Initial Project Summary – Tetra Phase 2 Helium and LNG Production Project

Project Location: Virginia, Free State, South Africa

Name of Applicant: Renergen Limited

Name of Project: Tetra Phase 2 Helium and LNG Production Project

<u>Project Description</u>: The Project involves the expansion of Tetra's Helium and LNG Production and is located in Virginia, Free State, South Africa.

The Project will expand helium and liquefied natural gas (LNG) production at the Borrower's existing Virginia Gas Project. The Phase 2 targets a production capacity of five (5) metric tonnes of liquid helium per day and 670,000 cubic meters per day per day of LNG. The LNG produced by the Project will be sold locally. Tetra's production rights cover an area of 187,000 hectares. No thermal power generation has been included in the current Project scope and an ESIA on power generation will be conducted when Tetra decides to secure power supplies from an Independent Power Producer (IPP).

The surrounding areas are primarily industrial and/or commercial areas as well as large commercial farms which border the access roads.

<u>Environmental and Social Categorization and Rationale</u>: The Project has been reviewed against DFC's categorical prohibitions and determined to be categorically eligible. The Project is screened as Category A because it involves a major expansion of an existing LNG and helium production facility which has the potential to cause significant and irreversible impacts which need to be adequately mitigated. Primary environmental and social issues of concern include worker and community safety.

The major risks are associated with the potential for accidental releases of methane (the primary component of natural gas) from process upsets resulting in fire and explosion, but such risks have been determined to be at acceptable levels at the Project fence-line because of the moderate gas pressure (with a maximum pressure of 275 bars) and the volume of gases (helium and LNG) being produced. In addition, there are also potential impacts and risks commonly associated with hazardous materials management, solid and hazardous waste management, occupational health and safety, and community health, safety, and security.

<u>Environmental and Social Standards</u>: 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 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;

The Project is an expansion of an existing helium and LNG production plant, no land acquisition is necessary. The Project will negotiate compensation for any temporary loss of cropland during

drilling and installation of underground gas pipes; as during Phase I, any land-user who does not agree to the compensation offered will be dropped and a nearby replacement site selected. No involuntary land acquisition will be required. The Project will not adversely impact biodiversity, Indigenous Peoples, or cultural heritage. Therefore, PS 5, 6, 7, and 8 are not triggered by the Project at this time.

IFC's Guidelines applicable to the Project identified under PS 3 include: General Environmental, Health, and Safety (EHS) (2007), Gas Distribution Systems (2007), Crude Oil and Petroleum Product Terminals (2007), and Liquefied Natural Gas Facilities (2017). Other international standards applicable include: National Fire Protection Association (NFPA) Codes 59A (Standard for the Production, Storage, and Handling of Liquefied Natural Gas [2016]) and 704 (Standard System for the Identification of the Hazards of Materials for Emergency Response-Liquefied Natural Gas), and the U.S. 49 Code of Federal Regulations Part 193 for Liquefied Natural Gas Facilities: Federal Safety Standards (CAS Registration Number 74-82-8).

The Project's direct greenhouse gas (carbon dioxide equivalent) emissions have been estimated to be less than 100,000 tons of carbon dioxide equivalent (CO_{2eq}) per year.

<u>Location of Local Access to Project Information</u>: The Project ESIA will be available for review at:

Virginia Public Library,

47 Virginia Gardens,

Virginia,

9431

and

Welkom City Library,

Welkom Central,

Welkom.

9460