

ANGVA2U Info 02/2019. 25th February 2019. (for ANGVA members only)

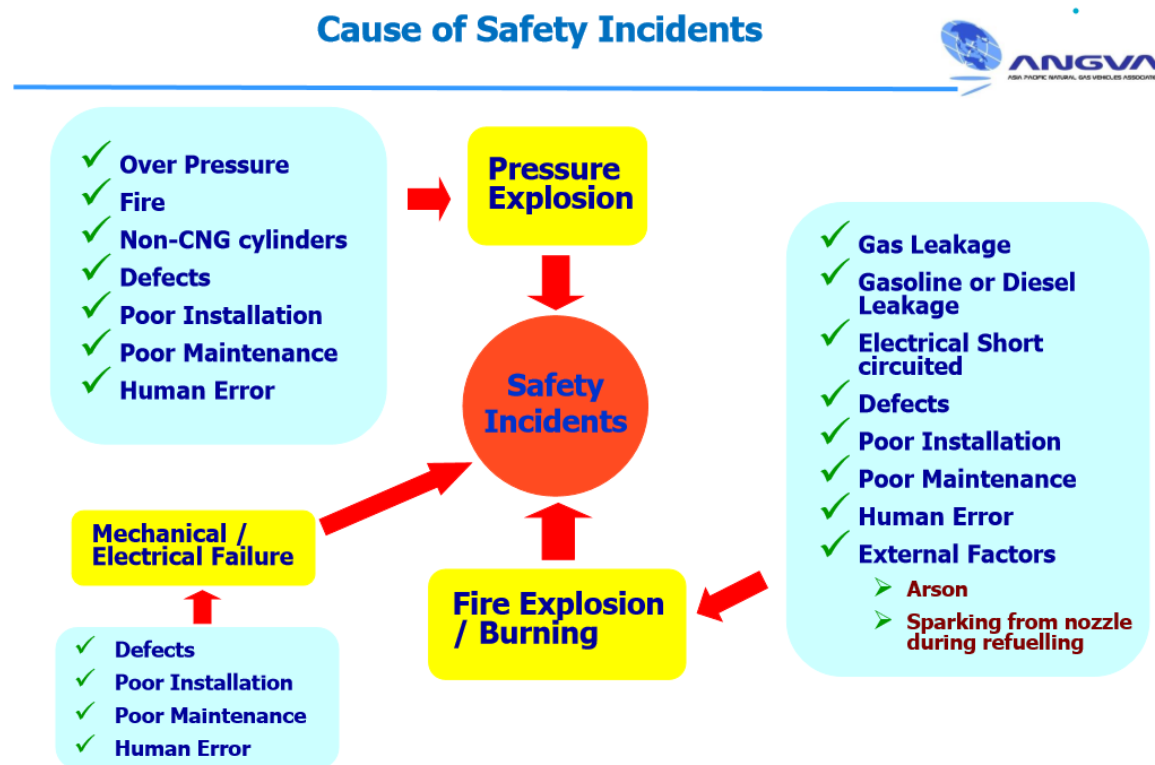
ANGVA2U Info aims to share information, data, and news related to NGV with ANGVA members. However, these information, data, and news are collected and shared in good faith, without any guarantees of accuracies. Members are advised to use these information and data prudently and at their own risks.

+++++

1.0 Safety

Safety is crucial in all transport fuels, be it gasoline, diesel, biofuels, CNG, LNG, LPG, electricity, or hydrogen. More often than not, safety were not practiced or ignored due to familiarity / routine of tasks, complacency, greed, illegal acts, or just plain ignorance of the high risk involved. Natural gas vehicles (NGVs) are as safe as any other vehicles (gasoline, diesel, LPG, etc.) operating on the roads.

The potential causes of safety incidents with NGVs are as shown in the diagram below:



The main safety challenge for NGVs is the high storage pressure CNG cylinders (or very low temperature cryogenic LNG tanks) onboard the vehicles. CNG cylinders are the highest pressure containment vessel commonly used by the general public. CNG cylinders have potential to cause extensive damage and injury if failed. Hence CNG cylinders must not be allowed to fail in any circumstances.

The starting point of ensuring safety is to have safety standards in place, and adoption of these standards as regulatory requirement by the relevant authorities of the country concern. (See Diagram in next page). These are then followed by compliances by the vehicle owners and monitoring and enforcement (and penalty) by the authorities. There must also be education and awareness on the safety requirement. Emergency response plan must be put in place and emergency responders such as police, fire fighters,

medical emergency personnel, etc., must be trained on how to response to incident / accident involving NGVs. Any safety incident / accidents must be properly investigated and lesson learnt must be shared to strengthen safety standards and safety practices.

Standards & Regulations – The Starting Point for Safety of CNG Cylinders



2.0 Selected News

2.1 Thailand

Taxi explodes during gas refill.

Writer: Sutthiwit Chayutworakan, Bangkok Post. January 15, 2019



The shattered remains of the taxi after its gas tank exploded at an NGV refueling station in Bang Phli district of Samut Prakan on Monday afternoon. (Photo by Sutthiwit Chayutworakan)

SAMUT PRAKAN: Experts have been called in to determine what caused the fuel cylinder of a natural-gas powered taxi to explode at a filling station in Bang Phli district on Monday, injuring three people.

