

Debriefing: Emergency Incident 11 June 2020

Background

Site: Unit 40 Oxygen Plant West

On Thursday 11 June 2020 Emergency Management West Station was activated to a confirmed fire at U 40 at the transformers. The West Fire Station responded with Timon, Eagle 2, Filter 1, Equipment Carrier and Langa 1. Upon arrival, the East Fire Station was also activated. They responded with Eagle 3 and Striker, Striker went to West Fire Station to collect DCP 1 to respond to scene.

Incident Description

Upon arrival responders found a transformer (L2-EE-110A) fully involved in fire. Two vehicles were parked right next to the burning transformer, directly exposed to the flames and heat. The transformer as well as the neighbouring transformer were de-energised and isolated. All personnel were already evacuated from scene and no injuries were reported.

Incident Times

Time Received:	11:33
Time Respond:	11:33
Time On-Scene:	11:35
Time Confirmed Transformer De-energised	11:40
Time Scene Under Control:	12:18
Time Incident Completed	13:08
Time Personnel Back at Station:	13:15

Actions Taken

- Upon arrival, Emergency Management responders moved the two vehicles from next to the burning transformer and parked them away from the scene (G. Nel & C. Rigaard).
- The Eagle was parked and setup to the South-East of the transformer.
- The filter was setup to the North-Western side of the fire.
- The Eagle deck monitor was activated on a fog to protect the vehicle while waiting for water flow to be established.
- The DCP unit was setup between the Eagle and Filter, to the West of the fire.
- Two attack lines was stretched from the Eagle to the fire.
- Once water flow was established, fire attack was done through the deck gun and two attack lines to the fire with a 1% foam mixture.
- The DCP line was charged and used to extinguish where the foam did not extinguish.
- After the fire was extinguished, the transformer and structure were cooled using water.
- The adjoining substations were investigated for possible fire spread.
- The basements were checked for possible flooding.

What went well?

- Response time to the site and approach of incident.
- Objective was achieved, fire extinguished successfully.
- No injuries were sustained before or during the incident.
- No equipment was damaged or lost.
- General sense of calmness on scene even when challenges were faced.
- Teamwork and assistance between personnel members.
- Efficiency in extinguishing fire once water flow was established.
- Eagerness to perform duties allocated.
- Fault finding and challenge resolution on scene.
- Fitness of personnel during operations.
- Training basics and skills were applied.
- Leadership and guidance from leaders.

- Actions taken to protect vehicle while waiting for water to flow.

What could have gone better?

- Hose layout, congested work area and no proper kinking done. Vehicle placement hampered actions.
- Vehicle placement, Eagle could have been reversed in rather than pull past incident. Eagle ended up in direct line of radiated heat. Officer on scene did not indicate proper placement of vehicles. Vehicle staging: Fluid overflow from the burning oil could have involved the vehicle.
- Vehicles were shifted and moved instead of adding lines.
- EM – Engineering team on scene did not wear proper bunker gear. Employees did not wear full PPE.
- One of the Engineering team gave instructions to Eagle operator directly instead of following chain of command.
- Eagle 2 had difficulty engaging the PTO. There was also difficulty when attempting to disengage the PTO back to Road gear.
- PPE, cleaning BA masks on scene because of contamination is problematic.
- Difficulty in establishing water supply. Filter vehicle breakdown.
- Equipment knowledge, knowing how to make equipment work if challenges are faced.
- DCP vehicle as first response for Electrical equipment fires.
- SCBA's to be donned on-route and worn by attack crews.
- Let the powder do the work we don't need to be on the fire.

Next Steps:

- Basic training drills with regards to scene and site layout to be conducted
- Hose layouts and responsibilities:
 - Eagle: Driver- Pump operator, crew- 125mm hose from Filter outlet to Eagle inlet, away from fire, thereafter report to Eagle for further instructions.
 - Filter: Driver- Filter operator, crew- 125mm hose from hydrant to Filter inlet, thereafter hydrant operator.
 - Rescue crew: initial attack line to fire.
 - Back-up crew: report to Eagle for further instructions.
- Vehicle placement: away from line of fire, outside collapse zone, within reach of equipment, according to incident mitigation strategy.
- Filter to be so staged to face water supply (if possible), thereby limiting probability of incorrect connections.
- Chain of command to be followed. Communications on scene to be trained, specific responsibilities to be trained and assigned, e.g. Filter operator will give instruction to hydrant operator to open hydrant.
- All vehicle defects to be relisted and resubmitted for rectification to vehicle maintenance teams and fleet co-ordinator.
- Wearing of PPE to be complied with all on scene.
- Competent operators and personnel to be developed into confident operators and personnel.
- DC to ensure vehicles required turn out to incidents.
- SCBA wearing to become mandatory during training – we train like we work.
- DCP training prop 8.

END