

# West Coast Gas Company Inc.

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10 February 2023

Terence Eng, PE  
Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division  
**California Public Utilities Commission**  
505 Van Ness Avenue  
San Francisco, CA 94102

RE: Response to SED Audit Letter dated January 13, 2023

Dear Mr. Eng,

Following is West Coast Gas Company Inc.'s response to the SED findings for the GO 112-F Inspection which occurred on September 12 through September 16, 2022.

If you have any questions, please feel free to contact me at 916-364-4100, Monday through Friday, 7 am to 3:30 pm.

Sincerely,

*Mark Williams*

Mark Williams  
President

cc:

Sann Naing, SED/GSRB

Matthewson Epuna, SED/GSRB

Kan Wai Tong, SED/GSRB

Claudia Almengor, SED

Raymond Czahar, WCG

Cynthia Morris, WCG

# Post-Inspection Written Preliminary Findings

**Dates of Inspection:** September 12, 13, 15, and 16, 2022

**Operator:** WEST COAST GAS CO INC

**Operator ID:** 31267 (primary)

**Inspection Systems:** West Coast Gas Natural Gas Distribution system

**Assets (Unit IDs) with results in this report:** West Coast Gas (88675)

**System Type:** GD

**Inspection Name:** 2022 WCG DDP and Section 114

**Lead Inspector:** Sann Naing

**Operator Representative:** Mark Williams, Operations Manager

## Unsatisfactory Results

**No Preliminary Findings.**

## Concerns

### **Public Awareness and Damage Prevention: Damage Prevention (PD.DP)**

Question Title, Construction Marking, PD.DP.EXCAVATEMARK.P  
ID

Question 3. Does the process require marking proposed excavation sites to the Common Ground Alliance's (CGA) Best Practices or the use of more stringent and accurate requirements?

References 192.614(c)(5)

Assets Covered West Coast Gas (88675 (34))

Issue Summary 1. West Coast Gas (WCG) has a written Locate and Mark procedure and FORM 614-BP (Locating & Marking Best Practices). However, WCG's written procedure parallels the generic information contained in the National Common Ground Alliance (CGA) best practices. Notwithstanding WCG's locating practices, its procedure should describe its processes for receiving and recording the notifications from the One-Call center(s) and its locate & mark field

personnel. Furthermore, West Coast Gas' procedure should describe its office staff communication processes with the One-Call center(s) including Electronic Positive Responds (EPR) as required by California Government Code (CGC), Section 4216. WCG should incorporate the reference materials and instructions into its procedures. WCG should include provisions to provide its pipeline maps to its field employees that perform the locate and mark.

**WCG'S RESPONSE**

WCG updated its OME to include Officer personnel procedure under Requestors. See Attachment A, Normal Operations 614, page 103, attached.

2.WCG's Damage Prevention procedure, "Normal Operations-614, Operations, Maintenance and Emergencies Procedural Manual", Section 13 states in part:

*"Standby will be required when any of the following conditions exist:*

- a) A planned excavation is near a critical WCG facility...*
- b) Trenchless Technology Methods – when the proposed work will cross perpendicular to WCG facilities and are within the approximate location."*

However, WCG's procedure did not define what is a "critical facility" and "approximate location". WCG should provide specific details to address the requirements of CGC Section 4216, including requirements for high priority subsurface installations (pipeline segments with MAOP higher than 60 psig). SED recommends that WCG revise its Damage Prevention procedures to address the information contained in the CGA best practices and CGC Section 4216 requirements.

**WCG'S RESPONSE**

WCG believes the words "critical" and "and are within the approximate location" to be vague and have removed them. See Attachment B, Normal Operations 614, page 105, attached.

WCG does not have any pipeline within its territory with a MAOP of 60 psig or higher.

Question Title, Documented Damage Prevention Program - TPD, PD.DP.TPD.P ID

Question 4. Does the process specify how reports of Third-Party Activity and names of associated contractors or excavators are input back into the mail-outs and communications with excavators along the system?

References 192.614(c)(1)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG's Damage Prevention procedure, "Normal Operations-614, Operations, Maintenance and Emergencies Procedural Manual, Instructions" section states in part:

*"Upon receipt of USA locate requests from the One Call System all tickets will be logged to establish a data base of individuals and excavator companies engaged in activities requiring the locate and marking of WCG facilities. This list will be used to identify persons who normally engage in excavation activities in the area in which the pipeline is located and allow WCG to target these excavators with periodic safety awareness communications as necessary. This list will be reviewed and updated once each calendar year."*

SED reviewed WCG's current excavator communication mail-out list (2021 Excavator List, provided on 9/12/2022), and noted that some of the excavators that performed excavation activities in the WCG's gas distribution service territories in 2019 and 2020 were not listed in its current mail-out list. Examples are D.E Sutton Plumbing (worked with USA Ticket W910100051-00W, created on 4/11/2019), Mckuin Pipeline (worked with USA Ticket X910502598-00X, created on 4/15/19), and Wood E & I (worked with USA Ticket X019103237-00X, created on 7/9/2020).

