What’s coming out of that stack?

Refineries use water to heat and cool
Water is used throughout refineries to heat fluids during the refining process and to cool various production units while they perform refining functions. In some units water temperatures reach more than 140 degrees Fahrenheit.

We reuse water to conserve it and that makes steam
In order to conserve water we continually reuse it, and that involves sending it to be cooled and stored in cooling towers. The cooling process causes some of the water to evaporate. As it mixes with the airstream on its way out of the cooling stacks at the top of the towers, it forms the visible “cloud” over the cooling units, which is usually just vapor or steam.

Sometimes mist forms on the ground
Occasionally, water vapor rising out of the refinery cooling towers is carried by the wind and condenses as a mist that settles back to the ground. When the mist bakes in the sun it can leave water spots and minerals behind that you may see on surfaces like cars.

Did you know?
Every refinery is closely monitored by federal, state, and local agencies and we work hard to meet and exceed air quality standards. Our track record of outstanding compliance speaks for itself and we will continue to uphold our commitment to efficient and environmentally-friendly operations.

The steam “cloud” changes based on weather
The “cloud” changes in appearance based on the temperature of the water entering the tower and the weather outside. For example, the hotter the water, the more evaporation needed to bring the temperature down so a larger “cloud” forms. On a humid day, when there is already a lot of moisture in the air, the water can’t be absorbed as quickly so the “clouds” are darker and look heavier.