Tank and Petroleum Use Mishaps

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By learning about the misfortunes of others, it is STI's hope to educate the public by creating a greater awareness of the hazards with storage and use of petroleum and chemicals. Please refer to the many industry standards and to the fire and building codes for further guidance on the safe operating practices with hazardous liquids. Thanks and credit for content are given to Dangerous Goods-Hazmat Group Network. http://groups.yahoo.com/group/DangerousGoods/

CANADA, ALBERTA, EDMONTON
JULY 3 2006.
TWO MEN DIE WELDING - OUTSIDE A CONTAINER FULL OF EXPLOSIVE MATERIALS

Eliza Barlow

Two men who died in a workplace blast Friday were welding outside a storage container full of explosive materials including propane and gasoline.

That’s according to Occupational Health and Safety investigators at the scene of the explosion at Alstar Oilfield Contractors Ltd. in Fox Creek, said OHS spokesman Fiona Wiseman Saturday.

Wiseman said a stop-work order has been issued, which applies to all welding activities around the storage container at the site, about 257 km northwest of Edmonton.

A 27-year-old Sherwood Park man and a 26-year-old Manitoba man died in the 3 p.m. explosion, which could be heard and felt across the town of about 2,500, according to some residents.

Wiseman said one of the men who died was a contractor with a company called Ultin Custom Fabrication.

The other was an employee of Alstar Oilfield Contractors, a pipeline construction company, she said.

Alstar Oilfield Contractors staff said Saturday that the company would not issue a statement until the investigation was complete.

No one else was injured in the explosion.

The province says 143 Albertans died in 2005 of work-related injury or illness.

Forty-one of those deaths were a result of worksite accidents.

http://www.edmontonsun.com/News/Alberta/2006/07/01/1663976.html

USA, IDAHO, BOISE
JULY 7, 2006
EXPLOSION, FIRE AT BIODIESEL PLANT KILLS ONE

By Rebecca Boone

An explosion and fire at a New Plymouth building being converted into a biodiesel plant killed one man Friday and injured two others, Idaho State Police said.

Dense black smoke rose from the fire, which destroyed the building housing the Blue Sky Biodiesel facility, state police spokesman Rick Ohnsman said.

Blue Sky Biodiesel had been expected to open sometime in the coming weeks, and the employees there were trying to get the plant ready for the grand opening, he said.

New Plymouth is about 50 miles northwest of Boise on the border with Oregon.

Blue Sky employee Blaise Black, 25, of Meridian, was killed. He had been welding on top of a biodiesel storage tank when the blast happened, Ohnsman said. The tank contained an unknown amount of the fuel, and the explosion touched off another, smaller explosion and a fire that quickly engulfed the entire building, the spokesman said.

Black's father, Rob Black, suffered second-degree burns and smoke inhalation trying to rescue his son, as did another employee, Ohnsman said. Both men were treated at the scene.

The Argus Observer of Ontario, Ore. has reported that Rob Black is a managing partner at the facility. He was not immediately reachable late Friday for comment.
"Other employees attempted to go in as well, but they were driven back by the heat and the smoke," Ohnsman said.

Ten area fire departments and local law enforcement agencies responded and nearby residents were temporarily evacuated, Ohnsman said. By Friday afternoon, the blaze had been extinguished, the residents were allowed to return home and crews were able to recover Black's body from the debris.

"The roof is pretty well gone, most of the southeast corner is gone," said Ohnsman, who added "This is kind of an economic blow to the community."

Blue Sky had been converting an old fruit warehouse into the biodiesel facility. The plant was set up to convert raw soy oil to the alternative fuel.

Staffers with the Idaho Department of Environmental Quality and the federal Environmental Protection Agency were on scene to see if the fire caused any hazards to the environment, Ohnsman said.

The smoke was not believed to be dangerous, he said.

