

WORKER CRUSHED BY FORKLIFT

Type of Incident: Fatality

Date of Incident: October 17, 2012

TABLE OF CONTENTS

SECTION	TITLE	PAGE NUMBER
1.0	DATE AND TIME OF INCIDENT	3
2.0	NAME & ADDRESS OF PRINCIPAL PARTIES	3
2.1	Owner	3
2.2	Prime Contractor	3
2.3	Employer(s)	3
2.4	Contractor(s)	3
2.5	Supplier(s)	3
2.6	Workers(s)	3
2.7	Others	3
3.0	DESCRIPTION OF PRINCIPAL PARTIES	4
3.1	Employers	4
3.2	Worker	4
4.0	LOCATION OF INCIDENT	4
5.0	EQUIPMENT, MATERIAL AND OBSERVATIONS	4
5.1	Equipment and Material	4
5.2	Observations	4
6.0	NARRATIVE DESCRIPTION OF INCIDENT	5
7.0	ANALYSIS	6
7.1	Direct Cause	6
7.2	Contributing Factors	6
8.0	FOLLOW-UP/ ACTION TAKEN	6
8.1	Human Services, Occupational Health and Safety	6
8.2	Industry	7
8.3	Additional Measures	7
9.0	SIGNATURES	8
10.0	ATTACHMENTS	8

SECTION 1.0 DATE AND TIME OF INCIDENT

1.1 October 17, 2012 at approximately 1:30 p.m.

SECTION 2.0 NAME AND ADDRESS OF PRINCIPAL PARTIES

2.1 Owner(s)

2.1.1 Mo-Tires Ltd.
2830 – 5 Avenue North
Lethbridge, Alberta
T1H 0P1

2.2 Prime Contractor

2.2.1 Not applicable.

2.3 Employer(s)

2.3.1 Mo-Tires Ltd.
2830 – 5 Avenue North
Lethbridge, Alberta
T1H 0P1

2.4 Contractor(s)

2.4.1 Not applicable.

2.5 Supplier(s)

2.5.1 Not applicable.

2.6 Worker(s)

2.6.1 Worker 1 (*****)

(Names and personal details were removed before distribution of this report.)

2.7 Others

2.7.1 Constable *****
Lethbridge Regional Police Service
135 – 1 Avenue South
Lethbridge, Alberta
T1J 0A1

SECTION 3.0 DESCRIPTION OF PRINCIPAL PARTIES

- 3.1.1 Mo-Tires Ltd. (Mo-Tires) is a Lethbridge, Alberta based wholesale and retail tire distributor and automotive service provider. Mo-Tires operates an automotive repair and tire shop as well as a heavy truck center in Lethbridge, Alberta. Mo-Tires employs 25 staff at its two Lethbridge locations.
- 3.1.2 Worker 1 (*****) was employed by Mo-Tires as a Shipper/Receiver at the truck center. Worker 1's (*****) primary job was to pick tires either from the outside storage area or the shop area to fill customer orders. Worker 1 (*****) had been employed by Mo-Tires for approximately 6 months.

SECTION 4.0 LOCATION OF INCIDENT

- 4.1.1 The incident occurred at the front of a metal fuel storage shed located in the southwest yard of the truck center located at 2830 – 5 Avenue North, Lethbridge, Alberta (Refer to Attachment A – Map, and Attachment B – Photographs 1 and 2).

SECTION 5.0 EQUIPMENT, MATERIAL AND OBSERVATIONS

5.1 Equipment and Material

- 5.1.1 A Toyota, Model 5FG15 (Serial Number ██████████), gasoline powered forklift (forklift) was used to bring tires from storage locations in the yard and shop to the service bays in the shop (Refer to Attachment B – Photographs 3 and 4).
- 5.1.2 A metal storage shed (shed) was used to store gasoline for refueling the forklift. The door of the shed, against which Worker 1 (*****) had been pinned, measured 1.22 meters wide by 1.83 meters high and was partially open during the refueling process.
- 5.1.3 A rotary barrel pump with attached black rubber hose was mounted in a 205 liter gasoline drum located inside the shed. The hose extended 1.62 meters outside of the shed (Refer to Attachment B – Photographs 2 and 5).

5.2 Observations

- 5.2.1 Prior to OHS responding to the work site, the forklift had been moved west of the incident location to facilitate first aid and Emergency Medical Service (EMS) response.
- 5.2.2 There was a tire indentation in the ground and a build up of gravel behind where the left front tire of the forklift had been sitting at the time of the incident.

- 5.2.3 The forklift had broken welds on the backrest extension, was leaking hydraulic fluid on the mast lift cylinder, had a broken rear signal/stop light and no seat belt.

