

Alternative Fuel Vehicle Fire Quick Response Guide

Assess

- ☐ Identify: Badging, markings, vehicle size up
- ☐ Assess: Is fire impinging on fuel sources?
- ☐ Note locations of fuel storage, fuel lines, and PRD locations
- ☐ Working companies: 1-EG, 1-LD, HMTF, DNTF, HM BC, District BC, SF, TSU, EDO, MED

Implement

- ☐ Isolate fuel source via fuel control module or cut loop if possible
- ☐ Extinguish any fire impinging on fuel source
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use 4-gas meter and TIC to assess fire attack
- ☐ If PRDs are activated, allow fire to burn

Plan

- ☐ Full structural PPE with SCBA within 400 ft
- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if fire is impinging on fuel sources and/or PRD's have activated

Evaluate

- ☐ Search vehicle when safe to do so
- ☐ Once PRDs have finished flowing, extinguish any remaining fire
- ☐ If indoors, consider moving vehicle outside when safe to do so
- ☐ Ensure tow company can properly tow damaged vehicle

Alternative Fuel Vehicle Fire Quick Response Guide

EV Notes (Pg. 3)

- ☐ Battery temperature below 150 F
- ☐ Establish technical decon with soap and water
- ☐ Tow on flatbed tow truck
- ☐ Engine to follow in case of reignition

LNG Notes (Pg. 5)



- ☐ "Cool" LNG cylinders and isolate via fuel control module
- ☐ Eliminate nearby ignition sources
- ☐ If PRDs are activated, allow fire to burn
- ☐ Do not stand in pooled LNG

CNG Notes (Pg. 7)



- ☐ Do not "cool" CNG cylinders
- ☐ Isolate cylinders via fuel control module if possible
- ☐ Eliminate nearby ignition sources
- ☐ If PRDs are activated, allow fire to burn

Hydrogen Notes (Pg. 9)



- ☐ Isolate fuel source via fuel control module if possible

- ☐ Eliminate nearby ignition sources

- ☐ If PRDs are activated, allow fire to burn

- ☐ Be aware of lithium-ion batteries

Propane Notes (Pg. 11)



- ☐ Identify cylinder material and use appropriate tactics

- ☐ Isolate fuel source via fuel control module if possible

- ☐ Eliminate nearby ignition sources

- ☐ If PRDs are activated, allow fire to burn

Resources (Pg. 13)

EV Fire Quick Response Guide

Assess

- ☐ Identify: type of vehicle (hybrid or EV)
- ☐ Assess: smoke color (white/gray), popping sounds, unusual odors reported, physical damage, visible fire
- ☐ Request additional resources
- ☐ Full structural PPE with SCBA within 400 feet

Implement

- ☐ Open windows and doors if possible
- ☐ Isolate batteries via cut loop if possible
- ☐ Copious amounts of water into passenger or battery compartment
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use TIC to assess fire attack
- ☐ Continue cooling with water until no heat signatures remain (below 150 F)

Plan

- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Be aware of toxic gases: CO₂, CO, LEL (approximately 3% or greater, especially indoors)
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if large vehicle or multiple vehicles involved

Evaluate

- ☐ Isolate battery or vehicle if necessary
- ☐ Notify MCPHD if there is runoff risk or disposal contractor needs
- ☐ Ensure vehicle is towed on flatbed tow truck
- ☐ Ensure all PPE is technically decontaminated with soap and water and immediately remitted to QM for cleaning

Assess Benchmarks/Notes

- ☐ Command established

EV Fire Quick Response Guide

☐ Confirm EV fire on radio

☐ Meter and temperature readings:

☐ Additional resources:

Implement Benchmarks/Notes

☐ Water on fire (inside compartment or directly to batteries)

☐ Ventilation established

☐ Exposures protected

Evaluate Benchmarks/Notes

☐ Battery temperature below 150 F

☐ Technical decon established/completed

☐ Vehicle on flatbed tow truck

Plan Benchmarks/Notes

☐ Isolation zone of 150 feet established

☐ Identify any exposures

LNG Vehicle Fire Quick Response Guide

Assess

- ☐ Identify: black LNG diamond/FCM visible
- ☐ Assess: Is fire impinging on LNG cylinders? Damage to LNG cylinders
- ☐ Note cylinder, fuel lines, and PRD locations
- ☐ LNG is odorless and colorless
- ☐ Request additional resources

Implement

- ☐ Isolate LNG cylinders via fuel control module if possible
- ☐ Cool LNG cylinders and extinguish any fire impinging on cylinders
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use 4-gas meter and TIC to assess fire attack
- ☐ If PRDs are activated, allow fire to burn
- ☐ Do not allow personnel to stand in or place water on pooled LNG

Plan

- ☐ Full structural PPE with SCBA
- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Use 4-gas meter to establish control zones
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if fire is impinging on cylinders and/or PRD's have activated

Evaluate

- ☐ Search vehicle when safe to do so
- ☐ Once PRDs have finished flowing, extinguish any remaining fire
- ☐ If indoors, consider moving vehicle outside when safe to do so
- ☐ Ensure tow company can properly tow damaged vehicle

