

1323308 January 2001

Source : CNN.COM, JANUARY 8, 2001

Location : Truth or Consequences, NEW MEXICO

Injured : 17 Dead : 0

Abstract

An explosion and fire occurred injuring seventeen people when a vehicle rolled onto a gasoline station and collided with an 18,000-gallon propane tank that was 85% full. Nearby residents were evacuated. A second tank holding 2,000 gallons of the flammable gas exploded as a result of the first explosion.
[fire - consequence, evacuation, road vehicle, gas - flammable]

Lessons

[None Reported]

1322114 December 2000

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, DECEMBER 15, 2000, (<http://www.chemsafety.gov>).

Location : Woodlawn, Ohio, USA

Injured : 0 **Dead** : 0

Abstract

One hundred and fifty people were evacuated when a hydrochloric acid spilled during preparations for offloading. The incident occurred when a flange on a road tanker broke spilling several hundred gallons of acid. Fortunately no one was injured in the incident.

[evacuation, unloading, flange failure]

Lessons

[None Reported]

1321430 November 2000

Source : YAHOO NEWS, NOVEMBER 30, 2000, (<http://www.uk.news.yahoo.com>)

Location : Northampton, UK

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Two carriages of a freight train derailed, fortunately the wagons stayed upright although the track was damaged in the incident. One wagon was carrying a freight container and another a 100 tonne flask, contents unknown. An investigation is underway into the cause of the derailment. Cost of repairs is estimated at £750,000 (2000).
[derailment - consequence, chemicals unknown]

Lessons

[None Reported]

Source : YAHOO NEWS, NOVEMBER 30, 2000, (<http://www.uk.news.yahoo.com>)

Location : Bristol, UK

Injured : 0 Dead : 0

Abstract

A rail transportation incident. An empty coal train derailed on its way from a power station spilling red diesel fuel onto nearby wetlands injuring many birds. No one was injured in the incident although it is reported that the driver was in shock. An investigation is underway to find the cause of the derailment.

[derailment - consequence, freight train, spill, environmental]

Lessons

[None Reported]

Source : TIME EUROPE, NOVEMBER 20, 2000.

Location : Kitzsteinhorn, AUSTRIA

Injured : 8 Dead : 150+

Abstract

A rail transportation incident. A funicular train caught fire inside a tunnel. The train was carrying more than one hundred and fifty passengers to the top of a ski slope when the incident occurred.

The fire fed by fresh air sucked into the tunnel and up through the train killing nearly all passengers, eight managed to escape. The cause of the fire is not known. An investigation into the incident is underway.

[passenger train, fatality, injury, fire - consequence]

Lessons

[None Reported]

Source : BBC NEWS, 2 NOVEMBER, 2000, (<http://www.bbc.co.uk>).

Location : Great Barrier Reef, AUSTRALIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A container ship carrying hazardous materials, fuel and oil ran aground on a reef causing a hole in the bow section, there are no reports of any spillage.

An attempt to refloat the ship is being made.

[ship ran aground, chemicals unknown]

Lessons

[None Reported]

Source : CNN INTERACTIVE, NOVEMBER 2, 2000, (<http://www.cnn.com>).

Location : Arizona, USA

Injured : 3 Dead : 1

Abstract

A rail transportation incident. Two freight trains, one containing hazardous materials and the other diesel fuel collided causing several carriages to derail. A fire and small explosion occurred as a result. It is reported that three crewmembers were injured and one killed in the incident. Nearby residents were evacuated as a consequence. Fortunately no hazardous materials were released.

An investigation into the incident is being carried out.

[collision, derailment - consequence, fire - consequence, evacuation, injury, fatality]

Lessons

[None Reported]

13193November 2000

Source : BBC NEWS, 6 NOVEMBER 2000, (<http://www.bbc.co.uk>).

Location : Osun State, NIGERIA

Injured : - **Dead** : 100+

Abstract

A road transportation incident. A petrol tanker exploded into a ball of flames when in collision with a queue of stationary cars. More than one hundred people were killed in the incident.

[road tanker, fire - consequence, explosion, fatality]

Lessons

[None Reported]

13192November 2000

Source : BBC NEWS, 5 NOVEMBER 2000, (<http://www.bbc.co.uk>).

Location : , BRAZIL

Injured : 0 Dead : 0

Abstract

A marine transportation incident. An oil tanker spilled an estimated twenty thousand gallons of crude oil. The incident occurred when the tanker collided with a pier whilst trying to dock. Part of the tankers hull was ripped open.
[marine tanker, collision]

Lessons

[None Reported]

Source : CNN.COM, NOVEMBER 23, 2000, (<http://www.cnn.com>).

Location :

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A freight train carrying containers on flat bed cars derailed. It is reported that one of the containers was carrying chlorine. One of the cars carrying containers slid in the shallow parts of a river. Fortunately no spillage occurred.

[derailment - consequence]

Lessons

[None Reported]

Source : BBC NEWS, 31 OCTOBER, 2000, 1 NOVEMBER, 2000, (<http://www.bbc.co.uk>).; CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 31 OCTOBER, 2000, (<http://www.chemsafety.gov>). Disclaimer: The Chemical Incident Reports Center (CIRC) is an information service provided by the U.S. Chemical Safety and Hazard Investigation Board (CSB). Users of this service should note that the contents of the CIRC are not intended to be a comprehensive listing of all incidents that have occurred; many incidents go unreported or are not entered into the database. Therefore, it is not appropriate to use the CIRC database to perform statistical analysis that extends conclusions beyond the content of the CIRC. Also, although the CSB never knowingly posts inaccurate information, the CSB is unable to independently verify all information that it receives from its various sources, much of which is based on initial reports. CIRC users should also note that the CSB receives more comprehensive reports about incidents that occur in the U.S.; comparisons made between U.S. incidents and those in other nations should take this fact into consideration.

Location : English Channel, Off Alderney,

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A marine tanker containing mainly styrene, a colourless, clear, odourless toxic liquid, sank in gale force winds after running aground. Other materials onboard included isopropanol, alcohol and methyl ethyl ketone. Fourteen crewmembers were winched to safety onboard a helicopter. It has been reported that styrene had been seen leaking from the vessel as it sank.

Styrene is a carcinogenic, is slightly soluble in water and very corrosive. There are concerns that the spillage may cause environmental and ecological damage to sea life and nearby coastlines.

[sinking, spill, strong winds, ship ran aground]

Lessons

[None Reported]

Source : CNN INTERACTIVE, OCTOBER 23, 2000, (<http://www.cnn.com>).

Location : Texas, USA

Injured : - Dead : 1

Abstract

An explosion occurred on a road tanker containing 8,000 gallons of liquid propane as it was unloading its contents at a propane storage facility. It has been reported that the incident occurred when the line exploded causing the tanker to catch fire and then the tanker itself exploded. One person was killed and another is missing. Nearby residents were evacuated as a precaution.

[fire - consequence, fatality, evacuation]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, OCTOBER 17, 2000, (<http://www.chemsafety.gov>), Disclaimer: The Chemical Incident Reports Center (CIRC) is an information service provided by the U.S. Chemical Safety and Hazard Investigation Board (CSB). Users of this service should note that the contents of the CIRC are not intended to be a comprehensive listing of all incidents that have occurred; many incidents go unreported or are not entered into the database. Therefore, it is not appropriate to use the CIRC database to perform statistical analysis that extends conclusions beyond the content of the CIRC. Also, although the CSB never knowingly posts inaccurate information, the CSB is unable to independently verify all information that it receives from its various sources, much of which is based on initial reports. CIRC users should also note that the CSB receives more comprehensive reports about incidents that occur in the U.S.; comparisons made between U.S. incidents and those in other nations should take this fact into consideration.

Location : Kilgore, Texas, USA

Injured : 3 **Dead :** 1

Abstract

An explosion occurred at a truck repair facility when a worker was trying to weld a ball valve onto the back of an oil tanker truck when residue from a gaseous hydrocarbon ignited. The worker was killed and three others injured in the incident.

An investigation into the incident is underway.

[welding, road tanker, fatality, injury]

Lessons

[None Reported]

1318111 October 2000

Source : BBC NEWS, 12 OCTOBER, 2000, (<http://www.bbc.co.uk>).

Location : Nigeria, AFRICA

Injured : - Dead : -

Abstract

A road transportation incident. A road tanker carrying fuel exploded when in collision with a bus carrying fifty-six people.
[explosion]

Lessons

[None Reported]

1319803 October 2000

Source : BBC NEWS, 3 OCTOBER 2000, (<http://www.bbc.co.uk>).

Location : , SINGAPORE OFFSHORE

Injured : 0 Dead : 0

Abstract

A marine transportation incident. An oil tanker containing over 40,000 tonnes of crude oil released 7,000 tonnes of the product into the sea after running aground.

There are reports of no injuries but four cargo tanks have been damaged in the incident. A 300-meter boom is being used to contain the spill and to prevent more oil from escaping.

[marine tanker, damage to equipment, ship ran aground]

Lessons

[None Reported]

13182October 2000

Source : BBC NEWS, 3 OCTOBER, 2000, (<http://www.bbc.co.uk>).

Location : Shanxi, CHINA

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker carrying sodium cyanide plunged into a river. An emergency barrier was immediately set up to contain the cyanide that had spilled into the river. Chemicals were poured into the river to neutralise the cyanide. No one is reported to have been injured or killed in the incident.

Lessons

[None Reported]

Source : CNN.COM, SEPTEMBER 26, 2000, (<http://www.cnn.com>).

Location : New York, USA

Injured : - Dead : 1

Abstract

A road transportation incident. An explosion and fire occurred when a road tanker carrying gasoline was in collision with a van. The driver of the van was killed. Nearby residents were evacuated as a precaution.

It is not known whether the road tanker was at full capacity of 9,8000 gallons at the time of the incident.

[fire - consequence, fatality, evacuation]

Lessons

[None Reported]

Source : CNN.COM, SEPTEMBER 25, 2000, (<http://www.cnn.com>).

Location : Florida, USA

Injured : 2 Dead : 0

Abstract

A rail transportation incident. A cargo train carrying sugar cane and potash collided with two parked cargo trains triggering a fire. As a result of the collision six cars and three locomotives derailed injuring two people. It was reported that no hazardous materials were onboard at the time of the incident.
[freight train, collision, fire - consequence, derailment - consequence, injury]

Lessons

[None Reported]

Source : CNN.COM, SEPTEMBER 7, 2000, (<http://www.cnn.com>).

Location : Bilbao, SPAIN

Injured : - Dead : 4

Abstract

A rail transportation incident. A collision occurred between two cargo trains causing one to derail and fall into a nearby river. Both trains were carrying aluminium coils at the time of the incident. Four people were killed in the incident.

[freight train, derailment - consequence, fatality]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, NOVEMBER 2000.

Location : New York, USA

Injured : 61 Dead : 0

Abstract

A rail transportation incident. Anhydrous ammonia leaked from a freight train injuring sixty-one people and forcing the evacuation of nearby residents.

[injury]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, NOVEMBER 2000.

Location : Kenya, AFRICA

Injured : - **Dead** : 25

Abstract

A rail transportation incident. Six cars of an eight-car freight train containing liquefied petroleum gas (LPG) exploded when the train overturned. Twenty-five people were killed and several injured in the incident.

[explosion, fatality, injury]

Lessons

[None Reported]

1299415 August 2000

Source : CNN.COM, U.S. NEWS, AUGUST 15, 2000, (<http://www.cnn.com>).

Location : Malta, Montana, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A freight train including tankers containing a poisonous chemical derailed forcing the evacuation of nearby residents and the closure of a highway. Sparks from the derailed tankers caused small fires for several miles.

Three of the tankers contained carbon disulphide, a poisonous, highly flammable chemical used in the making of solvents and cellophane. Two other tankers contained titanium dioxide and posed no threat to the environment. Fortunately no leak occurred.

[derailment, fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, OCTOBER 2000.

Location : Montana, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Seven cars of a freight train, three containing carbon disulphide and two containing titanium dioxide, derailed. Fortunately no spillage occurred although a number of small fires were reported. Nearby residents were evacuated.

[derailment - consequence, fire - consequence, evacuation]

Lessons

[None Reported]

1299214 August 2000

Source : BBC NEWS, 15 AUGUST, 2000, (<http://www.bbc.co.uk>).

Location : Uganda, AFRICA

Injured : 10 **Dead** : 18

Abstract

A fire occurred killing eighteen people and injuring ten when a burning cigarette caused petrol from a fuel tanker to catch fire as villagers were attempting to siphon fuel from the overturned tanker.

[fire - consequence, road tanker, fatality, burns, injury]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, NOVEMBER 2000.

Location : , GERMANY

Injured : 1 Dead : 0

Abstract

A road transportation incident. A road tanker containing 30m³ of diesel overturned when a tyre blew out causing a diesel spill, which then caught fire. Fortunately the driver managed to escape but received burns.
[fire - consequence, injury]

Lessons

[None Reported]

1292102 August 2000

Source : BBC NEWS, 2 AUGUST, 2000, (<http://www.bbc.co.uk>).

Location : Northern England, UK

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A freight train carrying nuclear waste derailed. The train was carrying four containers of low-level waste when it came off the track.

Fortunately no one was injured and no structural damage to the containers occurred in the incident.

Rail services in the area were disrupted.

[derailment - consequence, radioactive]

Lessons

[None Reported]

Source : BBC NEWS, 1 AUGUST, 2000, (<http://www.bbc.co.uk>).

Location : River Tagus, SPAIN

Injured : 0 Dead : 0

Abstract

Approximately two hundred and fifty thousand litres of highly toxic oil spilled from a power station into a nearby river creating an eight kilometre long oil slick. Water to a nearby city was cut off and farmers in the area were warned not to use the river to irrigate their land. Operations are underway to try and stop the spill from spreading. The incident was caused by a leak in the fuel depot at the power station. An investigation is underway into the cause of the leak.

[environmental]

Lessons

[None Reported]

13020August 2000

Source : EDIE NEWSROOM, 21 AUGUST, 2000, (<http://www.edie.net/news/>).

Location : Costa del Sol, SPAIN

Injured : 0 Dead : 0

Abstract

Cleaning emissions have been blamed for pollution that occurred over nine days on beaches across the Costa del Sol resulting in the closure of resorts and constant coastal clean up. The incident occurred during cleaning operations in the crude tanks of the petrol tanker.

[marine tanker, leak, hydrocarbon, cleaning fluid, ecological damage]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, OCTOBER 2000.

Location : New York, USA

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker trailer separated from it's tractor unit causing approximately 190 litres of gasoline to spill onto the highway.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, OCTOBER 2000.

Location : Sydney, AUSTRALIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A collision occurred between two freight trains during routine shunting. Approximately 20,000 litres of naphthalene was spilled. Nearby resident were evacuated. Fortunately no one was injured in the incident.
[evacuation]

Lessons

[None Reported]

1293425 July 2000

Source : BBC NEWS, 25, 26, 31 JULY, 2000, (www.bbc.co.uk).

Location : Paris, FRANCE

Injured : 0 **Dead** : 113

Abstract

An air transportation incident. Concorde carrying one hundred and nine people crashed into a hotel two minutes after take off. All passengers, crew and four people on the ground were killed as the jet exploded into a ball of flames.

Within minutes dozens of fire engines and ambulances were on the scene to tackle the fire and search for survivors.

An investigation is being carried out into the cause of the crash although it is theorised that a massive rupture to the fuel tank occurred.

[aircraft, explosion, fire - consequence, fatality]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, OCTOBER 2000.

Location : Texas, USA

Injured : 0 Dead : 0

Abstract

A river transportation incident. A tank barge containing petroleum distillate collided with a moored construction barge causing approximately 70m³ of the distillate to spill into the water.

[river barge, collision]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, JUNE 27, 2000, (<http://www.chemsafety.gov>).

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Location : New Waverly, USA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. A freight train derailed causing at least twenty cars to derail. One car containing propylene glycol was damaged in the incident resulting in a slight spillage of the chemical.

Nearby residents were evacuated as a precaution.

An investigation into the incident is being carried out.

[derailment, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, OCTOBER 2000.

Location : New York, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Twenty-nine of eighty-two cars of a freight train derailed. One containing methyl chloride was reported to have leaked. The other cars contained sulphuric acid and propane. Nearby residents were evacuated. Fortunately no one was injured in the incident.

[derailment, evacuation]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, JUNE 21, 2000, (<http://www.chemsafety.gov>).

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Location : Choropampa, PERU

Injured : 8 **Dead :** 0

Abstract

A road transportation incident. A spillage of mercury occurred from a road tanker making a delivery. Forty-six people were tested for mercury poisoning, eight of them were sent to hospital.

Mercury poisoning can damage the kidneys and nervous system and cause birth defects.

The cause of the spill is being investigated.

Lessons

[None Reported]

1253831 May 2000

Source : BBC NEWS, 31 MAY, 2000, (<http://www.bbc.co.uk>).

Location : Bangladesh, Chittagong, SOUTH ASIA

Injured : 40+ **Dead** : 11+

Abstract

An explosion occurred on a disused marine oil tanker in a ship-breaking yard killing at least eleven people and injuring forty others.

Workers are believed to have been using gas torches to dismantle the vessel when the explosion occurred.

[marine tanker, demolition, fatality, injury]

Lessons

[None Reported]

Source : CHEMICAL & ENGINEERING NEWS, JUNE 5, 2000.; CNN.COM, U.S. NEWS, MAY 31, 2000, (<http://www.cnn.com>); CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, MAY 31, 2000, (<http://www.chemsafety.gov>)

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Location : Eunice, USA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. Approximately 3,000 nearby residents were evacuated when a freight train derailed. One of the derailed cars contained flammable and toxic toluene diisocyanate another contained acrylic acid. Demolition experts set explosives on the pressurised tankers as handling them would be safer if the toxic substances inside were burned off. Damage occurred to 1,200 feet of rail track and a 189 foot bridge. No injuries occurred from the incident.

[derailment, fire - consequence, explosion, evacuation, damage to equipment, flammable chemical]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, JUNE 2, 2000, (<http://www.chemsafety.gov>)

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Location : St Tammany Parish, USA

Injured : 5 **Dead :** 0

Abstract

A noxious chemical was unearthed during construction. Five people were affected by the fumes. The incident occurred when a backhoe operator dug up a blue container, which had no identifiable markings.

The people affected suffered attacks of nausea, headaches and burning eyes and throats.

[gas / vapour release, people, damage by backhoe, bulldozer/jcb/digger, chemical fumes, injury]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, MAY 26, 2000, (<http://www.chemsafety.gov>)

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Location : Orlando, Florida, USA

Injured : 0 **Dead :** 0

Abstract

Approximately 900 gallons of a chlorine based chemical spilled in a residential area. The surrounding area was evacuated. The incident occurred when a leak occurred from a 3,000-gallon road tanker, which was delivering 1,900 gallons to a local swimming pool. [evacuation, gas / vapour release, road transportation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, JULY 2000,; REUTERS.

Location : Cherkassy Region, UKRAINE

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Six tank cars of a freight train derailed after heavy rains flooded the track, approximately 100 tonnes of ammonia solution spilt. Nearby residents were evacuated as a precaution. No injuries occurred.

[derailment - consequence, rain, spill, evacuation]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 30 APRIL, 2000, (<http://www.chemsafety.gov>)

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Location : Bossier City, USA

Injured : 0 **Dead :** 2

Abstract

A worker collapsed after entering a chemical tanker trailer with out breathing equipment to rescue an unconscious co-worker. Both workers died presumably from the effects of naphtha fumes.

Naphtha is often used for dry cleaning. Acute exposure can damage the central nervous system, according to OSHA guidelines.

[entry into confined space, safety procedures inadequate, road tanker, asphyxiation, fatality]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, JULY 2000,; LLOYDS LIST.

Location : Gateshead, UK

Injured : 2 Dead : 1

Abstract

An explosion occurred at an LPG plant in a gas bottle storage area killing one and injuring two others.

The incident occurred during unloading of a road tanker.

[fatality, injury]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 24 APRIL, 2000, (<http://www.chemsafety.gov>),

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Location : Seligman, USA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. A freight train derailed causing six cars containing hazardous materials, vinyl acetate and ethanol, to overturn. Two of the overturned cars were reported to be leaking.

No one was injured in the incident.

[derailment, spill, materials - hazardous]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 18 APRIL, 2000, (<http://www.chemsafety.gov>),

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Location : Fayette County, USA

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying liquid propane overturned on a highway when it was involved in a collision with another vehicle. An unknown amount of propane leaked from the tanker as a result.

Nearby residents were evacuated as a precaution.

[spill, evacuation, near miss]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 17 APRIL, 2000, (<http://www.chemsafety.gov>),

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Location : Burns Habor, USA

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying 125,000 cubic feet of flammable liquid hydrogen caught fire when the tankers vent stack malfunctioned.

The area within a one-mile radius was evacuated. No one was injured in the incident.

An investigation into the cause of the vent stack failure is underway.

[fire - consequence, mechanical equipment failure, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, JULY 2000,; LLOYDS LIST.

Location : , DENMARK OFFSHORE

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A marine tanker carrying 15,000 tonnes of gasoline ran aground on a sand bank. No damage or pollution occurred in the incident, although some cargo lightered.

[ship ran aground, transport effects]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, JULY 2000,; LLOYDS LIST.

Location : Delaware, USA

Injured : 0 Dead : 0

Abstract

A river transportation incident. The steering of a river tanker carrying ammonium nitrate cargo broke causing it to ground. No pollution occurred. The tanker was refloated.

[steering failure, transport effects]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 6 APRIL, 2000, (<http://www.chemsafety.gov>),

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Location : Port Royal, USA

Injured : 7 **Dead :** 0

Abstract

A release of organophosphates occurred due to a spill, which occurred in the back of a lorry. The fumes affected seven people.

Organophosphate is used as a soil fumigant used to kill bugs in soil before planting.

An investigation into the release found that the vapour came from a pressure relief valve.

[gas / vapour release, chemical, injury]

Lessons

[None Reported]

Source : BBC NEWS, 5 APRIL, 2000, (www.bbc.co.uk); CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 5 APRIL, 2000, (<http://www.chemsafety.gov>),

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Location : Lillestroem, NORWAY

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. Two freight trains collided when it is thought that one of the trains brakes failed. Two cars of one of the trains contained approximately 90 tonnes of propane gas. The surrounding area was evacuated as a precaution due to a fire that broke out which threatened the cargo of propane.

Firemen used a remote-controlled water cannon to pump thousands of water per minute onto the tank cars to cool them without dousing the flames.

[near miss, collision, brakes faulty, evacuation, fire - consequence]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 28 MARCH 2000, (<http://www.chemsafety.gov>).

