

A photograph of two red fire trucks on a street. The truck in the foreground is a Pierce engine, and the one in the background is a Grand Prairie pumper. The image is darkened to serve as a background for text.

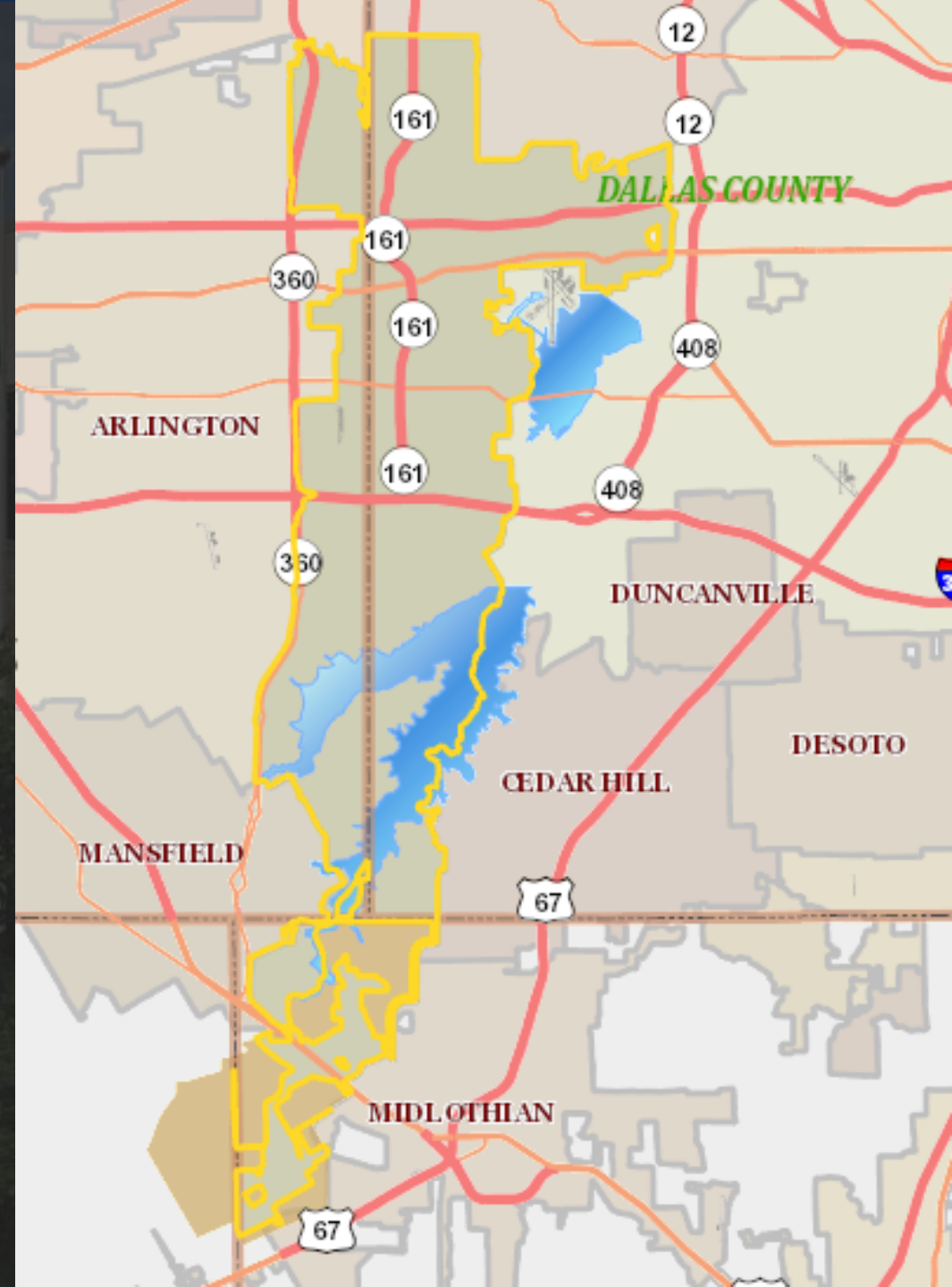
How Routine Firefighting Operations Can Create A City-wide Emergency

