PHILADELPHIA GAS WORKS
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July 22, 2015

Mr. Darren Gill
Deputy Director
Commonwealth of Pennsylvania
Bureaus of Technical Utility Service
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

RE: Docket No. C-2011-2278312
Philadelphia Gas Works' Leak Detection Pilot Program

On behalf of Philadelphia Gas Works (PGW), please find its response to the Pennsylvania Public Utility Commission's letter July 1, 2015 requesting additional information in conjunction with PGW's report on its Leak Detection Pilot Program.

The additional information requested was to provide a list of the non-cast iron facilities that received additional leak surveys in Fiscal Years 2013 through 2015 referencing an excerpt from the Final Order.

"PGW was ordered to expand their interim leak surveys to include all of PGW's high risk mains, as defined in PGW's Distribution Integrity Management Program (DIMP), rather than only on cast iron mains" (Order at 6).

The following analysis identifies PGW's high risk mains as defined in its DIMP.

DIMP Rank	Threat	Asset Group	Material	Diameter	Pressure
1	Natural Forces	Mains	All	All	4.5" to 5 psig
2	Natural Forces	Mains	All	All	10 – 35 psig
6	Corrosion	Mains	Cast / Ductile Iron	8" and smaller	All
7	Corrosion	Mains	Cast / Ductile Iron	Larger than 8"	10 – 35 psig
8	Corrosion	Mains	Cast / Ductile Iron	Larger than 8"	4.5 – 5 psig
10	Corrosion	Mains	Unprotected Coated Steel	All	All

When formulating and implementing the interim leak survey parameters, PGW compared the performance of the main assets located within its DIMP. In order to adequately prioritize and mitigate these threats on the different types of assets in PGW's distribution system, the top two threats are sub-divided to ensure the most risk prone assets are being addressed.

Below is a synopsis of the results of the performance analysis in each of the threat categories (more detailed analysis can be found in the Attachments under Exhibit A – DIMP Performance Monitoring):

1. Natural Forces (LP / IP)	2009	2010	2011	2012	2013	2014
Cast / Ductile Iron	1.29	1.08	1.37	1.19	1.44	1.92
Plastic	0.01	0.01	0.01	0.02	0.02	0.01
Steel	0.03	0.03	0.07	0.03	0.05	0.06

2. Natural Forces (HP)	2009	2010	2011	2012	2013	2014
Cast Iron	1.06	1.59	2.19	1.82	2.32	2.72
Plastic	0.00	0.07	0.13	0.06	0.00	0.04
Steel	0.00	0.01	0.03	0.01	0.00	0.01

All other main categories were below 0.25 leaks per mile.

Taking this analysis and the language in the Final Order into consideration, PGW felt it was most prudent to include additional surveys on the main assets located within the high pressure (10 – 35 psig) cast iron category as part of the interim leak survey program. Based on the above data this category of main constitutes PGW's "high risk" main according to its DIMP.