The Occupational Safety and Health Administration was expected to investigate, Ohnsman said.

http://seattlepi.nwsource.com/local/6420AP_ID_Biodiesel_Explosion.html

USA, PA, PHILADELPHIA
JULY 3 2006.
LIGHTNING STRIKE INJURES REFINERY CONTRACTOR

A lightning strike at the Sunoco refinery in South Philadelphia has injured a contractor. Police said the lightning bolt hit a gas tank at the refinery during a storm shortly before 8 p.m. Sunday. The 47-year-old victim was taken to the Hospital of the University of Pennsylvania. Police said he had burns over 25 percent of his body. His name was not released. Police and fire officials have no further details. A city Fire Department dispatcher said there was no explosion and the fire was not electrical.


USA, LA, NEW ORLEANS
JULY 4 2006.
LIGHTNING STRIKES TANK AT MURPHY OIL PLANT

Lightning apparently struck a tank containing 200 thousand barrels of gasoline at the Murphy Oil plant in St. Bernard Parish, setting the tank on fire. A spokesperson at the St. Bernard Fire Department says the blaze was quickly brought under control. The fire apparently started in the seal of the tank and no injuries were reported. Both the St. Bernard Fire Department and firefighters at Murphy Oil were on the scene.


USA, ILL, SPRINGFIELD
JULY 7 2006.
REWARD OFFERED IN GAS SPILL - COMPANY SAYS SOMEONE OPENED VALVES ON STORAGE TANK

The company that operates a central Illinois fuel distribution terminal where 148,000 gallons of gasoline spilled from a storage tank last month believes someone opened a series of valves and allowed the spill.

A spokesman for Buckeye Partners LP said Wednesday that he couldn't say the valves were opened intentionally "because we don't know that," but he did say said the valves apparently weren't opened during normal operation of the facility.

The Harristown terminal is about 25 miles east of Springfield in western Macon County.

Buckeye Partners is offering a $25,000 reward for information leading to the identification of the people who apparently caused the spill.

"At this time, we believe that a series of valves at the terminal facility were opened between the evening of June 11 and the early morning hours of June 12, which allowed gasoline to flow into a section of previously abandoned piping and into the tank containment area," said John Teriet, spokesman for Buckeye Partners.

"We have no indication that these valves were opened as a result of our operation of the terminal facility," he said.

Buckeye employees on June 12 discovered that a drainage tile was discharging gasoline into a tributary of Long Point Slough, which flows into the Sangamon River.

The release - originally reported as 71,400 gallons of gasoline from an above-ground storage tank - caused the closing of Old Route 36 and the Norfolk Southern rail line for a day.
Tank and Petroleum Use Mishaps

Absorbent booms were placed downstream from the tile in an attempt to recover the gasoline, much of which was confined to a containment ditch that surrounded the tank.

Buckeye Partners said on June 14 that a preliminary investigation indicated faulty piping connecting above-ground storage tanks was to blame for the spill.

The company told the Illinois Environmental Protection Agency on June 22 that an estimated 66,304 gallons of released gasoline hadn't been recovered and that its consultants were attempting to locate the fuel, much of which was thought to have evaporated.

Teriet said the volume of recovered gasoline won't be adjusted until a comprehensive accounting is complete.

A significant amount of contaminated soil has been removed from the spill site, and a groundwater recovery system has been installed to prevent any further migration of gasoline, he said.

Monitoring and recovery wells also have been installed and an extraction system put in place to remove gasoline from groundwater within the spill area.

The company continues to test water wells in the area. No contamination has been discovered so far, Teriet said.

Once its assessment is complete, the company will submit a cleanup plan to the IEPA for approval and implementation, Teriet said.

He said he hopes the plan will be submitted "relatively quickly."

The IEPA asked the state attorney general's office last week to look into the incident to determine whether any violations of Illinois' Environmental Protection Act had occurred and to take possible enforcement action against Buckeye Partners.

The Harristown terminal services gasoline tankers, which then transport the fuel to gas stations.

USA, ALA, ANCHORAGE
JULY 7 2006.
BROKEN FUEL TANK LINE POURS DIESEL ONTO GROUND

An estimated 7,000 gallons of diesel fuel spilled from a ruptured fuel tank line in the western Alaska village of Kipnuk, state environmental regulators said Thursday.

