a waiver is now called a special permit and the process for submitting a waiver/ special permit is covered in 190.341.

GSRB staff recommends that WGS add a reference for Part 190.341 and include the special permit language to the IMP, section 5.3.6.

WGS RESPONSE:

WGS agrees with GSRB staff recommendation, and will incorporate language in their Integrity Management Plan, Section 5.3.6 that more accurately references the term "special permit" versus waiver, per 49 CFR 190.341.

SED's Conclusion:

WGS's response adequately addresses this recommendation.