WCG stated that it uses a one-year record of USA call-out requests from USA North 811 center to create the current list. SED recommends WCG maintain at least three (3) years of USA call-out requests records and update the list frequently, instead of using only one-year records.

### **WCG'S RESPONSE**

WCG agrees to incorporate a 3 year list. See Attachment A, Normal Operations 614, page 103, attached.

Question Title, Documented Damage Prevention Program - TPD/One Call,  
ID PD.DP.TPDONECALL.P

Question 5. Does the process specify how reports of TPD are checked  
against One-Call tickets?

References 192.614(c)(3)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG indicated that it investigated incidents caused by excavation damage and documents it on "Form 615-4: Damage to facilities and gas loss". SED reviewed the incident records caused by excavation damage that occurred at [REDACTED], Mather, CA on August 24, 2021, where WCG's gas pipeline was struck and damaged by an excavation contractor (Elite Service Experts). SED observed that WCG's personnel failed to document most of the required information on its form 615-4, such as "type of damage", "pipe condition", "equipment that caused the incident", "name of contractor", and "contractor information" (phone number, address, etc.). In addition, SED reviewed WCG's "Form Gen C1: Gas Odor/Leak report" and noted that the required information was not captured on the form.

SED recommends that WCG ensure that its Damage Prevention Program personnel complete the required forms and document all required information, during its investigation of Third-Party Damage (TPD).

### **WCG'S RESPONSE**

WCG has updated its OME to reflect this clarification. See Attachment C, Emergencies 615, page 128, attached.

## **Public Awareness and Damage Prevention: Public Awareness (PD.PA)**

Question Title, Educational Provisions, PD.PA.EDUCATE.R  
ID

Question 8. Did delivered messages specifically include provisions to educate the public, emergency officials, local public officials, and excavators on: (1) Use of a one-call notification system prior to excavation and other damage prevention activities; (2) Possible hazards associated with unintended releases from a gas pipeline facility; (3) Physical indications of a possible release; (4) Steps to be taken for public safety in the event of a gas pipeline release; and (5) Procedures to report such an event?

References 192.616(d) (192.616(f))

Assets Covered West Coast Gas (88675 (34))

Issue Summary SED reviewed the WCG “knowledge pamphlet and sniff card” messages that are delivered once a year to the public, emergency officials, local public officials, and excavators. WCG’s messages lacked clear statements of potential hazards and consequences associated with natural gas release. Hazard awareness is important for personal safety, facility, and property safety. SED recommends that WCG revise its current message in the Knowledge Pamphlet to include the information of potential hazards and consequences associated with natural gas release, and the measures undertaken by WCG to prevent or mitigate the risks from pipeline incidents.

**WCG'S RESPONSE**

WCG has updated its Knowledge Pamphlet to incorporate potential hazards and consequences. See Attachment D, Knowledge Pamphlet, attached.

**Section 114 : Section 114 - Gas Distribution (114.GD)**

Question Title, Leaks & Releases - Venting, 114.114.LKRLSVENT.P (also ID presented in: 114.MM)

Question 6. Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

References 49 U.S.C. 60108(a)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG informed SED that it uses isolation valves in its natural gas distribution system to isolate small sections when it vents or blowdown segments of the gas pipelines. However, the use of isolation valves was not written in WCG’s O&M plan. SED recommends that WCG update its OME plan to include the use of isolation valves to isolate pipeline segments that require venting or blowdown, to minimize natural gas release volumes associated with non-emergency venting and blowdowns.

**WCG'S RESPONSE**

Isolation valves are in the WCG OME in Maintenance 747. WCG does not vent or blowdown. See Attachment E, Maintenance 747, attached.

Question Title, Leaks & Releases - Leak Data Collection and Analysis,  
ID 114.114.LKRLSLKDATA.P (also presented in: 114.MM)

Question 8. Do procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

References 49 U.S.C. 60108(a)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG's Leakage Survey procedural manual required collection and retention of information pertaining to detected natural gas leaks. However, the Leakage Survey procedural manual did not indicate the method or process for analyzing the collected gas leak information. Analysis of the collected gas leak data may identify trends and enable WCG to understand which components or pipeline locations are prone to gas leaks. In addition, the results from the analysis will enhance WCG's knowledge of actions necessary to prevent or minimize gas releases and reduce greenhouse gas (GHG) emissions.

