STEP 5 UNDERTAKING DEFINITIONAICLARIFICATION - BE CLEAR!!!

**Definitional Clarification 1: Clean Diesel Vehicles**

In the given context, "clean diesel vehicles" refers to the marketing term used by Volkswagen to promote their diesel vehicles as environmentally friendly and compliant with emission standards. However, it later became evident that these vehicles were equipped with the defeat device, which allowed them to pass emissions tests artificially while emitting higher levels of pollutants during normal driving conditions.

**Definitional Clarification 2: U.S. Emissions Testing**

U.S. emissions testing refers to the regulatory procedures and standards set by the United States Environmental Protection Agency (EPA) to assess the level of pollutants emitted by vehicles. These tests aim to ensure that vehicles meet specific emission limits, contributing to cleaner air and reduced environmental impact. However, the defeat device designed by Volkswagen was specifically calibrated to recognize and manipulate the engine's performance during these emissions tests, deceiving the regulators and compromising the accuracy of the test results.

**Definitional Clarification 3: Calibration**

Calibration, in the context of the Volkswagen Diesel Emissions Scandal, refers to the process of adjusting and fine-tuning the software in the engine control unit (ECU) to optimize engine performance. In the case of the defeat device, calibration involved programming the software to detect specific patterns or conditions that indicate the vehicle is undergoing emissions testing. This allowed the device to alter the engine's behavior during testing, reducing emissions to pass the test, while during regular road use, emissions levels were significantly higher. The calibration process was a critical step in implementing and refining the defeat device's functionality to achieve the desired deceptive effect.

Step 6: CONDUCTING ETHICAL ANALYSIS – APPLY”RULES”: IDENTIFY AND ORDER

**Engineer side:**

1. Environmental protection
2. Duties to the public

**Principles:**

1. Avoid damage to the environment and living beings that would result in serious negative consequences, including long-term ones, to human life;(3)
2. Keep the public informed of their decisions, which have the potential to seriously affect the public, and to be truthful and complete in their disclosures;(6)
3. ensure that fundamental human rights are not negatively impacted as a result of their work with technology;(2)

**Employee side:**

Organizational ethical principles

1. avoid producing unnecessary harms to those in and outside of their organizations;(1)
2. ensure that all relevant laws and regulations are followed within their organizations;(3)
3. ensure that all legitimate corporate contracts are upheld;(6)

**Employees ethical principles:**

1. Avoid actions that harm the corporation in acting on behalf of the organization;(4)

Action is justified because Liang is an engineer -> ethical responsibilities as an engineer