



The emergency plan for the pressure reduction station in Kafr El Zayat

- The presence of more than one technician within the station

• In case of emergency follow the following steps :

- 1. The Senior Technician shall contact the Engineer / Emergency Officer or responsible Engineer or call emergency number (129) to explain the details of the existing condition and follow the instructions**
- 2. The other technician deals with the problem inside the station .**
- 3. The assembly area is next to the main gate inside the station.**



s.	Faults occurring in the station	procedures for dealing with them	Possible reasons	Control measures
1	A break in one of the gas lines inside the station (Emergency level 3)	<ol style="list-style-type: none"> 1. The engineer contact immediately with officials. 2. The need to contact the auxiliary devices (rescue - firefighter - ambulance ... etc) 3. Evaluate the position of the work application E. S. D or not. 4. The breakage or infusion is treated by closing the valves before and after the infusion place, taking into account the direction and speed of the wind until the infusion is repaired. 5. In the case of a fire due to breakage or infusion , the part of the fire is gradually isolated until we get less flame possible then the individuals extinguish the flame using fire extinguishers and complete the isolation of the part of the fire to avoid a fire inside the pipes. 	Natural disasters or security problems (earthquakes, lightning, fires, riots, sabotage)	<ul style="list-style-type: none"> - The presence of fire extinguishers - coordination with the rest of the auxiliary agencies (firefighter - rescue - civil defense).



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2	<p>A break occurs in the main or daily odor tank or any link of the unit's add odor connections (Emergency level 3)</p>	<p>1- Informed Engineer to assess the situation and contact the officials.</p> <p>2-Do not increase the rate of spills by closing the valves and the use of appropriate respirators</p> <p>3- The material is absorbed by placing sand on the spill site.</p> <p>4- Hypochlorite sodium is used to produce a process equivalent to odor.</p> <p>5-Use water sprayers to isolate the material and not use any flame to prevent the fire taking into account the wind direction and speed</p> <p>6- Direct the amount of odor spilled into the special drainage tank and compare it with sodium hypochlorite.</p> <p>In case of fire: Use of powder extinguishers with the use of a suitable gasket for the type of gas and respirators suitable for this.</p>	<ul style="list-style-type: none"> • Natural disasters or security problems (earthquakes, lightning, etc.). • Human error when handling odor additive unit. 	<ul style="list-style-type: none"> -The presence of calcium hypochlorite in the plant to neutralize the odor substance. - presence of Fire extinguishers. - The presence of a special drainage tank in the station.



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3	<p>Turn off the heater completely (Pilot, Burner) (Emergency level 1)</p>	<p>1-The responsible engineer shall be notified to assess the situation. 2 - Attempt to restart the heater again by members of the shift stuff. 3. If the heater is not responding to the operation attempt, the pressure of all the existing organizations shall be reviewed by: a-Temperature Switches b- pressure Switch c- Level Switches 4- Emergency and urgent maintenance of the heater shall be carried out in accordance with the maintenance instructions of this unit.</p>	<p>Result of malfunction in any of the following: a-Temperature Switches b- pressure Switch c- Level Switches d- Pressure Regulaturs</p>	<p>Monitor both the pressure exit and gas exit temperature.</p>



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4	<p>Increase the condensate level within the fluid separator (Emergency level 1)</p>	<p>1- Informed responsible Engineer to assess the situation and contact the officials. 2-The responsible engineer will contact GASCO to find out why gas condensate has increased to coordinate with them to what extent the gas will continue to flow. 3- Open a valve (Drain Tank) to get rid of these condensates. 4- If the Diaphragm Actuator is not opened to drain the condensates inside the Drain Tank, the By-Pass on this unit must be manually opened after making sure that the gas is entered again dryly.</p>	<p>Failure or maintenance of the main feeding source(gasco)</p>	<p>Observe the shift stuff to separate the fluid by:- Liquid level ruler- - Pressure difference indicator (DPG) - Must follow the maintenance programs of this unit.</p>
5	<p>• Increase the solid objects inside the filter (Emergency level 1)</p>	<p>1- Informed responsible Engineer to assess the situation and contact the officials. 2- The responsible engineer contact GASCO to find out why gas objects increase to coordinate with them to how long the gas will continue to flow in this picture. 3-operating the reserve filter line. 4 - Open and clean the filler filter according to the instructions of maintenance of this unit.</p>	<p>Failure or maintenance of the main feeding source(gasco)</p>	<p>Observe the rosary individuals by reading (DPG) on the filter body. - Cleaning and changing filter according to maintenance instructions.</p>