SED recommends that WCG revise its Leakage Survey procedural manual to include method and process for analyzing the collected gas leak information, including small leaks that are remediated on the spot.

### **WCG'S RESPONSE**

WCG maintains a comprehensive map of all natural gas leaks found during our leak survey. These leaks are color coded by class. WCG analyzes these maps years during our leak survey to determine if there are any areas of concern. In addition all leaks are inputted into the DIMP/SHRIMP program for further analyses.

WCG has revised its OME to clarify this procedure. See Attachment F, Maintenance 723 Page 173.

Question Title, Leak Mitigation & Repair - Lost & Unaccounted for Gas,  
ID 114.114.LKMITRPRLAUF.P (also presented in: 114.MM)

Question 11. Do procedures provide for review of Lost & Unaccounted for Gas (LAUF) and do procedures specify actions to reduce the associated volume?

References 49 U.S.C. 60108(a)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG documents Lost & Unaccounted for Gas (LAUF) data in its Annual Distribution System Report. However, WCG's procedures

did not indicate its review process for the LAUF and WCG did not specify actions to reduce the associated volume of LAUF. SED recommends that WCG modify its written procedures to indicate the review process for LAUF and actions to reduce the associated volume and minimize the GHG emissions.

**WCG'S RESPONSE**

WCG documents and reviews its LAUF annually when it files the PHSMA Annual Gas Distribution Report and Cal e-GRRT reports.

WCG would like clarification as to where the SED would like to see a procedure for the review and the corresponding CFR code.

Question Title, Leak-Prone: Leaks & Releases, 114.LEAKPRONE.LKRLS.P (also ID presented in: 114.MM)

Question 17. What procedures are in place to monitor for and identify pipe segments that are leak-prone, and what criteria (e.g., frequency of leak or failure events) are specified for determining a pipeline segment is leak-prone?

References 49 U.S.C. 60108(a)

Assets Covered West Coast Gas (88675 (34))

Issue Summary WCG's Leakage Survey procedural manual addressed the record keeping of detected leaks. But the procedure did not indicate how it will identify the pipe segments that are leak-prone and what criteria will be used to determine a leak-prone pipeline segment.

SED recommends WCG to modify its Leakage Survey procedural manual to address the relevant criteria for determining/identifying a leak-prone pipeline segment.

**WCG'S RESPONSE**

WCG does not believe it has leak-prone pipeline segments due to annual leak surveys and daily pipeline patrolling along with immediate repair/remediation of class 1 and 2 leaks.





# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>NORMAL OPERATIONS 614</b>
February 3, 2023	Supersedes All Previous Dates

## DAMAGE PREVENTION

### SCOPE AND PURPOSE

The purpose of this standard is to establish procedures for the prevention of damage to WCG facilities in accordance with 49 CFR 192.614 and California Government Code 4216 (GC 4216).

### RESPONSIBILITY

WCG will establish a damage prevention liaison through membership/participation in the Underground Service Alert North (USAN) program and representation at engineering pre construction meetings.

WCG personnel will be responsible for contacting requestors either through the Underground Service Alert North (USAN) One Call System or by the telephone at least forty eight (48) hours prior to commencement of work. The forty eight (48) hour notice may be waived in an emergency scenario, which may endanger human life and property.

### PERSONNEL SAFETY

There are no special personnel safety issues associated with this procedure.

### EQUIPMENT AND MATERIALS

Written and verbal correspondence/communications to all excavators and landowners along the WCG right of way(s) including but not limited to:

- 1) USA One Call System Telephone Number
- 2) Wallet Cards
- 3) Excavator Notification List
- 4) Excavator Notification Letter

- 5) Subsite TS & Ditch Witch 900 Locators

### OPERATOR QUALIFICATIONS

This activity is a covered task under the Operator Qualification Plan.

### INSTRUCTIONS

#### Requestors

1) Upon receipt of USA locate requests from the One Call System all tickets will be logged to establish a data base of individuals and excavator companies engaged in activities requiring the locate and marking of WCG facilities. **The current year's list will be added to the previous 2 years and this list will be used to identify persons who normally engage in excavation activities in the area in the area in which the pipeline is located and allow WCG to target these excavators with periodic safety awareness communications as necessary.**

This list will be reviewed and updated once each calendar year.

