

UGI UTILITIES RESPONSE TO NTSB INFORMATION REQUEST
June 16, 2023

NTSB Request No. 105: Summarize the extent of Aldyl A in your system. Indicate the miles of main, number of active services, and number of retired (not abandoned) services. If this information is not known, explain why it is not known, provide an estimate, and describe the process used to develop the estimate. For those assets estimated to be Aldyl A, provide a table (similar to Part C of PHMSA’s Annual Report form), indicating: total leaks and hazardous leaks eliminated/repaired during each of the last 5 years by cause. Also include the number of known system leaks coming from these assets at the end of the year for the last 5 years.

UGI Response:

UGI performed a review of its main and service asset data to summarize the extent of Aldyl-A in UGI’s distribution system. To perform this review, available main and service data attributes were analyzed to pinpoint an initial asset population that is known in UGI’s GIS. The criteria for inclusion in Table 1 is listed below:

- Any pipe manufactured by Dupont.
- Any pipe manufactured by Uponor and installed between the years 1991-2001.
- Any pipe with Aldyl-A listed as its material type.

The following tables represent main and service data based upon the criteria above that best indicates UGI’s extent of its reported Aldyl-A asset population.

Table 1: Reported Aldyl-A in UGI’s Distribution System:

	Reported Mains (mi.)	Reported Services (unit)	Reported Retired Services
Total	741	8,970	172

Notwithstanding the figures reported in Table 1, UGI believes that there may be a significant number of additional main miles and services in its system that are composed of Aldyl-A. The Company and its predecessor companies did not always record the material resin type or name of manufacturer information upon installation of plastic mains and services. As a result, UGI believes there are additional mains and services composed of Aldyl-A not included in Table 1.

Leak Data for the population reflected in Table 1 is shown below in Tables 2-6. Open leaks have not been excavated, thoroughly inspected, nor attributed to a specific facility and are therefore not reflected in the response. Once a leak is repaired, it can be attributed to a specific asset in UGI’s distribution system. In some cases, repairing a leak through asset replacement may also prevent the attribution of a leak to a specific asset. Based on the last 5 years of leak repair data, Reported Aldyl-A materials have averaged 113 leak repairs/year on UGI’s distribution system.

Table 2: 2018 Potential Aldyl-A Total/Hazardous Leaks Repaired

2018 Reported Aldyl-A			
Row Labels	Hazardous	Non-Hazardous	Grand Total
Main			
Corrosion Failure	2	1	3
Equipment Failure	0	1	1
Excavation Damage	7	0	7
Incorrect Operation	2	2	4
Natural Force Damage	0	8	8
Other Cause	1	4	5
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	4	11	15
Service			
Corrosion Failure	3	2	5
Equipment Failure	6	10	16
Excavation Damage	11	0	11
Incorrect Operation	0	1	1
Natural Force Damage	7	14	21
Other Cause	1	1	2
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	7	13	20

Table 3: 2019 Potential Aldyl-A Total/Hazardous Leaks Repaired

2019 Reported Aldyl-A			
Row Labels	Hazardous	Non-Hazardous	Grand Total
Main			
Corrosion Failure	0	3	3
Equipment Failure	1	0	1
Excavation Damage	4	0	4
Incorrect Operation	0	1	1
Natural Force Damage	5	6	11
Other Cause	1	2	3
Other Outside Force Damage	1	0	1
Pipe, Weld, or Joint Failure	3	4	7
Service			
Corrosion Failure	2	1	3
Equipment Failure	3	9	12
Excavation Damage	23	0	23
Incorrect Operation	0	1	1
Natural Force Damage	6	13	19
Other Cause	0	1	1
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	4	10	14

Table 4: 2020 Potential Aldyl-A Total/Hazardous Leaks Repaired

2020 Reported Aldyl-A			
Row Labels	Hazardous	Non-Hazardous	Grand Total
Main			
Corrosion Failure	0	1	1
Equipment Failure	0	1	1
Excavation Damage	4	0	4
Incorrect Operation	0	1	1
Natural Force Damage	12	5	17
Other Cause	0	3	3
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	3	7	10
Service			
Corrosion Failure	1	0	1
Equipment Failure	3	3	6
Excavation Damage	11	1	12
Incorrect Operation	0	0	0
Natural Force Damage	5	13	18
Other Cause	1	1	2
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	0	6	6

Table 5: 2021 Potential Aldyl-A Total/Hazardous Leaks Repaired

2021 Reported Aldyl-A			
Row Labels	Hazardous	Non-Hazardous	Grand Total
Main			
Corrosion Failure	0	0	0
Equipment Failure	1	1	2
Excavation Damage	11	1	12
Incorrect Operation	0	0	0
Natural Force Damage	9	7	16
Other Cause	3	4	7
Other Outside Force Damage	1	1	2
Pipe, Weld, or Joint Failure	7	19	21
Service			
Corrosion Failure	2	2	4
Equipment Failure	2	14	16
Excavation Damage	15	0	15
Incorrect Operation	0	2	2
Natural Force Damage	6	18	24
Other Cause	1	4	5
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	3	4	7

Table 6: 2022 Potential Aldyl-A Total/Hazardous Leaks Repaired

2022 Reported Aldyl-A			
Row Labels	Hazardous	Non-Hazardous	Grand Total
Main			
Corrosion Failure	1	2	3
Equipment Failure	2	2	4
Excavation Damage	13	2	15
Incorrect Operation	0	0	0
Natural Force Damage	7	11	18
Other Cause	2	1	3
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	5	5	10
Service			
Corrosion Failure	3	3	6
Equipment Failure	4	6	10
Excavation Damage	20	0	20
Incorrect Operation	1	1	2
Natural Force Damage	8	21	29
Other Cause	1	1	2
Other Outside Force Damage	0	0	0
Pipe, Weld, or Joint Failure	2	4	6