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6	Lower pressure entering the pressure reduction station (Emergency Level 2)	<p>1- Informed responsible Engineer to assess the situation and contact the officials.</p> <p>2-The responsible engineer will contact GASCO to determine the low pressure and coordination with them to what extent the gas flow will continue with this pressure</p> <p>3-Notify customers (factories, car supply stations, etc.) of cutting off gas.</p> <p>4-The responsible engineer raises the output pressure of the station to the maximum pressure allowed.</p>	There is a break in GASCO line or emergency maintenance work at GASCO.	Observe the shift stuff to enter pressure to the station.
7	Increase the rate of flowing above the normal rate while observing the outside pressure. (Emergency level 3)	<p>1- Informed responsible Engineer to assess the situation and contact the officials.</p> <p>2-The responsible Engineer will contact the emergency to inquire about the presence of any broken lines or organizations and coordination with them until the repair</p> <p>3-The engineer reduces the exit pressure to the lowest allowed pressure until the repair.</p> <p>4-Follow the procedures of the maintenance plan for the region in the event of a broken lines</p>	Indicates a breakage or infusion of a major transport line or organization.	<p>-Monitoring the quantities of gas consumed (Flow Rate)</p> <p>- Outlet Pressure Monitoring (every half hour)</p>



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8	Lower external pressure with lower flowing rate (Emergency level 1)	<p>The members of the staff contact the responsible engineer to assess the situation.</p> <ul style="list-style-type: none"> - The station personnel review the status of the Slam Shut and try to open it if it is closed. -Station personnel periodically and immediately inspect all units P. R. S to make sure they all work properly: - *Review the level of water inside the fluid separator (Level Glass) *DPG OF Filter *Out let Gas Temperature of Heater * If the two automatic lines are malfunctioning, the shift staff opens the manual line 	<p>Stop working for one line by correct way:</p> <ul style="list-style-type: none"> -increase the quantity of liquid by steady. -increase the solid objects inside filter. - the heater stop working 	<p>Observation by The members of the shift concerning the readings of:</p> <ul style="list-style-type: none"> -the liquid level inside liquid separator. - consumption rate m3 / s - output pressure - reading (DPG) for filter - the temperature of output gas
9	Lock the safety lock (Slam Shut) of the automatic reduction line (Emergency level 1)	<ol style="list-style-type: none"> 1- The members of the staff contact the responsible engineer to assess the situation. 2. If the Slam Shut is closed by one of the automatic reduction lines, the Stand-By line is operated automatically. 3. In the case of a two-line malfunction, the manual line is operated and the exit pressure is monitored continuously to ensure that the gas reaches the required pressure and quantities. 4 - Emergency and urgent maintenance of the reduction lines in accordance with the maintenance instructions of the unit. 	<ul style="list-style-type: none"> - Pilot Damage - Restrictor failure - Diaphragm Damage <p>Of the active regulator or the monitor regulator</p>	<p>Observation by The members of the shift concerning the readings of:</p> <ul style="list-style-type: none"> - Pressure exit. - Flow rate m3 / s - Follow the programs of maintenance (simple- full) of the reduction unit.



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10	The odor adding pumps stopped working automatically (Emergency level 1)	<p>1-Turn on the add-on pumps (Manual) at appropriate rates.</p> <p>2 - Contact the responsible engineer to assess the situation and urgent maintenance work for this unit.</p>	<p>- Damage of any card inside odor addition unit</p> <p>- There is a problem with the odor adding pumps.</p>	<p>- Observation of the Odmoaic print by the members of the shift</p> <p>- odor tank pressure observation (daily and main)</p> <p>- Follow maintenance programs (simple and complete)of odor addition unit</p>
11	The power supply is cut off from the pressure reduction and odor adding station (Emergency level 1)	The members of the shift operate the electric generator of the reduction station to ensure the operation of the odor addition unit.	-----	The existence of an alternative source of electricity.



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12	Electric short circuit causing electrical fire inside the station P. R. S (Emergency level 3)	1- The responsible engineer shall be contacted to evaluate and inform the officials. 2- The electricity is completely isolated from the station. 3 - Ensure the isolation of the injured part. 4 - The speed of use of CO2 extinguisher.	-----	The presence of a CO2 extinguisher.
13	There are sit-ins and strikes (Emergency level 3)	1 - sit-ins outside the station in accordance with the law criminalizing the violation of freedom of work and facilities and does not affect the work of the station as it is placed on the operating mode permanently. 2- Workers who are not participating in the sit-in shall not be prevented from entering the station. 3. In case of any violation of the station or any individuals within it, contact the authorities responsible for the insurance of vital installations.	-----	The existence of appropriate means of communication.



S.	Faults occurring in the station	procedures for dealing with them	Possible reasons	Control measures
14	Terrorist acts or riots (Emergency level 3)	1- The gates of the station shall be closed to prevent entry of any personnel. 2 - Contacts with the entities responsible for the protection of vital installations.	-----	The existence of appropriate means of communication.
15	An employee injury (Emergency level 3)	1. In the case of light injury (which does not require medical care in a hospital), the first-aid kits in the station are used. 2. In the case of intermediate injury (need medical care and the casualty is not unconscious and able to move) first aid is done and then transferred to the nearest hospital. 3. In the case of severe injury (the casualty is unconscious or unable to move) the injured person is immediately transferred by ambulance to the nearest hospital.	Any state of emergency which is likely to have a fire, explosion or riot.	- Presence of first aid tasks in the station and training of workers on their use. - The existence of emergency numbers declared in a visible place - The existence of appropriate means of communication

- An emergency experiment is conducted on the previous scenarios at the rate of one experiment per month in the same order of scenarios.