Sincerely,

Raymond J. Welte
Vice President, Field Operations

cc: Matthew Stewart, Bureau of Technical Utility Services – PAPUC

Attachments: Exhibit A – DIMP Performance Monitoring

Exhibit A – DIMP Performance Monitoring

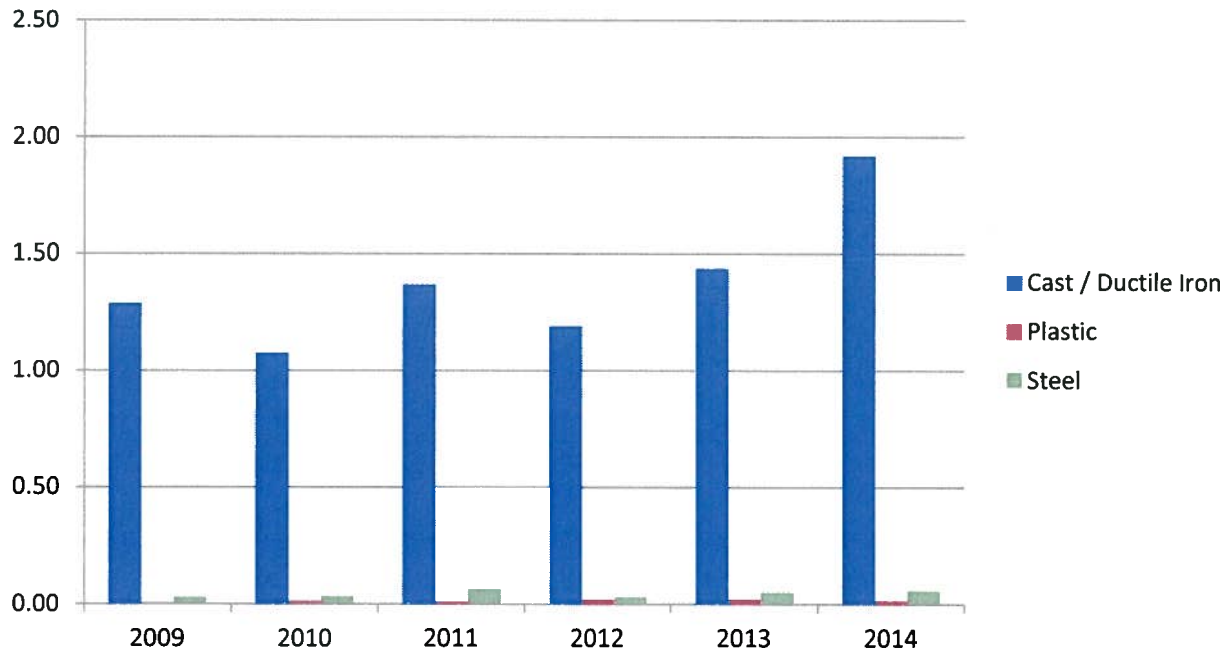
1. **Low & Intermediate Pressure**
   Threat: **Natural Forces – Concentrated Area**
   Description: **4.5" to 5 psig – All Materials**

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Cast/Ductile Iron	2,068	1,706	2,142	1,840	2,198	2,892	12,846
Plastic	2	4	4	7	8	6	31
Steel	21	24	49	22	37	42	195
Grand Total	**2,091**	**1,734**	**2,195**	**1,869**	**2,243**	**2,940**	**13,072**

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Cast/Ductile Iron	1.29	1.08	1.37	1.19	1.44	1.92
Plastic	0.01	0.01	0.01	0.02	0.02	0.01
Steel	0.03	0.03	0.07	0.03	0.05	0.06