**2) Office personnel will print page one of the Underground Service Alert (USA), in color and print the possible responses on the back and give USA to a technician.**

**a) Once the technician has completed the USA it is returned to Office personnel so they may respond to the USA through the Damage Prevention Portal.**

**3) Supplemental forms of damage prevention advisories may be implemented as deemed necessary within WCG gas service area boundaries.**



# Operations, Maintenance and Emergencies Procedural Manual

REVISION DATE	NORMAL OPERATIONS 614
February 3, 2023	Supersedes All Previous Dates

## DAMAGE PREVENTION

by 811 USAN. Refer to Form 614-BP: Locating & Marking Best Practices.

**10)** After receiving, documenting and filing of location/excavation intent notices completion, WCG personnel shall contact the Operations Manager and advice of all information recorded and any need for follow up at the location.

**11)** Follow up inspections of gas facilities at risk of damage by excavation activities will be performed on the excavation commencement date and again within twenty four (24) hours after completion of the subject.

**12)** When a locate request received includes the intent to use trenchless technologies such as horizontal directional drilling, boring, pneumatic piercing or other such methods, a field meet will be scheduled. The following topics will be discussed between WCG personnel and the excavator:

a) Scope and location of the activity.

b) Proximity to WCG facilities.

c) Potholing or daylighting facilities to confirm location and depth prior to commencement of work.

d) Scheduling of WCG personnel to standby during construction if necessary.

**13)** When notification is received that includes any blasting activity, a field meet will be scheduled. The following topics will be discussed between WCG personnel and the requestor:

a) Scope of blasting activity.

b) Proximity to WCG facilities.

c) Scheduling of leak survey of WCG facilities prior to and after the blasting has occurred.

d) Temporary disconnection or removal of WCG facilities, if required.

**14)** Standby will be required when any of the following conditions exist:

a) A planned excavation is near a ~~critical~~ WCG facility.

b) Trenchless Technology Methods - when the proposed work will cross perpendicular to WCG facilities.

c) Trenchless Technology Methods - when the proposed work will parallel WCG facilities ~~and are within the approximate location.~~

d) When confidence in an accurate locate is questionable due to field and/or facility conditions.

**15)** All written and verbal correspondences/communications to all excavators and landowners will include information regarding how the public can learn of the location of underground pipelines both under item one (1) above and through examination of gas system maps/plats upon request.

### Excavators

WCG shall follow all guidelines of the GC 4216 when in the role of excavator, including but not limited to:



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>EMERGENCIES 615</b>
February 3, 2023	Supersedes All Previous Dates

## EMERGENCY PLAN - CASTLE, MATHER, HERLONG

**The Operations Manager, or his/her designee will submit the following incident notifications/reports:**

Emergency scenarios that meet the definition of "Incident" under 49 CFR 191.3 (i)(ii) will be technically reported to PHMSA under the requirements of 49 CFR 192.5, 191.9 and 191.15.

**The following information will be needed for telephonically reporting an incident to Federal authorities:**

- 1) Name and telephone number of the individual reporting the incident.
- 2) The location of the incident (street address, city, county, state).
- 3) Date of the incident.
- 4) Estimated or actual time of incident.
- 5) The number of injured persons or fatalities involved, as applicable.
- 6) Type and extent to property damage, as applicable.
- 7) Description of the incident.  
Telephonic reports of incidents must be made at the earliest practical moment after discover but general within 2 hours after discovery.

Written distribution system incident reports will be submitted using PHMSA form RSPA F 7100.1 as soon as practical but not more than 30 days after the detection of an incident

required to be reported telephonically, as stated above.

Should additional relevant information pertaining to a distribution system incident, as described above, become available after submittal of the required written report. WCG will submit a supplemental report, as deemed necessary, clearly referencing the original written report by date and subject.

Form 615-3: Regulatory Notification Record can be used to facilitate written reports as described above.

When damage to WCG facilities occurs, Form 615-4: Damage to Facilities and Gas Loss, needs to be completed. **When completing forms please address all line items, even it is with a NA for Not Applicable.** Completed form is to be kept with Form GEN C: Gas Leak Report.

**RELATED CODES, PROCEDURES & FORMS**

Corrosion Control 465/459: External Corrosion Control Monitoring

Maintenance 605-B1: General Pipeline Repair

Normal Operations 605-B5: Startup / Shutdown / Purging

General 605-D: Safety Related Conditions

Maintenance 617: Investigation of Failures

Maintenance 625: Odorization

## COMMITTED TO SAFETY

West Coast Gas Company Inc. (WCG) is committed to providing safe, reliable gas service within its service territories of Mather Commerce Center, Mather Independence, Castle Airport & Development Center and Herlong Federal Correction Institution.