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Location : Calgary, Alberta, CANADA

Injured : 0 **Dead :** 0

Abstract

A factory was evacuated after a road tanker spilled 150 litres of sodium hydroxide into a sewer system during unloading operations.

A leak occurred in the tanker causing the spill.

Sodium hydroxide has corrosive effects; contact on skin and toxic if fumes are inhaled.

[evacuation]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 28 MARCH, 2000, (<http://www.chemsafety.gov>)

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Location : Orangeburg, USA**Injured :** 0 **Dead :** 0**Abstract**

A rail transportation incident. A rail tanker containing isobutylene derailed and overturned forcing the evacuation of the surrounding area. The incident occurred when the rail tanker was being moved to a siding rail to allow another train to pass on the main line, when one of the wheels fell off. Isobutylene is a colourless liquid used in the manufacture of synthetic rubber and resins.

[derailment - consequence, wheel broken]

Lessons

[None Reported]

Source : BBC NEWS, 23 MARCH, 2000, (<http://www.bbc.co.uk>); CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 22 MARCH, 2000, (<http://www.chemsafety.gov>).

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Location : Port Moresby, PAPUA NEW GUINEA

Injured : 0 **Dead :** 0

Abstract

An air transportation incident. Two one tonne boxes containing sodium cyanide pellets were being transported by helicopter when they were accidentally dropped from a sling.

It is thought around 100 and 150 kilos of the cyanide has been dissolved by rain and spilled into a nearby river.

Approximately 70% of a one tonne pallet has been recovered, the remaining cyanide will be neutralised with ferrous sulphate.

An investigation into the incident is being carried out.

[spill, pollution]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 22 MARCH, 2000, (<http://www.chemsafety.gov>).

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Location : North Powder, Oregon, USA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. Approximately 1000 gallons of fuel spilled from one or more tank cars when a freight train derailed. Clean-up operations are underway.

The incident caused damage to about a quarter-mile of track.

[derailment, damage to equipment]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, 14 MARCH, 2000, (<http://www.chemsafety.gov>).

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Location : Florida, USA

Injured : 0 **Dead :** 1

Abstract

A road transportation incident. A road tanker containing aviation fuel overturned on a highway when trying to avoid slower vehicles. The driver was killed in the accident.

[fire - consequence, fatality]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, MARCH 1, 2000. (<http://www.chemsafety.gov>).

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Location : , USA**Injured :** 30 **Dead :** 0**Abstract**

A chemical reaction occurred when a contractor driving a road tanker poured a chemical into the wrong tank causing chlorine vapour to be formed. Approximately 30 people were taken to hospital for treatment for eye, throat and nose irritation. Workers were evacuated in the incident. The incident occurred when the driver pumped sodium hypochlorite, bleach used for odour control, into the tank with a residue of ferric chloride, another odour control chemical.

An investigation into the incident is being carried out.

[unwanted chemical reaction, evacuation, injury, gas / vapour release, human causes, unloading]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, FEBRUARY 29, 2000, (<http://www.chemsafety.gov>).

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Location : Bellefonte, USA

Injured : 0 **Dead :** 0

Abstract

A 300-gallon barrel of sulphuric acid fell off a forklift truck, releasing approximately 75 to 100 gallons of the chemical into a storm sewer leading directly into a stream.

The spill impacted a mile-long stretch of the waterway.

The company contained some of the spill by adding lime to the acid in order to neutralize it.

[ecological damage, container, design or procedure error, spill, transportation]

Lessons

[None Reported]

1220616 February 2000

Source : CNN.COM, U.S. NEWS, FEBRUARY 17, 2000, (<http://www.cnn.com>).

Location : California, USA

Injured : 0 Dead : 3

Abstract

An air transportation incident. A cargo plane carrying normal industrial freight crashed into a car auction yard and burst into flames. All three crewmembers were killed.

Just before the crash, the pilot reported a problem with the positioning/balance of the plane's load.

[aircraft, fire - consequence, explosion, fatality]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, FEBRUARY 14, 2000. (<http://www.chemsafety.gov>).

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Location : British Columbia, CANADA

Injured : 0 **Dead :** 0

Abstract

A leak occurred on a pipeline carrying canola oil from a pumping station to a marine tanker.

It is thought that an estimated 50 tonnes has been spilt.

This is the third time in two years that birds in the area have been threatened by large canola oil spills.

Although cooking oil is not poisonous to the birds, it soaks their feathers, making them very heavy and no longer waterproof. Within hours birds can die from hypothermia.

[environmental, material transfer]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, FEBRUARY 7, 2000. (<http://www.chemsafety.gov>).

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Location : , FRANCE

Injured : 17 **Dead :** 0

Abstract

An oil leak occurred from the radiator of a mechanical digger in a traffic tunnel under construction, sending a wave of toxic smoke through the tunnel.

Fourteen workers and three fire fighters were affected.

[bulldozer/jcb/digger, gas / vapour release, injury]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, FEBRUARY 6, 2000. (<http://www.chemsafety.gov>).

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Location : , USA

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying approximately 2,500 gallons of oil spilt an uncertain amount of the oil on a highway.

A hazardous material team arrived on the scene to carry out the cleanup. The extent of environmental damage is not known.

[spill]

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, FEBRUARY 4, 2000. (<http://www.chemsafety.gov>).

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Location : , USA

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying a mixture of lead and chromium started to leak, forcing the evacuation of nearby residents and road closures.

The roads were closed four a couple of hours as a precaution as the chemicals are dangerous if inhaled.

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, JANUARY 28, 2000, (<http://www.chemsafety.gov>).

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Location : Lowell, USA

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying 11,900 gallons of gasoline overturned causing a spillage. The tanker was punctured on the right side causing the fuel to empty into nearby catch basins feeding into a nearby river. The driver was uninjured in the incident. Clean-up operations were carried out to contain the spill and foam was applied to prevent a fire. Nearby towns were forced to draw water from alternate sources as a precaution.

Lessons

[None Reported]

Source : CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD, JANUARY 12, 2000, (<http://www.chemsafety.gov>).

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Location : , USA**Injured :** 4+ **Dead :** 0**Abstract**

An explosion and fire occurred at a nut company when a forklift truck was being refuelled from a propane tank. The fire damaged the company's roof and gutted it's interior, the fire also spread to an adjacent two storey apartment block.

Three people were hospitalised and one declined medial attention.

[fire - consequence, loading, damage to equipment, injury]

Lessons

[None Reported]

Source : BBC NEWS, 24 DECEMBER, 1999, (<http://www.bbc.co.uk>).

Location : Wales, UK

Injured : 0 Dead : 0

Abstract

A marine transportation incident. An empty oil tanker ran aground on a beach in gale force winds. The 992 tonne oil tanker lost her anchor during force six gales, heavy sea and pouring rain. Fortunately the tanker was pulled off the beach a successfully re-floated.

[marine tanker, ship ran aground, weather effects, near miss]

Lessons

[None Reported]

8093 12 December 1999

Source : BBC NEWS, 20 DECEMBER, 1999, (<http://www.bbc.co.uk>).

Location : , BAY OF BISCAY

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker containing more than 20,000 tonnes of diesel oil, split in two. More than 10 million litres of oil was spilled causing severe environmental damage. The sunken wreckage still contains approximately 23 million litres. So far approximately 100,000 birds have been killed. 'An ecological catastrophe'.

[sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, JANUARY 2000.

Location : Milwaukee, USA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. A 144-car freight train derailed due to a worn wheel bearing. An uncertain amount of acid leaked from one car carrying 5.5 tonnes of product. A nearby residential area was evacuated.

[derailment - consequence, bearing failure, spill, evacuation]

Lessons

[None Reported]

9685 19 November 1999

Source : CNN.COM, U.S. NEWS, NOVEMBER 19, 1999, (<http://www.cnn.com>).

Location : Northwest Iowa, USA

Injured : 1+ Dead : 2

Abstract

A rail transportation incident. A freight train collided with an empty grain train, killing a conductor and the driver of a van that was parked by the tracks. Six of the freight cars derailed and four others overturned. A fire occurred from a diesel spill from the engine but was quickly extinguished.

The grain train was parked on the main tracks when the freight train collided with it at the junction with a side track.

An investigation is being carried out as to why the freight train didn't go on to the side track.

[collision, derailment - consequence, fire - consequence, fatality]

Lessons

[None Reported]

1270311 November 1999

Source : CNN.COM, U.S. NEWS, NOVEMBER 12, 1999, (<http://www.cnn.com>).

Location : North Carolina, USA

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker carrying 49,000 pounds of nitric acid overturned when the driver swerved to miss a deer. 3,000 gallons of nitric acid spilled.

Nitric acid fumes can cause severe burns or death if inhaled. Nitric acid is used in chemical synthesis and in making dyes and explosives. Nearby residents were evacuated.

[loss of control, driver error]

Lessons

[None Reported]

Source : BBC NEWS, NOVEMBER 8, 1999, (<http://www.bbc.co.uk>).

Location : , UK

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A cargo ship carrying bananas and pineapples collided with a tower causing a 26m gash in its side and five tonnes of lubricating oil to spill into the sea. The vessel also held approximately 440 tonnes of heavy fuel oil and 70 tonnes of diesel. It was not thought that the ship was in danger of sinking.

[container ship, collision]

Lessons

[None Reported]

1195205 October 1999

Source : BBC NEWS, OCTOBER 5, 1999, (<http://www.bbc.co.uk>).

Location : Ladbroke Grove, Paddington, UK

Injured : 150+ **Dead** : 31

Abstract

A rail transportation incident. At least 30 people were killed and over 150 were injured when two passenger trains collided. The force of the collision caused carriages to derail and one train burst into flames.

An investigation is underway, but it is thought that one of the trains ran through a red light.

[collision, fire - consequence, fatality, derailment - consequence, injury]

Lessons

[None Reported]

Source : CNN.COM, U.S. NEWS, SEPTEMBER 20, 1999, (<http://www.cnn.com>).

Location : Maryland, USA

Injured : 37 Dead : 0

Abstract

A rail transportation incident. A passenger train collided with a freight train in a rail yard, injuring 37 people. The collision damage the locomotive and the rear of the freight car. All cars remained upright.

[damage to equipment, injury]

Lessons

[None Reported]

Source : CNN.COM, U.S. NEWS, SEPTEMBER 20, 1999, (<http://www.cnn.com>).

Location : , GULF OF MEXICO

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A fire occurred onboard a cruise ship which was carrying 1,700 passengers.

The fire started in the engine room, which was quickly put out, but had damaged the engines. The star-board motor was temporarily restarted, but failed again, stranding the ship 100 miles off the coast.

[fire - consequence, damage to equipment, passenger ship]

Lessons

[None Reported]

1187314 September 1999

Source : BBC NEWS, SEPTEMBER 15, 1999, (<http://www.bbc.co.uk>).

Location : Aberdeen, Scotland, UK

Injured : 2+ Dead : 0

Abstract

A rail transportation incident. A train derailed when a mechanical digger being used on road works was left on the tracks, where it was hit by a passenger train carrying approximately 100 people. No one was seriously injured. Possible cause: vandalism.

[derailment - consequence, collision, bulldozer/jcb/digger, injury]

Lessons

[None Reported]

Source : CNN.COM, U.S. NEWS, SEPTEMBER 12, 1999, (<http://www.cnn.com>).

Location : New York, USA

Injured : 2 Dead : 0

Abstract

A fire occurred in a subway tunnel causing the evacuation of the terminal. Two people were treated for smoke inhalation.

It is thought that the fire started in building materials in a storage room.

[fire - consequence, people]

Lessons

[None Reported]

Source : YAHOO NEWS UK & IRELAND, SEPTEMBER 3, 1999, (<http://www.yahoo.co.uk>).

Location : , UK

Injured : 31 Dead : 0

Abstract

Thirty one workers were sent to hospital suffering breathing problems and nausea after a chemical leak at a warehouse. The workers were under observation after formaldehyde escapes from a container at the warehouse.

It is thought that a forklift truck punctured a container in a chemical handling area.

[gas / vapour release, warehousing, fracture, operator error, people]

Lessons

[None Reported]

1210127 August 1999

Source : CHEMICAL HAZARDS IN INDUSTRY, DECEMBER 1999,; SAFETY ONLINE, 30 AUG 1999, (<http://www.safetyon-line.com/>),; HAZARDOUS CARGO BULLETIN, NOVEMBER 1999.

Location : Ontario, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Six cars of a rail tanker containing flammable liquid derailed. This led to the evacuation of hundreds of people. One of the cars rolled past a steel stopper at the end of a storage line, spilling a large amount of recovered alcohol into a car park. A temporary dyke of sand was created to stop the flow of liquid. Some material entered a storm drain. The incident is under investigation.
[derailment - consequence]

Lessons

[None Reported]

1175024 August 1999

Source : YAHOO NEWS UK & IRELAND, SEPTEMBER 3, 1999, (<http://www.yahoo.co.uk>).

Location : , ENGLISH CHANNEL

Injured : 20+ Dead : 0

Abstract

A marine transportation incident. A cargo vessel collided with a cruise liner with more than 2,000 people on board.

Fortunately, the cruise liner was able to reach a nearby port safely despite severe damage to its bow.

The 52,000 tonne container ship, caught fire after the collision. More than 40 of the ships 3,092 containers held hazardous materials two of which carrying cyanide, these were stowed in the centre of the vessel and there was no danger of them being lost overboard. Some of the containers fell into the sea during the impact.

Coast guards reported no sign of trouble before the collision and that no radio message had been taken from either vessel.

[container ship, passenger ship, collision, fire - consequence, near miss, spill, damage to equipment, cyanide product]

Lessons

[None Reported]

Abstract

A rail transportation incident. A chemical tanker of a freight train derailed spilling flammable liquid for about eight hours before clean-up crews contained the leak. All but six cars that jumped the tracks were empty. The cars that derailed contained talc, liquefied petroleum gas, petroleum distillates and plastic pellets.

The leaking car carried approximately 18,000 gallons of petroleum distillates, it was not immediately known how much had been spilled.

A small grass fire started after the derailment but was quickly extinguished.

The cause of the derailment was being investigated.

[derailment - consequence, fire - consequence, spill, kerosene]

Lessons

Distillates are petroleum liquids, such as kerosene, that are produced during the oil distillation process.

Source : BBC NEWS, AUGUST 5, 1999, (<http://www.bbc.co.uk>).

Location : , AUSTRALIA

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker spilled approximately 80,000 litres of light crude oil into a harbour, releasing a cloud of acrid fumes over a city. Emergency crews fought to contain the spill, the bulk of the oil was contained behind booms. An number of birds have been found coated with oil, and dead fish have been washed up on the shore. It is thought the cause of the spill was due to an open valve while the ship was discharging.
[gas / vapour release, ecological damage, unloading, operation inadequate]

Lessons

[None Reported]

1175424 July 1999

Source : CNN.COM, U.S. NEWS, JULY 25, 1999, (<http://www.cnn.com>).

Location : , USA

Injured : 16 Dead : 0

Abstract

A rail transportation incident. A passenger train derailed as it approached a station. Three cars came off the tracks when the train collided into another train it was attempting to couple up to. Sixteen people were injured in the incident. The derailed cars included two passenger cars and a café car.

The cause of the incident is not known.

[derailment - consequence, collision, injury]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, SEPTEMBER 1999.

Location : Iowa, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Two of twenty six cars derailed from a freight train spilling denatured alcohol. Half of a nearby town was evacuated as fire crews and a specialist team worked to contain the spill.

[derailment, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, SEPTEMBER 1999.

Location : California, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Two freight trains collided head on at low speed. Over 37,000 l of diesel was spilled when more than a dozen engines and cars derailed.

[derailment - consequence, collision]

Lessons

[None Reported]

Source : ENVIRONMENTAL TIMES, VOLUME 6, ISSUE 3, SPRING 2000.

Location : Cornwall, UK

Injured : 1 **Dead** : 0

Abstract

A road transportation incident. A road tanker overturned spilling approximately 5,000 litres of red diesel fuel into a nearby stream. The driver of the tanker was seriously injured in the incident and an investigation is being carried out into the caused of the incident. The company of the vehicle was fined £250 and costs of £255 (2000).

[injury]

Lessons

All vehicles for transporting fuel must be properly maintained at all times to guard against pollution of the environment.

Source : HAZARDOUS CARGO BULLETIN, SEPTEMBER 1999.

Location : Texas, USA

Injured : 0 **Dead :** 0

Abstract

A marine transport incident. A loading arm broke whilst a tanker was discharging crude oil at a refinery. Approximately 4,000 l of oil was spilt into the dock. Booms and skimmers were used to clean-up.
[unloading, mechanical equipment failure, spill]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, SEPTEMBER 1999.

Location : , UNITED ARAB EMIRATES

Injured : 0 **Dead** : 0

Abstract

A marine incident. Marine tankers discharging tank washings into the ocean caused an oil slick.

[human causes, spill, pollution, cleaning]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, SEPTEMBER 1999.

Location : Pambala, AUSTRALIA

Injured : 1 **Dead** : 0

Abstract

A road transportation incident. A fire occurred when a road tanker overturned spilling 38,000 l of diesel and gasoline into a river. Fire crews extinguished the blaze and booms were used on the river.

[fire - consequence]

Lessons

[None Reported]

Source : NATIONAL TRANSPORTATION SAFETY BOARD, DCA99MZ006, (<http://www.nts.gov>).

Location : Michigan, USA

Injured : 1 **Dead** : 1

Abstract

A chemical reaction occurred during unloading from a road tanker of sodium hydrosulphide solution into a storage tank containing ferrous sulphate at a tannery. Sodium hydrosulphide solution reacts with ferrous sulphate solution to produce hydrogen sulphide, a poisonous gas.

An employee in the basement of the building smelled a pungent odour and lost consciousness, and fortunately regained consciousness ten minutes later. The driver of the road tanker was found unconscious and was later pronounced dead at the scene. It was determined that he had died from the effects of hydrogen sulphide gas.

[storage tanks, unwanted chemical reaction, fatality, management system inadequate, human causes, injury, evacuation]

Lessons

[None Reported]

1147916 May 1999

Source : BBC NEWS, MAY 16, 1999,
(<http://www.bbc.co.uk>).

Location : Pakistan, SOUTH ASIA

Injured : 50+ **Dead** : 40+

Abstract

A road transportation incident. At least 40 people were burnt to death when a petrol tanker caught fire after overturning on a highway. Hundreds of villagers gathered around the vehicle to collect the leaking fuel, before it caught fire, engulfing people in the flames. More than 50 victims were taken to hospital with serious burns.

[road tanker, fire - consequence, gasoline]

Lessons

[None Reported]

1147312 April 1999

Source : CNN.COM, U.S. NEWS, APRIL 12, 1999,
(<http://www.cnn.com>).

Location : Wuppertal, GERMANY

Injured : 52 **Dead :** 2

Abstract

A rail transportation incident. An elevated passenger train derailed and plunged into a river killing 2 people and injuring 52. The train apparently hit a platform left by track workers.

The train fell approximately 30 feet into the water, rescue officials pulled victims from water about 2 feet deep.

[derailment - consequence, fatality, injury]

Lessons

[None Reported]

1052219 March 1999

Source : YAHOO NEWS, MAR 20, 1999, (<http://www.yahoo.co.uk>).

Location : Offshore, SCOTLAND

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker carrying flammable chemical fluids caught fire off the northern coast of Scotland, rousing fears of an ecological disaster.

Some 200 residents of two tiny villages were evacuated as the vessel caught fire and drifted just off the rocky coastline.

The tanker was carrying 1,750 tonnes of potentially explosive vinyl acetate which is used in the manufacturing of paints and adhesives, 76 tonnes of bunker fuel and 20 tonnes of fuel oil.

The engine room was sealed and power shut down when the fire was first reported, causing the 102 metre vessel to drift in high winds and stormy seas before being stopped by its anchor less than half a mile from the coastline. The ships captain stayed on board for three more hours, whilst the rest of the crew were airlifted to safety, to set up tow lines, drop anchor and flood the compartment separating the fire from the explosive cargo.

The vessel was eventually towed to a safe haven and the fire was successfully put out.

[evacuation, fire - consequence, near miss]

Lessons

[None Reported]

1051917 March 1999

Source : BBC NEWS, MAR 17, 1999,
(<http://www.bbc.co.uk>).

Location : Chicago, USA

Injured : 120+ **Dead** : 14+

Abstract

A rail transportation incident. A passenger train derailed when it collided with a road truck on a crossing. Several carriages derailed and burst into flames after the train crashed into the tractor trailer, which was carrying a heavy load of steel. More than 200 passengers were on the train. Investigations are being made into whether the gates and lights at the crossing were working at the time of the incident.
[derailment - consequence, collision, road transport, fire - consequence, explosion, fatality]

Lessons

[None Reported]

1187415 March 1999

Source : CNN.COM, U.S. NEWS, SEPTEMBER 13, 1999, (<http://www.cnn.com>);; CNN.COM, U.S. NEWS, SEPTEMBER 14, 1999, (<http://www.cnn.com>).

Location : Bourbonnias, USA

Injured : 11 Dead : 122

Abstract

A rail transportation and road transportation incident. A collision between a passenger train and a road truck occurred on a railroad crossing, killing 11 passengers and injuring 122. The crash derailed several cars behind the locomotives. Many of the dead were in a sleeping car which was totally destroyed by a diesel fire. It is not yet known the exact cause of the incident.

The crash caused more than £14 million (1999) in damage.

[derailment - consequence, fire - consequence, damage to equipment, fatality, injury]

Lessons

[None Reported]

122291999

Source : CHEMICAL HAZARDS IN INDUSRTY, JANUARY 2000,; J. OCCUP. HEALTH SAFT. AUG. N. Z., OCT 1999, 15(5), 406.

Location : , AUSTRALIA

Injured : 0 **Dead** : 0

Abstract

Approximately 10,000 litres of LPG escaped to atmosphere when the driver of a road tanker drove off without disconnecting the filling hose. Fortunately the gas did not ignite. Nearby residents were evacuated as a precaution.

After an investigation the company was fined A\$2500 (1999), for the storage tank not meeting the Australian Standard AS 1596-1989.

[gas / vapour release, human causes, evacuation, loading, storage tanks]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : -

Abstract

A barge exploded whilst docked. Residual jet fuel was being vacuumed from the tanks and being emptied into a petroleum road tanker on a pier at the time of the explosion. The vessel had just delivered aviation fuel and the tank was being cleaned out for an new load of heating oil.

Investigations into the incident found three prime possibilities for the explosions.

Matches, which were found near the body of a crewman may have ignited the fuel vapours. Or one of the barge workers may have dropped and broken a flashlight, causing the blast. Another cause may have been due to the plastic hose which is used to vacuum the fuel accumulated enough static electricity to exploded the fumes.

Traces of alcohol were found in two of the crew members.