2. **High Pressure**

Threat: **Natural Forces – Concentrated Area**

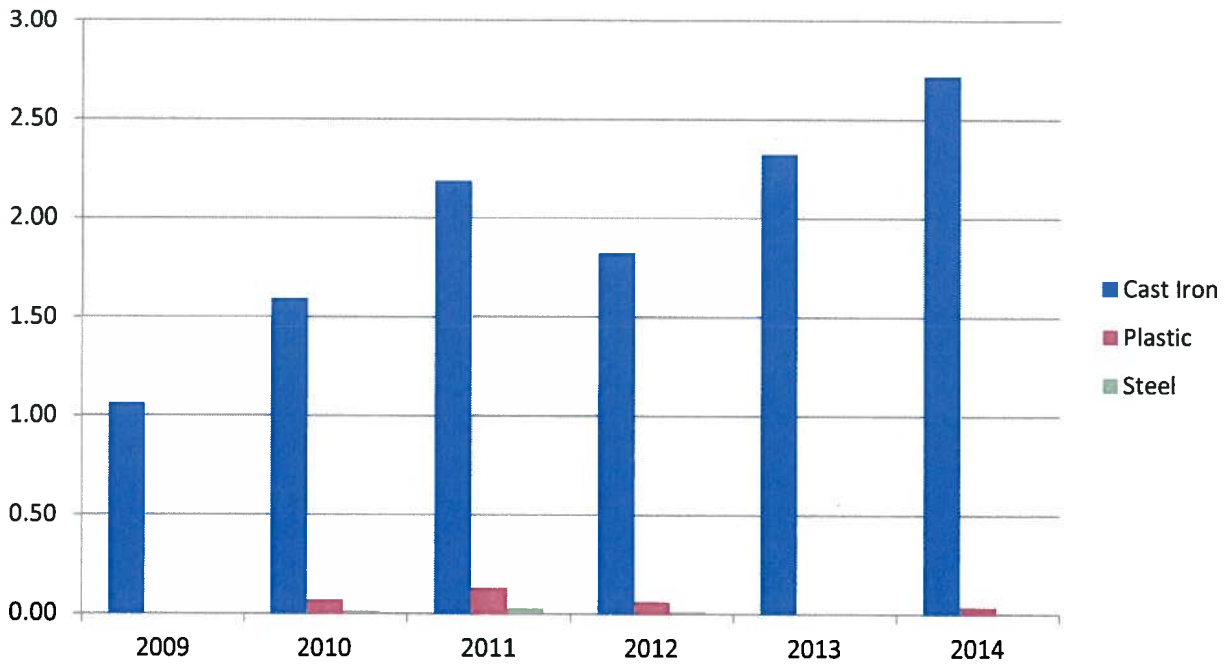
Description: **10 to 35 psig – All Materials**

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Cast Iron	110	165	223	185	223	246	1,128
Plastic	0	3	6	3	0	2	14
Steel	15	31	41	43	42	35	207

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Cast Iron	1.06	1.59	2.19	1.82	2.32	2.72
Plastic	0.00	0.07	0.13	0.06	0.00	0.04
Steel	0.00	0.01	0.03	0.01	0.00	0.01



6. **Cast and Ductile Iron (8" or Smaller)**

Threat: **Corrosion – External Corrosion**

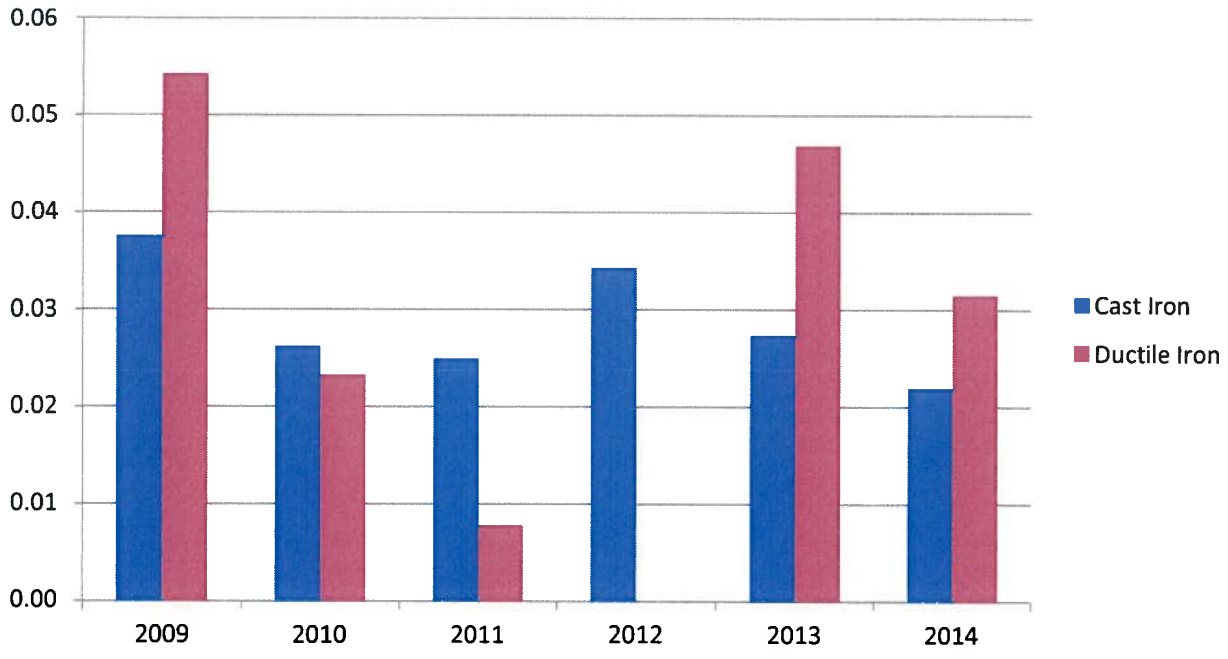
Description: **External Corrosion 8" and smaller main**

