

Re: Refinery Fire at Chevron of Canada Limited

Following is a report from the Fire Chief on a Fire at the subject firm's refinery on April 4, 1975.

As a result of the investigation that was carried out, the Fire Department on April 10 ordered the refinery in writing to comply with the following safety requirements:

1. Four (4) monitors to be installed as discussed during inspection.
2. Two (2) 150 lb. wheeled fire extinguishers to be provided at:
  - (a) east side of rack near garage
  - (b) west side near office.
3. Fire extinguishers to be installed on all hose reels and monitors at loading rack.
4. All firefighting equipment, including fire telephones to be painted red.
5. All emergency pull cords that are not in use to be removed immediately.
6. Establish driver training program for use of loading racks, to include emergency procedures in event of fire (Reference: Imperial Oil Drivers Manual).
7. All firefighting equipment to be properly maintained and kept in good condition at all times.

The Fire Chief is concerned that trained refinery personnel are not on duty at all times when the loading racks are open for service. This was not included in the list of orders to the firm, however, because the Chief does not have authority to order this particular type of compliance. He is, therefore, in the process of discussing this matter with the Workers' Compensation Board who it is believed has the authority to issue such an order.

The internal firefighting report procedures at the refinery requires the individual who discovers a fire to notify the engineer in the refinery's boiler room, who in turn pulls the fire alarm, which by code, reports the fire to the American District Telegraph, and concurrently, sounds the refinery's steam fire whistle. The American District Telegraph operator looks up the address of the code number and has it checked by his supervisor. The operator then by direct line telephones the local fire department. The Chief advises that this is a standard procedure for many industries in the lower mainland. He is satisfied with the adequacy of this procedure and feels that in the majority of cases it is the fastest method of reporting a fire to his department.

The firefighting equipment on hand at the refinery was not used because it was shut down for winterization and the fact that no company employee was present when the fire broke out (it should be pointed out, however, that the equipment could have been activated immediately by any individual who was aware of the proper valve to turn on).

The refinery has a pumper truck and considerable other firefighting equipment on order at this time. Upon delivery, firefighting facilities at the refinery, in the opinion of the Fire Department, will be adequate.

This is for the information of Council.

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REPORT OF FIRE: CHEVRON OF CANADA REFINERY  
Ft. Willingdon Ave., April 4, 1975

April 28, 1975

First call received: 0539  
#5 Pumper arrived : 0541  
Fire out : 0557

At 0539 hrs. April 4th, 1975, a citizen residing in the 4300 block Eton St., notified the Department of a fire at Chevron of Canada Refinery. Approximately 2 seconds later the fire was reported through American District Telegraph System.

Continued ...

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MANAGER'S REPORT NO. 33

COUNCIL MEETING May 5/75

REPORT OF FIRE: CHEVRON OF CANADA REFINERY Cont'd

Statements from persons involved indicate fire broke out at approximately 0535, and the delay in receipt of alarm from the refinery area can be attributed to their internal fire reporting procedures.

Subsequent investigation by Fire Prevention Officers, Provincial Fire Marshal Investigator, and refinery staff concluded that fire was caused by an overflow of diesel product onto hot muffler of truck involved causing a cooling and vapourization effect, and an expulsion of burning carbon from the muffler which caused ignition. There was no explosion to initiate fire.

Apparatus responding on first alarm included:

- Pumper #5
- Aerial 5
- Pumper #4
- Assistant Chief
- Equipment 1

Captain of Pumper #5 on approach called in a 2nd alarm as a result of heavy smoke emanating from scene, and standard operating procedures went into effect providing additional assistance, and movement of apparatus to ensure protection of affected areas.

Fire was struck out 16 minutes after receipt of 1st alarm, and crews responding to first alarm remained at scene cleaning up and doing routine work. All units were returned to quarters by 0700.

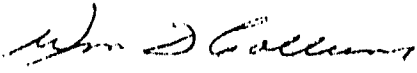
While loss figures as a result of this fire were estimated at approximately \$24,000.00, with main damage confined to truck and loading rack, this can in part be attributed to the performance of the fire crews, however, had the product involved been other than diesel or stove oil, the potential for a major catastrophe was present, and it pointed up some revealing, and questionable practises at the refinery:

- (a) there are no "trained" Chevron company employees on duty in loading rack area between the hours of 1700 and 0700;
- (b) all products are dispensed by "key" operations (approved by Provincial Fire Marshal) with no supervisory Chevron company staff of security personnel in the area;
- (c) the 1 1/2" first aid firefighting equipment was shut off at the main valve instead of the 1 1/2" valve as a winterization measure;
- (d) emergency telephones at loading rack are painted blue instead of red;
- (e) the static wire was not in a clamped on position, thereby grounding vehicle (Note: it was determined this had no bearing on this fire);
- (f) independent operators (non-Chevron drivers) who may or may not be familiar with operation of loading rack, and/or emergency procedures are permitted to operate loading rack. (The three drivers involved in this incident were non-company drivers).

Our file on this incident contains a statement to the effect that there was a malfunction of a loading/shut off device which allowed an overflow of about (metered) 41 gallons of diesel product.

There were three vehicles loading at time of fire.

This is for the information of Council.

  
W.F. Collum,  
Chief of Fire Department.

WFC/r

File: 1851