[river transport, cleaning, human causes]

Lessons

[None Reported]

Source : 1998 REUTERS LIMITED.

Location : , INDIA

Injured : 2+ Dead : 50

Abstract

A road transportation incident. Fifty people died when an overcrowded bus hit an oil tanker. The petrol from the tanker caught fire, causing an explosion. Two of the six people who managed to escape from the bus by jumping through the rear door were injured.

The oil tanker driver sustained burn injuries.

[road tanker, fire - consequence, fatality, burns, collision, gasoline, injury]

Lessons

[None Reported]

Source : 1998 CABLE NEWS NETWORK.

Location : , INDIA

Injured : 260 Dead : 192+

Abstract

A rail transportation incident. A passenger train derailed when it collided with a mail train minutes after it had jumped the tracks.

A total of 1,700 passengers were aboard both trains. In all 16 cars were damaged in the incident.

[derailment - consequence, collision, damage to equipment]

Lessons

[None Reported]

10446 November 1998

Source : CNN.COM, U.S. NEWS, 1998, (<http://www.cnn.com>).

Location : , INDIA

Injured : 260 Dead : 192+

Abstract

A rail transportation incident. A passenger train derailed when it collided with a mail train minutes after it had jumped the tracks.

A total of 1,700 passengers were aboard both trains. In all 16 cars were damaged in the incident.

[derailment - consequence, collision, fatality, damage to equipment]

Lessons

[None Reported]

Source : BBC NEWS, 23 SEP, 1998,
(<http://www.bbc.co.uk>).

Location : , UK

Injured : 8 **Dead :** 0

Abstract

A road transportation incident. Eight people were treated at hospital in blood spill scare after more than 50 gallons of cows' blood leaked from a tanker onto a motorway.

Tests on the blood revealed no BSE contamination.

The remains of the tanker's cargo was transferred to another tanker and transported to an incinerator to be destroyed.

The cause of the incident is thought to have been valve failure.

[waste, road tanker]

Lessons

[None Reported]

Source : YAHOO NEWS, THE ASSOCIATED PRESS, 18 SEP, 1998.

Location : New York, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Double stacked cars of a 125-car freight train struck an overpass and derailed, knocking out a rail line shortly before tens of thousands of commuters headed for their trains. One or two of the cars apparently were filled too high with empty containers when they struck the overpass.
[derailment]

Lessons

[None Reported]

12810July 1998

Source : BBC NEWS, OCTOBER 28, 1999, (<http://www.bbc.co.uk>).

Location : Wales, UK

Injured : 0 **Dead** : 1

Abstract

A lorry driver was killed when he'd left his vehicle and was on the way back to it when he was hit and run over by a front-loading vehicle.

The company was fined £75,000 (1999).

[fatality, human causes, forklift truck]

Lessons

[None Reported]

Source : ICHEME

Location : , USA

Injured : 7 Dead : 2

Abstract

A BLEVE (Boiling Liquid Expanding Vapour Explosion) occurred on a propane storage tank at a paltry farm. The incident occurred when a vehicle collided with two pipes attached to the 18,000 gallon tank.

This caused the pipe to rupture, releasing propane which then ignited.

Two fire fighters were killed and seven others injured.

[storage tanks, road vehicle, human causes, fatality, injury]

Lessons

[None Reported]

Source : ICHEME

Location : , FRANCE

Injured : 1 Dead : 0

Abstract

An contractor operator fell into the water between a ship and a jetty.

The accident occurred when the seaman on board the ship released the tanker hose. It appears that the hose knocked the operator off the jetty into the water. Fortunately the location of a nearby ladder allowed the operator to climb back to safety. He suffered extensive bruising.

The cargo loading arm was too short (outside its operating envelope) for this particular ship and therefore the transfer operation had to be undertaken using a hose.

The incident happened during darkness and the operator was not wearing a life jacket.

The immediate cause of the accident was the unsafe way in which the hose was released from the ship to the shore.

The basic causes were :

1. An inadequate loading arm which was not designed with an operating envelope which takes into account all the various factors including the freeboard of the largest and smallest tankers.

2. No risk assessment (task analysis) prior to using a hose instead of the loading arm.

3. A potential contributory factor was that the jetty operator was not wearing a life jacket since he could have easily drowned.

[fall, marine transport, operator error, design or procedure error]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A lube oil spillage occurred during the demolition of a redundant road tanker filling gantry due to inadequate isolation of the pipework. The redundant road tanker filling gantry consisted of numerous horizontally run overhead pipes that branched off from existing operational pipes going to other filling stations.

The demolition work was controlled under a permit-to-work that clearly required positive isolation of each filling line.

The permit considered the line in question to be positively isolated by a blind. Unfortunately due to the congestion of lines in the area, the line was mistakenly identified with an adjacent pipe which was fitted with a blind.

The fact that a blind had not been fitted or the ball valve was not in its closed position was not discovered until the main filling line was used again to the existing operational filling station.

The slop header could not cope with the flow of oil from the hose with the result that the tundishes overflowed onto the rail tracks and road. Approximately 8,500 litres of oil was

recovered by means of a vacuum truck or from the oily water sewer.

A further spillage occurred the following day. In spite of checking the position of the handles on the ball valves, it had not been identified or considered for the handles to be 90 degrees away from their normal position and no blinds had been fitted to the lines. The valve handles had been

modified sometime ago to enable a mechanical locking device to be fitted. Not only had the handles been modified, washers had been fitted which obscured the true position of the ports in

the valve itself. There was no way of determining whether the valve was open or closed and not all the valves had been modified. An inconsistent arrangement which was prone to human error. Approximately 4,500 litres was recovered from the second spillage under level control.

The immediate causes of the spillage was failure to positively isolate the pipes through shut and locked ball valves and the installation of blinds.

The basic causes were the failure to properly document previous modifications of the valve handles and failure to follow the correct isolation practices for demolition work before issuing work permits.

A contributory cause was a failure to carry out regular monitoring of the work permit system for this type of activity.

[isolation inadequate, design or procedure error]

Lessons

[None Reported]

1040609 December 1997

Source : LOSS PREVENTION BULLETIN, 139, 22-23. THE CHEMICAL ENGINEER, 15 JANUARY 1998. CEEFAX, 9 DECEMBER.; CNN.COM, U.S. NEWS, 9 DECEMBER 1997.

Location : , GERMANY

Injured : 100 **Dead :** 0

Abstract

A rail transportation incident. A freight train and passenger train collided injuring some one hundred people, two critically.

Three tanker cars loaded with diesel exploded during the collision. Fire fighters took two hours to extinguish the flames, and prevented the fire from spreading to the remaining nineteen tanker cars on the freight train. The cause of the collision has not yet been identified.

[fire - consequence, explosion, injury]

Lessons

[None Reported]

Source : LOSS CONTROL NEWSLETTER, 1997.

Location : , ANGOLA

Injured : 5 **Dead :** 2

Abstract

A fire consumed a depot's entire stock of solvents and lubricants but was extinguished before spreading to fuel storage tanks at a nearby refinery. The fire was apparently caused by a short circuit.

[fire - consequence, fatality, storage equipment]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 **Dead :** 0

Abstract

An incident occurred during unloading operations, xylene was being transferred from a road tanker to a bulk storage tank. Confusion concerning the capacity of a tank and the amount of material in it caused the tank to overflow.

The spilled material was contained in a bund, covered with foam and then pumped into 200 l drums.

[storage tanks, operation inadequate]

Lessons

[None Reported]

Source : LLOYDS LIST, 12 NOV, 1997.

Location : , USA

Injured : 1 Dead : 0

Abstract

A fire occurred at a loading terminal of a petroleum storage facility whilst three road tankers were being loaded. A series of explosions occurred as a result. The cause of the fire is not known.
[fire - consequence, unidentified cause, injury]

Lessons

[None Reported]

Source : LOSS CONTROL NEWSLETTER, 1997.

Location : , INDIA

Injured : 0 **Dead :** 0

Abstract

A spillage of diesel occurred on one of two lines carrying petroleum products from ship to terminal.

The explosion occurred in the sewage and storm water drains around the area. Following the explosions, the line was shutdown and filled with water to locate the possible source of the leakage.

[unloading, pipework, marine transport, drains & sewers]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

Leaking chemical drums on an industrial site had triggered a fire on a lorry on which they were stored.

The police sealed off the area around the industrial estate and fire fighters were alerted. Two 25 litre drums, stored on the lorry parked overnight at the industrial estate, containing benzene and phosphorus oxydichloride had leaked. The chemical gives off toxic fumes when it is in contact with air and especially water.

The fire service, using special absorbent material which acts as an oil and chemical binder, transferred the leaking drums to larger drums which had been sealed.

It was confirmed that the spillage had been contained and that there was no threat to the environment.

[storage, fire - consequence]

Lessons

[None Reported]

Source : LOSS CONTROL NEWSLETTER

Location : , SINGAPORE

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. Two marine tankers collided spilling 29,000 tonne of fuel oil into the sea. 51 anti-pollution craft were involved in cleanup.
[collision, pollution]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. REUTER.

Location : , FRANCE

Injured : 0 Dead : 1

Abstract

An explosion and fire occurred at a fireworks killing one person, rockets sprayed hundreds of metres and several parked cars were set ablaze.
[fire - consequence, damage to equipment, fatality, processing]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. UPI.

Location : Illinois, USA

Injured : 0 **Dead** : 0

Abstract

A fire occurred due to an explosion of a forklift truck LPG tank. The fire swept through the warehouse which was storing cardboard and paper. Fire fighters prevented the fire from reaching the store.

[fire - consequence, warehousing]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. UPI.

Location : New York, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Forty cars of a 95 car train, including a tank car carrying sulphuric acid derailed, the tank car leaked from the top dome.
[derailment, spill, rail tanker]

Lessons

[None Reported]

Source : LLOYDS LIST, 16 SEP, 1997, 2 OCT, 1997,; OIL AND GAS JOURNAL, 22 SEP, 1997,; THE CHEMICAL ENGINEER, 25 SEP, 1997,; THE GUARDIAN, 18 SEP, 1997.

Location : , INDIA

Injured : 20 **Dead** : 60

Abstract

A leak of LPG occurred on a pipeline whilst unloading a marine tanker causing an explosion and igniting six storage tanks, some containing kerosene. The fire burned for two days and damaged 19 tanks, a two storey office block and five other buildings. The smoke caused the port to be shut down and 100,000 people evacuated.

[fire - consequence, damage to equipment, fatality, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. OGJ,; LOSS CONTROL NEWSLETTER, 1997.

Location : Visakhapatnam, INDIA

Injured : 0 **Dead** : 56

Abstract

A pipe carrying LPG from harbour to refinery leaked setting off an explosion that triggered a fire which engulfed 18 storage tanks. Seven tanks containing LPG and crude oil were completely destroyed. 100,000 people were reported to have left the area following the incident. All within a 500 metre radius of explosion were killed. Pre-commissioning of one of the crude distillation units will begin in December, the second in January.

[fatality, refining, road tanker, damage to equipment, leak]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. LLOYDS LIST.

Location : Chittagong, BANGLADESH

Injured : 0 **Dead** : 0

Abstract

A marine transport incident. A stern mooring line on a tanker parted during cargo discharge, the ship swung in a strong ebb tide damaging the jetty, shore lines and an adjacent bulk carrier.

[damage to equipment, material transfer]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV. LLOYDS LIST.

Location : , ARGENTINA

Injured : 12 Dead : 0

Abstract

An explosion occurred in a tank of non-gas free marine tanker in a dock for maintenance, the deck plating was ripped off.
[damage to equipment]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, NOV, REUTER.

Location : , FRANCE

Injured : 16 Dead : 10

Abstract

A road transportation and rail transportation incident. A road tanker burst into flames after being struck by a passenger train at a railway crossing. 10 people were killed and 16 injured, a fire then spread to nearby buildings.
[fire - consequence, fatality, injury]

Lessons

[None Reported]

10810September 1997

Source : BBC NEWS 1998, (<http://www.bbc.co.uk>).

Location : , UK

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A railway maintenance company is facing a charge of negligence following an accident in which a quarter of a mile of track was destroyed and lines were disrupted for several days.

The accident occurred in September 1997, when the maintenance company was rectifying track that had become waterlogged through drainage problems.

A 21 wagon freight train was partly derailed and eight wagons hit a bridge, showering bricks onto a road.

The company was accused of having failed to maintain a safe method of repairing the track and of failing to ensure that rail passengers were not exposed to the risk of injury.

[derailment - consequence, human causes]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, SEP. LLOYDS LIST.

Location : , MALACCA STRAITS

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A marine tanker collided with a bulk carrier causing a No.2 port side tank the be holed and 150 tonnes of fuel oil spilt, consequential widespread pollution occurred.

[collision]

Lessons

[None Reported]

8929 26 July 1997

Source : HAZARDOUS CARGO BULLETIN, 1997, SEP. LLOYDS LIST.

Location : , OFF SINGAPORE

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A container ship sustained serious damage when in collision with a laden tanker, no pollution occurred.
[damage to equipment]

Lessons

[None Reported]

8927 24 July 1997

Source : HAZARDOUS CARGO BULLETIN, 1997, SEP. LLOYDS LIST.

Location : Texas, USA

Injured : 0 Dead : 0

Abstract

Oil leaked from a marine tanker during lightering, apparently due to hull crack suffered in collision a month earlier but no damage was found at the time.

Lessons

[None Reported]

8926 19 July 1997

Source : HAZARDOUS CARGO BULLETIN, 1997,

Location : , CANADA

Injured : 3 **Dead** : 1

Abstract

An explosion and fire occurred onboard a marine tanker while preparing to load. The fire destroyed the wharf.

[fire - consequence, loading, fatality]

Lessons

[None Reported]

8921 09 July 1997

Source : HAZARDOUS CARGO BULLETIN, 1997, SEP. LLOYDS LIST.

Location : , CHILE

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker carrying 27,000 tonnes of gasoline grounded. Two tugs were used to pull the vessel clear averted, possible ecological disaster.

[ship ran aground]

Lessons

[None Reported]

8916 05 July 1997

Source : HAZARDOUS CARGO BULLETIN, 1997, SEP. REUTER.

Location : , GERMANY

Injured : 3 Dead : 6

Abstract

A rail transportation. A poorly secured pipe, 1.2m diameter, 15m long, weighing 6 tonnes broke loose from a freight train slicing open a passing passenger train.
[fatality, human causes, injury]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG.

Location : West Virginia, USA

Injured : 2 **Dead** : 1

Abstract

A rail transportation incident. A freight train carrying hazardous chemicals rammed into a coal train, two engines and 13 cars derailed and burst into flames, one person was killed and two injured.

[fatality, fire - consequence, derailment, collision, chemicals unknown, injury]

Lessons

[None Reported]

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, NOV.

Location :

Injured : 2 Dead : 1

Abstract

A rail transportation incident. A transportation freight train carrying hazardous chemicals crashed into a coal train. The freight train burst into flames as its two engines and 13 of its cars derailed. Homes within a half-mile radius of the crash site were evacuated for 24 hours. One freight crew member was killed and two were injured but there were no injuries on the coal carrier.

Tank cars carrying bleach, sulphuric acid and ammonium nitrate were initially reported to be on fire at the scene. The sulphuric acid was transferred and a car partially loaded with hydrogen peroxide was removed.

A tank car carrying acetaldehyde continued burning through to the next day.

[fire - consequence, collision, derailment - consequence, evacuation, fatality, injury]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. FAIR PLAY.

Location : Nanjing, CHINA

Injured : 0 **Dead** : 0

Abstract

A fire and explosion occurred on a marine tanker with 19,700 tonnes of crude being unloaded. The tanker and one barge sank at anchorage.
[fire - consequence, unloading, sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. TRADE WINDS.

Location : , TURKEY

Injured : 0 Dead : 4

Abstract

A marine transportation incident. An explosion occurred in a tank on a marine tanker the cause was due to welding operations during repairs on a "gas free ship" at anchorage.

[hot surface, fatality]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. LLOYDS LIST.

Location : California, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A freight train carrying LPG residue and phosphoric acid derailed. Nineteen cars left the tracks, no spill occurred. Resident were evacuated and gas and electricity supplies were cut off.

[derailment, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. LLOYDS LIST.

Location : , SINGAPORE

Injured : 0 Dead : 0

Abstract

A large part of a waste treatment and tank cleaning depot was destroyed by fire due to a burst incinerator exhaust pipe igniting vapours.
[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. LLOYDS LIST.

Location : , SOUTH KOREA

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A container ship collided with a 2,850 gt cargo ship and then sank with 48 containers on board.
[sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. THE DAY.

Location : Connecticut, USA

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker overturned after swerving to avoid a car causing 10,000 litres of heating oil to onto the road, two truckloads of sand was used to contain the oil.

Lessons

[None Reported]

8877 05 May 1997

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. REUTER.

Location : , MEXICO

Injured : 0 Dead : 0

Abstract

A fire occurred in a solvent , the fire was brought under control in one hour.

[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, AUG. FAIR PLAY.

Location : Muang, THAILAND

Injured : 20 **Dead** : 4

Abstract

An explosion occurred when workers were welding a barge at dock. The hull was full of thinner and gas after being painted.
[marine transport, hot surface, fatality]

Lessons

[None Reported]

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, OCT.

Location : , FRANCE

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. One hundred and twenty tonnes of fuel oil leaked into a dock when a tanker hit the quay while trying to dock.
[collision]

Lessons

[None Reported]

8980 May 1997

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, OCT.

Location : Tyneside, UK

Injured : 3 **Dead** : 0

Abstract

An explosion and fire occurred in an acetylene store at a dockyard.

[fire - consequence, storage]

Lessons

[None Reported]

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, JUL.

Location : Tirana, ALBANIA

Injured : 0 **Dead** : 22

Abstract

A weapons depot exploded causing fire. Munitions at the depot were stored in underground tunnels. Most of the people killed were inside the tunnel when it exploded, flames spread to adjoining tunnel.

[storage, fire - consequence, explosion, fatality]

Lessons

[None Reported]

Source : LOSS PREVENTION BULLETIN, 134, 24.

Location : ,

Injured : 28 Dead : 0

Abstract

Twenty eight people were taken to hospital after a chemical alert at an airport. Ground staff unloading the aircraft found 68 powdered chemicals, thought to be pesticides, leaking into the hold and giving off toxic fumes.

Fire crews in chemical protection suits and breathing apparatus were called. Ambulances took casualties to two local hospitals. The victims had inhaled fumes, though none was seriously affected.

[spill, gas / vapour release]

Lessons

[None Reported]

9005 March 1997

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, SEP.

Location : , SPAIN

Injured : 0 Dead : 0

Abstract

15,000 litres of hydrochloric acid were accidentally released at a chemical plant. The spill occurred during the unloading of a tanker.

[road tanker, human causes]

Lessons

[None Reported]

8452 18 January 1997

Source : OBSERVER, 1997, JAN, 19,; GUARDIAN, 1997, JAN, 20.

Location : English Channel,

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Two marine tankers in collision in fog, 32 miles from Dover. One marine tanker holed and leaked gasoline into sea. 3000 tonnes of gasoline leaked into sea.

[spill]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, MAR.

Location : Lahore, PAKISTAN

Injured : 100+ **Dead** : 20

Abstract

A road transportation incident. A leak of poisonous gas occurred, the gas believed to be chlorine, leaked from drums loaded inside two containers which were being carried on a lorry that slid into a ditch. It is believed that the safety valves on the drums had not been tightened properly and loosened as the truck slid into the ditch.

The leak lasted for several hours until the area was flooded the area to dissipate the gas. 1,000 people were evacuated into nearby schools. Police in gas masks eventually removed the containers.

[evacuation, fatality, injury]

Lessons

[None Reported]

Source : LOSS CONTROL NEWSLETTER, 1997.

Location : , JAPAN

Injured : 0 **Dead :** 1

Abstract

A marine transportation incident. Much of the cargo of 19,000 tonnes of fuel oil leaked from marine tanker when it broke in two in stormy weather. The 10 km wide spill has affected up to 450 km of coastline. The ship is believed to have sunk after colliding with semi-submerged object.
[collision, sinking, fatality, pollution, heavy seas]

Lessons

[None Reported]

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, SEP.

Location :

Injured : 1 Dead : 0

Abstract

LPG gas which leaked during tanker filling caused an explosion and fire at a depot. One worker who was loading the tank into the vehicle was burned and needed hospital treatment. A further 200 people were evacuated.

[fire - consequence, burns, road tanker, evacuation]

Lessons

[None Reported]

Source : LOSS PREVENTION BULLETIN, 134, 24.

Location : ,

Injured : 0 **Dead :** 2

Abstract

An incident occurred with a liquefied gas powered vehicle. The driver had difficulty in starting the vehicle and activated the choke. This apparently allowed an explosive gas/air mixture to accumulate near the starter. On turning the ignition an explosion and flash flame occurred, which damaged the tubing from the gas bottle so that liquid/gas sprayed out. Another worker attempted to close the valve but the worker's clothing ignited, with a bystander also seriously burned. Both victims died as a result of their injuries. Fatality.

[road vehicle, damage to equipment]

Lessons

The following recommendations were made:

1. The working group on the fork lift trucks and on the use of liquefied gas made recommendations to avoid further accidents.
 2. These included precautions with the choke (only to required for older vehicles) and measures to avoid gas accumulation.
-

Source : CHEMICAL HAZARDS IN INDUSTRY, 1997, SEP.

Location :

Injured : 0 Dead : 1

Abstract

A worker at a fabrications factory was killed after being crushed between a wall and a forklift truck.

[fatality]

Lessons

[None Reported]

8655 05 December 1996

Source : LLOYDS LIST, 1996, DEC, 14.

Location : Florida, USA

Injured : 2 Dead : 0

Abstract

A rail transportation incident. 1,200 gallons of fuel spillage when youths operated a switching device which caused the derailment of a rail tanker. \$1 million (1996) damage done.

[derailment - consequence, damage to equipment]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1996.

Location : Off Corpus Christi, USA

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. An oil marine tanker containing ballast struck an unmanned gas platform 15 miles east of Port Aransas. Damage to legs of platform.

[damage to equipment, offshore, collision]

Lessons

[None Reported]

8472 03 October 1996

Source : PROCESS ENGINEERING, 1996, NOV.; EUROPEAN CHEMICAL NEWS, 1996, OCT, 7.; PRESS ASSOCIATION.

Location : Avonmouth, UK

Injured : 18 **Dead** : 0

Abstract

A series of explosions ripped through an epichlorohydrin storage tank when a road tanker was unloading sodium chlorite. Smoke drifted across the M4 and M5 motorways which were closed. Rail services were closed. The documentation for the tanker appeared to be incorrect.
[storage tanks, document errors]

Lessons

[None Reported]

8640 10 September 1996

Source : BBC NEWS, (<http://www.bbc.co.uk>).

