

Initial Project Summary – Indorama Eleme Fertilizers and Chemicals Limited

Project Location: Eleme, Port Harcourt, Rivers State, Nigeria

Name of Applicant: Indorama Eleme Fertilizers and Chemicals Limited.

Project Description: The Project involves development of a third train for the production of ammonia at the rate of 2,300 metric tonnes per day (MTPD) and granulated urea at the rate of 4,000 MTPD (Line 3 Plant) at the existing petrochemicals complex of Indorama Eleme Fertilizer and Chemicals Limited (IEFCL). The third train will be constructed adjacent to the first and second trains with a similar production capacity. The first train was commissioned in 2016, with funding from IFC and other DFIs. Natural gas will be used in a steam reformer to generate hydrogen which will then be combined with nitrogen from the air to manufacture ammonia. Ammonia will then be reacted with carbon dioxide from the steam reformer to manufacture granulated urea. Natural gas is currently being piped to IEFCL's petrochemicals complex from nearby gas fields. The gas supply company will transport gas for the third train by adding another pipeline in the pipeline corridor in an existing right-of-way.

The Line 3 Plant will contain steam production, cooling tower, water treatment, product handling, power generation, nitrogen plant, air and instrument air, passive and active firefighting systems, along with product storage and material handling facilities.

In addition, the expansion of production facilities will result in an estimated surplus of 400 MTPD of ammonia. To facilitate exports of fertilizer and ammonia, IEFCL will also undertake the construction of a dedicated jetty, the Line 3 Jetty. Positioned approximately 20 kilometers from the fertilizer production site, at the Onne Port Complex, this planned jetty will expand Indorama's existing export infrastructure capacity by providing necessary storage and export capabilities for the surplus ammonia and bulk urea produced by Line 3. The jetty is considered an associated facility to the Project.

The Indorama complex, the site of the Line 3 implementation, features state-of-the-art facilities such as a captive gas fired power unit, utilities, an effluent treatment plant, storage tanks, bagging, a warehouse, and other supporting facilities. The Project site, located within a wider industrial complex, neighbors six communities, comprising a population of around 62,000 residents.

There are approximately 1,200 workers currently employed at Indorama's Nigeria facility. The Project will add 172 positions. A complaint on behalf of IEFCL employees was filed with IFC's CAO in 2018. The CAO is currently undertaking a compliance review of the case and is in the monitoring phase.

Environmental and Social Categorization and Rationale: The Project has been screened as Category A because it requires modifications to a major manufacturing complex and has the potential for accidental releases of methane, hydrogen, and ammonia. In addition, the Project's greenhouse gas (GHG) emissions have been estimated to be 688,000 tons of carbon dioxide equivalent per year which are greater than DFC's threshold of 100,000 tons of carbon dioxide per year for Category A projects.

The major environmental and social risks associated with the Project include the potential for ammonia and particulate matter releases beyond the Project boundary, occupational health and safety risks associated with the handling of hazardous materials (including hydrogen, ammonia, and methane), potential risks to community health, safety, and security (including managing project induced influx), and labor management.

Environmental and Social Standards: DFC's preliminary environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following of the International Finance Corporation's (IFC) 2012 Performance Standards (PS):

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- PS 2: Labor and Working Conditions;
- PS 3: Resource Efficiency and Pollution Prevention; and
- PS 4: Community Health, Safety, and Security.

Based on the information currently available, the Project will not acquire land as the Sponsor already owns the Project site, which is located in an industrial estate and no significant biodiversity resources have been identified at or near the Project site or the jetty. In addition, there are no indigenous people or cultural resources at or near the Project site. Therefore, PS 5, 6, 7, and 8 are not expected to apply to the Project.

Environmental Guidelines applicable to the Project include: International Finance Corporation's (IFC) General Environmental, Health, and Safety (EHS) Guidelines (April 2007) and IFC's Nitrogenous Fertilizer Production EHS Guidelines (2007).

Location of Local Access to Project Information: A copy of the Environmental and Social Impact Assessment (ESIA) may be found at the following location:

Indorama Eleme Fertilizers & Chemicals Ltd
Indorama Petrochemicals Complex, Eleme
East -West Expressway, Eleme
PMB-5151, Port Harcourt, Rivers State
Nigeria

Federal Ministry of Environment, EIA Division, Environment House
Independence Way, South Central Business District-FCT
Abuja, Nigeria