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Cast Iron	48	33	31	42	33	26	213
Ductile Iron	7	3	1		6	4	21
Grand Total	**55**	**36**	**32**	**42**	**39**	**30**	**234**

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Cast Iron	0.04	0.03	0.02	0.03	0.03	0.02
Ductile Iron	0.05	0.02	0.01	0.00	0.05	0.03



7. High Pressure - Cast and Ductile Iron (Larger than 8")

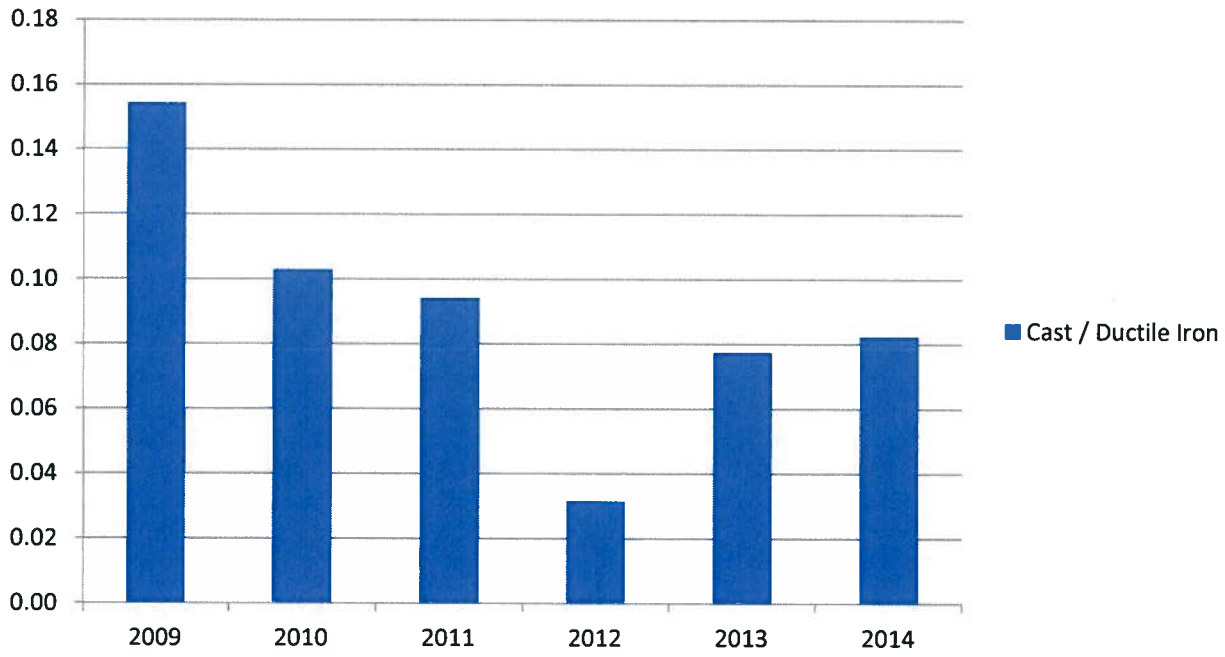
Description: 10 – 35 psig

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Cast / Ductile Iron	15	10	9	3	7	7	51
Grand Total	**15**	**10**	**9**	**3**	**7**	**7**	**51**

