

## Tank Full Surface Fires

Ref. no: IAP 18  
 Date approve: 01 June 2023  
 Rev: 1

### RESPONSE STRATEGY: PREVENT INCIDENT ESCALATION & MINIMIZE IMPACT

Confirmed fire – Shutdown heat source and system accordingly – Isolate pump activate spray – & cool exposure - Evacuation to assembly point

Initial	Actions	Equipment / Resources	Details
<b>At control room</b> Call Centre IC (IC) (IC) Call Centre IC	Request confirmation and notify STC. Get details of incident. Take command & control and give direction to ERT. Instruct Control Operator to activate siren / alarm & announcement. Secure system & area. Activate Fire Water system Notify as per notification list Consider stopping operation at facilities & consider ESD	Two-way radio CCTV	The name of the tank which is affected and the area the tank is situated. Priorities: <b>PEAR</b> Notify authorities soonest Notify COMCEN within 1 hour Refer to plant operation manual Refer to Emergency Response Plan Refer to emergency shutdown procedure
<b>1<sup>st</sup> Response</b>	<b>Actions</b>	<b>Equipment / Resources</b>	<b>Details</b>
<b>At location</b> ERT ERT ERT ERT Security Evacuation Marshalls	Size up / zoning & determine fire source. Set up FCP away minimum 10 times the diameter of the tank. Communicate position of FCP and implement Zoning. Consider wind direction , activate tank sprays downwind or apply protection to exposed tanks using large diameter monitors and portable monitors. Request for support & advise OSC to declare Tier 2 / 3 Determine support from external resources. Arrange for Foam and Equipment before commencing foam attack. Set up for foam pourer or base injection if not full can fire. Use the correct pressure settings. If full can fire and bund fire - Extinguish fire at bund first before foam application on tank. Position Monitor after considering wind direction. If 2 monitors are being used -co-ordinate the attack to form a foot print. Close main gate & Admin gate to stop all ingress except emergency vehicles / direct all external assistance to staging area. Support EHQ, Staging Area and Media Centre when needed. Check headcount. Ensure non-responders have evacuated & direct all external assistance to staging area.	Fixed system ERT with full PPE & gas detector. FCB Foam Tankers and Monitors  CCTV at control room	Risk & Potential. Determine any casualties @ number & location Wind direction & weather condition Stand-by ERT, fire trucks, ambulance, FCP to be identified according to wind direction Refer to Fire pre-plan  Monitor vehicles & people movement through CCTV
<b>2<sup>nd</sup> Response</b>	<b>Actions</b>	<b>Equipment / Resources</b>	<b>Details</b>
<b>At location</b> Evacuation Marshalls Staging Officer ERT Support Team ERT EMT IC	Check personnel evacuation status through headcount system at security Manage the staging area and support the ICs instructions.  Brief external support required and brief external supports like (EThekwini Metro Fire / Metro Police, Disaster Management and City Health) on current situation. Consider pump out product until burn out occurs Apply preventive foam blanket to cover any spillage Cool tank walls (if required) to assist final extinguishment Managing incident as ruled out in OSEPs ERP Advice and request ED to declare stand down and activate all clear siren	Headcount system record at assembly point.  Ranger Monitor Ironman First Responding Fire Truck Foam Tanker	External responders report to staging area / await instructions from the IC Ensure ERT / external response wearing full firefighting PPE.  Monitor foam breakdown once the fire is extinguished, Consider MUTUAL AID.  Consider Radiant Heat and required cooling.
<b>3<sup>rd</sup> Response</b>	<b>Actions</b>	<b>Equipment / Resources</b>	<b>Details</b>
<b>Outside Refinery</b> ED IC ED	Update response and Notify JOC chairperson of escalation to Tier 3 and required activation of second JOC. Notify Cape Town Crisis Centre. Send a Representative to the JOC at the Disaster Centre. Perform overhaul before advise ED to declare stand down. Declare stand down and activate all clear siren	Two way Radios/Telephones	Refinery JOC will deal with the incident within the refinery and the Disaster Management JOC will direct and Control Operations outside of the refinery whilst both JOCs remain in contact.
<b>Incident potential hazards</b>	Consider the rapid escalation of the fire incident and the possibility of an explosion. Consider Boilover where applicable. Consider structure and associated equipment collapse due to fire exposure and material strength degradation.		
<b>Other concern / hazards</b>	Surrounding tanks may be threatened as well as the neighbouring community. Monitor Foam stocks, quantity of water available and fatigue management. Monitor run off into the ETP. Public Affairs to deal with Media and public.		