

YOUR FREQUENTLY ASKED QUESTIONS

Does the Fife Ethylene Plant produce toxic chemicals?

No. We produce ethylene, a non-toxic naturally occurring gas, and a very small amount of a subsidiary product called Naptha (used to make e.g. lighter fluid, high octane gas and metal cleaner).

What is the white 'smoke' I see above the plant?

It isn't smoke.

It is simply steam, or water vapour from our cooling tower, exactly the same as a rain cloud.

Can I smell a sulphur from the plant?

FEP does not have any sulphur on the facility. This smell must be from another source.

Are the emissions from the plant impacting air quality?

No. Multiple air quality reports and modelling studies confirm that FEP has no significant impact on air quality. This includes reports from SEPA, Fife Council, NHS, Independent Air Quality Monitoring Group, and Independent Specialists.

Do emissions at FEP cause cancer?

No. There is absolutely no evidence to show this as confirmed in NHS Fife Reports in both 2012 and 2019.

Will you consider installing real time air monitoring at FEP?

We do not believe real time air monitoring will add any value. There is extensive, independent information already available that comprehensively concludes that there are no air quality issues associated with the plant. We will however focus on improving awareness of the extensive air quality data to help address any community concern.

We will continue to monitor combustion processes to confirm that what is being emitted remains within legislation.

Fife Council continues to fulfil its obligations under the Environment Act 1995 and engages a specialist consultant to review local air quality annually. This data has, to date, focused their air quality monitoring on traffic – which is shown to impact air quality.

We will use sound scientific data to invest in actions – such as our BAT Programme – that further improve our environmental performance, and which will actually make a difference to local communities.

Why do you need to flare?

Our plant is a single line process – ethane gas enters at one end and is then turned into ethylene liquid gas that exits at the other.

The gas flows constantly down a pipeline from the North Sea so it's not possible to just push it back up.

If a piece of machinery goes offline or needs maintenance we have to divert the gas to the flare while our team work on the issue.

Flaring allows us to keep our other machinery running, which helps us to come out of the flare much quicker than if we stopped these machines and then had to re-start.

Is flaring safe?

Yes. Flaring is, itself, a safety mechanism. It is by far the safest and most environmentally responsible process to manage excess gas, which is why it is used all over the world.

Are emissions from the flare dangerous?

No. Flaring has been demonstrated by independent specialists to have no impact on local air quality.

A clean burning flame emits nothing more than water vapour and CO₂.

Independent modelling has shown that even if our flare was to burn smoky for 365 days at high volume (this would never happen), the amount of materials released is so insignificant that they do not pose any risk to local air quality or health.

Why have you flared more frequently over recent months?

We experienced technical issues that caused some of our machinery to go offline. These issues meant that our reliability levels were not where we wanted them to be – the plant has always operated safely.

What difference will your BAT (Best Available Techniques) programme make to communities?

We believe it will achieve noticeable difference.

Twelve of the 14 steps are designed specifically to prevent or reduce flaring events.

The other two are designed to reduce concern and frustration on the occasions when we do need to flare. A new state of the art flare tip, in conjunction with preventative actions, will create a smaller, fatter, lazier flare thus reducing noise, light and vibration. See below for our plans for a Ground Flare. (See more on Fact Sheet 4)

Are you planning to install a ground flare?

Yes. Our final step of our Best Available Techniques programme is to engineer an enclosed ground flare with the capacity required to ensure we avoid using our elevated stack – this alone will take away much of the visual and vibration element of flaring known to cause concern and frustration in the community.

What are you doing to make reliability better?

We are investing an additional £140m in 2019/20 to reduce the probability of process upsets which may result in flaring.

We are also delivering a multi-million pound programme called 'Best Available Techniques' that will reduce the frequency and amenity impact of flaring – this will improve processes, technology, training and will also see a new elevated flare tip and enclosed ground flare introduced.

Is your £140m investment simply a reaction to community pressure?

No. This additional investment has been in planning for over two years and is part of a regular cycle to upgrade key infrastructure and introduce new technologies that will significantly improve operational reliability and performance.

Is the plant properly maintained?

Yes. Just like any complex machinery – aircraft, ships, power stations or cars – the plant needs servicing, repair and upgrades throughout its life to maintain safety and reliability. This is why we spend c£20m every year on routine maintenance (this is separate to the additional £140m investment in 2019/20).

Is the plant now beyond its intended operational age limit?

No. FEP is actually one of the youngest plants of its kind in Europe. Other similar facilities are operating safely at two or even three times its age.

Historical references to a '25-year lifespan' were only in relation to the expected economical supply of gas from the North Sea – this was subsequently extended.

Is the plant safe?

Yes. We put safety above everything else. Since we began operations, we have never experienced a major incident. We are also one of the most regulated industries anywhere in the world. We would simply not be allowed to operate if we did not do it safely.

Why did you decide to temporarily shut down your operations in 2019?

Two of the three boilers we operate experienced mechanical failure earlier this year. Each boiler is the size of an average house, so our repair and replace programme took a lot of engineering.

We took the time required to deliver this to the highest standard – and also undertook a range of other work - ensuring that when we re-start we are as reliable as we can be.

Mossmorran is a COMAH Site. What does that mean?

Mossmorran has been a COMAH (Control of Major Accident Hazards) designated facility since the day it opened – this is because the facility processes natural gas.

It indicates a strictly regulated facility where the operators are required to implement the highest of safety standards.

Does FEP have a future in Scotland?

FEP has a long-term future as a competitive asset, contributing to both the local and national economies. Furthermore, we believe our ethylene product has a key role to play in a sustainable future, supporting materials that make future technologies such as electric vehicles more efficient and effective.