

What is that flare?



A flame burning at the top of a pipe stack can look alarming. Although the sight of flares and the rumbling noise that sometimes accompanies flaring can cause concern, please remember that flaring is an important safety measure and environmental control tool that keeps our facilities running safely.

How do flares work?

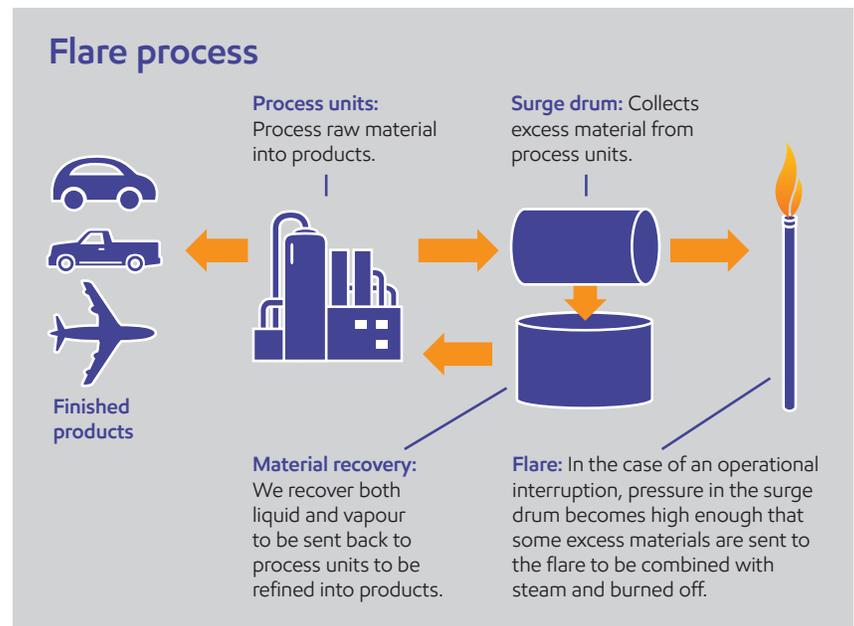
During normal operations, materials from the process are collected and routed to recovery tanks for further processing. There, they are converted into products such as gasoline and jet fuel. However, when the operation experiences an interruption, such as unplanned loss of power, some of these materials have to be collected and routed to the site flare system. There, vapours are combined with steam and burned off. This system ensures maximum combustion of hydrocarbons while minimizing emissions into the air.

What is black smoke?

Black smoke from the flare occurs when an insufficient amount of steam is available to effectively burn the hydrocarbons sent to the flare. Imperial personnel monitor the flare system via cameras in the control room so that steam flowing to the flares can be adjusted as needed. In the rare instance of a sudden release of hydrocarbons to the system, there may be a delay in response before sufficient steam can be supplied to the burning process, and black smoke may result.

What is that rumbling noise?

Occasionally, during flare activity, a rumbling sound, much like far-off thunder, resonates from the system. The rumbling that may be heard is the result of the turbulent mixing of vapours, air and steam during the flaring process.



Regulating emissions?

Provincial governments strictly regulates emissions from the flare stacks and limit the density and duration of allowable smoke. In recent years, Imperial has taken steps to recover and reprocess excess materials to lessen the flaring on a day-to-day basis. However, use of the flare system is still essential to the safe operation of our facilities.