The spill was discovered about 2 p.m. Wednesday by a resident of Kipnuk, a community of 685 on the west bank of the Kugkaktlik River in the Yukon-Kuskokwim delta, 485 miles west of Anchorage. Regulators believe the line ruptured earlier in the day.

Representatives of the Alaska Department of Environmental Conservation were heading to the area Thursday to get a better idea of the extent of the spill and coordinate additional response efforts.

Villagers, meanwhile, laid down booms across a creek and sandbags at its mouth to block the spill from the river, where salmon are present.

Some of the fuel did get into the river at some point, but the wind blew at least some of it out onto the bank, according to John Brown, DEC's case manager on the spill. He said there was no indication the fish were harmed. The village drinking water is taken out of a nearby lake, which was not affected.

The 110,000-gallon bulk fuel tank is operated by the Kugkaktlik Ltd. Native Corp., the village corporation. The tank was shut off after the leak was discovered, but there is a second tank and plenty of fuel for the village, Brown said.

USA, TX, WESTLACO
JULY 9 2006.
LIGHTING HITS GAS STATION

A gas station shuts down in Donna after lightning strikes on the property. Donna fire and rescue crews swarmed the new Circle K on Val Verde road and expressway 83. The deputy fire marshall tells NEWSCHANNEL 5 the lightning bolt hit what is called a "diesel breather" pipe. That pipe allows fuel to ventilate properly. The lightning did "not" create a major explosion, but it did apply pressure in the pipe causing the cap to pop out.

http://www.newschannel5.tv/2006/7/7/8361/Lighting-hits-gas-station
Tank and Petroleum Use Mishaps

USA, IDAHO, BOISE
JULY 9 2006.
EXPLOSION, FIRE AT BIODIESEL PLANT KILLS ONE
Rebecca Boone

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New Plymouth is about 50 miles northwest of Boise on the border with Oregon.

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The Occupational Safety and Health Administration was expected to investigate, Ohnsman said.

http://seattlepi.nwsource.com/local/6420AP_ID_Biodiesel_Explosion.html

USA, IOWA, DES MOINES
JULY 10 2006.
MAN FIRED FOR DRINKING ETHANOL FUEL DENIED UNEMPLOYMENT

A man who claimed discrimination after being fired from an ethanol plant for drinking "automobile fuel" has been denied unemployment benefits. Cory Neddermeyer was dismissed by Amaizing Energy in April. The Denison-based company produces ethanol fuel for vehicles. The formula that includes a high concentration of alcohol. According to Neddermeyer, he showed up for work on April 21st and saw that there had been a spill of fuel alcohol. The liquid, which was 190-proof, had not been blended with gasoline. Neddermayer, a recovering alcoholic, says he was curious about its effects and taste. He says he drank between two and three ounces. Neddermeyer was later found by co-workers in an incoherent state. He was taken to the hospital, where his blood-alcohol level, according to state records, was reported at zero-point-seven-two. That's almost twice the level considered potentially fatal for many adults.

Tank and Petroleum Use Mishaps

USA, ILL. HARTFORD
JULY 10 2006.
FIRE STRIKES PIASA MOTOR FUELS
Nick Lucchesi

Diesel fuel and liquid asphalt ignited a blaze at a fuel distribution company on Illinois Route 3 early Saturday, shooting flames more than 100 feet into the air and creating thick black smoke that could be seen from up to 30 miles away.

No one was hurt in the fire at Piasa Motor Fuels, said Bill Schrimpf, 20-year president of the gasoline and diesel distributor, and the fire’s cause remained under investigation by the Hartford Fire Department.

Two tanker trailers were inside a maintenance building used for truck washing and had an undetermined amount of liquid in them. While the 20-year-old building was not critical to Piasa business operations, it sits along the southern portion of a property that has a number of fuel tanks above and below the ground.

Schrimpf’s son, Matt Schrimpf, was at the facility when a radio dispatcher heard crackling interference on Piasa’s intercom system. The dispatcher and Matt Schrimpf called 911 after seeing the fire.

"They turned around and looked, and the dispatcher said, ‘There’s a fire out there,’" Bill Schrimpf said.