Location : , UK

Injured : 1 Dead : 0

Abstract

A road transportation incident. Liquid nitrogen spillage onto M25 motorway when road tanker overturned.

Lessons

[None Reported]

8637 29 August 1996

Source : LLOYDS LIST, 1996, SEP,4.

Location : Quebec, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. 36 wagons of a freight train were derailed causing hydrogen peroxide to leak and forcing the evacuation of 30 families.
[derailment]

Lessons

[None Reported]

8629 10 August 1996

Source : LLOYDS LIST, 1996, AUG, 13.

Location : Ontario, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Two hundred people evacuated when a rail tanker of sulphuric acid was derailed and ruptured. Spill.
[derailment, evacuation]

Lessons

[None Reported]

8630 09 August 1996

Source : LLOYDS LIST, 1996, AUG, 13.

Location : , GREECE

Injured : 0 Dead : 0

Abstract

Loading of oil at a terminal resulted in a spillage when loading pipe ruptured during a storm.

The spillage of 300 tonnes of oil occurred when hose broke during routine unloading of marine tanker causing pollution. The company blamed the accident on the weather but they were fined \$650,000 (1996) due to the vessel not being safely docked and delay in shutting off the loading valve. The master and first mate have been charged with causing the pollution and the refinery director and loading manager have also been indicted over the incident.

[weather effects]

Lessons

[None Reported]

8622 05 July 1996

Source : BBC NEWS, (<http://www.bbc.co.uk>).

Location : , UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. Road tanker overturned causing a spillage of 1000 gallons of concentrated hydrochloric acid occurred.

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 1

Abstract

Contractor fatality during tank construction at an LPG terminal. A contractor's fitter working on a 3 m high catwalk for the erection of a water storage tank fell head-down into the bottom of the tank. It was found that the fitter was not using/standing on a proper platform. The time was approaching the end of the working day and, instead of rearranging the catwalk (wooded plank), he chose to balance with one foot on the pointed edge of a slender angle bar, which gave way. Fatality.

[safety procedures inadequate]

Lessons

Detailed discussion with tank constructors by the project teams on how safe working platforms are to be provided is obviously necessary before the work starts, and requirements must be written into the contracts and checked on throughout the project.

Source : LOSS CONTROL NEWSLETTER, ISSUE 2, 1996.

Location : West Bengal, INDIA

Injured : 0 **Dead** : 0

Abstract

364,000 litres of diesel spilt when a marine tanker's pipeline overflowed during loading operations on a jetty.

[spill, marine transport]

Lessons

[None Reported]

8605 02 June 1996

Source : LLOYDS LIST, 1996, JUN, 5, JUN, 6.

Location : , INDIA

Injured : 0 Dead : 0

Abstract

A river transportation incident. Spillage of several tonnes of petroleum products into water at jetty when oil barge overflowed her pipeline during loading operations. 358,000 litres of diesel spilt.

Lessons

[None Reported]

8462 31 May 1996

Source : EUROPEAN CHEMICAL NEWS, 1996, JUN, 17, NOV, 4,; WASTE ENVIRONMENT TODAY, VOL. 19, PAGE 506, 1996, JUN, 12.

Location : Magdeburg, GERMANY

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment and explosion of four of 18 rail tankers, each carrying 50 tonnes of vinyl chloride which were consumed in the fire. Schools nearby were closed for a week. Pollution of ground water over 46,000 km² area with dioxins and other contaminants was reported.
[fire - consequence, contamination]

Lessons

[None Reported]

Source : ENDS REPORT 261, 1996, OCT.

Location : Co Durham, UK

Injured : 0 **Dead** : 0

Abstract

Up to 50 kg of chlorine were released from a faulty connection between a road tanker and a storage tank.

[storage tanks, spill, material transfer]

Lessons

[None Reported]

8589 23 March 1996

Source : LLOYDS LIST, 1996, MAR, 30.

Location : North Orillia, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 60 people were evacuated following a derailment of 13 rail tankers, some containing ethylene oxide.
[evacuation]

Lessons

[None Reported]

8583 19 March 1996

Source : LLOYDS LIST, 1996, MAR, 21.

Location : Galveston, USA

Injured : 0 Dead : 0

Abstract

A river transportation incident. A river barge caused an oil spillage in waters.

Lessons

[None Reported]

8582 15 March 1996

Source : LLOYDS LIST, 1996, MAR, 16.

Location : Paese, ITALY

Injured : 11 Dead : 1

Abstract

A road transportation incident. Two road tankers carrying butane burst into flames. A gas leak was spotted as 5 tankers were unloading into storage tanks. Schools and houses within 1 km radius evacuated. Fatality.
[evacuation, fire - consequence]

Lessons

[None Reported]

8705 11 March 1996

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1996.

Location : Bintulu, MALAYSIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Spillage of crude oil occurred following a hose line burst during loading. The accident occurred while the oil marine tanker was making fast to the terminal.

Lessons

[None Reported]

Source : LOSS CONTROL NEWSLETTER, ISSUE 2, 1996.

Location : Bintulu, MALASYIA

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A spillage of crude oil occurred following a hose line burst while a road tanker was on its way to the terminal.
[mechanical equipment failure]

Lessons

[None Reported]

8575 28 February 1996

Source : LLOYDS LIST, 1996, MAR, 6.

Location : Tennessee, USA

Injured : 1 Dead : 2

Abstract

A rail transportation incident. 54,000 gallon of sulphuric acid spillage from 4 rail tankers derailed. Fatality.
[derailment]

Lessons

[None Reported]

8461 19 February 1996

Source : ENDS REPORT, 1996, MAR.; THE CHEMICAL ENGINEER, 7 MARCH, 1996.

Location : Billingham; Cleveland, UK

Injured : 11 **Dead** : 0

Abstract

A road transportation incident. A road tanker collided with a diesel tanker, caused by loss of control. Substances involved: nitrobenzene, diesel. Both vehicles caught fire.

Clean up costs estimated at £200,000 (1996).

[fire - consequence, collision, loss of control, spill]

Lessons

Although harmful to aquatic life, nitrobenzene is biodegradable.

Source : THE GUARDIAN, 1996, FEB, 17,; THE OBSERVER, 1996, FEB, 18,; HAZARDOUS CARGO BULLETIN, SEPTEMBER 1997, VOL 18, NO.9,; BBC NEWS, FEBRUARY 11, 1998, (<http://www.bbc.co.uk>).

Location : Wales, UK

Injured : 0 **Dead** : 0

Abstract

Pilot error caused the grounding of an oil tanker carrying 130,000 tonnes of light crude oil at the entrance to a harbour. Although the main engine was stopped, put astern and both anchors dropped, the vessel continued to run ahead finally coming to rest aground. The starboard cargo ballast tanks were ruptured by the first grounding resulting in heavy trim by the head and starboard list. A quantity of oil was lost from the damaged cargo tanks.

It was decided to manoeuvre the vessel into deeper water using tugs where the vessel could be anchored and lightered to be allowed to enter the harbour and discharged the remainder of the cargo. This was achieved without further loss of cargo but a forecast of gale force winds led to the decision to turn into the wind and re-anchor. While preparations for lightering were still in progress the weather worsened and control was lost and the vessel grounded again.

Four days later the vessel was brought under control and taken in to the harbour where the remainder of the cargo was discharged. Although there was no loss of life or serious injury, a total of 71,800 tonnes of crude oil was lost, of which only 2,500 tonnes escaped during the initial grounding.

[spill, environmental, ship ran aground]

Lessons

[None Reported]

Source : LLOYDS LIST, 1996, FEB, 23.

Location : Tennessee, USA

Injured : 0 **Dead** : 0

Abstract

Rail transportation. 500 evacuated for a second time on the 13 Feb after a flash fire from a midweek chemical spill. Rail tanker split open and 8000 gallons of carbon disulphide spillage. People within 1/2 mile evacuated for two nights.

[fire - consequence, evacuation]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

Fire at compressor suction drum at a terminal during maintenance. The drain valve of the interstage liquid drum was inadvertently opened, releasing hydrocarbons into the open drain system below the suction drum. Within seconds, the hydrocarbons were ignited. There was damage to equipment and material loss. The most likely source of hydrocarbon release was from the inadvertent operation of a level gauge drain cock by insulation technicians working in the relatively confined work area. In addition the drain cock could easily be partially opened by body contact. Also the control of the work was insufficient to prevent the incident occurring.

[fire - consequence, product loss]

Lessons

The control of maintenance/installation work adjacent to running plant needs very careful consideration as to the degree of control needed to prevent incidents.

The atmospheric drainage of "light ends" on process units can be hazardous if not carefully controlled. Wherever practicable, drain valves should be double valved, locked off or otherwise protected when not in use.

1810 01 February 1996

Source : LLOYDS LIST, 1996, FEB, 3.

Location : Los Angeles, USA

Injured : 0 Dead : 0

Abstract

Rail transportation. Freight train carrying hazardous chemicals derailed and caught fire and sent up large toxic cloud causing the evacuation of 1/2 square mile area.

[derailment, gas / vapour release, fire - consequence, chemicals unknown]

Lessons

[None Reported]

8339 14 January 1996

Source : LLOYDS LIST, 1996, JAN, 15.

Location : Perth, AUSTRALIA

Injured : 1 **Dead** : 2

Abstract

A rail transportation incident. Two freight trains in collision caused fire ball when diesel ignited. Fatality.
[fire - consequence]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1996.

Location : , RUSSIA

Injured : 0 Dead : 0

Abstract

1,220 mm oil pipeline damaged by bulldozer carrying out excavation. 242 tonnes oil spillage over an area of 650 sq. metres.
[excavation damage, bulldozer/JCB/digger]

Lessons

[None Reported]

8567 09 January 1996

Source : LLOYDS LIST, 1996, JAN, 12.

Location : Vado Ligure, ITALY

Injured : 0 Dead : 0

Abstract

An explosion and fire occurred in a No. 33 shore tank at the petroleum terminal while marine tanker was unloading.

[fire - consequence]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1996.

Location : Pennsylvania, USA

Injured : 40 **Dead** : 0

Abstract

Chlorine release caused a vapour cloud over the town but was dissipated after a number of hours. The leak occurred while product was being transferred from a rail tanker to production equipment.

[gas / vapour release, material transfer]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 1

Abstract

A contractor had been carrying out the work of moving catalyst drums. Upon entering the storage area, the unloaded forklift truck collided with a lamp post and knocked it down. The operator was thrown from the vehicle; but the vehicle overturned, trapping him between the safety roof and the ground. It was found that blind spots obstructed clear vision of the lamp post in the work area. The basic cause was overconfidence with regard to repetitive, routine work, without apparent risk and insufficient awareness in attitude toward safety.

[safety procedures inadequate, fatality]

Lessons

Even trained and experienced forklift truck operators have serious accidents, most likely through complacency.

Emphasis must be placed on maintaining an AWARENESS of good safety practice.

Source : ICHEME

Location : ,

Injured : 1 **Dead :** 0

Abstract

During the lifting/moving of a dock hose, the person tasked with guiding the hose through the dock structure had two of his fingers partially amputated when they were caught between the dead leg of the two-part tag line and the sheave in the load block. This accident was caused by the structural design of the dock which resulted in a very hazardous job task; the open load block design created a severely hazardous pinch point to employees/contractors. In addition there was a lack of awareness on the worker's part as to the hazard of placing a body part in a pinch point.

[operator error, design inadequate]

Lessons

There is a need to ensure that personnel are aware of the hazard of "pinch points" in machinery, lifting equipment, etc.

It is a hazardous practice to manually handle a load line while a lifting operation is in hand.

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1995.

Location : Mississippi River, New Orleans, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. 38,000 gallons of crude oil spillage following the collision of a single hulled tanker river barge with a steel dolphin, causing a 1.2 metre gash. River closed to traffic for 4 days.

Lessons

[None Reported]

Source : ENDS REPORT 263, 1996, DEC.

Location : North Yorkshire, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker delivered 7 tonnes of 96% sulphuric acid which was unloaded into a tank of dioctyl phthalate. No violent reaction occurred but clean up operations were difficult.

[unloading, near miss, design or procedure error]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Shafter, California, USA

Injured : 15 **Dead** : 0

Abstract

A rail transportation incident. Chlorodifluoromethane release following the derailment of a rail tanker.

[gas / vapour release]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Bogalusa, Louisiana, USA

Injured : 400 **Dead** : 0

Abstract

A rail transportation incident. The release of nitrogen tetroxide was caused by a ruptured rail tanker. 3000 evacuated.

[evacuation, nitrogen peroxide]

Lessons

[None Reported]

8189 19 October 1995

Source : LLOYDS LIST, 1995, OCT, 19.

Location : , ST. LUCIA

Injured : 0 Dead : 0

Abstract

An oil spillage occurred during loading operations at a terminal.

Lessons

[None Reported]

8204 17 October 1995

Source : HAZARDOUS CARGO BULLETIN, 1995, DEC.

Location : Mina Al Ahmadi, KUWAIT

Injured : 0 Dead : 0

Abstract

A marine transportation incident. One of 2 strings of flexible hoses parted during loading of 350,000 dwt marine oil tanker at single buoy mooring. Spillage of 800 tonnes of oil.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, NOV.

Location : Bugrysh, Udmurtia, RUSSIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A fire occurred after rail tanker with propane derailed and overturned. Fire over area of 1000 sq. metres.
[rail incidents, derailment, fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, DEC.

Location : Map Ta Phut, THAILAND

Injured : 0 **Dead** : 2

Abstract

A marine transportation incident. An explosion and fire occurred on a marine chemical tanker during unloading of methanol at a pier. Fatality.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1996.

Location : Map La Phut, THAILAND

Injured : 0 **Dead** : 2

Abstract

A marine transportation incident. An explosion and fire occurred on board a chemical marine tanker during unloading of methanol. Fatality.
[fire - consequence]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : , HONG KONG

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Marine tanker rammed a jetty causing 20 tonne of crude oil spillage. No major pollution as leak was stopped and dispersant used.

[collision]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, NOV.

Location : Brisbane, Queensland, AUSTRALIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Hose coupling on marine tanker failed during discharge at wharf during unloading. Small spillage of oil due to prompt shut down of pump.

[coupling failure]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 3, 1995.

Location : Nizhniy Tagil, RUSSIA

Injured : 2 **Dead** : 0

Abstract

Four storage depots completely destroyed when 28 tonnes of salts of 2-ethylhexoic acid exploded. Windows 3 km away broken.
[damage to equipment]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, OCT.

Location : Rotterdam, NETHERLANDS

Injured : 1 **Dead** : 1

Abstract

A marine transportation incident. A marine tanker barge loading at terminal was struck by ro-ro ferry and sank. 10 tonnes of naphtha spillage to canal from damaged hull. Small LPG spillage. Fatality.

[collision]

Lessons

[None Reported]

1968 21 August 1995

Source : ASSOCIATED PRESS

Location : Bellingham, Washington, USA

Injured : 5 **Dead** : 0

Abstract

A road transportation incident. A road tanker carrying liquefied oxygen overturned on State Highway and started leaking. Evacuation of people within half mile carried out. Release of material left to evaporate.

[gas / vapour release]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Huangpu, SINGAPORE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Spillage of crude oil resulting from collision of marine tanker closed port for two days.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, SEP.

Location : Corpus Christi, Texas, USA

Injured : 0 **Dead** : 0

Abstract

Marine transportation. Lightning struck marine tanker barge loaded with 630 tonnes of toluene at refinery. The fire burnt out on No.3 tank but not on No's 1 or 3.
[fire - consequence, damage to equipment]

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 1 Dead : 0

Abstract

A driver/operator of a tanker being loaded with polyethylene pellets fell to the ground from the top of the tanker.

He sustained head and arm injuries.

During the loading of the tanker, the driver/operator had noticed that pellets were being spilled from the loading sock. He moved along the top of the tanker barrel to try and stop the spillage. He lost his balance and fell, after coming into contact with scaffolding. The tanker loading operation was halted.

The driver/operator was treated for his injuries at the scene, before being transferred to hospital.

An enquiry team investigated the incident.

[road tanker, fall, injury]

Lessons

1. Modifications to scaffolding in the loading area were recommended to prevent it from protruding beyond the fixed loading platform.
 2. The requirement for some form of restraint to be provided on/near the tanker top to prevent falls, in the event that tanker ports have to be accessed (e.g. use of tankers with collapsible handrails; provision of a grab rail in the loading tunnel; harness and restraining cord provision across loading platform working areas).
 3. Review of the frequency of first aid training.
 4. Review of policy for calling a doctor and for transfers to hospital.
-

1887 06 August 1995

Source : LLOYDS LIST, 1995, AUG, 11, AUG 16.

Location : Conchan, La Chira, PERU

Injured : 0 Dead : 0

Abstract

Marine transportation. Hose on marine tanker broke during unloading of oil causing spillage of 18,000 gallons to sea. 13 km of shore line affected.
[pollution]

Lessons

[None Reported]

1828 24 July 1995

Source : HAZARDOUS CARGO BULLETIN, 1995, SEP.

Location : , SOUTH KOREA

Injured : 0 Dead : 1

Abstract

Marine transportation. A marine oil tanker was driven onto rocks by Typhoon Faye, causing a spillage of several hundred tonnes of crude oil. An oil slick 20 miles long was reported. The tanker was discharging a full cargo when the typhoon warning led to the vessel leaving port. Fatality.
[marine tanker, pollution]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Westville, New Jersey, USA

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. Strong winds caused marine tanker to move away from terminal during unloading operations. Flexible hose parted and spillage of 130 tonnes of crude oil occurred into the river causing pollution.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Nizhny Novgorod, RUSSIA

Injured : 0 **Dead** : 6

Abstract

A rail transportation incident. Collision of two trains caused 12 wagons to be derailed. Explosion of three rail tankers loaded with butadiene occurred and set light to others. Fatality.
[fire - consequence]

Lessons

[None Reported]

7613 17 July 1995

Source : HAZARDOUS CARGO BULLETIN, 1995, SEP.

Location : Nizhny Novgorod, RUSSIA

Injured : 0 **Dead** : 6

Abstract

A rail transportation incident. Collision between two trains caused 12 wagons to derail. Explosion of one of three rail tankers containing butadiene and ignited other rail wagons. Fatality.

[derailment - consequence]

Lessons

[None Reported]

1855 05 July 1995

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1995.

Location : Songkhla, THAILAND

Injured : 0 **Dead** : 1

Abstract

Marine transportation. 2 million litres of benzene were destroyed in an explosion in engine room and fire when marine tanker was offloading at this storage facility. Fatality.

[fire - consequence]

Lessons

[None Reported]

2643 29 June 1995

Source : LLOYDS LIST, 1995, JUN, 30,; HAZARDOUS CARGO BULLETIN, 1995, AUG.

Location : Clevedon, Avon, UK

Injured : 0 **Dead** : 0

Abstract

An explosion occurred when road tanker was unloading at chemical factory on industrial estate. Debris hurled into adjacent buildings site.

[unknown chemicals]

Lessons

[None Reported]

1589 26 June 1995

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1995.

Location : Volga, RUSSIA

Injured : 0 **Dead** : 1

Abstract

A rail transportation incident. Loading of 3 rail tankers with butane and propane when there was an explosion. The blaze spread to 18 other rail tankers. Fatality.

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A crude oil spill occurred at a jetty on a refinery. During an unloading operation, the marine loading arms' isolating ball valves were closed and the arms disconnected from the manifold of the ship. As a result, approximately 20 tonnes of oil was spilled, some of it finding its way into the water. It was found that tradesmen had changed the printed circuit cards in the control box without having sufficient knowledge of the Marine Loading Arm Control System.

[environmental, refining,]

Lessons

Technical, detailed knowledge by tradesmen of refinery equipment can be much less than assumed and may lead to unwanted situations. Routine, e.g., annual reading and attesting to by signature of refinery safety regulations, operating instructions, maintenance regulations, etc. by those concerned is necessary.

2660 14 June 1995

Source : HAZARDOUS CARGO BULLETIN, 1995, AUG.

Location : Off Mexican Pacific Coast, MEXICO

Injured : 0 **Dead** : 2

Abstract

Marine transportation. Engine room explosion and fire on loaded 30,800 dwt marine chemical tanker caused abandonment of ship. 35 crew saved, no cargo spillage. Fatality.

[fire - consequence, marine tanker]

Lessons

[None Reported]

1845 14 June 1995

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1995.

Location : Volgograd, RUSSIA

Injured : 10 **Dead** : 0

Abstract

A rail transportation incident. A rail tanker containing liquefied propane caught fire. Explosion spread and set light to other tankers.

[fire - consequence]

Lessons

[None Reported]

2907 01 June 1995

Source : HAZARDOUS CARGO BULLETIN, 1995, SEP.

Location : Junction 2 of M621, near Leeds, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker overturned causing small spillage of aniline.

Lessons

[None Reported]

Source : LOSS PREVENTION BULLETIN, 133, 22.

Location : ,

Injured : 0 **Dead :** 1

Abstract

A mechanic who was carrying out maintenance work on a vacuum tanker using an oxyacetylene torch to remove a faulty valve, was unaware of the fact that the road tanker had not been cleaned since its use two days earlier for the transportation of petrol, waste oil and sludge. Consequently, flammable vapours remaining in the valve were ignited by the torch, leading to the explosion which killed the operator. Fatality.

[hot work, gasoline]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 2, 1995.

Location : Beryl Alpha, North Sea, UK

Injured : 1 **Dead** : 0

Abstract

A fire occurred on a piece of gas cooling equipment. 250 people called to muster stations and helicopter scrambled.

[fire - consequence, offshore]

Lessons

[None Reported]

2497 13 May 1995

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 2ND QUARTER, 1995.

Location : Onitsha, NIGERIA

Injured : 0 **Dead** : 20

Abstract

A road tanker explosion while unloading LPG. The explosion caused a panic in the area in which several people were crushed by motorists fleeing the scene.
Fatality.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

During discharge of solid flake from a bulk tanker, sparks were observed on the outside of the discharge flexible hose. The discharge was stopped immediately and the vehicle disconnected and sent away part discharged. There were no other consequences. The hose was translucent plastic with internal carbon steel wire armouring. Continuity had been lost between this and the metal coupling on the end of the hose. The hose had been supplied as having anti static properties but was not subject to regular continuity testing. This was because it belonged to the transport department and not the production plant. The SOP for the operation was also out of date, being for a "walking floor" type of vehicle. This had not been used for between 18 months and two years at this site. The operation had been carried out many times without incident.

The main recommendations were:

1. Procure two new anti-static hoses to be the property of the Plant.
2. Include earth continuity checks in the engineering department schedule.
3. Revise and re-issue the SOP.
4. Circulate Company guidance note on "Rules and Procedures for Sources of Ignition" to all relevant businesses in Group.