The WCG natural gas distribution system delivers gas to your home or business through a system of gas mains, underground service lines and above ground regulators and meters.

To ensure safety, WCG, continually conducts regular inspections and patrolling to check for possible gas leaks and other damage.

Customers with *any* safety concerns should immediately contact WCG at 1-877-924-4411.

*The general public can assist in detecting gas leaks.*

## POTENTIAL HAZARDS AND CONSEQUENCE OF A NATURAL GAS LEAK

### **POTENTIAL HAZARDS :**

-Fire   - Poisoning   - Burn

### **CONSEQUENCE:**

- Loss of life   - Loss of property

**TO MINIMIZE** potential hazards and their consequence, WCG does daily patrolling and annual leak surveying of its pipeline.

## NATURAL GAS LEAK INDICATORS

Pipelines carry natural gas to homes, schools and businesses.

### Gas Leak Warning Signs

Use your senses to detect possible gas leaks.

**SMELL . . .** Smelling a “Rotten Egg” odor may be an indication of a gas leak.

**SEE . . .** Look for blowing dirt, water with bubbles or a small area of dead plants.

**HEAR . . .** A leaking pipe might make a hissing sound.

### What To Do If You Suspect A Gas Leak

Leave the area immediately! Do NOT touch or use anything electronic on your way out - not even a light switch, telephone or cell phone.

Call West Coast Gas Company Inc. at 1-877-924-4411 from somewhere other than the location of the gas leak.

Alert others to the possibility of danger.

Do NOT return until it is safe to do so.

# *There is safety in knowledge*

For more information

You can call us at  
**916-364-4100**

Or toll free at  
**1-877-924-4411**

You can email us at  
**westgas@aol.com**

You can visit our website  
at  
**www.westcoastgas.com**

**West Coast Gas Company Inc.**  
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**WEST COAST GAS**

Important  
things  
to know  
about  
*natural gas*  
*safety*



# Operations, Maintenance and Emergencies Procedural Manual

REVISION DATE	Maintenance 747
August 7, 2019	Supersedes All Previous Dates

## KEY & SECONDARY VALVES - CASTLE COMMERCIAL

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### SUBJECT

Castle  
Valve Maintenance - Commercial Area

### 14 KEY VALVES

Used to isolate areas within the commercial area system. The 14 Key Valves break up the commercial area into **Map Sheets**.

**Emergency Valves 1 and 2** will shut down the entire system at the PG&E Meter and Regulation Station located on **Santa Fe Drive and Airdome Entry (Map Sheet 2)**.

These 14 Key Valves are covered by **49 CFR 192.747**.

### 14 SECONDARY KEY VALVES

Used to isolate each by Map Sheets. These valves also break up into the Castle Commercial system valves 2, 3, 4, 5, 6, 7, 10, 16, 17, 18, 19, 21, 24, and 26.

NOTE: Valve 19 will shut down the Atwater Prison.

All of the key valves are marked on WCG plans and maps. These valves are covered by **49 CFR 192.747**.

WCG has a combined total of 65 valves that meet the requirement of **49 CFR 192.747**, Valve Maintenance and Inspection Code.



## Operations, Maintenance and Emergencies Procedural Manual

REVISION DATE	Maintenance 747
August 7, 2019	Supersedes All Previous Dates

### KEY & SECONDARY VALVES - CASTLE COMMERCIAL

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# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## KEY & SECONDARY VALVES - HERLONG FCI

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### **SUBJECT**

Herlong Valve Maintenance - Federal Correctional Institution (FCI)

### **2 KEY VALVES**

Used to isolate areas within the Herlong System that service the FCI.

Key Valves 3 and 4 will shut down the FCI.

Inline Valves 5 & 6, located at the Herlong WCG Meter Station, will only shut down the Utility Plant Building. The rest of the prison will remain on.

### **4 EMERGENCY VALVES**

Main Valve 1 (MV1), Main Valve 2 (MV2), Bypass Valve 1 (BPV1), Bypass Valve 2 (BPV2) will shut down the entire system at the Herlong WCG Regulator Stations located in Herlong, map sheet 1.

All of the key valves are marked on WCG plans and maps. These valves are covered by **49 CFR 192.747**.

WCG has a combined total of 8 valves that meet the requirements of **49 CFR 192-747: Valve Maintenance and Inspection**.