Assess Benchmarks/Notes

LNG Vehicle Fire Quick Response Guide

- ☐ Command established
- ☐ Confirm LNG vehicle over radio
- ☐ Additional resources:

- ☐ Ignition sources eliminated
- ☐ Meter and temperature readings:

Implement Benchmarks/Notes

- ☐ Water on fire and cylinder
- ☐ Exposures protected
- ☐ Evacuation of surrounding area complete

Evaluate Benchmarks/Notes

- ☐ PRDs have finished venting
- ☐ Fire is out
- ☐ Vehicle secured by towing company

Plan Benchmarks/Notes

- ☐ Isolation zone of 150 feet established

CNG Vehicle Fire Quick Response Guide

Assess

- ☐ Identify: blue CNG diamond/FCM visible
- ☐ Assess: Is fire impinging on CNG cylinders? Can fire and CNG cylinders be separated?
- ☐ Note cylinder, fuel lines, and PRD locations
- ☐ Request additional resources

Implement

- ☐ Isolate CNG cylinders via fuel control module if possible
- ☐ Do NOT cool cylinders
- ☐ Extinguish any fire impinging on cylinders
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use 4-gas meter and TIC to assess fire attack
- ☐ If PRDs are activated, allow fire to burn

Plan

- ☐ Full structural PPE with SCBA
- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Use 4-gas meter to establish control zones
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if fire is impinging on cylinders and/or PRD's have activated

Evaluate

- ☐ If garbage truck, consider possibility of lithium-ion battery waste
- ☐ Once PRDs have finished flowing, extinguish any remaining fire
- ☐ If indoors, consider moving vehicle outside when safe to do so
- ☐ Ensure tow company can properly tow damaged vehicle

Assess Benchmarks/Notes

CNG Vehicle Fire Quick Response Guide

☐ Command established

☐ Confirm CNG vehicle over radio

☐ Additional resources requested:

☐ Ignition sources eliminated

☐ Meter and temperature readings:

Implement Benchmarks/Notes

☐ Water on fire

☐ Exposures protected

☐ Evacuation of surrounding area complete

Evaluate Benchmarks/Notes

☐ PRDs have finished venting

☐ Fire is out

☐ Vehicle secured by towing company

Plan Benchmarks/Notes

☐ Isolation zone of 150 feet established

Hydrogen Vehicle Fire Quick Response Guide

Assess

- ☐ Identify: blue hydrogen diamond/FCM visible
- ☐ Assess: Is fire impinging on hydrogen cylinders?
- ☐ Note cylinder, fuel lines, and PRD locations
- ☐ Locate and isolate lithium-ion battery modules
- ☐ Request additional resources:

Implement

- ☐ Isolate hydrogen cylinders via fuel control module if possible
- ☐ Do NOT cool cylinders
- ☐ Extinguish any fire impinging on cylinders
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use 4-gas meter and TIC to assess fire attack
- ☐ If PRDs are activated, allow fire to burn
- ☐ Monitor for signs of thermal runaway in lithium-ion battery modules

Plan

- ☐ Full structural PPE with SCBA
- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if fire is impinging on cylinders and/or PRD's have activated

Evaluate

- ☐ Search vehicle when safe to do so
- ☐ Once PRDs have finished flowing, extinguish any remaining fire
- ☐ If indoors, consider moving vehicle outside when safe to do so
- ☐ Ensure tow company can properly tow damaged vehicle

Assess Benchmarks/Notes

Hydrogen Vehicle Fire Quick Response Guide

☐ Command established

☐ Confirm hydrogen powered vehicle over radio

☐ Additional resources requested:

☐ Ignition sources eliminated

☐ Meter and temperature readings:

Implement Benchmarks/Notes

☐ Water on fire

☐ Exposures protected

☐ Evacuation of surrounding area complete

Evaluate Benchmarks/Notes

☐ PRDs have finished venting

☐ Fire is out

☐ Vehicle secured by towing company

Plan Benchmarks/Notes

☐ Isolation zone of 150 feet established

Propane Vehicle Fire Response Guide

Assess

- ☐ Identify: blue or black propane diamond
- ☐ Assess: Is fire impinging on propane cylinders? What type of cylinder?
- ☐ Note cylinder material, fuel lines, and PRD locations
- ☐ Request additional resources

Implement

- ☐ Extinguish any fire impinging on cylinders
- ☐ Cool metal LPG cylinders
- ☐ Do NOT cool composite LPG cylinders
- ☐ Ventilate immediate area/structure with PPV fans
- ☐ Use 4-gas meter and TIC to assess fire attack
- ☐ If PRDs are activated, allow fire to burn
- ☐ Monitor for signs of BLEVE

Plan

- ☐ Full structural PPE with SCBA
- ☐ Establish minimum isolation zone of 150 ft
- ☐ Protect adjacent structures, vehicles, and other combustibles
- ☐ Use 4-gas meter to establish control zones
- ☐ Eliminate nearby ignition sources
- ☐ Consider 1500 feet evacuation if fire is impinging on cylinders and/or PRD's have activated