[unloading, road tanker, near miss]

Lessons

[None Reported]

8271 07 May 1995

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 4, 1995.

Location : Amur region, RUSSIA

Injured : 1 **Dead** : 2

Abstract

A rail transportation incident. Derailment of 27 rail cars. Explosion of 3 rail tankers containing propane. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, JUN.

Location : Near Chita, Siberia, RUSSIA

Injured : 0 **Dead** : 3

Abstract

A rail transportation incident. A freight train collided with mechanical road digger near a station. 10 of 35 rail tanker wagons with crude oil derailed and caught fire. Fatality.

[derailment, fire - consequence, collision]

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 3 Dead : 0

Abstract

Three staff were affected by fumes in two separate episodes on a site where NaHS tanker loading took place. In the first episode two gatehouse staff complained of lachrymatory fumes during the afternoon. On checking it was found that during NaHS tanker loading, the tanker vent scrubber pump was not running. It was restarted but the lachrymatory fumes persisted well beyond the 30 minutes required to load a tanker.

A second, related, episode occurred at 18:30 that evening. The night-duty man was affected by fumes. At 20:00 the fumes were gone but the man reported sick the following day with symptoms typical of H₂S exposure.

It was later discovered that a catchpot on the NaHS plant was being drained at 18:30. The procedure was to use breathing apparatus and drain the pot until gas came out as the only indication that the pot was clear of liquid. The drain line was 2 inches in diameter and the system pressure was 5 psi. At one time the drain discharged below the surface of liquid containing bleach in a sump but following plant modifications this was no longer the case. The night-duty man's exposure was attributed to the puff of H₂S released in this operation.

[hydrogen sulphide, gas / vapour release, pump failure, road tanker, draining, people]

Lessons

Actions proposed were:

1. Modify the catchpot sight glass to allow it to be drained while still leaving a few inches of liquid as a seal;
 2. Modify the drain line to allow it to dip into the sump;
 3. Carry out the HAZOP study of the NaHS plant due in June 1995.
-

8095 20 April 1995

Source : DAILY TELEGRAPH, 1995, APR, 21.

Location : Watford, Northants, UK

Injured : 31 Dead : 0

Abstract

A road transportation incident. Fifteen gallons of benzyl mercaptan leaked from a road tanker carrying drums containing the chemical. Thirty one people were taken to hospital for treatment and residents living within 10 miles of the release were advised to keep indoors.
[drums]

Lessons

[None Reported]

8111 12 April 1995

Source : LLOYDS LIST, 1995, APR, 14,.; HAZARDOUS CARGO BULLETIN, 1995, JUN.

Location : Dragos Voda, ROMANIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A passenger train in collision with derailed freight train with rail tankers of gasoline. Fire burnt out two carriages.
[derailment, fire - consequence]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 2ND QUARTER, 1995.

Location : Edgeworthstown, County Longford, IRELAND

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker containing 20,000 litres of LPG came off the road at a bend into the village and ended in the front garden of a house. Gas leaked from the tanker and about an hour later ignited and destroyed the house.

[explosion, fire - consequence, damage to equipment]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, JUN,; ICHEME S&LP SG NEWSLETTER, ISSUE 15, SUMMER 2000.

Location : Savannah, Georgia, USA

Injured : 0 Dead : 0

Abstract

An explosion and fire occurred on a low pressure storage tank containing approximately 800 m³ of crude sulphate turpentine. The other two tanks were also involved in the explosion.

Crude sulphate turpentine has a flash point as low as 24 degrees C.

The incident occurred due to the oxygen content during the day being low but rose later in the day when the tank became cold and air was sucked in.

Three other tanks were damaged in the explosion, one containing acidic liquid and the other an alkaline liquid. The two liquids mixed and reacted to form hydrogen sulphide.

Several thousand residents evacuated and school closed.

[fire - consequence, evacuation]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 2, 1995.

Location : , SINGAPORE

Injured : 0 Dead : 0

Abstract

Fire broke out at the road loading terminal at this refinery. Fire controlled within 20 minutes.

[fire - consequence]

Lessons

[None Reported]

8560 23 March 1995

Source : THE GUARDIAN, 1995, MAR, 13,; HAZARDOUS CARGO BULLETIN, 1995, MAY.

Location : , INDIA

Injured : 0 Dead : 110

Abstract

A road transportation incident. An accident occurred on a highway when fire engulfed a road tanker, bus and tractor trailer carrying wedding guests.

Substance involved: benzene.

[fire - consequence, fatality]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1995.

Location : Carteret, New Jersey, USA

Injured : 0 **Dead** : 0

Abstract

A 2 hour fire raged at this gasoline storage terminal after a pipe connected to a 2 million gallon gasoline tank failed. Some nearby toll operators were taken to hospital after inhaling toxic fumes.

[fire - consequence, tank failure]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1995.

Location : Brixlegg, AUSTRIA

Injured : 0 **Dead** : 1

Abstract

An explosion occurred which destroyed a depot's offices and store buildings. Fatality.

[storage]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, APR.

Location : , BRAZIL

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A chemical marine tanker struck an underwater object. 32 tonnes of styrene monomer spilt from port tank to sea. City and port area tainted by odour.

[collision, gas / vapour release, spill]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1997, MAR.

Location : , NORTH ATLANTIC

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A leak from a tank container occurred aboard a container ship. The frame of a tank container buckled during a storm at sea, causing damage to the tank shell and discharge valve and the loss of some eight tonnes of product (a solution of sodium borohydride and sodium hydroxide in water) occurred. This compound, UN number 1760, is a Class 8 corrosive product and releases hydrogen when in contact with metals. When discovered the frame around the tank container was seen to be bent and the discharge valve was damaged. The crew attempted to staunch the leak but was only partially successful.

[weather effects, damage to equipment, spill]

Lessons

[None Reported]

8504 07 February 1995

Source : LLOYDS LIST, 1995, FEB, 9.

Location : Perama, GREECE

Injured : 0 Dead : 0

Abstract

Transportation. Fire broke out when a fuel oil pipeline running from a storage tank to a loading terminal sprung a leak and ignited.
[storage tanks, fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, APR.

Location : Ghent, BELGIUM

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Leakage of 30-40 kg of chlorine from rail tanker on site. Road and canal traffic halted. Spill.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

During discharging of a load of acetone from a tanker, the driver sat in the cab to have a cup of tea. The operator checked the discharge operation every 10 minutes (discharge normally takes 45 minutes). When the the tanker was empty, the discharge pump automatically shut down and the operator closed all the isolation valves, removed the wheel chocks and the earthing clip. The operator then opened the compound gates.

The operator stated that he then opened the cab door, told the driver that the tanker was discharged and only needed disconnecting. The operator stated that he noticed that the driver's eyes were closed but when he spoke the driver sat up and said "OK". The operator went to the rear of the tanker to wait for the driver to disconnect the hose but the driver started the engine and the tanker drove off.

The connecting hose stretched and broke before the driver realised that he had driven away without disconnecting it.

[unloading, road tanker, driver error, operation inadequate, spill]

Lessons

A review of the operating procedure for tanker discharging showed that disconnection of the hose had been omitted from the steps. The procedure also clearly stated that the driver should have carried out the opening and closing of the tanker discharge valve.

The available documents did not contain any recommendations but it is clear that the above deficiencies in the procedures and their applications would require to be addressed.

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1995.

Location : Tawachiche River, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 50,000 gallons of sulphuric acid spillage into an environmentally sensitive area after 28 rail tankers came off the rail track. Extensive pollution and damage to fish spawning grounds.
[ecological damage]

Lessons

[None Reported]

6798 19 January 1995

Source : BBC NEWS

Location : North Sea, UK

Injured : 0 Dead : 0

Abstract

Helicopter struck by lightning and put down in sea. All rescued in one hour.

[offshore]

Lessons

[None Reported]

8501 19 January 1995

Source : CIVIL PROTECTION, 1995, FEB.

Location : North Sea, UK

Injured : 0 Dead : 0

Abstract

16 oil rig workers and 2 air crew were rescued when their helicopter had to make a controlled ditch into the sea after being hit by lightning. The men spent 90 minutes in the water in two inflated rafts before being rescued. Offshore.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, JAN, 3.

Location : Essex, UK

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Vapour emission during discharge of oil at terminal. Local complaints.

[gas / vapour release, environmental]

Lessons

[None Reported]

6794 24 December 1994

Source : BBC NEWS, 1994, 24 DEC.

Location : Stockton-on-tees, UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. Acid spillage from a road tanker in car park.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, FEB.

Location : Louisiana, UK

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A towed tank river barge struck steel mooring dolphin. 150,000 litres of crude oil leaked to lower part of the river from gash in single hull.

[spill, collision]

Lessons

[None Reported]

6790 16 December 1994

Source : LLOYDS LIST, 1994, 17 DEC.

Location : Binh Dinh, VIETNAM

Injured : 0 Dead : 0

Abstract

A hose from a marine tanker to a storage tank broke off causing a spill of 37000 litres of diesel into the sea.

[hose failure, material transfer]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, ISSUE 1, 1995.

Location : Xian, Shanxi Province, CHINA

Injured : 0 **Dead** : 100

Abstract

A rail transportation incident. Two rail wagons carrying 1.83 million sticks of dynamite, 270 boxes of detonators and 60 tonnes of TNT exploded destroying trains, engine sheds and oil car in a 100 metre radius. Walls and windows were damaged one mile away. Four villages devastated. Local rail line closed along with 24 factories.

[explosion]

Lessons

[None Reported]

6784 06 December 1994

Source : LLOYDS LIST, 1994, 8 DEC.

Location : Jose Ignacio Terminal, URUGUAY

Injured : 0 Dead : 0

Abstract

Spillage of light crude oil during unloading from a marine tanker at a terminal.

Lessons

[None Reported]

6780 01 December 1994

Source : LLOYDS LIST, 1994, 6 DEC.

Location : North Shore; Montreal, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A spill of 60 000 litres of oil occurred during rail tanker derailment.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, JAN.

Location : Hampshire, UK

Injured : 0 **Dead** : 0

Abstract

A faulty coupling on loading arm at jetty caused small spill of fuel oil. Some beach pollution.

[coupling failure]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1995, JAN.

Location : Fawley; Hampshire, UK

Injured : 0 **Dead** : 0

Abstract

Faulty coupling on loading arm at jetty caused spill of fuel oil.

[coupling failure]

Lessons

[None Reported]

8481 16 November 1994

Source : HAZARDOUS CARGO BULLETIN, 1995, JAN.

Location : Michigan, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A fire and explosion occurred in freight train with sodium isopropylxanthate. Homes and two schools evacuated.
[fire - consequence, evacuation]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1995, JAN.

Location : Baltimore; Maryland, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Terminal struck by berthing vehicle, pier part submerged and pipeline cracked. 16 000 litres of oil spillage.

Lessons

[None Reported]

6754 05 November 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1995, JAN.

Location : , MALACCA STRAITS

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Due to a navigation error a marine tanker hit rocks, causing a spill of palm oil to the sea from holed tank.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1995, JAN.

Location : Onitsha, NIGERIA

Injured : 0 Dead : 60

Abstract

A road transportation incident. A bus was in collision with a road tanker of fuel oil in a remote area and caught fire. Fatality.

Lessons

[None Reported]

6743 24 October 1994

Source : THE CHEMICAL ENGINEER, 1994, 27 OCT.

Location : Tees Dock; Cleveland, UK

Injured : 14 Dead : 0

Abstract

A road transportation incident. Methyl methacrylate spilled from a road tanker as it was being loaded onto a ferry. There was a 2 inch gap in a rear seal.

Lessons

[None Reported]

6742 24 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.

Location : Terengganu, MALAYSIA

Injured : 0 Dead : 0

Abstract

A road transportation incident. A lorry was in collision with a road tanker causing a spill of gasoline which ignited and destroyed shop and house.

Lessons

[None Reported]

6735 19 October 1994

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 4TH QUARTER, 1994.

Location : Corinth Canal, GREECE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker rammed a pier and fuel oil leaked for 50 minutes creating 2 oil slicks 600 and 300 square metres.
[spill, pollution]

Lessons

[None Reported]

6730 17 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 29 OCT.

Location : Lethbridge; Alberta, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of a train carrying methanol in 6 cars. Two rail tankers leaked. Led to the evacuation of people.
[spill]

Lessons

[None Reported]

6729 17 October 1994

Source : BBC NEWS, 1994, 18 OCT.

Location : Teeside, UK

Injured : 0 Dead : 0

Abstract

Spillage of chemicals at a terminal.

[unknown chemicals]

Lessons

[None Reported]

6732 17 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 6 DEC.

Location : Off Kainan City; Wakayama, JAPAN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker was in collision with another tanker causing a hole below waterline, a spill of crude oil and severe pollution

Lessons

[None Reported]

6726 14 October 1994

Source : LLOYDS LIST, 1994, 17 OCT.

Location : , OFF NORTHERN PORTUGAL

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A spill of 2000 tonnes of crude oil occurred when a marine tanker holed on rocks. 80000 tonnes transferred to another tanker.

[ship ran aground]

Lessons

[None Reported]

6719 08 October 1994

Source : LLOYDS LIST, 1994, OCT.

Location : St. Croix, VIRGIN ISLANDS

Injured : 7 **Dead** : 3

Abstract

A marine transportation incident. Explosion on marine tanker thought to have been caused by engine room fire. The vessel was empty following discharge of crude oil. It is not known how much bunker fuel remained on board. Fatality.
[fire - consequence]

Lessons

[None Reported]

6717 04 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.

Location : Rastanura, SAUDI ARABIA

Injured : 0 **Dead** : 0

Abstract

Loading overpressured a wing tank on a marine tanker causing an oil spill.
[overpressurisation]

Lessons

[None Reported]

6716 03 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, NOV.

Location : Ho Chin Minh City, VIETNAM

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker manoeuvring to unload at jetty, struck it causing a spill of 1000 tonnes of gas oil.

Lessons

[None Reported]

6714 02 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 6 DEC.

Location : Leixoes, PORTUGAL

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker struck rocks puncturing a tank and causing spillage of crude oil. Oil transferred to another tanker.

Lessons

[None Reported]

6713 01 October 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, NOV.

Location : Athens, GREECE

Injured : 0 **Dead** : 0

Abstract

Products marine tanker damaged pipeline after loading at a refinery. Causing a spill of 500 tonnes of oil into the sea.
[damage to equipment]

Lessons

[None Reported]

6704 21 September 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 24 SEP.

Location : Tsing Yi Island, HONG KONG

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker damaged an oil depot pier. 400 litres of diesel/fuel oil were spilled.

Lessons

[None Reported]

6700 16 September 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.

Location : Chao Phya River; Bangkok, THAILAND

Injured : 4 **Dead** : 1

Abstract

Explosion after pipe leaked during loading of ethyl alcohol to a marine tanker. Lighter destroyed. Fatality.

Lessons

[None Reported]

6690 07 September 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, NOV.

Location : River Test, UK

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Up to 2 tonnes of crude oil spilled from a marine tanker.

Lessons

[None Reported]

Source : THE SAFETY AND HEALTH PRACTITIONER, APRIL, 1997.

Location : Kent, UK

Injured : 7 Dead : 6

Abstract

A pedestrian walkway collapsed. The walkway had been installed four months prior to its collapse and was designed to be used by up to four million passengers a year. It led from a passenger terminal to a floating pontoon and from there to the ferry. The only part of the structure which was attached to the pontoon was the upper right hand foot which was attached by way of a stub axle and was thus a safety critical part of the design. The stub axle welds both failed as a result of fatigue cracking because the walkway and its foot assembly had not been designed to withstand the stresses to which it was exposed. Once these welds failed, the walkway section was unrestrained and simply walked off the support platform as a result of the pontoon's normal motion.

[metal fatigue, weld failure, fatality]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1994.

Location : Uto Island, FINLAND

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker that sunk in 1947 started leaking oil at 3 cum per day. The vessel is believed to contain between 600 tonnes and 900 tonnes of oil.

[sinking, spill, pollution]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 24 AUG., 25 AUG., & 7 SEP.

Location : Mentor; Ohio, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 11 rail tanker cars of a 118 car train led to one leaking vinyl acetate from 3 leaks. 12000 gallons spilt. Two leaks were plugged but third could not be stopped. Tanker righted to stop leakage. People evacuated. Cost of incident reported at \$1 million (1994).
[evacuation, spill]

Lessons

[None Reported]

6665 15 August 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 18 AUG, & 24 AUG.

Location : Baton Rouge; Louisiana, USA

Injured : 4 **Dead** : 0

Abstract

Explosion on a marine transport barge of toluene led to a fire at the hall buck marine terminal. Lack of an earth on the flexible hose probably ignited flammable vapours during cleaning of the barge.

[lack of earthing, static, fire - consequence]

Lessons

[None Reported]

6663 14 August 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.

Location : Tbilisi, GEORGIA

Injured : 16 Dead : 24

Abstract

A rail transportation incident. A passenger train was in collision with a freight train causing a spill of 3200 tonnes of fuel oil. [fatality, injury]

Lessons

[None Reported]

6659 09 August 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.

Location : My Lio; Thu Duc, VIETNAM

Injured : 2 **Dead** : 5

Abstract

Explosion in engine room of a marine tanker while unloading gasoline. Fatality.

Lessons

[None Reported]

6656 07 August 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, OCT.; LLOYDS LIST, 1994, 9 AUG.

Location : North Bay; Ontario, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A train hit gravel truck on level crossing. 1 of 12 rail tankers ruptured causing a spill of sulphuric acid.
[collision]

Lessons

[None Reported]

6649 05 August 1994

Source : CIVIL PROTECTION, 1994, AUTUMN.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994 OCT.

Location : Avonmouth, UK

Injured : 1 Dead : 1

Abstract

A port worker was killed in a fire at a fuel pipeline at dock. Fire spread to Kerosene in tanks at the storage depot and burned for 18 hours. Fatality.
[fire - consequence]

Lessons

[None Reported]

6651 01 August 1994

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1994.

Location : Corpus Christi; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker damaged fender at a marine terminal causing a spill of 35 tonnes fuel oil.
[collision]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1994, OCT., 92.

Location : White Plains; New York, USA

Injured : 23 **Dead** : 1

Abstract

A road transportation incident. A road tanker hit an overpass bridge support. The tank containing 3.56 cum propane, ruptured, leaked and ignited. The force of the blast propelled the main part of the cargo tank over 100 metres. 10 house destroyed. Fatality.
[fire - consequence]

Lessons

[None Reported]

6635 17 July 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, SEP.; LLOYDS LIST, 1994, 21 JUL.

Location : Rio Blanco; Vera Cruz, MEXICO

Injured : 25 **Dead** : 0

Abstract

A road transportation incident. A road tanker truck was in collision with a passenger train at a crossing and led to spillage of 5283 gallons of caustic soda.
[sodium hydroxide, injury]

Lessons

[None Reported]

Source : CHEMICAL WEEK INTERNATIONAL, PAGE 6, 1994, JUL, 27.

Location : California, USA

Injured : 1 Dead : 2

Abstract

A road transportation incident. A lorry carrying drums and a bulk container of acetic acid, bleach, sodium hydroxide, methanol, sulphuric acid and surfactants, was involved in an accident. The spillage caused the evacuation of residents. Fatality.

[leak]

Lessons

[None Reported]

6630 14 July 1994

Source : LLOYDS LIST, 1994, 24 SEP.

Location : Off Cienfuegos, CYPRUS

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Explosion in slop tank of a marine tanker holed deck.

Lessons

[None Reported]

6620 07 July 1994

Source : THE INDEPENDENT, 1994, 8 JUL.

Location : Appleby; Cumbria, UK

Injured : 0 Dead : 1

Abstract

A road transportation incident. Five lorry crash caused fire among gas cylinders. Fatality.

Lessons

[None Reported]

6619 06 July 1994

Source : ENDS REPORT, 1994, AUG.

Location : Runcorn; Merseyside, UK

Injured : 0 **Dead** : 0

Abstract

Substantial leak of vinyl chloride monomer (VCM) occurred during the unloading of a road tanker. A vapour lock in the coupling arrangement interrupted the unloading and the operator opened a valve to release the blockage. The valve was not closed once the vapour lock was cleared and the release continued for an hour. 5 tonnes of VCM released.

[gas / vapour release]

Lessons

[None Reported]

6618 05 July 1994

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1994.

Location : Antwerp, BELGIUM

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. An LPG marine tanker destroyed a jetty during berthing and damaged pipelines. Gas escaped but did not ignite.
[collision, damage to equipment]

Lessons

[None Reported]

6611 29 June 1994

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1994.

Location : Briqah; Aden, YEMEN

Injured : 0 **Dead** : 0

Abstract

Aircraft bombed this storage tank depot during a Civil War.

[deliberate acts]

Lessons

[None Reported]

6610 29 June 1994

Source : LLOYDS LIST, 1994, 11 JUL.; HAZARDOUS CARGO BULLETIN, 1994, SEP., 92.

Location : Lausanne, SWITZERLAND

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 14 of 40 cars.

Two rail tanker wagons with epichlorohydrin overturned and punctured. Led to the evacuation of 1200 people. No fire.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1998, AUG.

Location : Barcelona, SPAIN

Injured : 0 **Dead** : 0

Abstract

Fire at storage terminal.

[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, AUG.

Location : Wieniawa; Radom, POLAND

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 10 rail tanker cars. Fuel oil spilled to the ground but tankers of butane, propane and ethylene remained intact.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

Intermediate bulk containers (IBC), containing 36% hydrochloric acid, were being unloaded from a lorry, using a forklift truck.

The HCL was to be used for cleaning of cracked gas coolers. An IBC tipped sideways off the forklift truck and fell approximately 3 feet to the ground. The top of the IBC fractured on hitting the ground, and the entire contents (1000 litres) spilled onto the ground. The acid was diluted with water then neutralised for disposal.

The IBC was fabricated from medium density polyethylene.

[unloading, material of construction failure]

Lessons

1. The IBC fell because the cotton spar of the supporting frame was missing, probably due to corrosion.
2. The IBC should have withstood a fall of 3 feet without rupture.
3. The IBC had exceeded its recommendations inspection periodicity. No inspection had been carried out at the recommended time or up to the time of the incident.
4. An inspection would have revealed the defective frame.

The following recommendations were stated:

1. Inspect all IBC's and frameworks for defects.
 2. Visually inspect all IBC's and frames before commencing offloading from a lorry.
 3. No defective equipment to be offloaded.
 4. Have systems available to contain effluent spills that could contaminate works drains.
 5. Ensure that only the correct type of IBC is used for a particular job.
 6. Review forklift truck driver training and implement improvements if necessary.
 7. Continue with investigations to establish why the IBC ruptured.
-

6598 22 June 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, AUG.