Fire Chief Robert Fite
Grand Prairie Fire Department

E1124+

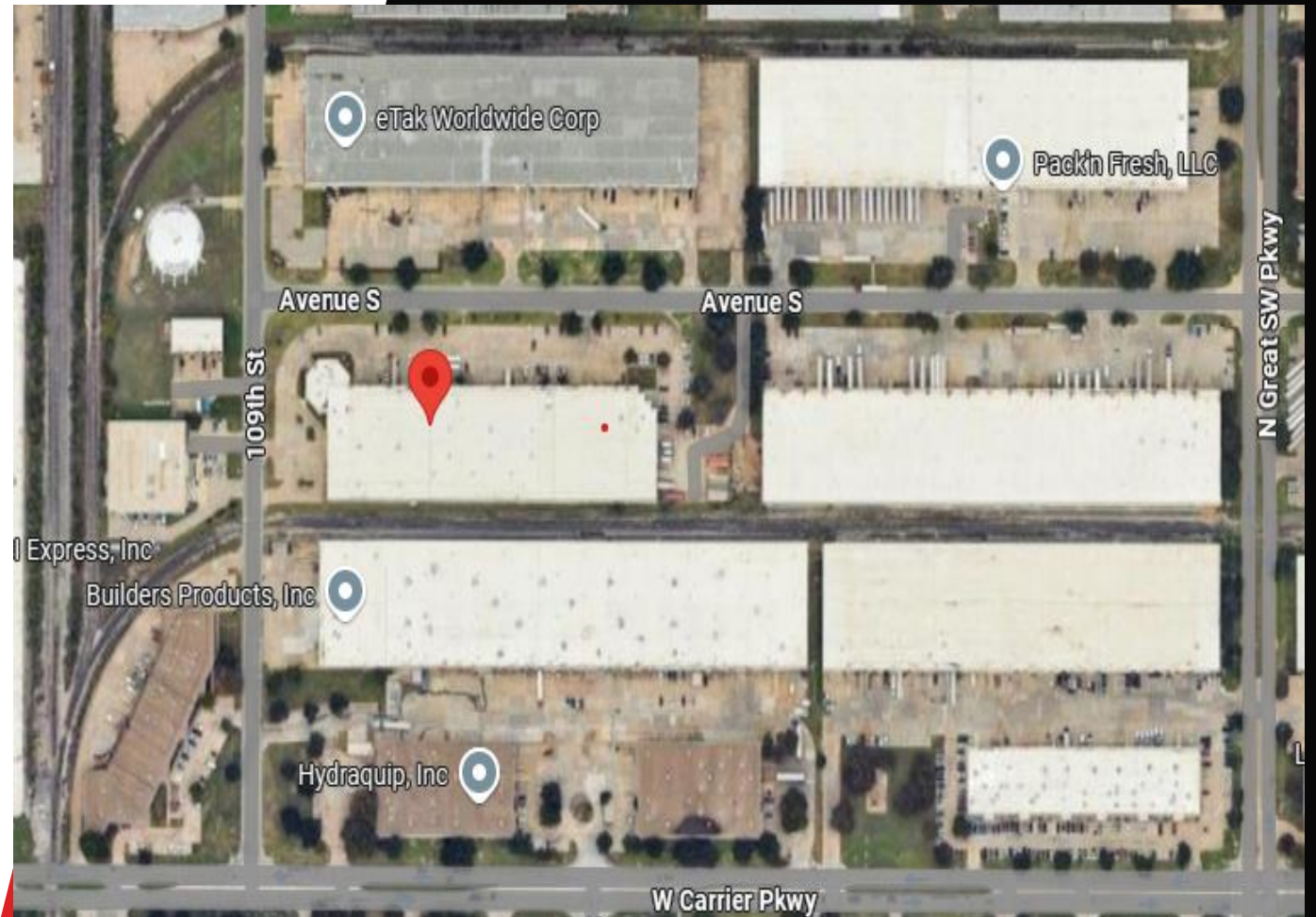
City of Grand Prairie

- 220,000 population
- 11 Fire Stations
- All Hazards
- 35 Miles long/4 miles wide
- Border Dallas and Fort Worth
- Lake, Horse Track, Miles of highways, Airport, 3rd largest Industrial District



Building Issues

- Large warehouse owned by a REIT
- One address divided into 3 separate buildings
- NO Certificate of Occupancy
- 2014 approved permits
- Importance of Inspections and pre-planning
- Auction/Amazon reseller
- Water Tower across street



September 3, 2024

900 Block of Avenue S

- Mid morning warehouse fire
- 3 Engines, 2 Trucks, 1 MICU, 2 BC's, and 1 air truck
- 24-28 staff on 1st alarm
- Under control in 38 Minutes



Conditions and Operational Issues

- Heavy Smoke Charlie Side
- Hoarder like conditions inside
- Fire was a large pile of electric cords on pallets