Hartford Fire Chief Ron Cobine said the department received a 911 call at 8:40 a.m. and eventually called the Wood River, South Roxana, Roxana and Rosewood Heights fire departments for assistance. During the blaze, the two tanker trailers, estimated to be worth $15,000 to $20,000 each, were destroyed, along with the building.

"It took us a little while to get (the fire) under control," Cobine said as the fire was dying down and the black smoke was turning to white. "It was probably a good hour-and-a-half or so."

After the fire was put out, black diesel fuel formed large pools around the building and began filling drainage ditches along South Delmar Avenue. Cobine said firefighters were blocking off the spilled fuel with sand, and Hartford municipal trucks were working to build dikes in surrounding ditches.

Environmental Protection Agency officials also arrived on scene to investigate the spillage, Cobine said. Vacuum trucks typically used to clean up refinery spills were called in to vacuum the spilled flammables, Cobine said.

Traffic was brought to a stop-and-go status at the intersection of Route 3 and West Piasa Lane for the duration of the two-hour fire. Only a few houses dot the industrial landscape of the area.

The amount of liquid in the two tankers, one with a 6,000-gallon capacity and the other with a 2,500-gallon capacity, was unclear. Schrimpf said one of the tankers was carrying liquid asphalt and the other was carrying dust control, a product similar to asphalt that is used to keep dust down.

Cans of paint and diesel fuel barrels were stored in the building, causing four or five minor explosions. No barrels were projected into the air from the explosions, and no firefighters were hurt. The Wood River Fire Department used its foam truck to suppress the flames from the top of a Snorkel aerial platform.


USA, GA, SAVANNAH
JULY 12 2006.
SMALL EXPLOSION AT RECYCLING PLANT

A small explosion kept the Savannah Fire Department busy this morning. It happened around 9:30am at Southern Metals recycling plant off Tremont Road. Fire officials say two welders were cutting through the steel of an old gas tank when it exploded. "What they do here is they take old steel to be recycled and it's either smashed or cut up in small pieces," explained Capt. Thad Dixon. "This was an old underground tank, had old fuel vapors, but enough to cause an explosion." One of the welders did suffer minor injuries.


USA, MISS, ST LOUIS
JULY 16 2006.
SMALL EXPLOSION AT MALLINCKRODT INJURES TWO

An unidentified male worker at Mallinckrodt Inc. set off a small flash fire Tuesday while mixing a highly flammable chemical, Capt. Steve Simpson, media officer for the St. Louis Fire Department, told the St. Louis Business Journal.

The explosion occurred at Building 235 at the Mallinckrodt complex at 3700 N. Broadway.

The man, who was reportedly wearing a protective suit, bruised his legs and suffered second degree burns on his hands, said Simpson, who didn't know if the man was wearing protective gloves.
Tank and Petroleum Use Mishaps

A woman, who was not identified, also suffered minor injuries when she walking into the room just as the flash fire occurred, Simpson said.

Joanna Schooler, Tyco Healthcare/Mallinckrodt's director of public relations, told the Business Journal that early reports indicate that the material the worker was handling was paraformaldehyde, but she said the incident is still being investigated.

"Most operations are continuing to run," Schooler said, adding the company expects the area affected by the flash fire to resume operations soon. "The fire was contained on site and put out by (Mallinckrodt's) onsite first responders."

At the time of the incident, a little after 10 a.m., Schooler said about 600 employees were working on campus.

Schooler said the company's first responders are highly trained in dealing with such incidents and said workers who handle dangerous materials are given regular safety training.

Mallinckrodt, headquartered in Hazelwood, Mo., is part of the health-care segment of Tyco International Ltd. Tyco Healthcare/Mallinckrodt manufactures and markets health-care products through respiratory, imaging and pharmaceuticals divisions. It employs nearly 2,500 in seven locations in the region, according to the company's Web site.

Pembroke, Bermuda-based Tyco International Ltd. (NYSE: TYC) is a diversified company with interests in electronics, fire and security, health care, and engineered products and services.


USA, USA, DE, WILMINGTON
JULY 16 2006.
2,100 GALLONS OF OIL SPILLED Into CHRISTINA, SITE OWNER SAYS
Esteban Para

An oil spill into the Christina River yesterday evening was limited to 2,100 gallons, the owner of the site announced today.