Location : Tatarstan, RUSSIA

Injured : 3 **Dead** : 8

Abstract

Helicopter surveying gas pipeline crashed after engine fire. Fatality.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 2ND QUARTER, 1994.

Location : Saldanha Bay; Cape Town, SOUTH AFRICA

Injured : 0 **Dead** : 36

Abstract

A marine transportation incident. A marine tanker of crude oil sank causing a spill and pollution. Fatality.

[sinking]

Lessons

[None Reported]

Source : LLOYDS LIST, 1994, 27 JUN.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, AUG.

Location : Kfar Vitkin, ISRAEL

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 5 rail tanker cars of methyl bromide and pesticides led to damage to equipment but no injuries or spillage.

Lessons

[None Reported]

6593 13 June 1994

Source : LLOYDS LIST, 1994, 14 JUN.

Location : Piraeus, GREECE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Oil spillage from petroleum products on a marine tanker

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, AUG.

Location : Off Kithira Islands, GREECE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker with 4200 tonnes of caustic soda grounded. No spillage. Near miss.
[sodium hydroxide, ship ran aground]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, AUG.

Location : Thetford; Norfolk, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker overturned at a roundabout and 5000 litres of diesel oil was spilled from 1 of 4 compartments. No spill to river.

Lessons

[None Reported]

6572 28 May 1994

Source : LLOYDS LIST, 1994, 31 MAY.

Location : Houston Ship Canal; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision of 2 barges with marine tanker. Small oil spill.

Lessons

[None Reported]

6570 27 May 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUL.

Location : , ADRIATIC SEA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Explosion on a marine tanker at anchor after unloading monoethylene glycol on previous day. Vessel sank.
[sinking]

Lessons

[None Reported]

6561 22 May 1994

Source : LLOYDS LIST, 1994, 24 MAY.

Location : Valdez; Alaska, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. 8000 gallons of crude oil spilled from the wing tank of a marine tanker.

Lessons

[None Reported]

6559 19 May 1994

Source : LLOYDS LIST, 1994, 25 MAY.

Location : Santos, BRAZIL

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A spill of 10 tonnes of oil occurred from a road tanker parked at port.

Lessons

[None Reported]

6552 12 May 1994

Source : HAZARDOUS CARGO BULLETIN, 1994, 12 MAY.

Location : Queretaro, MEXICO

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Collision between 2 freight trains hauling wheat and acid. Acid tankers remained intact.

Lessons

[None Reported]

6546 09 May 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUL.

Location : Ossett; West Yorkshire, UK

Injured : 12 **Dead** : 1

Abstract

A worker became unconscious and died from fumes when steam cleaning a valve at a transport depot. Substance involved, p-chlorocresol. Fatality [asphyxiation].

Lessons

[None Reported]

6545 09 May 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUL.

Location : Neuengamme, GERMANY

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Collision of 2 river tankers in fog caused 100 000 litres of gasoline to spill into a river.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUL.

Location : Strait Of Malacca, MALAYSIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision of a marine tanker with a bulk carrier in a thunderstorm led to the tanker being holed in 2 tanks and 400 tonnes of jet fuel and gas oil to be spilled to the sea.

[weather effects]

Lessons

[None Reported]

6540 08 May 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUL.

Location : Long Tau River, CHINA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision of a marine tanker with a container ship led to a spill of 200 tonnes of fuel oil.

Lessons

[None Reported]

6537 06 May 1994

Source : LLOYDS LIST, 1994, 10 MAY.

Location : Texas City, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker hit a harbour and 3000 barrels of fuel oil were spilled.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

A leak of benzene occurred at a jetty after a ship had been loaded with the material. There were no injuries but in the course of the investigation traffic on a public road was halted for a period. The quantity lost was estimated at less than 10 gallons. Initial estimates based on instrument reconciliation however, put the leak at 20 tonnes. While investigating the suggested 20 tonne spillage, site personnel discovered some hydrocarbons on mudflats near the outfall to the river. These were subsequently found not to be associated with the benzene spill. A small pool of liquid under a flange on the benzene loading line was also discovered.

The leak was caused by pressurisation of the line. This was because a valve between the thermal relief valve and its discharge to the storage tank was closed. The calculated discrepancy was caused by an error in a level instrument on a tank that had not previously been used for benzene.

The hydrocarbon on the mud flats had accumulated over a long period. An expanding plug left in a drain after maintenance work had been preventing contaminated water from flowing to the correct route. As a result the material overflowed into the river directly.

The joint was re-made and pressure tested and the line returned to service.

The internal enquiry recommended:-

1. Improving procedures for returning relief valves and other safety devices to service after maintenance.
2. Reviewing the drainage systems in the jetty tank farm area to ensure proper hydrocarbon containment.
3. A review of procedures for contacting external parties in the event of an emergency.

[loading, overpressurisation, design or procedure error]

Lessons

1. Maintenance procedures for safety items were inadequate.
 2. Drainage systems in a tank farm area should be reviewed.
 3. Off-site emergency contact procedures should be reviewed.
-

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

Dock transfer line ruptures. During transfer of product at a product loading dock, a 16 inch crude oil line ruptured. There was damage to equipment, product loss, environmental damage, release to soil and water, cost of clean-up. Product expansion caused the pipeline to rupture. The basic cause was inadequate communications, including lack of written procedures. In addition the operator lacked facility knowledge.

[human causes]

Lessons

Well written procedures as well as knowledgeable operators are critical to safe conduct of any task.

6516 19 April 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.

Location : Kaohsiung, TAIWAN

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Water ingress in river tanker barge prior to bunkering vessel. Barge sank and diesel was spilled into river. Slick 300 by 330 metres.

[sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.

Location : Hampton; Virginia, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Fire on river barge with containers containing unknown chemicals. Fire out after 2 days.
[fire - consequence]

Lessons

[None Reported]

6507 14 April 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.; LLOYDS LIST, 1994, 27 APR.; FIRE PREVENTION, 1994, OCT.

Location : Balch Springs; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker carrying 21 ton of pesticide crashed and suffered an explosion causing evacuation of 4000 people in a 5 sq mile area.

Lessons

[None Reported]

6504 12 April 1994

Source : LLOYDS LIST, 1994, 11 APR.

Location : Kfar Ata; Haifa, ISRAEL

Injured : 2 **Dead** : 0

Abstract

Fire broke out at depot where gas cylinders are refilled.

[fire - consequence]

Lessons

[None Reported]

6503 11 April 1994

Source : LLOYDS LIST, 1994, 25 MAY.

Location : Sao Sebastiao, BRAZIL

Injured : 00 **Dead** : 0

Abstract

Spill of oil from marine tanker during unloading operations.

Lessons

[None Reported]

6500 09 April 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.

Location : Off Valparaiso, CHILE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A container ship lost 10 containers in rough seas, 3 contained 54 tonnes of cyanide salt.

[weather effects, spill]

Lessons

[None Reported]

6498 08 April 1994

Source : LLOYDS LIST, 1994, 9 APR., & 11 APR.

Location : Zaanstad; Amsterdam, NETHERLANDS

Injured : 5 **Dead** : 1

Abstract

Explosion at chemical packaging plant. A barrel containing chemicals toppled over and was set on fire by sparks from a forklift truck. The blaze spread to tanks containing propane and butane. Fatality.

[fire - consequence, processing]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A container was being loaded with shrink-wrapped pallet loads of bagged polyethylene product using a forklift truck. A proprietary mobile ramp was being used to allow access to the container, the platform of which is approximately 4ft above ground level. During the loading operation the ramp became detached from the container and resulted in the forklift truck and driver being placed in a hazardous position.

No injuries were sustained by the driver and damage to the fork-lift truck and ramp were minimal.

The cause of the accident was the failure to adhere to correct operating procedures for locating the ramp to the container.

[loading, operation inadequate, near miss]

Lessons

1. The secondary safety stop 'A' frame is to be bolted to the floor.
 2. The loading ramp is to be fitted with a mechanical stop.
 3. The security chains will be locked in position
 4. Operating Instructions are to be revised.
 5. All warehouse personnel to be given refresher training on container filling operation.
 6. Housekeeping standards should be improved in the loading area.
 7. Prior to further use of ramps inspections should be carried out to ensure the ramp is fit for purpose.
 8. All 'near-misses' should be reported
-

6492 04 April 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.; LLOYDS LIST, 1994, 16 APR.

Location : Perham Area; Minnesota, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. derailment of 20 rail tankers occurred including one carrying chlorine. Homes located within 5 miles down wind were evacuated. The chlorine tanker did not leak but one containing petroleum type material did leak and this was contained.
[spill, evacuation]

Lessons

[None Reported]

6485 31 March 1994

Source : LLOYDS LIST, 1994, 1 APR.

Location : , GULF OF OMAN

Injured : 0 Dead : 0

Abstract

A marine transportation incident. 2 marine tankers were in collision resulting in an oil spillage of 7000 tonnes. No fire.

Lessons

[None Reported]

6481 26 March 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JUN.

Location : Chittagong, BANGLADESH

Injured : 0 **Dead** : 0

Abstract

A marine tanker loading high sulphur fuel oil drifted to middle of river after mooring buoy chains parted. Hose damaged but no spillage. Near miss.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

Drums containing CS₂ (carbon disulphide) were being loaded onto a freight container by a forklift truck. When the driver removed the forks from the one pallet (holding four drums) he found a leak of CS₂. It is thought that the trucks forks had pierced the bottom of a drum. To stop the leak, the driver placed the forks back into the hole and then moved the pallet to a nearby pool of water. When he removed the forks again the CS₂ leaked and caught fire. The fire was controlled and extinguished.

[loading, fire - consequence, leak, human causes]

Lessons

[None Reported]

6474 20 March 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY.

Location : , ARABIAN SEA

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. Explosion and fire on marine tanker loaded with 64,500 tonnes of crude oil on board. Cargo intact but superstructure burnt out.

[fire - consequence]

Lessons

[None Reported]

6467 17 March 1994

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 1ST QUARTER, 1994.

Location : Lalang, INDONESIA

Injured : 0 **Dead** : 0

Abstract

Fire in a boiler at a marine storage terminal led to suspension of crude oil export.

[fire - consequence]

Lessons

[None Reported]

6468 17 March 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY.

Location : Karachi, PAKISTAN

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. Fire in road tanker carrying oil while filling at gasoline pump. Tanker driven from pump. Fire engulfed tanker and 13 shops but under control in 2 hours.

[fire - consequence]

Lessons

[None Reported]

6464 15 March 1994

Source : LLOYDS LIST, 1994, 1 APR.

Location : Newark Bay, USA

Injured : 0 **Dead** : 0

Abstract

A caustic solution was being transferred from a marine tanker when it started listing and then started leaking as material came out of the tank vents.
[spill, material transfer, caustic soda]

Lessons

[None Reported]

6460 14 March 1994

Source : THE GUARDIAN, 1994, 15 MAR.; HAZARDOUS CARGO BULLETIN, 1994, APR., 80.

Location : Bosporus, TURKEY

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision of marine tanker of crude oil with freighter led to explosion and fire.

[fire - consequence]

Lessons

[None Reported]

6456 08 March 1994

Source : LLOYDS LIST, 1994, 9 MAR.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY.

Location : Zurich, SWITZERLAND

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of five rail tankers occurred due to a broken axle and caught fire. Gasoline flowed into sewers.
[fire - consequence]

Lessons

[None Reported]

6451 06 March 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY.

Location : , GULF OF THAILAND

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A bulk carrier was in collision with a marine tanker loaded with diesel and LPG. 425 tonnes of diesel spilled to the sea.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY.

Location : Muringur; Nr Cochin; Kerala, INDIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 28 rail cars including rail tankers of diesel and kerosene led to a fire. Sabotage has been ruled out.
[fire - consequence]

Lessons

[None Reported]

6422 14 February 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.; LLOYDS LIST, 1994, 16 FEB.

Location : Bath Island; Karachi, PAKISTAN

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of rail tankers of crude oil led to a fire.

[fire - consequence]

Lessons

[None Reported]

6419 13 February 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : Sukai Off, JAPAN

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Collision between inbound vessel and marine tanker with 499 tonnes of ethyl acetate. No spillage.
[damage to equipment]

Lessons

[None Reported]

6416 10 February 1994

Source : LLOYDS LIST, 1994, 11 FEB.

Location : Ulyanovsk, RUSSIA

Injured : 1 **Dead :** 0

Abstract

A bulldozer excavating along a pipeline caused an explosion and fire.

[bulldozer/JCB/digger, fire - consequence, excavation damage]

Lessons

[None Reported]

6415 08 February 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAY. 5-94

Location : Suez Canal, EGYPT

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker grounded after collision with ferry. 3000 tonnes of liquid cargo transferred.
[damage to equipment]

Lessons

[None Reported]

6414 08 February 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : , CARIBBEAN SEA

Injured : 0 **Dead :** 6

Abstract

A marine transportation incident. Explosion on oil marine tanker in ballast. Second explosion broke vessel into 2 pieces. Fatality.

Lessons

[None Reported]

6408 04 February 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : Mutsure Off, JAPAN

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Collision between a cargo vessel and marine tanker with methyl methacrylate and trichlorethylene. No spillage.
[near miss]

Lessons

[None Reported]

6403 01 February 1994

Source : LLOYDS LIST, 1994, 2 FEB.; CIVIL PROTECTION, 1994, SUMMER; ENDS REPORT, 1994, FEB.

Location : Immingham, UK

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Valve in oily water separator on oil marine tanker left open at terminal and oil sheen seen.

[pollution]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : Covington; Kentucky, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A river tanker barge adrift and grounded after being punctured by support of bridge. 23000 litre of gasoline was spilled into river.

Lessons

[None Reported]

6390 24 January 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : , SOUTH CHINA SEA

Injured : 0 **Dead :** 12

Abstract

A marine transportation incident. Explosion in cargo tank of crude oil marine tanker carrying 23000 tonnes. Vessel split in two. Fatality.

Lessons

[None Reported]

6389 23 January 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : Mongstad, NORWAY

Injured : 0 Dead : 0

Abstract

A marine transportation incident. An ethylene marine tanker lost anchorage in severe storm, drifted and grounded. There was damage to the rudder and propeller and a spill of some fuel oil.

[weather effects]

Lessons

[None Reported]

6388 23 January 1994

Source : LLOYDS LIST, 1994, 26 JAN.

Location : Longlac; Ontario, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 26 rail cars derailed and fell into a ditch spilling fertiliser and grain.

[derailment rail tanker]

Lessons

[None Reported]

6385 18 January 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : Northridge; California, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. An earthquake caused derailment of a freight train and one tanker of sulphuric acid leaked.

[spill]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, APR.

Location : , STRAIT OF MALACCA

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. A marine tanker was detained after dumping 600 - 800 tonnes of waste from tank cleaning. Divers identified bags of oil sludge on seabed.

[pollution]

Lessons

[None Reported]

6381 12 January 1994

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : Rotterdam, NETHERLANDS

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Collision between river tanker with 1050 tonnes of gasoline and a cargo ship led to a gasoline spill into a river.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 1ST QUARTER, 1994.

Location : Valdez, USA

Injured : 0 **Dead** : 0

Abstract

Small fire due to ignition of lubricating oil at a marine storage terminal.

[lube oil, fire - consequence]

Lessons

[None Reported]

6379 11 January 1994

Source : LLOYDS LIST, 1994, 12 JAN.

Location : Karsaz, PAKISTAN

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of 6 rail tankers containing oil. Near miss.

Lessons

[None Reported]

6376 09 January 1994

Source : LLOYDS LIST, 1994, 12 DEC.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : Suez, EGYPT

Injured : 0 Dead : 0

Abstract

Shore flexible hose coupling slipped and parted at berth during cargo unloading from marine tanker. Some vegetable oil was spilled into the water.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.; LLOYDS LIST, 1994, 10 JAN., & 11 JAN.

Location : Lesanthe, ZIMBABWE

Injured : 5 **Dead** : 0

Abstract

A rail transportation incident. Train loaded with 1.5 million litres of gasoline and diesel in 29 wagons was in collision with another train and burst into flames. 11 rail tankers were saved. Fire controlled after 9 hours.
[fire - consequence]

Lessons

[None Reported]

6357 26 December 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : Tokyo Bay, JAPAN

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A crude oil marine tanker struck mooring dolphin at a sea birth. Base riser distorted, gangway and 4 loading arms crushed. Crude oil supplies to 4 refineries cut off.

Lessons

[None Reported]

Source : ICHEME

Location : , FRANCE

Injured : 0 Dead : 0

Abstract

A rail transportation incident. 24 rail tankers imported into site derailed due to broken rail. 2 rail tankers fell down and severely damaged fuel gas supply pipeline to the site. One rail tanker leaked causing a spill of dichloroethane. The gas supply pipe did not leak.
[rail broken, damage to equipment]

Lessons

[None Reported]

6352 24 December 1993

Source : LLOYDS LIST, 1993, 28 DEC.

Location : Caspian Sea, RUSSIA

Injured : 5 **Dead** : 1

Abstract

Helicopter crashed on offshore oil well as it was landing. Fatality.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 1ST QUARTER, 1994.

Location : Garzdai, LITHUANIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of six rail tankers caused a substantial crude oil spill and subsequent fire.
[fire - consequence]

Lessons

[None Reported]

Source : LLOYDS LIST, 1993, 23 DEC.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JAN.

Location : Bay Lake; Latchford; Ontario, CANADA

Injured : 1 **Dead** : 0

Abstract

A road transportation incident. A spill of 11000 litres of aluminium sulphate occurred when 2 road tankers were in collision on a highway.

Lessons

[None Reported]

6346 19 December 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JAN.

Location : Hamburg, GERMANY

Injured : 0 Dead : 0

Abstract

Bow of marine tanker pushed from loading jetty during storm and 25 cm hose tore. 1000 litres of p-xylene spilled, part absorbed part went into harbour.

Lessons

[None Reported]

6348 19 December 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.; LLOYDS LIST, 1993, 31 DEC.

Location : Baton Rouge; Louisiana, USA

Injured : 0 **Dead** : 0

Abstract

250000 lb chemical spill into river during unloading of perchloroethylene from barge to terminal.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.

Location : Rio De Janeiro, BRAZIL

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker grounded with 200 tonnes lube oil additive and 500 tonnes brake fluid. Transferred to another tanker with no spillage.

[near miss, ship ran aground]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JAN.

Location : Quingdao, CHINA

Injured : 0 **Dead** : 3

Abstract

Explosion and fire on marine tanker during loading of crude oil at oil jetty. Vessel broke in two and sank. Fire burned for 12 hours. Fatality.
[fire - consequence, sinking]

Lessons

[None Reported]

6334 09 December 1993

Source : LLOYDS LIST, 1993, 10 DEC.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JAN.

Location : English Channel, UK

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker sustained a ballast tank rupture and pump failure in a storm leading to a spill of xylene. Vessel overturned and sank.

[weather effects, sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, JAN.

Location : Off Normandy, FRANCE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A container ship lost containers mid-channel. Over 50000 aluminium sachets of pesticide was recovered one week later.
[spill]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 4TH QUARTER, 1993.

Location : Granger; Wyoming, USA

Injured : 5 **Dead** : 0

Abstract

Fire broke out at natural gas liquids (NGL) loading and storage terminal halting production at the 210 million scfd capacity gas plant.

[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, MAR.; LLOYDS LIST, 1994, 10 JAN.

Location : Saratov, RUSSIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 5 rail tanker cars filled with gasoline and 4 tank cars with ammonia were derailed and exploded causing damage to 100 metres of rail track, 3 piers of a bridge and 1 house.

[derailment, explosion]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Hamburg, GERMANY

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A river tanker leaked 70000 litres of gasoline to the river. The rest of the cargo was transferred.

[spill]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 4TH QUARTER, 1993.

Location : Brindisi, ITALY

Injured : 0 **Dead** : 0

Abstract

Slick of fuel oil in harbour attributed to spill from shore pipe terminal.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Rauma, FINLAND

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker grounded and refloated. Cargo of ethylene glycol transhipped. Near miss.
[ship ran aground]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Glen, FRANCE

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. Collision at level crossing in central France between passenger train and road tanker which fractured causing a spill of 16000 litres of fuel oil.

[rail transportation,

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Ressons-sur-matz, FRANCE

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker of mono propylene glycol overturned after collision with heavy goods vehicle. Tanker contents remained intact. Near miss.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Khulna, BANGLADESH

Injured : 2 **Dead** : 5

Abstract

Explosion during repair in engine room of an inland marine tanker carrying 800 cum (cubic metres) of gasoline and diesel. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1994, JAN., 74.; LLOYDS LIST, 1993, 12 NOV.

Location : South West, FRANCE

Injured : 50 **Dead** : 15

Abstract

A road transportation incident. A collision involving a road tanker of methanol on a motorway led to a fire that engulfed cars in a pile up. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Kelso; Washington, USA

Injured : 0 **Dead** : 5

Abstract

A rail transportation incident. Explosion and fireball after head on collision in fog between two freight trains. 32 of 193 tank wagons overturned. Diesel/fuel oil ignited. Fatality.

Lessons

[None Reported]

6282 03 November 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.; EXECUTIVE NEWS, 1993, 3 NOV.

Location : Louisville; Kentucky, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of 10 rail tankers, led to the evacuation of 2800 people within 1 mile of the wreck. 2 rail tankers of chloroprene had small leaks but were resealed later. Other tankers were carrying butadiene, vinyl chloride, hydrogen fluoride, methyl methacrylate and acetic acid.

[spill]

Lessons

[None Reported]

6278 31 October 1993

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 4TH QUARTER, 1993.

Location : Chaguaramas, TRINIDAD

Injured : 12 **Dead** : 5

Abstract

A marine tanker was alongside pier to allow hot work repair to replace steel plates inside no. 1 starboard ballast tank. Explosion blew a hole in the bow of the vessel. Fatality.

Lessons

[None Reported]

6269 22 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, DEC.

Location : Buenos Aires, ARGENTINA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker barge sagged and cracked when loading, causing a spill of 90 tonnes of gas oil.

Lessons

[None Reported]

6265 20 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1994, FEB.

Location : Lechang, CHINA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of train caused rail tanker wagons to overturn and sulphuric acid to spill.

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A marine transportation incident. An unloading incident from a marine tanker to a tank causing an overfill at a refinery.