Dispatch Audio



Importance of Sole Pumper to FDC

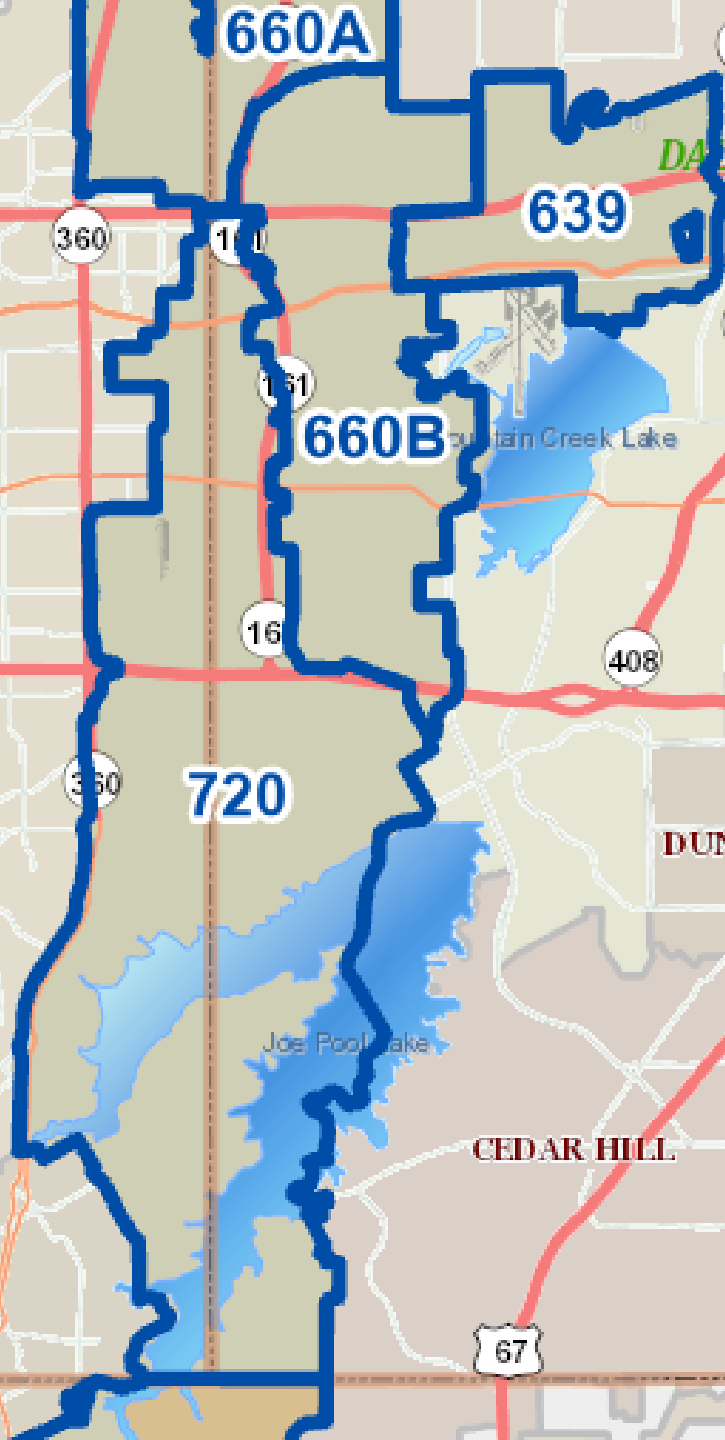
- Hydrant at FDC was OOS
- Water source used from Truck 8 to Engine 3, dual pumping
- Engine 3 was multi-pumping to several lines including FDC
- Pierce PUC Velocity (Pierce Ultimate Configuration)
- Foam lines are all or none



SEQUENCE OF EVENTS



- Inside teams called for foam on the handline
- Driver of Engine 3 begins foam at .1% to handline
- Foam is also sent into the FDC @125 gpm
- Fire quickly goes out with foam and sprinkler head is flowing foam
- FDC water backflows into city system as check valve is bad
- Engine 3 uses 30 gallons of foam from 1 sprinkler head and 1 handline.
- Water tower across the street is full of foamy water
- Fire is out and we all hi five each other but little did we know.....