Siemens Corp. representatives accepted responsibility for the accident in an afternoon news conference and apologized for any problems it caused.

Workers were transferring waste oil from auto repair shops and garages from one tank into another Saturday evening discovered a hose had ruptured, releasing close to 8,000 gallons of oil.

Most, however, was captured by retainers inside the facility on South Market Street.

The 2,100 gallons have since spread over about five miles, from the mouth of the Christina to the Interstate 95 overpass. Oil slicks have been spotted farther upriver, however, and in parts of the Brandywine.

The slick poses the biggest threat to birds and plant life along the water. Because it is light oil, there is less danger to fish, the Coast Guard said.

About 6,000 feet of boom have been placed on the river, with 1,700 feet on standby.


USA, ALABAMA, ALBERTVILLE
JULY 20 2006.
FIRE DAMAGES LOCAL PAINT PLANT

A fire that began around 8 p.m. Tuesday heavily damaged the Universal Coating Corp.’s paint mixing plant located on High Point Road.

Units responding from the Albertville Fire Department and Douglas and Pleasant Grove volunteer fire departments, upon arrival, were confronted with flames leaping nearly 75 feet into the air.

Albertville fire Marshal Robert Terrell said the building housing the mixing plant was fully involved.

Intermittent explosions of containers containing volatile chemicals made early attempts to put out the fire somewhat difficult and dangerous, Terrell said.

Albertville fire Capt. Brad Hix said about 30 firefighters, from all departments, were involved in the effort to save the business owned by Gerald Livingston that produces finished paint solvents from raw materials.

Albertville’s aerial platform ladder truck was instrumental in knocking the fire down quickly, according to fire Chief Johnny Hix.

The platform’s ability to rise as high as 95 feet above a fire enables the firefighters to concentrate and pour more than 1,000 gallons of water on to a fire from above.

“The city’s investment in this piece of equipment more than pays for itself in our ability to reduce the time we might have to fight a fire,” Hix said.

“If we didn’t have it here tonight we might have had to stay until tomorrow to finish putting the fire out.”
Tank and Petroleum Use Mishaps

Hix praised the work of all the responding departments. “It was a tough fire, but everyone did a great job,” he said. Firefighters succeeded in dousing the fire in a little more than two hours.

Albertville police officers maintained traffic control and a Marshall County EMS crew was on the scene if needed, but no one was injured during the incident.

Municipal Utilities Board workers were called in to disconnect electrical wiring as a safety precaution, as wiring had the potential to fall on firefighters.

Terrell said the investigation into the cause of the fire would begin in earnest Wednesday morning.

http://www.sandmountainreporter.com/story.lasso?ewcd=d598b47b7c180dd1

USA, IDAHO, BOISE
JULY 14, 2006
CAUSE OF NEW PLYMOUTH BIODIESEL EXPLOSION RELEASED

Investigators say they now know what caused an explosion at a New Plymouth biodiesel plant last week that killed a Meridian man.

The Payette County Sheriff's Office released its findings today into the explosion and subsequent fire at the plant that left 25-year-old Blaise Black dead.

The cause of the fire was determined to be an explosion of a 25,000 gallon steel holding tank that Blaise was working on. The tank contain about 30 to 40 gallons of glycerin and methanol liquid mix. Both products are flammable and give off flammable vapors.

Investigators say at the time of the explosion Blaise was working on the top of the tank attempting to install a two-inch steel pipe with a 90-degree elbow on the end to function as a vent on the top of the tank. During the installation of the vent tube a steel two-inch cap was removed from the side of the tank where the vent was to be installed. This allowed the vapors to escape from the tank. When Blaise lit his cutting torch it ignited the vapors, which triggered the fire and explosion.

The Payette County coroner says Blaise it appears Blaise died from blunt force traumas as a result of the explosion.

The explosion would have thrown him violently upward against the ceiling and a large beam that was above him. As a result of the explosion, the ceiling and beam came down and trapped him on the top of the tank. The force of the impact would have killed him immediately.