



SOUTHWEST GAS CORPORATION

October 31, 2024

Via Email

Mr. Terence Eng, P.E.
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

SUBJECT: General Order (GO) 112-F Compliance Inspection of Southwest Gas Corporation's Material Traceability Program

Dear Mr. Eng,

Southwest Gas Corporation (Southwest Gas or Company) respectfully submits the attached response to the Summary of Inspection Findings of SED's General Order 112-F inspection of the Company's Material Traceability Program, which was conducted April 8-12, 2024, and included review of Company's records from the Pipeline Safety Enhancement Program work performed in 2015.

Southwest Gas submits the attached responses to the four (4) concerns reported by SED in the Summary of Inspection Findings and appreciates SED's consideration of this matter.

Please do not hesitate to contact me if there are any questions or concerns.

Sincerely,

Kevin Lang
Vice President, Engineering Staff

cc: Sam Grandlienard
Valerie Ontiveroz
Paul Gustilo

Claudia Almengor, CPUC
Michelle Wei, CPUC
Kan Wai Tong, CPUC

Summary of Inspection Findings

Southwest Gas Response: Southwest Gas will address each of SED's concern and recommendations listed below individually; however, the Company would like to acknowledge that the projects reviewed during the Verification of Pipeline Materials Inspection were high-pressure distribution projects completed in December 2015. Southwest Gas has continued to improve its process and procedures over the years, including implementing new technologies to enhance how and what is documented related to construction projects ensuring that its procedures meet or exceed the State and Federal pipeline safety regulations. As discussed during the inspection, Southwest Gas is currently in the process of vetting and implementing additional initiatives related to project documentation.

Concerns:

1. During its records review, SED noted that SWG did not document the heat numbers for valves and elbows that were installed in all the projects SED reviewed. The full list of projects can be found in Attachment A. For example, SWG did not document the mill test reports for the pipe with heat number T50497A used in a bore. SWG stated that this documentation was not required to be maintained on distribution projects. There is no specific requirement in the 49 CFR Part 192 for documentation of material heat numbers for non-transmission pipes. However, 49 CFR Part 192 Section 192.1007(a)(5) states: "Provide for the capture and retention of data on any new pipeline installed. The data must include, at a minimum, the location where the new pipeline is installed and the material of which it is constructed." SED recommends that SWG ensures that they document any data that is relevant to the material properties of pipes or fittings for high pressure distribution pipeline projects.

Southwest Gas Response: Southwest Gas respectfully acknowledges SED's recommendation to ensure relevant material properties of pipe and fittings for high pressure distribution projects is documented. Southwest Gas is currently implementing and/or reviewing several initiatives to capture this data, which will be contained within future project documentation. Once these additional initiatives are thoroughly vetted, and the optimal solution is identified, Southwest Gas will advise SED during a future semi-annual management meeting.

2. During its review of the welding records, SED noted that SWG allowed the welders to inspect their own welds. SED is concerned that this practice of allowing a welder to inspect his/her own welding work product lacks objectivity, accountability, and does not inspire confidence in the result of the welding inspection report.

Southwest Gas Response: Southwest Gas understands SED's concern and has implemented non-destructive testing on welds performed on high-pressure distribution projects, in addition to where the State and Federal pipeline safety code require testing on Transmission projects. The Company

has also added another layer of review to inspect welds through an independent third-party, utilizing Ooga Technologies, to perform remote inspections of NDT testing data and records.

3. During the inspection, SED and SWG discussed SWG's QA/QC process for construction project completion and consolidation. SED also reviewed a sample project checklist, and the list of tasks required for completion in their Work Management system. However, SWG does not have a written procedure that details the QA/QC process and what documentation needs to be retained. SWG stated that the checklist is not retained as part of the project records. SED recommends that SWG develop a written process/procedure and add the checklist to the project records for retention, demonstrating that the QA/QC process was followed and completed.

Southwest Gas Response: Southwest Gas respectfully acknowledges SED's recommendation of development of a written QA/QC process and procedures and to retain the construction project checklist to the project record. As discussed with SED during the inspection, there are several tasks and checklists, completed both electronically, within the Company's Work Management System, and manually during the project review phase. These tasks and checklist must be completed for the project to be considered completed. Training on these tasks and checklists are provided to employees who complete this work through the Company's Field Operations Management System (FOMS) training and the as-built review training.

The project documentation is reviewed by several individuals throughout the review and approval process to ensure quality assurance in the final project package. The Company understands the importance of records retention and would like to reiterate that the task list in the Company's FOMS system is retained within the system. Southwest Gas will review its processes to determine if including a final copy of the as-built checklist into the project package would be beneficial, especially with some of the initiatives and new technologies Southwest Gas is planning to implement in the near future.

4. During review of the construction weld maps, SED was unable to readily locate the welding procedure used for any of the welds we looked at during record review. SED reviewed all the welds for each project listed in Attachment A. SWG later provided the welding inspector's notes that documented the welding procedures used. SWG informed SED that the welding inspector's notes are not maintained as part of the construction closeout package. SED recommends that SWG review its pipeline construction project close-out documentation and retention procedure to ensure that all information that describes how the weld was created, and by whom, is documented and retained for the life of the pipeline.

Southwest Gas Response: Southwest Gas acknowledges SED's recommendation to ensure all information describes how the weld was created and by whom is documented within the project's close-out package and retrained for the life of the pipeline. As noted during the inspection, Southwest Gas is working on implementing a new initiative for steel projects that will capture the information SED has referenced in its recommendation. Once the initiative is implemented,

Southwest Gas will provide an update and demonstration of the information that will be captured on steel projects going forward to SED.