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Cast / Ductile Iron	0.15	0.10	0.09	0.03	0.08	0.08



8. Low and Intermediate Pressure - Cast and Ductile Iron (Larger than 8")

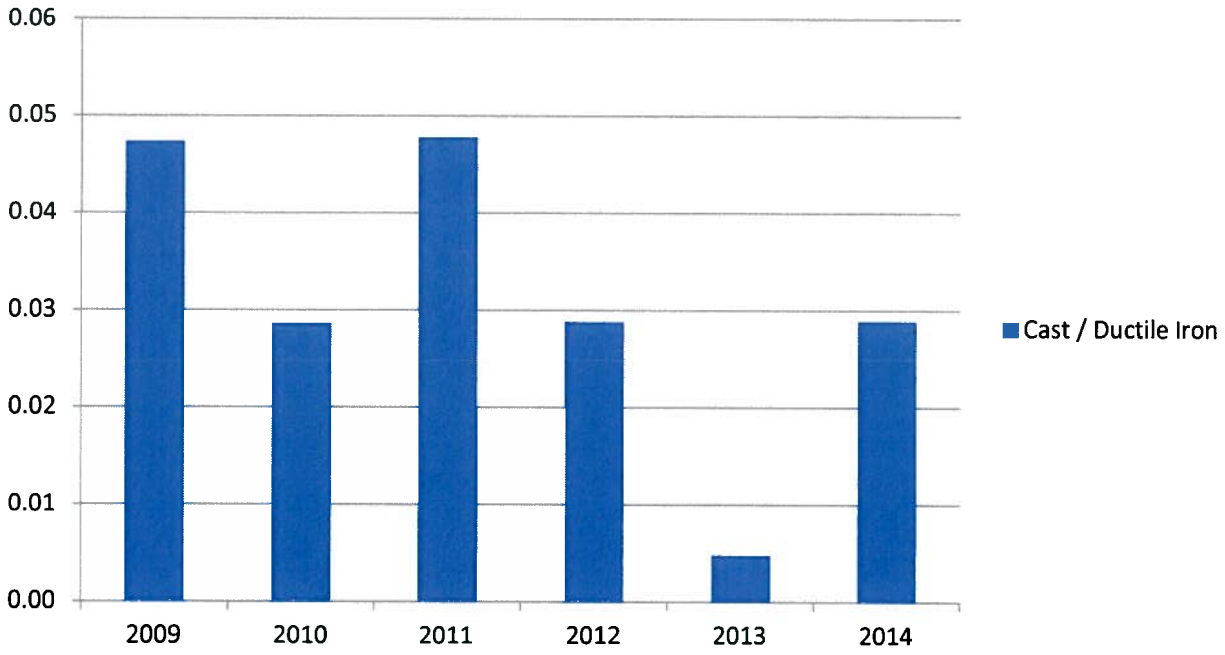
Threat: Corrosion – External Corrosion – Cast and Ductile Iron (> than 8")
Description: 4.5" - 5 psig

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Cast / Ductile Iron	10	6	10	6	1	6	39
Grand Total	**10**	**6**	**10**	**6**	**1**	**6**	**39**

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Cast / Ductile Iron	0.05	0.03	0.05	0.03	0.00	0.03



10. Unprotected Coated Steel

Threat: **Corrosion – External Corrosion**
Description: **Unprotected Coated Steel**

Leak Repaired

Main Material	2009	2010	2011	2012	2013	2014	Grand Total
Unprotected, Coated Steel	76	94	125	87	92	101	575
Grand Total	**76**	**94**	**125**	**87**	**92**	**101**	**575**

Leaks Repaired per Mile

	2009	2010	2011	2012	2013	2014
Unprotected, Coated Steel	0.15	0.19	0.25	0.18	0.19	0.21