Evaluate

- ☐ Search vehicle when safe to do so
- ☐ Once PRD's have finished venting, extinguish any remaining fire
- ☐ If needed, HMTF will defuel cylinders
- ☐ Ensure tow company can properly tow damaged vehicle

Assess Benchmarks/Notes

- ☐ Command established

Propane Vehicle Fire Response Guide

- ☐ Confirm propane powered vehicle over radio
- ☐ Meter and temperature readings:
- ☐ Additional resources requested:

Implement Benchmarks/Notes

- ☐ Water on fire and cylinder if appropriate
- ☐ Exposures protected
- ☐ Evacuation of surrounding area complete

Evaluate Benchmarks/Notes

- ☐ Fire is out
- ☐ Cylinders are below 100 degrees F
- ☐ Vehicle secured by towing company

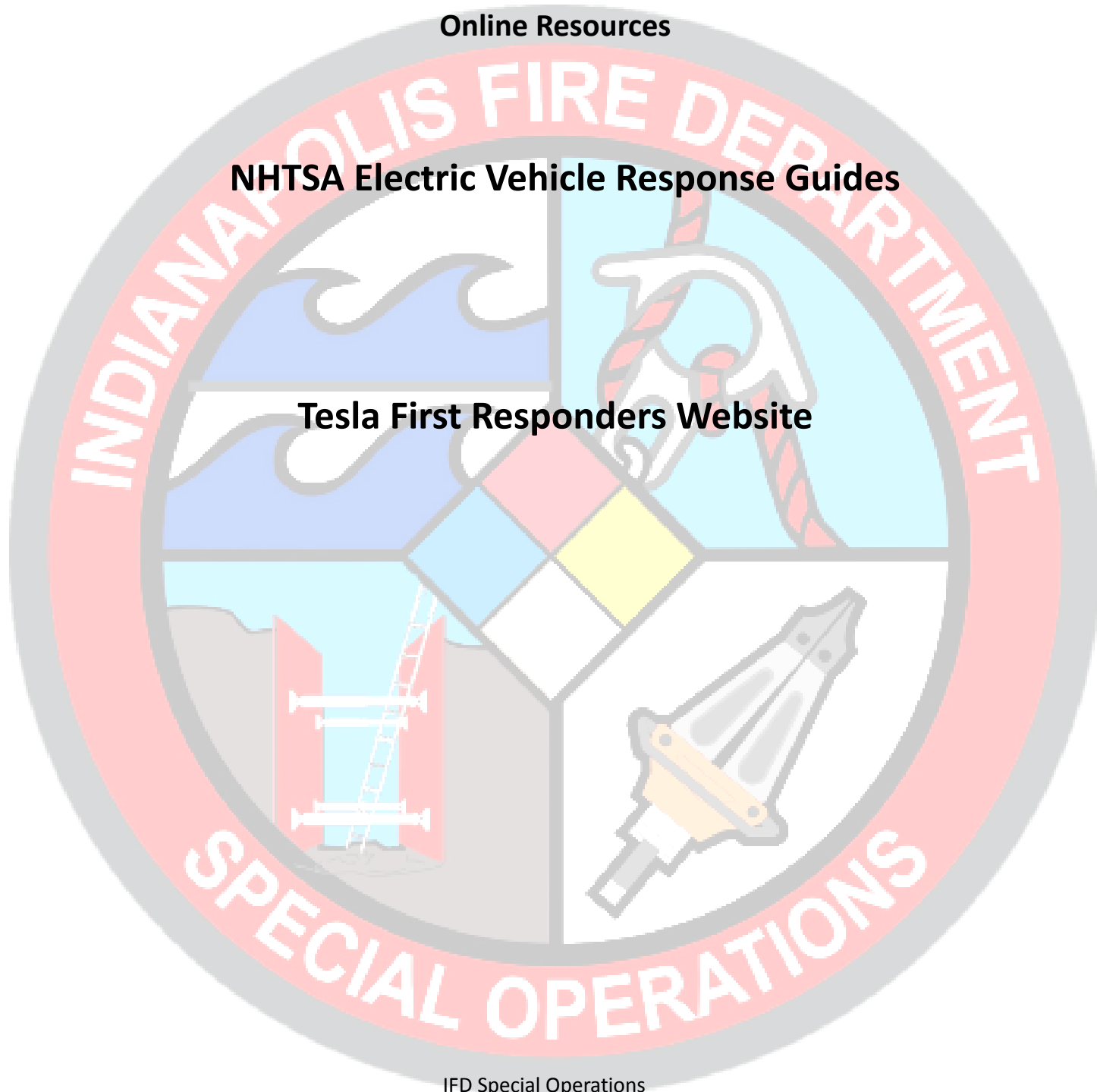
Plan Benchmarks/Notes

- ☐ Isolation zone of 150 feet established
- ☐ Ignition sources eliminated

Online Resources

NHTSA Electric Vehicle Response Guides

Tesla First Responders Website



IFD Special Operations