BULLETIN

NO.: 21-078

DATE: May 24, 2021

TO: All Personnel

FROM: David Picone, Battalion Chief, Health and Safety Officer

SUBJECT: Tailboard Safety - Natural Gas Incident Safe Practices

The attached Tailboard Safety addresses Natural gas leak "broken and blowing" incidents that are both common and potentially dangerous.

The goal of the Occupational Health & Safety Committee (OHSC) is to make these messages easily accessible to the crews and relevant to the time of year, as well as to individual safety concerns identified by training, administration and/or current events.

The attached Tailboard will be placed in the 3rd Quarter

- All other prior Tailboards can be found on Target Solutions @
 - o Logged in: Use the following link !Safety Communications folder
 - File Path: <u>San Diego Fire Rescue Department's Files > Health & Safety > !Safety Communications</u>
- Tailboard Table of contents (attached)

Supervisors of all Fire-Rescue Divisions are to select a Tailboard Safety Message and discuss it with their personnel.

- Fire Operations:
 - During the morning meeting of the division's 'first-day' back (twice monthly)
- All other divisions
 - One topic monthly to review with staff
 - o One (different topic) monthly to post at all site locations
- Please review this as a crew
 - Supervisors have the ability to add their crew members for assignment completion on all Health & Safety material

Any questions should be directed through the chain of command.

- Refer to SDFD Operations Manual
 - SI 10 Section 04 Safety Communications

If you have an idea for a new Tailboard Safety Message contact the Health and Safety Office.

Please contact the Health and Safety Office at SDFDHealth&Safety@sandiego.gov with comments or areas of improvement. For all other questions contact HSO/Battalion Chief David Picone at 619.533.4466 or dpicone@sandiego.gov

Jan-March	ety Messages April-June
·	* *
3 Watchouts & the Standard Firefighting Orders 2018	Africanized Honey Bees 2018
Attitude is Everything 2018 Cancer Risk Reduction 2018	Apparatus Rasking 2018
	Apparatus Backing 2018 CAPP Review 2018
Driving Situations 2018 Hazard Awareness 2018	
	Eye Protection 2018 Fentanyl 2018
Health & Safety in the Workplace 2018 Hydration 2018	FF LODD Statistics 2018
MRSA 2018	Hand and Power Tools 2018
Roadway Safety 2018 Safety and Maintenance of Hand Tools 2018	Neon Signs 2018 Office Safety and Extension Cords 2018
Safety and Maintenance of Hand Tools 2018 SCBA Immersion in Water 2018	Office Safety and Extension Cords 2018
	Roof Ventilation Safety 2018 Supervisors 10 Commandments of Safety 2018
Seat Belt Safety 2018 Unsafe Acts 2018	-
	Office Cleanliness 2019 Rescue Board 2019
Tensioned Cable Safety 2019 Raised Foundation Hazards 2020	Taking Short Cuts 2019
Organophosphate 2021	
Organophosphate 2021	Equipment Usage During Red Flag Warnings 2021
July-Sept	Oct-Dec
Coastal Rescuer Safety 2018	Carpal Tunnel Syndrome 2019
Confined Space Hazards 2018	Freeway Response Guidelines 2018
Exercise Warm Up and Cool Down 2018	Hand Tool Injuries 2018
Firefighter Safety in Urban Interface 2018	Lifting Safety 2018
Ground Ladder Safety 2018	Office Environment Safety 2018
Internally Grounded Power Tools 2018	Office Lighting 2018
Leadership Influences on Safety Culture 2018	Personal Safety at Vehicle Fires 2018
Office Mishaps and Causes for Concern 2018	Rescue Water Craft 2018
Rescue Water Craft Situational Awarness 2018	Rhabdomyolysis Dangers 2018
Seatbelts Save Lives 2018	Safe Parking at Incidents 2018
Solar Panel Safety 2018	The Use of Highway Flares 2018
Station Safety Considerations 2018	Transient Encampment Fires 2018
Warrning Signals of Extreme Fire Behavior 2018	High Pressure Gas 2018
Dangers of Energy Drinks 2019	Hydrogen Sulfide 2019
Eye Strain 2019	Medical Information on Smart Phones 2019
	Hazardous Materials Operations 2020



San Diego Fire-Rescue Department Health & Safety Office

Tailboard Safety

Topic: Natural Gas Incident Safe Practices

Background:

Natural gas leak broken and blowing incidents that are both common and potentially dangerous. Natural gas is comprised primarily of methane and is odorized with mercaptan. It is also invisible, lighter than air and has an explosive range of approximately five to fifteen percent. Be aware that crews can become desensitized to the odor of mercaptan due to lengthy exposure and that mercaptan can be leaked out of the Natural Gas if it travels up through soil on from broken, buried gas lines.

Proper procedures at a broken gas line include:

- 1. Crews are never to utilize redwood plugs or similar objects to try and plug a leak nor attempt to crimp/clamp gas lines
- 2. Attempting to isolate the gas leak by shutting the gas meter or appliance valve

As natural gas travels under pressure through pipes, it can build static electricity. When a "grounding opportunity" is found, this can introduce a spark for ignition. These techniques do not control static electricity and can result in an ignition. They can also damage or split the polypropylene pipes (further complicating control efforts). If crews cannot turn off the gas, isolating the area, setting up an exposure line, calling for a SDGE Control Crew and air monitoring utilizing a 4-gas meter are appropriate measures.



Do not get complacent on these incidents.

Below is a short video that clearly illustrates the explosive power and flammability of natural gas or methane.

References:

YouTube:

• Traffic camera captures Dubuque house explosion from gas leak

Target solutions:

- Logged in:
 - o SDFD Operations Manual SI02, Sec34 Special Operations: Natural Gas Emergencies
 - o File Path:
 - San Diego Fire Rescue Department's Files > Admin Resources-Manuals-Department Communications > Manuals & Guides > SDFD Operations Manual > Ops Manual SI 02: SPECIALIZED RESPONSE GUIDELINES



Colin Stowell Fire Chief

Chris WebberAssistant Chief, Emergency Operations

John WoodAssistant Chief, Business Operations

David Picone

Battalion Chief, Health & Safety Officer

New Safety Tailboards, Messages, Feedback, Suggestions and/or Reporting to the OHSC - SDFDHEALTH&SAFETY@SANDIEGO.GOV

"Promoting Safe and Healthy Lives"