While receiving an import of atmospheric residue, a gauge became stuck at an incorrect level, and the tank was overfilled. 100 kl of residue overflowed into a bunded area, of which 85 kl were recovered. Prior to the incident the tank had been surveyed and an error in its indicated dip identified. The incomplete installation of gauges in that dip tubes (stillwells) were not installed on the majority of the tanks at the time the gauges were installed. When the ship's discharge rate appeared to slow (the gauge had stuck), it was assumed by boardman that the ship was nearing the end of its discharge; and he did not question the jetty operator. Also, boardman had no knowledge of the incorrect reading taken from the tank previously.

[overflow, refining, operation inadequate]

Lessons

Improved liaison between operators in monitoring transfers of hydrocarbons is required to avoid overfilling tanks.

Information on unreliability of instrumentation needs to be communicated between shifts.

6256 09 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, DEC.

Location : Galveston; Texas, USA

Injured : 12 Dead : 3

Abstract

Explosion on a marine tanker while 2 workers were welding in cargo area. Explosion blew holes in the side of the ship which sank in the ship canal.

Substance involved: gasoline.

[fatality]

Lessons

[None Reported]

6255 08 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, DEC.

Location : Off Spurn Point; Humberside, UK

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Decomposition and heat up of 3000 tonnes of fertiliser in hold of a marine tanker. Cargo cooled with water.

Lessons

[None Reported]

6252 02 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, DEC.

Location : Felling; Tyne And Wear, UK

Injured : 0 Dead : 0

Abstract

Forklift truck punctured 2 drums of ethylamine causing a spill. Fumes spread through storage depot.

[collision]

Lessons

[None Reported]

6249 01 October 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, DEC,

Location : Off Daesan, SOUTH KOREA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker grounded on approach to a terminal. Bottom damaged and 8400 tonnes of naphtha spilled to sea.
[ship ran aground]

Lessons

[None Reported]

6251 01 October 1993

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. 17 000 litres of ethanol in a road tanker was stolen from a compound in the docks.
[deliberate acts, ethyl alcohol]

Lessons

[None Reported]

Source : OIL AND GAS JOURNAL, 1993, 4 OCT.

Location : Red Bluff; Pasadena; Texas, USA

Injured : 0 **Dead** : 0

Abstract

Fire in loading rack at a storage tank farm. Substance involved: gasoline.

[loading bay, fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1999, DEC.; LLOYDS LIST, 1993, 29 SEP., & 30 SEP.

Location : Temara, MOROCCO

Injured : 103 **Dead** : 14

Abstract

A rail transportation incident. Collision of passenger train and freight train carrying naphtha caused fire. Fatality.
[fire - consequence, injury]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 4TH QUARTER, 1993.

Location : Kochi, INDIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Fire destroyed five rail tankers loaded with gasoline in the loading terminal and damaged pipeline installations.
[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, NOV.

Location : Off Aliaga, TURKEY

Injured : 0 **Dead** : 2

Abstract

A marine tanker sank 700 m off port after loading 1000 tonnes of phosphotungstic acid. Alleged misloading and delay in taking ballast.
[sinking]

Lessons

[None Reported]

6222 09 September 1993

Source : CHEMICAL HAZARDS IN INDUSTRY, 1994, JAN.

Location : Odessa; Texas, USA

Injured : 0 Dead : 0

Abstract

Evacuation of 1000 people took place when a spill of benzyl chloride occurred during material transfer from a road tanker. 100 gallons were spilt when the larger tank ruptured.

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1993.

Location : Rotterdam, NETHERLANDS

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. 50% of jetty disappeared following collision by a marine tanker.

Lessons

[None Reported]

6206 27 August 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, NOV.

Location : Melbourne, AUSTRALIA

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Valve failure on marine tanker caused spillage of 2000 litres of crude oil at discharge jetty.

Lessons

[None Reported]

6205 26 August 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, NOV.

Location : Harding County; Washington, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of train led to a spill of vinylidene chloride from a punctured rail tanker that was undetected until salvage began.

Lessons

[None Reported]

6191 17 August 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, OCT.

Location : Off Toulon, FRANCE

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Bow of rising submarine hit marine tanker and caused spillage of 2800 tonnes of crude oil.
[collision]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, DEC.

Location : Sudbury, Ontario, CANADA

Injured : 0 Dead : 0

Abstract

An incorrectly fitted and deteriorated manway nozzle gasket caused a leak of hydrogen sulphide from a rail tanker car involved in a derailment. Two cars were derailed around a 7 degree curve taken at 8 kmph. One contained vinyl acetate residue and the other 2,700 kg of hydrogen sulphide residues. The bill of lading accompanying this tank wagon identified it as an "empty car which last contained hydrogen sulphide". The tank car was taken to a repair yard where a concentration of 600 ppm was recorded. The gas was flared off. The investigation showed that the derailment occurred because the tank wagon had insufficient side bearing clearance to permit the bogies to rotate sufficiently on the curve. The side bearing clearance did not meet the appropriate regulations. The manway gasket, from which the hydrogen sulphide gas leaked, had not been replaced for at least 4 years.

[human causes]

Lessons

The following lessons were learnt:

1. The placarding of the tankwagon did not give the appropriate warning for hydrogen sulphide.
 2. The hydrogen sulphide was being carried in a single compartment tank wagon under a temporary permit. This practice was now under review.
 3. Several loading and inspection procedures did not comply with the regulations and neither the wagon owners or the shipper were aware of these regulations. A review of compliance with these regulations was being carried out to see if it was the cause of other accidents.
-

6184 09 August 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, OCT.

Location : Icklingham; Thetford; Norfolk, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A lorry carrying 45 drums of desalination chemical overturned on trunk road. Firemen using breathing apparatus cleared chemicals.

[spill]

Lessons

[None Reported]

Source : LOSS PREVENTION BULLETIN, 115, 7-8.

Location : ,

Injured : 1 Dead : 0

Abstract

This incident occurred as an operator was setting up a rail tanker for unloading. The car was pressurised to about 20 psig (1.38 bar), an expected condition that results from the final leak test for the supplier. Following the standard company procedure for top unloading, the operator verified that the valve stem on the liquid line appeared to be in the closed position. The operator then cracked the cap of the liquid line while listening for any evidence of pressure. The operator heard no hissing, which indicated to him that there was no pressure in the line, and continued to turn the screw cap. As he reached the last turn the pressure blew off the cap and butyl acrylate discharged from the line, splashing him.

[spill, safety procedures inadequate]

Lessons

An investigation of the accident revealed that, the company procedure did not require the pressure on the car to be relieved through the vapour line before removing the liquid line cap, and that the valve did not have clear markings on to indicate whether or not it was closed, and the orientation and configuration of the valves were different on different rail cars. This led to an inability of the operator to reliably confirm that the valve was closed.

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, NOV.

Location : Richmond; California, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A rail tanker leaked sulphuric acid which formed a cloud 1000 ft high and 6 to 8 miles long. Industrial area evacuated. Workers were moving the tanker when pressure inside the tanker lifted the safety relief valve.
[overpressurisation, evacuation, spill]

Lessons

[None Reported]

6164 29 July 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, OCT.

Location : Ellesmere Port; Cheshire, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker swerved to avoid an oncoming car and hit tree on railway embankment. A spill of 5000 litres of diesel oil occurred. Remaining load pumped out.

Lessons

[None Reported]

6161 26 July 1993

Source : FIRE, 1993, SEP.

Location : Cheshire, UK

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Rail tankers of gasoline were being reversed and hit buffers. Two tankers overturned into a river but did not leak. Damage caused to nitrogen pipeline and signal box.

Lessons

[None Reported]

6160 26 July 1993

Source : LLOYDS LIST, 1994, 21 FEB.

Location : Richmond; California, USA

Injured : 0 **Dead** : 0

Abstract

A rail tanker safety seal failed when unloading 45000 litres of oleum. White cloud formed. The highway and ship channel were closed and led to the evacuation of 2000 people.

[seal failure, sulphuric acid]

Lessons

[None Reported]

6158 23 July 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, SEP.

Location : Off Shimoda, JAPAN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision between a loaded vehicle carrier and oil marine tanker caused a spill of 500 tonnes of heavy oil.

Lessons

[None Reported]

6142 05 July 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, SEP.

Location : Off Marsa El Brega, LIBYA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Fully refrigerated LPG marine tanker carrier loaded with anhydrous ammonia grounded. Ship offloaded to another ship and refloated.

[ship ran aground]

Lessons

[None Reported]

6138 03 July 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, SEP.

Location : Off Cape Palmas, LIBERIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Explosion on marine tanker with 2029 tonnes of refined petroleum products.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, AUG.

Location : Lazaro Cardenas, MEXICO

Injured : 0 **Dead** : 0

Abstract

Leakage of sulphuric acid in pump room on marine tanker during part unloading.

[spill]

Lessons

[None Reported]

6131 24 June 1993

Source : SKY NEWS, 1993, 24 JUN.

Location : Moscow, RUSSIA

Injured : 8 **Dead** : 11

Abstract

A road transportation incident. A road tanker stopped at traffic lights and was hit in the rear by a lorry. Gasoline sprayed onto 3 buses and ignited. Fatality.
[fire - consequence, collision]

Lessons

[None Reported]

6123 16 June 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, AUG.

Location : Nizhny Novgorod, RUSSIA

Injured : 1 **Dead** : 1

Abstract

A river transportation incident. Fire on a river tanker with 600 tonnes of gasoline. Explosion of tanker later. Fatality.

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A marine transportation incident. A marine tanker (dwt 2,180 tonnes) was approaching to berth in order to discharge its cargo to an installation via the 12 inch product line.

The tanker dropped anchor and was manoeuvring to tighten the ropes on the buoys. At the time, a strong wind blowing West-East, (25-31 mph), which caused the tanker to drag on its anchor and the Pilot decided to abandon the berth.

While doing this, either the anchor entangled with the 12 inch line (crude oil/black products) or the marking buoy got entangled with the propeller with the result that six flexible hoses and couplings from the line broke off and 5-10 m of oil product entered the sea.

At 18.30 hours it was found that oil had polluted part of the beach. At 19.00 hours the spill was sprayed with oil dispersant on sea and land. Cleaning operations continued through the next day.

Estimated cost of the incident was C£60,500 (approximately US\$120,000) (1993), which includes clean up costs - C£15,000 (1993), ship fine - C£3,000 (1993), repair to pipeline - C£16,000 (1993) and demurrage (delayed crude oil ship) - C£26,500 (1993).

[shipping incidents, strong winds, pollution, ecological damage]

Lessons

[None Reported]

6116 11 June 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.; LLOYDS LIST, 1993, 23 JUN.

Location : Carlisle; South Carolina, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. The derailment of 7 rail tanker wagons of an 83 car train caused a spill of many gallons of chemicals, including ethylene glycol, hydrochloric acid and methanol.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, AUG.

Location : Buenos Aires, ARGENTINA

Injured : 2 **Dead** : 0

Abstract

Fire and explosion on marine tanker during loading of oil. Vessel sank.

[sinking]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Damage to marine crude oil pipeline.

Strong winds caused a marine tanker to move, dragging its anchor. The anchor became entangled with other underwater lines, with an end result of six flexible hoses being broken and 5-10 m³ of LFO entering the sea. Spill.

Repairs to pipeline, demurrage, clean up costs, ship's fine C £60,500 (1993) (\$120,000) (1993).

[damage to equipment]

Lessons

Periodic sea bed surveys need to be conducted at anchor drops to determine if the soil will hold the anchor reliably.

Weather is another element in an operation that needs to be monitored.

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, AUG.

Location : Moscow, RUSSIA

Injured : 0 **Dead** : 11

Abstract

A road transportation incident. Container lorry crashed into road tanker spilling fuel oil which ignited and set alight 3 trolley buses. Fatality.
[collision]

Lessons

[None Reported]

6085 31 May 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.

Location : Off Shiogama, JAPAN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. 500 tonnes spillage of heavy oil from a marine tanker after collision.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.

Location : Port Kelang, MALAYSIA

Injured : 0 **Dead** : 0

Abstract

Fire in pipe on marine tanker after unloading fuel oil.

[fire - consequence]

Lessons

[None Reported]

6083 30 May 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.

Location : Sao Sebastiao, BRAZIL

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Malfunction of a valve on a marine tanker at terminal caused a spill of 15000 litres of crude oil.

Lessons

[None Reported]

6076 20 May 1993

Source : THE CHEMICAL ENGINEER, 1993, 16 SEP.; CHEMICAL HAZARDS IN INDUSTRY, 1994, APR.

Location : Institute; Charleston; West Virginia, USA

Injured : 17 **Dead** : 0

Abstract

Hose burst releasing 10 gallons chlorine at barge loading terminal.

[hose failure, gas / vapour release]

Lessons

[None Reported]

6066 07 May 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.

Location : , HONG KONG

Injured : 2 Dead : 0

Abstract

Explosion during welding after launch on bow deck of diesel/kerosene marine tanker barge at repair yard.

Lessons

[None Reported]

6058 01 May 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUL.

Location : Off Worthing; Sussex, UK

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision in fog and bow penetrated marine tanker below waterline leading to a spill of tonnes of lubricating oil.

Lessons

[None Reported]

6051 29 April 1993

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 2ND QUARTER, 1993.

Location : Abu Dhabi, UAE

Injured : 0 **Dead** : 0

Abstract

Mooring ropes and 2 floating hoses parted during heavy weather loading of a marine tanker. Minor spill of crude oil.

[weather effects]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : Samsun, TURKEY

Injured : 0 **Dead** : 0

Abstract

Sudden wind during unloading of ammonia caused gas tanker to bend jetty loading arm.

[near miss, damage to equipment, weather effects]

Lessons

[None Reported]

6031 13 April 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : Forked Islands; Louisiana, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Pusher tug lost steering and grounded. A river barge was damaged and 80 tonnes of fuel oil was spilled into the waterway.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : Busan, SOUTH KOREA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Coastal marine tanker with 690 tonnes of bunker oil ran aground and sank.

[ship ran aground, sinking]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : New Orleans; Louisiana, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Double hull river tanker barge under tow struck bridge and caused a large fuel oil spill from ruptured barge.
[collision]

Lessons

[None Reported]

6014 03 April 1993

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 2ND QUARTER, 1993.

Location : Casablanca, MOROCCO

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Freight train carrying crude oil was in collision with another. 24 of 34 rail tankers destroyed.

Lessons

[None Reported]

6007 April 1993

Source : CHEMICAL HAZARDS IN INDUSTRY, 1993, AUG.

Location : , JAPAN

Injured : 0 Dead : 0

Abstract

Explosion in engine room of small marine tanker when loading naphtha.

Lessons

[None Reported]

5996 23 March 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : Germantown; Maryland, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of a freight train caused gasoline in cars to ignite and destroyed 13 railcars and 79 vehicles.
[fire - consequence]

Lessons

[None Reported]

5992 19 March 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : Runcorn Near; Cheshire, UK

Injured : 0 **Dead** : 1

Abstract

A road transportation incident. Collision with car caused a road tanker carrying kerosene to plunge onto main rail line causing explosion and fire after rail power lines ignited fuel. Fatality.

Lessons

[None Reported]

5990 19 March 1993

Source : LLOYDS LIST, 1993, 22 MAR.

Location : North Sea, OFF DUTCH COAST

Injured : 3 **Dead** : 1

Abstract

A marine transportation incident. Explosion in no. 8 tank of a marine tanker when carrying ethyl hexanol and dioctyl hexanol. One crew man found dead in tank. Fatality.

Lessons

[None Reported]

5989 17 March 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAY.

Location : Fort Lauderdale; Florida, USA

Injured : 0 **Dead** : 5

Abstract

A transportation incident. Explosion and fireball after a passenger train was in collision with a road tanker, carrying gasoline, at level crossing. Fire engulfed 5 vehicles.

[fire - consequence]

Lessons

[None Reported]

5981 10 March 1993

Source : TOXIC MATERIALS NEWS, 1993, 17 MAR.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JUN.

Location : New Albany; Indiana, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Ruptured line on river tanker barge during unloading to factory caused 200 tonnes of toluene to spill to a river. City water intake upstream of berth.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, APR.

Location : Fakenham; Norfolk, UK

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker jack-knifed in wet at roadworks, resulting in a collision with the car in front. Tanker had previously discharged propane load.

[gas / vapour release]

Lessons

[None Reported]

5964 24 February 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, APR.

Location : Off Fiumicino, ITALY

Injured : 0 Dead : 0

Abstract

Faulty hose at offshore terminal during unloading from marine tanker caused limited spill of crude oil to sea.

Lessons

[None Reported]

5959 21 February 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, APR.

Location : Highland Falls; New York, USA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. 19 cars of a 76 car freight train derailed and rolled from a trestle bridge into a river. Substance involved: carboxylic acid.
[spill, derailment]

Lessons

[None Reported]

5951 13 February 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, APR.

Location : Off Madeira, MADEIRA

Injured : 2 **Dead :** 1

Abstract

A marine transportation incident. Explosion during tank cleaning in ballast of a marine tanker. Substance involved: oil residue. Fatality

Lessons

[None Reported]

5950 12 February 1993

Source : LLOYDS LIST, 1993, 13 FEB.

Location : Repsol Jetty; Tarragona, SPAIN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker was manoeuvring to go alongside a jetty when she struck the jetty damaging pipelines and starting a fire.

Substances involved: gasoline and naphtha.

[fire - consequence]

Lessons

[None Reported]

5944 03 February 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, APR.

Location : Hiningham; Norfolk, UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker jack-knifed and overturned after taking evasive action to avoid a car in a minor shunt. Gasoline leaked. Exclusion setup and road closed for 10 hours.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAY.

Location : Wester Scheldt, BELGIUM

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A river tanker with 600 tonnes of crude oil grounded and broke her back causing a major pollution threat.
[ship ran aground, spill]

Lessons

[None Reported]

5935 20 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : , SUMATRA

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Collision of two marine tankers caused spillage of 32 000 tonnes of crude oil.

Lessons

[None Reported]

5934 20 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : Caleta Olivai, ARGENTINA

Injured : 0 **Dead** : 0

Abstract

Second spill in 6 days at refinery when 22 700 litres of crude oil spilt from marine tanker during loading.

Lessons

[None Reported]

5929 18 January 1993

Source : LLOYDS LIST, 1993, 25 JAN.

Location : Rouleau; Saskatchewan, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of a train of one rail tanker of butane and 11 others carrying steel pipes. No leakage.

Lessons

[None Reported]

5922 14 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : La Voulte, FRANCE

Injured : 6 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 6 rail tankers caused 3 to explode. Gasoline entered sewers and further explosions occurred. 10 homes damaged and the evacuation of 300 took place.

Lessons

[None Reported]

5920 13 January 1993

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 1ST QUARTER, 1993.

Location : Frigg; North Sea, NORWAY

Injured : 0 **Dead** : 0

Abstract

Engine room fire on an offshore platform caused evacuation of the majority of personnel by helicopter.

Lessons

[None Reported]

5916 13 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : Muroran, JAPAN

Injured : 3 **Dead :** 6

Abstract

A marine transportation incident. Explosion and fire in engine room of a marine tanker during unloading of naphtha. Fatality.

Lessons

[None Reported]

5913 08 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : Dupnitsa, BULGARIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of 18 rail tankers led to a spill 10 tonnes of fuel oil.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1993, FEB., 71.

Location : Les Epares, FRANCE

Injured : 0 **Dead** : 10

Abstract

A road transportation incident. A road tanker carrying dialkyl-ammonium-meta-sulphate was in collision with other vehicles possibly due to brakes failure, and caused fire of vehicles in village. Cargo intact. Fatality.

[brakes faulty]

Lessons

[None Reported]

5910 06 January 1993

Source : ICHEME

Location : , UK

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A very small leak of acetic anhydride developed at a valve on a rail tanker while in a siding.
[spill]

Lessons

[None Reported]

5908 06 January 1993

Source : BBC NEWS

Location : Kent, UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker of gasoline overturned on roadway.

Lessons

[None Reported]

5906 05 January 1993

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.,; LLOYDS LIST, 1993, 6 JAN.

Location : Shetland Islands, UK

Injured : 0 Dead : 0

Abstract

A marine transportation incident. The destruction of an oil tanker on the coast of Shetland with the loss of its 85,000 tonne cargo of crude oil. The environment itself managed to flush out the effects of the pollution, wind and wave action broke up the light crude oil into tiny droplets more efficiently than any chemical dispersant, these droplets were then captured by silt sediment churned up from the sea floor during the ferocious storm that was raging at the time of the incident. The silt sank back to the sea floor when the weather calmed taking the oil droplets with it. More oil evaporated and some was blown onto the island where it has been degraded into the soil. The main problems caused by the spill concerned the fishing industry and there is still a ban on the harvesting of scampi since these crustaceans burrow into the sea floor and so become tainted with the oil still held in the sediment. The impact on other types of fish and other marine life, such as sea otters and seals, has been very limited.

[ship ran aground]

Lessons

[None Reported]

Source : CHEMICAL ENGINEER, 1993, 19 AUG.

Location : Richmond; California, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 70 tonnes of oleum released from a safety relief valve of a rail tanker created cloud 300 m high by 8 miles.

[gas / vapour release]

Lessons

[None Reported]

Source : CHEMICAL HAZARDS IN INDUSTRY, 1994, APR.

Location :

Injured : 0 **Dead :** 0

Abstract

Discharge of detergent from loading bay to river caused fish kill. Analysis of the discharge showed hundreds of milligrams per litre of anionic and non-ionic surfactants and phenols. Pollution.

Lessons

[None Reported]

124081993

Source : ICHEME

Location : ,

Injured : 1 Dead : 0

Abstract

A maintenance employee suffered severe injuries when the upper part of the split rims of a forklift truck tyre flew off while he was inflating it. The rim struck the man on the bridge of his nose and he needed extensive surgery to correct the injuries.

The maintenance employee received a spare wheel, which had been returned by an outside contractor who had repaired the tyre. The contractor had noticed that three of the five bolts were slipping during tightening. Hence, he did not inflate the tyre but marked the slipping bolts with chalk, and communicated this to the supervisor.

The victim, however, was given the wheel without being told about its state and assumed the wheel was ready for inflation. He did not check the condition of the rim nor did he torque the bolts before inflating the tyre. At 6.6 bar(g) the rim flew apart.

[safety procedures inadequate, injury]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 2 Dead : 1

Abstract

A marine transportation incident. Gassing incident during unloading of sour crude oil from a marine tanker. Two inspectors and one crew member were gassed during sampling/measuring of the ship's tanks. Protective equipment was not used in this hazardous atmosphere, and workers were not aware of the potential hazards of H₂S, hydrogen sulphide. Fatality.
[asphyxiation, safety procedures inadequate]

Lessons

With the introduction of inert gas blanketed cargo tanks, the latter no longer "breathe" on voyage; and, therefore, even small concentrations in the liquid space build up to high values in the vapour space. Exposure of personnel to this inert gas/H₂S mixture will produce rapid loss of consciousness leading to death. Rescue attempts should only be made when wearing the appropriate respiratory protection.