Pol Maj Gen Ampol Buarabporn, commissioner of the Provincial Police Region 1, inspected the blast scene, a natural gas pump operated by Royal Golden Dragon on Soi Wat Sri Waree Noi in tambon Bang Chalong, on Tuesday morning.

He said investigators still had no idea why the explosion occurred.

"Such incidents have happened before. I set up a panel to carefully investigate the cause. All relevant factors must be looked at, the taxi, the station and its staff. We must determine the cause in the interest of public safety," Pol Maj Gen Ampol said.

Experts from the Energy Ministry and engineers from PTT Plc had joined the investigation, he said.

The cab's compressed natural gas cylinder exploded about 2.30pm on Monday.

Witnesses said the blast occurred when taxi driver Wichai Buadok, 45, got out of his taxi to pay for the gas. Mr Wichai was seriously injured by the explosion, which tore the taxi apart.

Two employees of the gas station were also hurt and another taxi and gas pumps damaged.

Source: <https://www.bangkokpost.com/news/general/1611498/taxi-explodes-during-gas-refill>

2.2 Pakistan

15 die in Karak van cylinder blast

by Staff Reporter. The NATION. February 7, 2019



PESHAWAR: At least 15 people were killed and three others injured when a gas cylinder installed in a passenger van exploded on the main Indus Highway in Karak yesterday.

Police said the accident happened in Speena Banda area of Karak when a Dera Ismail Khan-bound Peshawar passenger van hit a pick-up coming from the opposite direction. The passenger vehicle caught fire after the collision as the gas cylinder exploded. Local people retrieved the dead bodies and injured on self-help basis. Police also reached the scene later. An official said passengers' bodies were beyond recognition due to burning in the fire.

The bodies and the injured were shifted to District Headquarters Hospital. However, the injured were stated to be in critical condition. Emergency was declared in the hospital after the incident.

District police also initiated investigation into the incident. Sources said such incidents often happened due to use of substandard cylinders in vehicles. Social circles of the area have called upon authorities to

keep check on use of substandard cylinders to avoid occurrence of such horrible incidents. Earlier in the day, a man was killed and 10 others injured when two passenger vans collided with each other due to dense fog in Lakki Marwat.

The dead also included women.

Kyber Pakhtunkhwa Chief Minister Mahmood Khan has expressed grief and sorrow over the loss of precious lives in Karak incident where a passenger coach caught fire after colliding with a van, In a statement issued in Peshawar, the chief minister expressed grief over the loss of lives in the tragic road mishap. He also prayed for the eternal peace of departed souls and granting courage to bereaved family members. He also prayed for the early recovery of those injured in the incident.

Source: <https://nation.com.pk/07-Feb-2019/15-die-in-karak-van-cylinder-blast>

2.3 India

Bus catches fire in Pune: 35 passengers escape unhurt

HT Correspondent. HINDUSTAN TIMES. January 31, 2019

PUNE: The passengers were immediately asked to alight the vehicle after which it went up in flames completely, said PMPML officials.



A PMPML bus which was travelling from Katraj to Nigdi caught fire at Warje on Wednesday. (HT PHOTOS)

A Pune Mahanagar Parivahan Mahamandal Limited (PMPML) bus was gutted in a fire while carrying 35 passengers at Warje on Wednesday.

The bus was carrying 35 passengers from Katraj to Nigdi when it caught fire. The passengers were immediately asked to alight the vehicle after which it went up in flames completely, said PMPML officials. No casualties were reported in the incident which happened close to Rosary school located on Mumbai-Bangalore highway at Warje.

“The bus crossed from under the bridge near Rosary school and turned towards Warje when the smoke started coming. Because of a high amount of fibre, the fire started billowing,” said fire officer Agand Dnyanoba Lipane who was leading the team to douse the fire.

This was the third such incident this year. In 2018, six incidents of PMPML bus catching fire were reported. According to Lipane, the wiring of the bus, the cushions, everything caught fire immediately.

“We took two fire vehicles (instead of one) because of the compressed natural gas (CNG) fuel in the bus which was at risk of fuelling the fire further,” said Lipane. A total of 11 firemen and 2 drivers, along with fire officer Lipane, were involved in the process that lasted for 35 minutes and two fire brigade vehicles were present at the spot.

The bus was manufactured by Ashok Leyland and was four years and four months old. Registered under MH12KQ1186, the bus was fuelled by CNG and was registered in Pune.

The bus is owned and maintained by a contractor identified as Anthony Garages Private Limited and is daily parked at Nigdi PMPML bus depot.

Meanwhile, the public transport body is facing multiple issues including its buses often catching fire, frequent breakdowns and unclean buses. The PMPML currently owns 1,450 buses in its fleet with the public transport body plans to increase the number up to 2,450 in coming two years.

Also, last year, the PMPML had conducted a special drive to assess the condition of buses and found that there are 12 common technical problems plaguing the fleet.