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## KEY & SECONDARY VALVES - HERLONG FCI

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# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## KEY & SECONDARY VALVES - MATHER COMMERCIAL

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### SUBJECT

Mather Valve Maintenance - Commercial Area

### 12 KEY VALVES

Used to isolate areas within the commercial area system. The 12 Key Valves break up the commercial area into **Sections A, B, C, D and E**.

**Valves 7, 8, 9 and 120** will shut down the entire system at the PG&E Meter and Regulation Station located on **Mather Blvd. and Peter A. McCuen Blvd.**

These 12 Key Valves are covered by **49 CFR 192.747**.

### 12 SECONDARY KEY VALVES

Used to isolate each by Sections A, B, C, D and E. These valves also break up into the commercial.

Valves 2, 14 and 20 will isolate Section A.

Valves 1, 15 and 20 will isolate Section B.

Valve 6 will isolate Section C.

Valves 9, 10, 11, 12, and 13 will isolate Section D.

Valve 120 will isolate Section E.

All of the key valves are marked on WCG plans and maps. These valves are covered by **49 CFR 192.747**.

WCG has a combined total of 126 valves that meet the requirement of **49 CFR 192.747**, Valve Maintenance and Inspection Code.



## Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

### **KEY & SECONDARY VALVES - MATHER COMMERCIAL**

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# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## KEY & SECONDARY VALVES - MATHER RESIDENTIAL

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### SUBJECT

Mather Valve Maintenance - Residential Area

### 18 KEY VALVES

Used to isolate areas within the Mather Residential System. The 18 Key Valves break up the Mather Residential into **Wherry, Capehart and Sin City Sections**. These 18 Key Valves are covered by **49 CFR 192.747**.

**Valves 1 and 2** will shut down the entire system.

**Valve 1** is located on **Excelsior Road and Keifer Blvd.** near the PG&E Meter and Regulation Station.

**Valve 2** is located on **Excelsior Road and Woodring Drive** near WCG Regulation Station.

### 5 SECONDARY KEY VALVES

Used to isolate each by Section; Wherry, Capehart & Sin City.

Valves 3, 4, & 81 will isolate the Wherry Section.

Valve 2 will isolate the Capehart Section.

Valve 60 will isolate the Sin City Section.

Valves 4, 6, 8, 12, 15, 72 and 73 will isolate Section D.

WCG has a combined total of 96 valves that meet the requirements of **49 CFR 192.474**, Valve Inspection and Maintenance.



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## **KEY & SECONDARY VALVES - MATHER RESIDENTIAL**

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# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

### SCOPE AND PURPOSE

This procedure is to ensure the safe and proper operation of valves, which may be required during an emergency as well as during normal operations under **49 CFR 192.747**.

### RESPONSIBILITY

The Operations Manager is responsible for ensuring that all valves intended for emergency and normal operations of the distribution system are inspected according to the provision of this procedure.

### PERSONNEL SAEFTY

All personnel are to use proper protective clothing and equipment when valve inspection and maintenance are performed.

### EQUIPMENT AND MATERIALS

Val-Tex 1400 Hydraulic Lubrication Gun (Flush)  
 Val-Tex 1400 Hydraulic Lubrication Gun (Grease)  
 Val-Tex Valve Flush  
 Val-Tex Valve Grease  
 Valve Wrenches  
 Pipe Wrenches  
 Leak Soap

### OPERATOR QUALIFICATIONS

This activity is a covered task under the Operator Qualification Plan and may only be completed/performed by or directed and observed by a WCG employee who is currently qualified to perform this task. Refer to the WCG OQ Plan for specific qualification requirements.

### INSPECTION FREQUENCY

Each valve indicated on system plans and maps shall be inspected and maintained at least once each calendar year at intervals not to exceed 15 months per **49 CFR 192.747**.

### INSTRUCTIONS

#### Steel Valve Procedures

- 1) Check that the valve is in the proper operating condition.
- 2) Visually inspect for signs of tampering or damage.
- 3) Check for leaks using leak soap.
- 4) Before using valve flush try to turn the valve. This could loosen some of the particles that are binding the plug.
- 5) Make sure that the valve is in the full open position.
- 6) Begin to tighten grease gun to button head fitting and add valve flush equal to the sealant capacity listed for the valve.

**NOTE:** Allow at least 20 pumps with the hydraulic grease gun for it to prime.

- 7) While pumping valve flush into valve, it's recommended that you do not exceed an injection pressure of 4000 psi for valves four (4) inches and smaller and 6000 psi for valves six (6) inches or larger. Please consult your manufacturer's catalog "Val-Tex" or assess the general condition of you valve to determine a safe injection pressure.