AT CITY COUNCIL

- 911 calls begin
- "foamy water" is a common complaint
- Warehouse district issues
- Water Department begins to isolate
- ISOLATE=Shutting off water/planes helped isolate
- QUICKLY gets out of hand and we decide to activate a small EOC group
- TCEQ Conference call at 2230
- Haz Mat team sent to the area to test



Calcmeter - [Analysis Results - GAS-LIB-402_SN33656_c14_13_Rev1.CLIB: SAMPLE_01580.SPEX]

Ch	Component	Concentrati...	Unit	Range	Residual
0001	Water vapor	-0.40	vol-%	3	0.0026
0002	Carbon dioxide	245.75	ppm	2000	0.0022
0003	Methane	0.00	ppm	100	0.0046
0004	Nitrous oxide	0.18	ppm	100	0.0022
0005	Carbon monoxide	0.00	ppm	200	0.0023
0006	Nitrogen monoxide	0.00	ppm	200	0.0038
0007	Ammonia	0.00	ppm	50	0.0091
0008	Hydrogen fluoride	0.00	ppm	200	0.0012
0009	Hydrogen cyanide	0.00	ppm	50	0.0033
0010	Hydrogen chloride	0.00	ppm	50	0.0005
0011	Formic acid	1.07	ppm	100	0.0103
0012	Benzene	0.00	ppm	50	0.0038
0013	Toluene	0.00	ppm	200	0.0041
0014	Ethyl benzene	0.00	ppm	100	0.0052
0015	M-Xylene	0.00	ppm	200	0.0062
0016	Ethane	0.00	ppm	50	0.0062
0017	Propane	0.00	ppm	50	0.0049
0018	Cyclohexane	0.11	ppm	50	0.0045

Calcmeter - [Analysis Results - GAS-LIB-402_SN33656_c14_13_Rev1.CLIB: SAMPLE_01568.SPEX]

Ch	Component	Concentrati...	Unit	Range	Residual
0001	Water vapor	-0.17	vol-%	3	0.0015
0002	Carbon dioxide	202.82	ppm	2000	0.0020
0003	Methane	0.00	ppm	100	0.0031
0004	Nitrous oxide	0.23	ppm	100	0.0020
0005	Carbon monoxide	0.00	ppm	200	0.0023
0006	Nitrogen monoxide	0.00	ppm	200	0.0028
0007	Ammonia	0.00	ppm	50	0.0085
0008	Hydrogen fluoride	0.00	ppm	200	0.0012
0009	Hydrogen cyanide	0.00	ppm	50	0.0024
0010	Hydrogen chloride	0.00	ppm	50	0.0006
0011	Formic acid	1.14	ppm	100	0.0096
0012	Benzene	0.00	ppm	50	0.0030
0013	Toluene	0.00	ppm	200	0.0030
0014	Ethyl benzene	0.00	ppm	100	0.0041
0015	M-Xylene	0.00	ppm	200	0.0045
0016	Ethane	0.00	ppm	50	0.0055
0017	Propane	0.00	ppm	50	0.0062
0018	Cyclohexane	0.25	ppm	50	0.0050
0019	Hexane	0.00	ppm	50	0.0065

- Sample of Hydrant compared to Microblaze
- Statistical 99% match



City of Grand Prairie - Municipal Government

September 3, 2024 · 🌐

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DO NOT USE WATER ADVISORY:

The City of Grand Prairie has detected a foaming agent in the water supply north of I20. Crews are currently investigating the issue and working to isolate the affected area. If you live north of I20 in Grand Prairie, please avoid using water other than for flushing until further notice.

The City will have bottled water distribution stations. Please visit gptx.org for specific locations. For questions regarding this matter, please contact 972-237-8400.

Grand Prairie Residents: DO NOT USE TAP WATER; Fire Fighting Foam May be in Tap Water

Posted on September 4, 2024

Is there any indication this was an act of malice or terrorism?

Is anyone available to talk with us tonight/overnight?



Communications and Messaging

- Harsh wording – “DO NOT USE”
Website page wasn’t live with post
Phone lines were not ready and were having issues with influx of calls
- Fire Information released without Fire PIO/Not included in City Communications
- Microblaze "slightly toxic"

Challenges and Legal Claims

- 48 hours and all schools and restaurants closed
- Citizens googled Firefighting foam and wanted compensation
- Claims begin to flood online system
- Elected Officials




Water Resources and Coordination

- Fire and PD helping hand out water
- Media Staging area
- Delivering to citizens signed up to SPEER
- Copied COVID vaccine and food give away
- Importance of tracking donations



LESSONS LEARNED

A thick red horizontal bar with a diagonal cut on the right side, spanning across the top of the content area.

- Sole source FDC Pumper
 - Fire Engine Design
 - One check valve away from IFSTA changes
 - Non-PFAS Foam
 - ONLY water into FDC
 - Inspection Program
 - Check Valve inspections
 - State TCEQ
 - EOC Activation, earlier the better
 - Messaging strategy
 - Legal Claims and process to track
 - Water pick up/delivery/tracking
 - Elected Officials and messaging
- 
- A large decorative graphic in the bottom right corner consisting of a red triangle pointing upwards and to the right, and a black triangle pointing downwards and to the right, meeting at a diagonal line.