DCA16FP003 – 8701 Arliss Street, Silver Spring, MD – House Explosion and Fire Accident.

Washington Gas should provide the following:

 From your entire pipeline system, state; the total number and type of mercury-sealed regulators that remains in service and the total number that has been removed from service.

We estimate that approximately 175,000 mercury regulators have been replaced through the years, with approximately 125,000 remaining in service. Washington Gas is unable to provide exact numbers of remaining mercury regulators due to multiple changes in the means for which the mercury regulator installation, maintenance, and replacement data was captured over the years.

- 2. Washington Gas should provide the following up-to-date information for the entire Flower Branch Apartments buildings;
- i. State the number of buildings, the type and number of mercury-sealed regulator installed in each building after its construction. Include the year of installation.

See Attachment A for tabulated data

ii. State the number of mercury-sealed regulator that has been removed from any building, include; the reason for the removal, the identified failure after the regulator was removed from service, and the year it was removed.

See Attachment A for tabulated data

When a mercury regulator is encountered through our normal course of work, the location of the regulator is noted in our Computer Aided Dispatch (CAD) System. A mercury regulator will be replaced when one of the identified reasons documented in Section 5125 of the WG Operations and Maintenance Manual is encountered. Depending upon the identified reason for replacement, that reason for replacement may not be documented in CAD.

iii. State what WG does with the mercury-sealed regulators after they are removed from service/each building.

WGL uses several contractors who specialize in meter and regulator work to perform the majority of the removals. These contractors are trained in the safe handling of mercury-containing regulators, and are equipped with Jerome mercury vapor analyzers to detect any mercury vapors that may be present in the work area. During removal, care is taken to ensure that all mercury is contained within the regulator unit. After removal, the regulators are immediately bagged and placed into dedicated, labeled plastic buckets with tight-fitting locking caps.

The regulators are transported by the contractors to central hazardous waste accumulation areas at WGL facilities. At the waste accumulation areas, the bagged regulators are removed

DCA16FP003 – 8701 Arliss Street, Silver Spring, MD – House Explosion and Fire Accident.

from the locking buckets and are placed into secured 55-gal drums. The drums are picked up at least every 90 days by a hazardous waste contractor, Veolia Environmental Services. The drums are transported under a secure chain of custody to Veolia's recycling facility. At the recycling facility, Veolia applies heat to the regulators to vaporize the mercury, thereby removing it from the regulators. The vaporized mercury is then re-condensed, collected, and stored as a hazardous waste. The regulators, which are free of mercury after the vaporization process, are then recycled as a scrap metal.

Address	Date of installation	Type of regulator initially installed	Number of regulators installed	Number of regulators removed	Date removed #1	Reason for removal #1	Date removed #2	Reason for removal #2	Size	Notes
8640 Piney Branch Rd	May 26 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8642 Piney Branch Rd	June 1 1955	Reynolds Model 30 #1	2	2	8/11/2016	Post incident removal	8/11/2016	Post incident removal	3/4 x 1	
8644 Piney Branch Rd	June 8 1955	Reynolds Model 30 #1	2	2	9/2/2010	Data unavailable	9/2/2010	Data unavailable	3/4 x 1	
8648 Piney Branch Rd	June 1 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	1 x 2**	**likely 3/4 x 1
8650 Piney Branch Rd	June 28 1955	Reynolds Model 30 #1	2	2	8/27/2010	Data unavailable	8/27/2010	Data unavailable	3/4 x 1	
8652 Piney Branch Rd	July 6 1955	Reynolds Model 30 #1	2	2	8/31/2010	Data unavailable	8/31/2010	Data unavailable	3/4 x 1	
8654 Piney Branch Rd	June 1 1955*	No regulator info on service record card	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable		*service installation date
8656 Piney Branch Rd	July 14 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8658 Piney Branch Rd	June 1 1955*	No regulator info on service record card	2	2	8/31/2010	Data unavailable	8/31/2010	Data unavailable		*service installation date
8660 Piney Branch Rd	July 22 1955	Reynolds Model 30 #1	2	2	10/7/2009	Data unavailable	Data unavailable	Data unavailable	1 x 2**	**likely 3/4 x 1
8662 Piney Branch Rd	August 8 1955	Reynolds Model 30 #1	2	2	9/20/2010	Data unavailable	9/20/2010	Data unavailable	3/4 x 1	
8664 Piney Branch Rd	August 9 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8666 Piney Branch Rd	March 23 1956	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8668 Piney Branch Rd	March 26 1956	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8670 Piney Branch Rd	April 4 1956	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8672 Piney Branch Rd	April 5 1956	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8674 Piney Branch Rd	April 9 1956	Reynolds Model 30 #1	2	2	8/25/2016	Post incident removal	Data unavailable	Data unavailable	3/4 x 1	
8701 Arliss St	June 15 1955	Reynolds Model 30 #1	2	0***					3/4 x 1	***incident building
8703 Arliss St	June 17 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8707 Arliss St	September 16 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8709 Arliss St	September 2 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8711 Arliss St	September 16 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8851 Garland Ave	September 23 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
8853 Garland Ave	September 27 1955	Reynolds Model 30 #1	2	2	9/2/2010	Data unavailable	9/2/2010	Data unavailable	3/4 x 1	
8855 Garland Ave	September 1 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	
3857 Garland Ave	August 26 1955	Reynolds Model 30 #1	2	2	Data unavailable	Data unavailable	Data unavailable	Data unavailable	3/4 x 1	

Mercury Regulator Removal Categories

Based upon a review of the mercury regulator replacement completion codes in our customer information system, over the past two years, Washington Gas has replaced approximately 4,000 mercury regulators. These reasons for these replacements fall into one of four categories:

- 1.) Regulator leaking leaking from body/connections or overpressure protection engaged and venting,.
- 2.) Replaced according to WG practice during the course of other work
- 3.) Failed to hold set point or wouldn't lock up during testing associated with a service visit
- 4.) Improperly returned to service; Mercury blown out of reservoir

The removal by year/category is below:

2015

Removal reason	Count			
1	143			
2	2163			
3	15			
4	52			
Grand Total	2373			

2016

Removal reason	Count			
1	118			
2	1124			
3	10			
4	51			
Total	1303			

8/26/2016 1 of 1