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

8) If the grease gun will not build pressure, check the following:  
**a) Seepage Around the fitting -**  
 Inspect the coupler washer and the fitting for defects or debris.

**b) Leakage Around the Coupler -**  
 tighten the coupler back on to the button head fitting.

9) Try to keep the pressure above 1000 psi. If the pressure drops rapidly or never builds (after the procedures in number 8) you are probably relieving in one (1) or two (2) veins only.

**NOTE:** You can try to build a false blockage by injecting a small amount of lube sealant (approximately 10% to 20% of its capacity) to temporarily plug the open veins and allow the valve flush to build pressure against the veins that are still clogged.

10) After injecting valve flush let it soak for 30 minutes or as long as possible to allow it time to soften the hardened deposits.

**Caution:** Never remove the coupler before opening the bleeder valve on the grease gun. Keep your hand away from coupler and wiggle the hose to release trapped pressure.

11) While using lubrication grease gun please perform procedures 5 through 10 as needed.

12) Flex the valve approximately 10 times by turning it from an open to a closed position. Any valve that cannot be closed completely should be closed as much as possible.

13) If required repeat this procedure:

SIZE	CAMERON BALL VALVE	GROVE PBV BALL VALVE	PLUG VALVE
3/4"	---	---	1/2 oz
1"	---	---	1 oz
1 1/2"	---	---	1 oz
2"	2 oz	---	3 oz
3"	2 oz	---	4 oz
4"	3 oz	---	5 oz
6"	4 oz	3 oz	9 oz
8"	6 oz	3 oz	11 oz

**NOTE:** It takes approximately 350 strokes of the hydraulic gun to pump 8 oz. of material. It takes 44 pumps to deliver 1 oz. of material through the hydraulic gun, see manufacturer's chart to calculate quantity desired.

### PE Valve Procedure

- 1) Check that the valve is in the proper operating condition.
- 2) Visually inspect for signs of tampering or damage.
- 3) Check for leaks using leak soap.
- 4) Using the correct size valve wrench exercise the PE valve by closing and opening valve.
- 5) PE valves do not/will not accept flush and grease.



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

### VALVE FINDINGS

#### Castle Commercial

VALVE TYPE	VALVE SIZE	QUANTITY
Plastic	1"	3
Steel	1"	3
Plastic	1 1/4"	3
Steel	1 1/4"	4
Steel	1 1/2"	3
Plastic	2"	2
Steel	2"	11
Steel	3"	2
Plastic	4"	1
Steel	4"	31
Steel	6"	2

#### Mather Commercial

VALVE TYPE	VALVE SIZE	QUANTITY
Plastic	3/4"	1
Steel	3/4"	1
Steel	1"	5
Plastic	1 1/4"	6
Steel	1 1/4"	17
Steel	1 1/2"	1
Plastic	2"	6
Steel	2"	14
Plastic	2 1/2"	1
Steel	2 1/2"	6
Plastic	3"	2
Steel	3"	18
Plastic	4"	7
Steel	4"	14
Plastic	6"	1
Steel	6"	22
Steel	8"	2

#### Mather Residential

VALVE TYPE	VALVE SIZE	QUANTITY
Steel	1"	1
Steel	1 1/2"	2
Plastic	2"	48
Steel	2"	17
Steel	3"	3
Plastic	4"	4
Plastic	6"	3
Steel	6"	18

#### Herlong Federal Correction Institution

VALVE TYPE	VALVE SIZE	QUANTITY
Plastic	4"	2
Steel	2"	5
Steel	4"	2

#### Inoperable Valve

If, for any reason, a valve is found/discovered to be inoperable the employee is to immediately contact the Operations Manager or Supervisor of Field Operations so that a different valve(s) can be selected to take the place of the inoperable valve.

Any changes to valves must be documented on all maps and communicated to ALL employees.

After selecting a different valve to control gas flow the Operations Manager will schedule a date to promptly repair or replace inoperable valve.

#### Replacing Valves

Whenever steel valves can be taken out of service for repair purposes, repairs can be accomplished using a replacement segment of pre-tested PE pipe (poly) and PE valve.



