Volkswagen admitted in 2015 to installing software designed to reduce emissions during lab tests in 11 million diesel engines worldwide.

As Volkswagen faces the wrath of car owners in a mass "dieselgate" lawsuit on its home turf, here's a look at how emissions cheating was uncovered and the fallout for the auto giant:

2014

US researchers at the University of West Virginia discover that certain VW diesel cars emit up to 40 times the permissible levels of harmful nitrogen oxide when tested on the road.

2015

September 18: The US Environmental Protection Agency accuses VW of duping diesel emissions tests using so-called "defeat devices".

September 22: Volkswagen admits installing software designed to reduce emissions during lab tests in 11 million diesel engines worldwide. VW shares plunge by 40 percent in two days.

September 23: Chief executive Martin Winterkorn steps down but insists he knew nothing of the scam.

2016

April 22: VW announces a net loss for 2015, its first in 20 years, after setting aside billions to cover the anticipated costs of the scandal.

June 28: VW agrees to pay $14.7 billion in buybacks, compensation and penalties in a mammoth settlement with US authorities. The deal, which covers 2.0 litre diesel engines only, includes cash payouts for nearly 500,000 US drivers.

September 21: The first VW investors file lawsuits in a German court seeking billions in damages. They accuse the automaker of failing to communicate about the crisis in a timely way.

December 8: The European Commission launches legal action against seven EU nations including Germany for failing to crack down on emissions cheating.

2017

January 11: VW pleads guilty to three US charges including fraud and agrees to pay $4.3 billion in civil and criminal fines.

As part of the plea deal, VW signs up to a "statement of facts" in which it admits that the cheating dates back to 2006, but it remains unclear how much the top brass knew about the scam.

February 1: Car parts maker Bosch, which supplied elements of the software, agrees to pay nearly $330 million to US car owners and dealers but admits no wrongdoing.

VW says it will pay at least $1.2 billion to compensate some 80,000 US buyers of 3.0 litre engines as well as buying back or refitting their vehicles.

August 25: A Michigan court sentences VW
engineer James Liang to 40 months in prison and a $200,000 fine.

December 6: VW executive Oliver Schmidt, who was arrested while on holiday in Florida, is sentenced to seven years in jail.

October 16: Audi agrees to pay a fine of 800 million euros.

November 1: Consumer organisation VZBV files mass lawsuit whose hearings open Monday.

November 16: VW launches far-reaching electrification strategy.

2018

February 23: VW roars back to profit after record sales in 2017.

February 27: A German court paves the way for cities to ban the oldest diesels from their roads to combat air pollution.

April 12: VW brand chief Herbert Diess hastily replaces CEO Matthias Mueller after he too lands in prosecutors' sights.

May 3: Winterkorn is indicted in the US, accused of trying to cover up the cheating.

June 13: VW agrees to pay a one-billion-euro fine in Germany, admitting its responsibility for the diesel crisis. The scandal has now cost the group over 27 billion euros.

June 18: Rupert Stadler, CEO of VW's Audi subsidiary, is arrested in Germany, accused of fraud and trying to suppress evidence.

September 10: Shareholders' case against VW claiming nine billion euros of damages opens in Brunswick.

March 15: US market watchdog SEC announces legal action against VW.

April 15: Winterkorn and four other managers are charged with "serious fraud" as well as unfair competition and breach of trust.

May 7: Porsche agrees to pay a fine of 535 million euros.

July 31: Stadler and three former Audi managers are charged with fraud.

September 24: Present VW chief Herbert Diess, supervisory board chairman Hans Dieter Poetsch and Winterkorn are charged with market manipulation.

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