SECTION 6.0 NARRATIVE DESCRIPTION OF THE INCIDENT

- 6.1 Worker 1 (*****) arrived at work around 8:00 a.m. and began to start retrieving tires from the shop and yard areas. Worker 1 (*****) had retrieved 4 or 5 sets of tires that morning before notifying Worker 2 (*****) at around 12:30 p.m. that he was taking a lunch break.
- 6.2 At approximately 1:15 p.m., Worker 3 (*****) went to the shipping bay to look for a forklift. As there were no forklifts located at the shipping bay, Worker 3 (*****) looked out from the back of the shop and thought he saw Worker 1 (*****) refueling the forklift.
- 6.3 Worker 3 (*****) walked towards Worker 1 (*****) and discovered that he was pinned between the forklift and the edge of the shed door. The shed door was in the partially open position. Worker 3 (*****) ran to the chroming shed and summoned Worker 4 (*****) and Worker 5 (*****) for help.
- 6.4 Worker 4 (*****) got into and reversed the forklift while Worker 3 (*****) held Worker 1 (*****) to prevent him from falling. Worker 4 (*****) noted that the forklift key was in the “on” position but the forklift was not running. Worker 5 (*****) ran to the office, got Worker 2 (*****) to call 911 and then returned to the incident scene.
- 6.5 Worker 2 (*****) called 911 then responded to the incident scene and began cardio-pulmonary resuscitation (CPR) on Worker 1 (*****). EMS arrived and took over treatment of Worker 1 (*****).
- 6.6 Lethbridge Regional Police Service (LRPS) also responded to the incident and commenced an investigation.
- 6.7 Worker 1 (*****) was transported to Chinook Regional Hospital where he was pronounced deceased.

SECTION 7.0 ANALYSIS

7.1 Direct Cause

7.1.1 Worker 1 (*****) was crushed between the forklift and the door of the shed.

7.2 Contributing Factors

7.2.1 The forklift key was in the “on” position.

7.2.2 The forklift brake was out of adjustment and did not hold while the forklift was running and in gear.

7.2.3 The angle of the forklift in relation to the partially open shed door created a pinch point.

7.2.4 Worker 1 (*****) had not been formally trained in forklift refueling or operating procedures.

SECTION 8.0 FOLLOW-UP/ ACTION TAKEN

8.1 Human Services, Occupational Health and Safety

8.1.1 On October 17, 2012, OHS received an incident notification, responded to the scene and commenced an incident investigation.

8.1.2 OHS issued the following orders to Mo-Tires:

- Conduct an incident investigation and prepare a report outlining the circumstances surrounding the incident as well as preventive measures.
- Stop Use of the forklift until it has been inspected and repaired in accordance with the manufacturer’s specifications (tag # 7537).
- Ensure forklift operators are trained in the safe operation of forklifts they are required to operate.

8.1.3 OHS also issued a Demand to Mo-Tires for copies of information related to the incident.

8.1.4 OHS commissioned a mechanical inspection of the forklift by an authorized service depot.

8.2 Industry

- 8.2.1 Mo-Tires completed an incident investigation and provided a copy of their report to OHS.
- 8.2.2 Mo-Tires sent two workers to a Lift Truck Safety Training Course and provided OHS with copies of training certificates for these and two other previously trained forklift operators. Mo-Tires also designated specific workers as qualified to operate forklifts.
- 8.2.3 Mo-Tires removed the forklift from service for inspection and evaluation, then subsequently sold it.
- 8.2.4 Mo-Tires purchased a new propane fueled forklift.
- 8.2.5 Mo-Tires developed and implemented refueling procedures for forklifts.
- 8.2.6 Mo-Tires implemented a health and safety program.
- 8.2.7 Mo-Tires complied with all orders issued by OHS.

8.3 Additional Measures

- 8.3.1 Lethbridge Regional Police Service conducted tests to determine whether the park brake on the forklift was functioning properly.

SECTION 9.0 SIGNATURES

Original report signed
***** *** Lead Investigator

Date

Original report signed
***** ***** Reviewer

Date

Original report signed
***** ***** Director South Region

Date

SECTION 10.0 ATTACHMENTS:

Attachment A – Map.
Attachment B – Photographs.

MO-TIRES LTD.

**File: F-16739
ATTACHMENT A
MAP**



Red arrow shows the location where the incident occurred in the southwest corner of the Mo-Tires Ltd. yard at 2830 – 5 Avenue North, Lethbridge, Alberta.

MO-TIRES LTD.

**File: F-16739
ATTACHMENT B
PHOTOGRAPH 1 of 5**



Photograph 1 - Picture shows the Mo-Tires Ltd. truck center office and shop located at 2830 – 5 Avenue North, Lethbridge, Alberta.



Photograph 2 – Shows the shed located in the southwest yard of Mo-Tires Ltd. truck service center. Green arrow shows the edge of the partially open shed door that Worker 1 (*****) was pinned against at the time of the incident. Blue arrow shows where the forklift’s front left tire had dug into the gravel. Red arrow shows the gasoline refueling hose.

MO-TIRES LTD.

**File: F-16739
ATTACHMENT B
PHOTOGRAPH 3 of 5**



Photograph 3 - Shows the Toyota, Model 5FG15 (Serial Number [REDACTED]) forklift that was involved in the incident.



Photograph 4 - Shows the approximate location of the forklift during the refueling process. Red arrow shows the location of Worker 1 (*****) when the incident occurred.



Photograph 5 – View from the west of the shed, 205 liter drum of gasoline with barrel pump, and the hose used to refuel the Toyota, Model 5FG15 forklift. The hose extended 1.62 meters outside of the shed.