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

- 1) Removed valve segment to be replaced with PE pipe and PE valve.
- 2) Use steel pipe threader to cut pipe threads onto both ends of remaining steel pipe in ground.
- 3) Clean newly cut threads using a wire brush and a clean rag. After cleaning apply teflon tape and/or pipe thread compound to threads.
- 4) Install new steel threaded coupler onto both ends of threaded steel pipe with pipe wrench.
- 5) Apply teflon tape and/or pipe thread compound onto threaded ends of steel to poly transition fittings.
- 6) Install transition fittings into steel couplers using pipe wrench.
- 7) Fusion on new PE (poly) valve onto one end of PE pipe (poly) with a PE coupler. Measure the gap between the valve and transition fittings and cut a new section of pre-tested PE pipe to fit.
- 8) Refer to the **Maintenance 281: Plastic Fusion Procedure** and select a method of fusion to use to make the connection between the transition fittings and the PE pipe/PE valve.
- 9) Follow fusion procedures in this manual and make the connection.
- 10) Restore gas to pipeline

- 11) Refer to **Design/Construction 503: Facility Leak Test/Pressure Requirements** and follow the leak test procedures to ensure the safe operation of this pipeline.
- 12) Restore cathodic protection by cad welding tracer wire across repair to both ends of steel pipe.
- 13) Complete and file all documentation necessary for repair.

### REPORTING AND NOTIFICATION

Complete valve inspection and maintenance forms for each valve using **Form 747MC: Mather Commercial Valve Maintenance Record**, **Form 747MR: Mather Residential Valve Maintenance Record**, **Form 747C: Castle Commercial Valve Maintenance Record** or **Form 747H: Herlong Valve Maintenance**.

Notify the Operations Manager of any problems that could not be repaired during the inspection and maintenance.

### RELATED CODES, PROCEDURES & FORMS

**Maintenance 281: Plastic Fusion Procedure**

**Design/Construction 503: Facility Leak Test/Pressure Requirements**

**Maintenance 709: Record Keeping**

**Maintenance 747: Valve Inspection and Maintenance**

**49 CFR 192.747: Valve Maintenance**





# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

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Form 747C: Valve Maintenance Record -  
Castle Commercial

Form 747H: Valve Maintenance Record -  
Herlong FCI

Form 747MC: Valve Maintenance Record -  
Mather Commercial

Form 747MR: Valve Maintenance Record -  
Mather Residential



# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>Maintenance 747</b>
August 7, 2019	Supersedes All Previous Dates

## VALVE INSPECTION AND MAINTENANCE

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# Operations, Maintenance and Emergencies Procedural Manual

<b>REVISION DATE</b>	<b>MAINTENANCE 723</b>
February 10, 2023	Supersedes All Previous Dates

## LEAKAGE SURVEYS

### SCOPE AND PURPOSE

The purpose of this procedure is to ensure the safe operation of the pipeline system through periodic leakage surveys according to the requirements of **49 CFR 192.723**.

### RESPONSIBILITY

All qualified WCG personnel are responsible for ensuring that all pipeline system leakage surveys are performed according to the provision of this procedure and that proper records are made.

The Operations Manager may use an outside agency to perform the leakage survey and assign a WCG Qualified employee to assist and oversee the survey. The outside agency that WCG contracts with to perform leakage surveys will be Health Consultants on an as need basis.

Outside agencies will follow WCG procedures while leak surveying WCG system.

### PERSONNEL SAEFTY

There are no special personnel safety issues.

### EQUIPMENT AND MATERIALS

- Facility Maps
- Traffic Safety Vest
- Gas Leak Reports
- General Pipeline Repair Form
- Combustible Gas Indicator (CGI) (DP-IR)
- Barhole Equipment
- Roto Hammer
- Generator

### OPERATOR QUALIFICATIONS

This activity is a covered task under the Operator Qualification Plan and may only be completed/performed by or directed and observed by a WCG employee who is currently qualified to perform this task. Refer to the WCG OQ Plan for specific qualification requirements.

### FREQUENCY

WCG will conduct leakage surveys of all of its facilities once each calendar year and not to exceed 15 months.

**WCG maintains a comprehensive map of all natural gas leaks found. This map is to be reviewed during leak surveying to determine if there are any areas that are prone to have more gas leaks.**

### INSTRUCTIONS

#### Procedure for DP-IR

- 1) Replace dust filter by removing the front dust cap and changing out the filter. Replace the filter, at minimum, on a daily basis. More often in dusty conditions.
- 2) Turn the DP-IR on, instrument will count down to indicate that it is warming up. Once the instrument is warmed up it will go to the run screen.
- 3) Push menu button intel, it reads alarm level. Use the up & down arrows to set desired alarm level. Alarm level should be set to 10 ppm.
- 4) Perform the self test calibration by pushing the menu button until front screen