

NGV Incident Investigation Questionnaire

Instructions: this form is provided as a guide to support the efficient collection of pertinent information related to any incident involving a vehicle equipped with a liquefied natural gas (LNG) fuel system. Please complete as much of the form as possible based on your familiarity with LNG fuel systems and technology. This form can be submitted via any of the contact methods listed at the end of this form with as much--or as little--information as you are able to provide.

Notes: (1) For vehicles equipped with a CNG fuel system, refer to the CNG-specific form.
(2) All user-entry fields in this form are reserved for providing detailed evidence only. Users without knowledge or experience relative to any item on this form should not provide conjecture, and should instead skip to the next questionnaire item or provide photographic documentation in lieu of detailed comments.

On behalf of NGVAmerica staff, its members, and the entire NGV community, your support of this effort is greatly appreciated. Thank you for the critical role that you play in this investigative process.

Date & Time of Incident

Location of Incident

(e.g. address, city, state, place of business, etc.)

Vehicle Info & System Info

Year, make, and model of vehicle:

VIN: _____

Make of Body: _____

Commercial or private vehicle: _____

If commercial, identify company name: _____

Other hybrid vehicle system(s): _____

Make and year of LNG fuel system: _____

Name of system Integrator/installer: _____

Serial # or Traceability # of system: _____

Location of system: _____

Manufacturer of LNG container: _____

Number of containers: _____

Manufacturer of methane detectors: _____

Number of methane detectors: _____

Location of methane detectors: _____

Incident Details

Describe any injuries: _____

Describe property damage: _____

Brief Incident Description: _____

Did this incident involve a thermal event (i.e. fire)? _____ If no for both of these questions, skip to non-fire specific questions below.
Did this incident involve a fuel container rupture? _____
If yes, provide number of containers that ruptured and their location(s): _____

Describe any evidence of PRD activation, or lack thereof, specific to each PRD on the fuel container(s):

Is ignition source of the thermal event known? _____

Describe any evidence of thermal event temperature or intensity (e.g. material condition of steel, aluminum, zinc, plastic, fiberglass):

Other observations: _____

Non-Fire Specific Questions

Was the presence of methane detected with an audio or visual alarm from the vehicle's methane detectors?

Does the vehicle have any prior history of methane detector alarms? _____
Are all methane detectors on the vehicle functioning properly? _____
Witness description and/or evidence of gas leakage: _____

Was the vehicle refueling at time of incident? _____
What was the fuel level at the time of the incident? _____
What was the fuel tank pressure at the time of the incident? _____
When was the vehicle last filled? _____
When was the last inspection done on the system? _____
What issues were indicated in the inspection? _____

Are label(s) on the fuel container(s) visible and legible? _____
If yes, provide the date(s) identified along with the specification (e.g. manufacture date, end-of-life date): _____

Was the vehicle involved in a collision? _____

If yes, provide a detailed description of the collision and damage: _____

Does the vehicle have any historical incident reports associated with it? _____
If yes, provide brief description of each: _____

What operational issues or observations existed with the vehicle prior to the incident (e.g. range reduction, rough running, unusual lack of power, methane alarm, audible or visible leaks)? _____

Was the vehicle indoors when the incident occurred? _____
If yes, how long had it been indoors? _____
Was a heat source present in the building, and if so what type? _____

Is the building certified to permit LNG vehicle operation or parking? _____
What specific training has the driver and relevant service/maintenance personnel received for operating, inspecting, or working on LNG vehicles? _____

What was the ambient temperature at time of incident? _____
What were the events preceding the incident? _____

Were all the container valves open? _____
If no, which container valves were closed? _____

Is there any fuel or pressure remaining in the system? _____
If yes, what is the remaining fuel level and pressure? _____
Was there any recent repair or maintenance work performed? _____
If yes, describe the work that was performed and obtain work order documentation from the service provider: _____

If incident involves PRD malfunction, is there any evidence of moisture in the vent line(s) or other contributing factors: _____

List any other incident details or contributing factors here: _____

Personnel On Scene

Fire Department: _____
Primary contact for incident report follow up: _____
Contact information: _____

Police Department: _____
Primary contact for incident report follow up: _____
Contact information: _____

Other authorities on scene: _____
Primary contact for follow up: _____
Contact information: _____

News media on scene: _____
Link(s) to internet news story(s): _____

Incident Witnesses and contact information: _____

Attachments

Try to obtain the following as supporting documentation of this incident:

1. Incident/fire reports from first responders and/or local authorities
2. Service provider work orders from recent vehicle maintenance or repair
3. Historical vehicle incident reports
4. Photos or videos that provide a full understanding of all involved vehicles, vehicle dataplates, fuel system components, component labels, the surrounding area, occurrence of the incident, thermal event in progress, post-incident damage, events leading up to the incident, other exemplar vehicles nearby that are the same or similar model, age, or usage, etc.

Incident Investigation Contacts

Your name and contact info: _____

Submit this completed form and attachments via one of the following methods:

e-mail
psandsted@ngvamerica.org

fax
(202) 824-7084

Physical Delivery
NGVAmerica
ATTN: Paul Sandsted
400 N. Capitol St. NW
STE 450
Washington, DC 20001