Source: <https://www.hindustantimes.com/pune-news/35-passengers-escape-unhurt-as-pmpml-bus-in-pune-catches-fire/story-ubHKzzq5yOwZB5BlapiHAL.html>

2.4 Malaysia

Cemas tong NGV meletup (translation: *Panic NGV tank exploded*)

by Nur Saliawati Salberi. nursaliawati@nstp.com.my. MyMetro. February 17, 2019



Anggota bomba memeriksa MPV Naza Ria selepas tong NGV kenderaan itu meletup. Gambar kecil menunjukkan keadaan motorsikal yang rosak akibat terkena tong NGV dan bahagian kenderaan yang rosak akibat tong NGV itu meletup. FOTO: Ihsan Bomba. (translation: Firemen checking the MPV Naza Ria after its NGV tank exploded. Inset photos showed pictures of a motorcycle damaged after being hit by the flying exploded tank and picture of the NGV tank that exploded underneath the MPV (Multi Purpose Vehicle).

Melaka: PEMANDU kenderaan pelbagai guna (MPV) Naza Ria berdepan detik cemas apabila tong gas asli (NGV) kenderaannya meletup dalam kejadian di stesen minyak dekat Sungai Petai, Melaka, semalam. (Driver of a MPV confronted by panic when NGV tank exploded at refueling station near Sungai Petai, Melaka, yesterday).

Kejadian berlaku kira-kira 6 petang ketika lelaki berusia lewat 30-an yang membawa kenderaan itu mengisi NGV di stesen minyak berkenaan. (The incident happened around 6 pm when the man, late 30 years old, was filling NGV (CNG) at the station).

Komander Operasi Balai Bomba dan Penyelamat (BBP) Alor Gajah, Penguasa Bomba Kanan (PBK) II Roslan Manas berkata, pihaknya menerima panggilan kecemasan pada 6.10 petang sebelum dua jentera masing-masing dari BBP Alor Gajah dan BBP Tangga Batu bergegas ke lokasi kejadian. *(Fire Department operation commander of Alor Gajah station, Senior Superintendent (II) Roslan Manas said, the Fire Department received an emergency call at 6.10 pm. Two fire engines from Alor Gajah and Tangga Batu stations rushed to the incident location)*

Menurutnya, sejurus tiba di lokasi, pihaknya mendapati tong NGV tercampak berhampiran sebuah motosikal. *(He said, when arriving at the location, it was found that an NGV tank was thrown near a motorcycle)*

“Letupan gas itu tidak membabitkan kebakaran dan sebarang kemalangan jiwa. *(The gas explosion did not resulted in any fire and fatalities (injuries))*

“Ketika mengisi NGV tong gas yang berada pada bahagian belakang kenderaan itu meletup dan terputus dua,” katanya. *(While filling the NGV tank, which was located underneath the vehicle, the tank exploded into two).*

Roslan berkata, akibat terputus dua pada bahagian injap kepala, tong gas itu kemudian terpelanting kira-kira dua meter terkena sebuah motosikal jenis Honda Wave milik pekerja stesen minyak berkenaan. *(Roslan said due to the explosion, the tank broke into two at the valve part of the tank. The tank then flew around 2 meters and hit a Honda Wave motorcycle belonging to a worker of the filling station).*

“Difahamkan kenderaan terbabit mempunyai dua tong tetapi hanya satu yang meletup. *(It was believed that the vehicle involved had two NGV tanks, however only one tank exploded).*

“Siasatan lanjut mengenai insiden itu dilakukan pasukan forensik bomba bagi mengetahui punca sebenar kejadian,” katanya. *(Further investigation was conducted by the Fire Department Forensic team to determine the cause of the incident).*

Source: <https://www.hmetro.com.my/mutakhir/2019/02/424224/cemas-tong-ngv-meletup>

3.0 Events

- i. LNG and Natural Gas for Power and Industries Thailand Forum 2019. Organized by AEG. Endorsed by ANGVA. St. Regis Hotel, Bangkok, Thailand. 27th Feb – 1st Mar '19. *(27-28 Feb – Forum. 1st Mar – Site visit). ANGVA Executive Director is scheduled to speak on “Development of LNG for Transport to Drive Demand Growth” on Day 2 of the Forum.*
- ii. 20th China International NGVS and Gas Station Equipment Exhibition 2019 + 2nd China International Natural Gas Vehicle and Ship Development Forum 2019. China International Exhibition Center (New Venue), Beijing, China. 16th – 18th May 2019.
- iii. ANGVA 2019, The 8th ANGVA International Biennial Conference & Exhibition. Balai Kartini Exhibition & Convention Center, Jakarta, Indonesia. 18th – 20th Nov 2019. *Theme: Moving towards Low Carbon, Low Emissions, Next Generation Vehicles. Please contact ANGVA Secretariat at angva@angva.org or aznita@angva.org if you are interested to attend as exhibitor, delegate and / or speaker.*

4.0 End

Any comments and suggestions on the topics and information covered and to be covered in future are most welcome. Please send your comments and suggestions to Lee Giok Seng at email: leegs@angva.org