Source : HAZARDOUS CARGO BULLETIN, 1994, JUL.

Location : Saint John; New Brunswick, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. 10 rail tanker cars of LPG ran free from yard and ended on the main line. They ran free over one public and two private crossings.

[near miss]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : Mount Airy; North Carolina, USA

Injured : 15 **Dead** : 0

Abstract

A road transportation incident. A road tanker unloading propane to a storage tank moved off causing leak and 3 explosions. Led to the evacuation of 200.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, MAR.

Location : Cape Girardeau; Missouri, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A river barge was in collision with a towboat causing 700 tonnes of liquid fertiliser, ammonium nitrate, to be spilled.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : Houston Ship Channel; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. Cargo ship was in collision with a river tanker barge containing 2800 tonnes of molten sulphur which sank. Cargo intact.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : Off New London; Connecticut, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. A towed river barge grounded and 70 tonnes of fuel oil spilled into the sound.

[ship ran aground]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : San Lorenzo, ARGENTINA

Injured : 0 **Dead** : 0

Abstract

Hose broke on marine tanker during loading at refinery. A spill of 22 700 litres of fuel oil occurred.

[hose failure]

Lessons

[None Reported]

5873 06 December 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : Tampa; Florida, USA

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Small hole in hull of a marine tanker caused spillage of 5600 litres of fuel oil. Leaked stopped when oil pumped to storage.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : Corunna, SPAIN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Massive pollution after marine tanker grounded with 80 000 tonnes of crude oil.
[ship ran aground]

Lessons

[None Reported]

5867 01 December 1992

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 1ST QUARTER, 1993.

Location : Ankara, TURKEY

Injured : 0 Dead : 22

Abstract

A road transportation incident. A road traffic accident involving a road tanker of LPG resulted in a large fire and explosion. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, , 1993, JAN.

Location : Izmir, TURKEY

Injured : 0 **Dead** : 8

Abstract

Explosion in cargo tank of a marine tanker during demolition. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : , SINGAPORE

Injured : 16 Dead : 6

Abstract

Explosion and flash fire during hot work in centre tank of a marine tanker at repair yard. Fatality.

[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : Port Harcourt, NIGERIA

Injured : 0 **Dead** : 0

Abstract

Pressure spray at manifold, when the loading of gasoline was started in error, ignited and damaged marine tanker and tug.
[fire - consequence]

Lessons

[None Reported]

5858 24 November 1992

Source : LLOYDS LIST, 1992, 10 DEC.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, FEB.

Location : Yaroslavl, RUSSIA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Five rail tankers carrying fuel oil, gasoline and diesel, suffered a derailment causing a spill of 84 tonnes of diesel and 40 tonnes of gasoline. Fish spawning grounds threatened.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JAN.

Location : Off Spurn Head; Humberside, UK

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Styrene slops dumped from marine tanker after discharging. Fine £5900 (1992) plus £2500 (1992) costs.

[Pollution]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 1 Dead : 0

Abstract

A forklift truck driver took a pallet from a 3 high rack. During this operation he pushed a pallet in the second row in an unstable situation. To correct this, all pallets of the first row were removed with the help of a second forklift driver.

In order to reach the unstable pallet he driver had to remove some loose wood and an empty pallet of the floor.

During this operation a form and fill foil roll fell down from the unstable pallet and hit the foot of one of the forklift drivers.

[operation inadequate, operator error, people]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : Bombay, INDIA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker struck a wharf and punctured tank spilling 280 tonnes of crude oil.
[collision]

Lessons

[None Reported]

5841 03 November 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : Immingham; Humberside, UK

Injured : 0 **Dead** : 0

Abstract

Explosion in nos. 3 and 4 tank during unloading of crude oil from a marine tanker.

Lessons

[None Reported]

5838 31 October 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, DEC.

Location : Willemstad, NETHERLANDS

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A tug was in collision with a moored marine tanker causing 80 tonne spillage of naphtha from ruptured tank.

Lessons

[None Reported]

5836 27 October 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, DEC.

Location : Port Said, EGYPT

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Collision at harbour entrance penetrated marine tanker and caused 350 tonnes crude oil to spill.

Lessons

[None Reported]

5835 26 October 1992

Source : LLOYDS LIST, 1992, 27 OCT.; THE INDEPENDENT, 1992, 27 OCT.

Location : Sullom Voe, Shetland Islands, UK

Injured : 0 Dead : 0

Abstract

Fire in drier unit of the gas processing plant at a terminal. Substance involved: crude oil.

[fire - consequence, heating]

Lessons

[None Reported]

Source : LLOYDS LIST, 1992, 7 NOV.

Location : Massey Creek; Scarborough; Ontario, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Thousand of gallons of lubricating oil spilled and contaminated water after a rail tanker car had a valve opened.
[ecological damage]

Lessons

[None Reported]

5824 19 October 1992

Source : WASHINGTON POST

Location : Mountgomery; Maryland, USA

Injured : 3 **Dead** : 2

Abstract

A road transportation incident. A road tanker of gasoline crashed into a bridge and caught fire. Fatality.

[fire - consequence]

Lessons

[None Reported]

5818 12 October 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1993, JAN.

Location : Bahia Blanca, ARGENTINA

Injured : 0 **Dead** : 0

Abstract

A marine tanker struck a hose during unloading at a terminal spilling 600 tonnes of crude oil.

Lessons

[None Reported]

5810 05 October 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Off Castellon, SPAIN

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. Crude oil leaked for 12 hours from a small hole in a marine tanker while awaiting berth at island refinery.

[spill]

Lessons

[None Reported]

5795 25 September 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Naestved, DENMARK

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Collision of trains caused a rail tanker to overturn and spill 600 kg of acrylonitrile.

Lessons

[None Reported]

5793 23 September 1992

Source : ENVIRONMENTAL EMERGENCIES: A REVIEW OF EMERGENCIES AND DISASTERS INVOLVING HAZARDOUS SUBSTANCES OVER THE PAST TEN YEARS, UNITED NATIONS CENTRE FOR URGENT ENVIRONMENTAL ASSISTANCE, UNITED NATIONS ENVIRONMENT PROGRAMME, 1993

Location : , HONDURAS

Injured : 0 **Dead** : 0

Abstract

A road transportation accident caused the spillage of paraquat from a road tanker. Firefighters washed the material into a river. Pollution.

Lessons

[None Reported]

5784 18 September 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Piraeus, GREECE

Injured : 0 **Dead** : 2

Abstract

An explosion in a marine tanker when cleaning squad with torch tried to enter cofferdam between No's 1 and 2 tank. Substances involved: white spirit and hexane. Fatality.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Warman, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A derailment of 43 rail tankers occurred including 3 carrying ammonia. Cargo pumped to road tankers with no leaks.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Northern Greece,

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Explosion and fire after train with fuel oil rail tankers suffered a derailment.

[fire - consequence]

Lessons

[None Reported]

5776 03 September 1992

Source : LLOYDS LIST, 1992, 18 SEP.

Location : Voronezh Oblast, RUSSIA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Derailment of 14 tanks containing fuel oil when an automatic coupling broke. Fuel oil from two rail tankers leaked onto the ground.
[coupling failure, spill]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, NOV.

Location : Tallinn, ESTONIA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of a rail tanker caused a spill of 50 tonnes of diesel into a harbour which spread to a bay.

Lessons

[None Reported]

Source : LOSS PREVENTION BULLETIN, 114, 15-17; THE SCOTSMAN, 1992, 27 AUG.

Location : Sunderland, UK

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker had been loaded with 44,000 litres of gasoline at the Docks. After it had travelled about 4 kilometres a van pulled out of a side street in front of it. The tanker driver tried to take avoiding action but this caused the tanker to turn over on its near side. The momentum of the tanker caused it to slide on its side for some distance and this was responsible for some of the punctures in its shell. The van was also turned over on its side and came to rest some distance away. After the tanker came to rest, the issuing petrol almost immediately caught fire, probably from hot surfaces on the tractor unit. The burning liquid spread and ignited parked cars.

[fire - consequence, collision, spill]

Lessons

[None Reported]

5757 25 August 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Agen, FRANCE

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker was hit from behind at traffic lights by a heavy goods vehicle causing leak of LPG from pipes. 100 evacuated.
[collision, gas / vapour release, evacuation, spill]

Lessons

[None Reported]

5753 19 August 1992

Source : LLOYDS LIST, 1992, 22 AUG.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Dorion; Quebec, CANADA

Injured : 0 **Dead :** 0

Abstract

A rail transportation incident. Derailment of 5 rail tankers containing propane which overturned. The leaking tanker was repaired. 30 people evacuated.
[evacuation, spill]

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 1

Abstract

A contractor employee was struck and fatally injured by an all-terrain forklift truck while walking diagonally into a construction site access road. A blind-spot on the right hand side of the equipment when the fork lifts are in the lower position for travel. There were no flagmen to assist the equipment operator in travel. In addition pedestrians and mobile equipment were sharing a congested workplace and the area was noisy due to the construction equipment. Pedestrian walkways were not established in all areas where personnel travel. Fatality.

[safety procedures inadequate]

Lessons

1. A safety policy and/or safe practices procedure should exist that establishes guidelines for the use of mobile equipment in congested areas.
 2. A training programme, including refresher training, for construction workers should include awareness of dangers created by working in proximity to mobile equipment.
-

5749 17 August 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Texas City; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. 310 tonnes of crude oil was spilled into a harbour from a marine tanker. Most recovered.

Lessons

[None Reported]

5746 15 August 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Madras, INDIA

Injured : 0 Dead : 0

Abstract

During overnight material transfer a spill of 1060 tonnes of kerosene occurred into a harbour through a valve failure on a receiving marine tanker.

Lessons

[None Reported]

5745 13 August 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Bangkok, THAILAND

Injured : 3 Dead : 1

Abstract

A marine transportation incident. An explosion occurred in the engine room of a marine tanker carrying gasoline. Fatality.

Lessons

[None Reported]

Source : ICHEME

Location : , UK

Injured : 1 Dead : 0

Abstract

An operator operating a forklift truck was lifting trash into an open top trash disposal unit. During the operation some pellets leaked onto the ground. The operator backed up the forklift truck and started to clean up the pellets. He stepped on some of the loose pellets and lost his footing. He struck the ground with his head. The employee got back on his feet and walked to the locker room where he sent another employee for help. The ambulance was called and he was transported to the local hospital emergency room.

[waste, cleaning, fall]

Lessons

[None Reported]

Source : LLOYDS LIST, 1992, 6 AUG.

Location : Karlsruhe, GERMANY

Injured : 4 Dead : 1

Abstract

A road transportation incident. A road tanker skidded off road and fell 10 metres onto a intercity locomotive. Fatality.

[loss of control]

Lessons

[None Reported]

5726 25 July 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Ghent, BELGIUM

Injured : 0 Dead : 0

Abstract

A river transportation incident. A river tanker ruptured bottom at lock and sank. 490 tonnes of sulphuric acid transhipped.
[sinking]

Lessons

[None Reported]

5719 21 July 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, OCT.

Location : Condobolin; New South Wales, AUSTRALIA

Injured : 0 **Dead** : 1

Abstract

A rail transportation incident. A freight train derailed after hitting a road tanker on a crossing. Rail wagons contained 40 tonnes of sodium cyanide.
[derailment, evacuation, fatality]

Lessons

[None Reported]

5717 17 July 1992

Source : LLOYDS LIST, 1992, 13 AUG.

Location : Texas City; Texas, USA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A spill of 97,000 gallons of crude oil occurred into a harbour as a marine tanker arrived.

Lessons

[None Reported]

Source : LLOYDS LIST, 1992, 14 JUL. ICHEME

Location : , SINGAPORE

Injured : 60 Dead : 6

Abstract

A marine transportation incident. Flash fire erupted on marine tanker undergoing repairs in shipyard. Fire could have occurred when cleaning fluid accidentally splashed on an engine in the boiler room.

Six people were killed and 60 others injured (8 critically) when a flash fire erupted on board a chemical tanker, which was undergoing repair at a Singapore shipyard on the morning of July 12, 1992. Initial investigations indicated that the fire was caused when cleaning fluid splashed down onto hot work being done further below in the engine/boiler rooms.

Police said there were 225 people working on the 24,000 dwt tanker when the fire broke out.

The dead, and most of the injured, were working in the boiler and engine rooms at the time.

Witnesses said there was panic when fire and intense smoke engulfed the rooms. Many people scrambled to the only staircase leading to the ship's main deck above.

Fire safety officers from the shipyard were the first at the scene and were joined within minutes by firemen of the Singapore Civil Defense Force (SCDF). Half of the firemen concentrated on the fire while the rest evacuated the casualties. The fire was put out within 30 minutes.

Over eighty firefighters were involved in the operation

A foreman led 15 workers to shelter behind a thick steel wall of a control room where they were protected from the fire but not from smoke. This group, however, was rescued after about 30 minutes, the foreman using his mobile radio to attract help. Most of the injured who survived the initial fire were overcome by the dense smoke and fumes, which filled the three levels of the boiler room.

The probable cause of the incident was a 'Permit to Work' on the ship which had been issued following gas free tests by port chemists.

Workers said that some cleaning liquid which was being used to clean pipes fell onto a boiler on a lower deck where welding was being done. A leak in cleaning hoses was mentioned.

Witnesses said they saw the fluid begin to burn as it hit the boiler, with a flash fire. Some workers said that the fluid smelled like thinner or kerosene. The fire spread to insulation material inside the boiler room, and this is believed to have released toxic fumes. Fatality.

[fire - consequence, hot surface, evacuation, toxic fumes, injury]

Lessons

1. Strict control of hot work and use of flammable materials is essential to avoid incidents.

2. Safe means of emergency escape from work area should be provided.

Ship board repairs, when alongside refinery jetties (docks), must only be allowed subject to site and Maritime Code restrictions - e.g., International Oil Tanker Terminal Safety Guide (IOTTSG), national and harbor regulations, etc.

5703 04 July 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, AUG.

Location : Philadelphia; Pennsylvania, USA

Injured : 0 **Dead** : 0

Abstract

During tank cleaning on marine tanker a spill of 3800 litres of oil occurred.

Lessons

[None Reported]

5702 02 July 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, AUG.

Location : Bombay, INDIA

Injured : 4 **Dead** : 3

Abstract

An explosion and fire occurred in the engine room of a marine tanker during loading of naphtha. Fatality.

[fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, AUG; LLOYDS LIST, 1992, 3 JUL., &15 JUL.

Location : Superior Area; Wisconsin, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. A rail tanker derailed and plunged 75 feet from a bridge into a river. Toxic cloud formed and 80000 people evacuated. 24000 gallons of benzene involved in incident.

[derailment, spill, evacuation]

Lessons

[None Reported]

Source : THE INDEPENDENT, 1992, 1 JUL.

Location : Duluth; Minnesota, USA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. Derailment of a rail tanker led to the release of toxic vapour and the evacuation of 50000 people.

[gas / vapour release]

Lessons

[None Reported]

5691 22 June 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, AUG.

Location : Port Kelang, MALAYSIA

Injured : 0 **Dead** : 13

Abstract

A marine transportation incident. Explosion and huge fire on a marine tanker at a depot during 2nd cargo test of 400 tonnes of xylene. 1st test rejected cargo. Previous cargo toluene. Fatality.

Lessons

[None Reported]

5687 20 June 1992

Source : LLOYDS LIST, 1992, 22 JUN.

Location : Port Kelang, SINGAPORE

Injured : 0 **Dead** : 13

Abstract

A marine transportation incident. Surveyors were determining the quantity of a cargo prior to discharging xylene when an explosion occurred. Fire damaged the terminal and two storage tanks. The marine tanker burnt out and sank. Fatality.
[sinking, fire - consequence]

Lessons

[None Reported]

5684 16 June 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, AUG.

Location : Houston; Texas, USA

Injured : 30 **Dead** : 0

Abstract

A pipe broke during road tanker loading operations leading to a spill of 350 litres of liquid sulphur dioxide.

Lessons

[None Reported]

Source : ICHEME

Location : , ITALY

Injured : 0 **Dead :** 0

Abstract

A road transportation incident. A road tanker carrying ethylene oxide left the road and came to rest on soft earth at the side of the road, still upright, but at an incline. There were no spillage's and no injuries to any personnel.
[transport effects]

Lessons

[None Reported]

Source : SEDGWICK LOSS CONTROL NEWSLETTER, 3RD QUARTER, 1992.

Location : Sriracha, THAILAND

Injured : 0 **Dead** : 0

Abstract

Transportation. Impact occurred to a crude oil pipeline loading facility and jetty during berthing. The cause is attributed to failure of a marine tanker reversing system. Part of the pipeline fell into the sea and leakage occurred. Approximately 80 cubic metres of oil spilled.
[collision]

Lessons

[None Reported]

5672 26 May 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUL.

Location : Fairfax; Virginia, USA

Injured : 0 **Dead** : 0

Abstract

Tank terminal closed after fuel oil leak had contaminated ground and forced evacuation of nearby homes. Spill estimated at 600 tonnes.

Lessons

[None Reported]

5671 25 May 1992

Source : LLOYDS LIST, 1992, 4 JUN.

Location : Longlac; Ontario, CANADA

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. After derailment a rail tanker of ammonia started leaking. Led to the evacuation of 500 people 1.5 km downstream.

[gas / vapour release]

Lessons

[None Reported]

5670 25 May 1992

Source : LLOYDS LIST, 1992, 30 MAY.

Location : New Orleans; Louisiana, USA

Injured : 0 **Dead** : 0

Abstract

A river transportation incident. 200 gallons of fuel oil leaked from a river tanker barge into a river.

[spill]

Lessons

[None Reported]

5666 21 May 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUL.

Location : Grangemouth; Scotland, UK

Injured : 0 **Dead** : 0

Abstract

A leak developed on a marine tanker when loading polyethylene.

As a result of this the emergency services were called. The Fire Service sprayed water on the escaping vapour and sections of the surrounding dock areas, all ships crews were evacuated.

The tanker had approximately 650 tonnes of propylene gas in the effected tank.

The effected area was sealed off by the police, the wind was carrying the vapours to the west of the dock area.

Gas readings were taken from the area which showed low levels.

[instrument/controller, gas / vapour release, human causes]

Lessons

[None Reported]

5659 10 May 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUL.

Location : Off Busan, SOUTH KOREA

Injured : 0 **Dead** : 0

Abstract

A marine transportation incident. A marine tanker with 1500 tonnes of monopropylene glycol grounded and hull broke in 3 pieces, causing a spill.
[ship ran aground]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1992, JUL., 78.

Location : Lozere, FRANCE

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker went out of control on a steep hillside road and careered down a ravine spilling part of its 30000 litres of diesel.
[road incidents, loss of control]

Lessons

[None Reported]

Source : ICHEME

Location :

Injured : 0 Dead : 0

Abstract

A rail transportation incident. Chlorine gas released from rail tanker caused breathing problems and sickness in community.

[gas / vapour release, leak]

Lessons

[None Reported]

Source : LLOYDS WEEKLY CASUALTY REPORTS 288/7

Location : Keamari; Karachi, PAKISTAN

Injured : 03 Dead : 0

Abstract

A fire occurred at a terminal and destroyed a section of pipeline. Fire broke out while welders were fixing a pipeline valve. Sparks from welding fell on oil. Fire controlled in one hour.

[fire - consequence]

Lessons

[None Reported]

5648 29 April 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUN.

Location : , SOUTH CHINA SEA

Injured : 0 Dead : 0

Abstract

A marine transportation incident. Collision of container ship and cruise ship. No injuries but 1000 drums of calcium carbide removed from flooded hold.

Lessons

[None Reported]

Source : ICHEME

Location : ,

Injured : 0 Dead : 0

Abstract

A road transportation incident. A road tanker carrying ethylene oxide was left unattended while driver booked in at gatehouse. The vehicle ran away onto lawn and demolished a sign. Tank undamaged.

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUN.

Location : , MOZAMBIQUE

Injured : 0 **Dead :** 0

Abstract

A marine transportation incident. Hull cracked on marine tanker with 60,000 tonnes of fuel oil and later broke in half under tow and sank. Large oil slick.
[sinking, spill]

Lessons

[None Reported]

5635 14 April 1992

Source : LLOYDS LIST, 1993, 16 JAN.; HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUN.

Location : Off Jieh, LEBANON

Injured : 3 **Dead** : 6

Abstract

A marine transportation incident. Mooring ropes broke on marine tanker in heavy weather at offshore terminal. Discharge hose parted and hit stern causing sparks which ignited the gasoline. Fatality.

[weather effects, fire - consequence]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN, 1995, OCT.

Location : Keith, Alberta, CANADA

Injured : 0 Dead : 0

Abstract

A rail transportation incident. A rail tanker loaded with 90 tonnes of molten sulphur caught fire in the marshalling yards. The tanker was found to have severe corrosion around the safety relief valve which penetrated 75% of the weld thickness securing the valve fitment. The exterior gave no indication of the corrosion which had progressed from inside the tanker.

[fire - consequence]

Lessons

Corrosion of the weld produced 'mackinawite', a spontaneously combustible product when exposed to air and possibly provided the source of ignition. A survey of 128 rail tankers found that 74% had incurred a tank shell loss of 16% or more at the manway area. As a result of this accident, rail tanker specifications for molten sulphur must now have a protective coating or corrosion resistant material in areas of high heat flux. They must also be tested and inspected every 10 years.

5603 16 March 1992

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, JUN.; HAZARDOUS CARGO BULLETIN, 1992, JUL., 78.

Location : Aix-les-bains, FRANCE

Injured : 0 **Dead** : 0

Abstract

A rail transportation incident. The derailment of rail tankers occurred in a built up area. One tanker containing dimethylamine overturned and leaked slightly but was capped and was removed to a remote site for offloading.

[spill]

Lessons

[None Reported]

5601 14 March 1992

Source : LLOYDS LIST, 1993, 27 MAY.

Location : , NORTH SEA

Injured : 0 Dead : 11

Abstract

Helicopter crash in North Sea after flight from an offshore platform. Inquiry concluded that pilot error was the prime cause of the disaster but failure of the operating company to comply with statutory regulations governing the use of standby vessels, defects in the company's system of work and a failure to consider the effect of adverse weather on available rescue facilities had contributed to the loss of life. Fatality.

[driver error]

Lessons

[None Reported]

Source : HAZARDOUS CARGO BULLETIN INCIDENT LOG, 1992, MAY.

Location : Greenwich; New Jersey, USA

Injured : 0 **Dead** : 0

Abstract

A road transportation incident. A road tanker of propane was in collision with a train within a refinery and overturned. No spill or injuries but 60 homes evacuated.

[evacuation]

Lessons

[None Reported]
