Summary Initial Environmental Examination


Prepared by: Qingdao Jierui Environmental Protection Technology Service Co., Ltd
For: Technology-Introduction Office of Shandong Provincial Department of Agriculture

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Asian Development Bank
Summary of Non-core subproject IEE for Wandefu

1. 项目名称（Name of project）:
   Shandong Wonderful Industrial Group Co., LTD Centralized biogas project

2. 项目位置（Location of project）:
   THE EAST OF HUA FENG RD AND NORTH OF YI HONG RIVER RD, KENLI, DONGYING, SHANDONG, CHINA

3. 鉴定单位（Evaluation unit）:
   Qingdao Jierui Environmental Protection Technology Service Co., Ltd.

4. 项目投资规模（Project investment, US$）
   4.2653 million

5. 建设内容（Construction content）:
   (1) location, type and scale of farm, and the amount of waste (位置，农场类型和规模和废物的数量)
   Location: The projects in the east of huafeng rd and north of yihong river rd, kenli , dongying, shandong, China . Type and scale of the farm: 30,000 live pig farms in the year
   Amount of waste: After the completion of the project, it can dispose Daily treatment of biogas 36000m3, annual treatment of biogas 10 million 800 thousand M3, annual biogas production capacity of 19 million 440 thousand kWh. The amount of SO2 produced by the project is 1.54t/a, the amount of NOx generated is 17.93t/a, the amount of dust generated is 1.12t/a, and the annual output of water separator is 150m3/a.

   (2) type of biogas plant, equipment used（沼气厂和使用设备的类型）
   Type of biogas plant: The project mainly purchased a set of bio desulfurization biogas purification system and 1 biogas generating units.

   (3) amount of biogas generated, uses of biogas, uses of slurry and sludge（沼气产量，沼气的使用，沼渣沼液的使用）
   Daily treatment of biogas 36000m3, annual treatment of biogas 10 million 800 thousand M3, annual biogas production capacity of 19 million 440 thousand kWh. The concentration and drying of biogas slurry can become a high-quality organic fertilizer.

   (4) construction and operational period（建设期和运作期）
   The project construction period is in June-August 2018, and the project will run for 20 years.
6. Major environmental impacts

In the process of construction and operation of the project, we need to strictly implement the "Three Simultaneity" regulations and put the suggestions put forward in the report into practice. During the operation of the project, the biogas after the biological desulphurization is used in the project, the exhaust gas of the combustion exhaust is organized by 15 meter high exhaust cylinder; the supernatant of the sedimentation tank is reused to the circulating water system; the bottom wastewater of the sedimentation tank is promoted into the biogas liquid pool, and then reconcentrated and dried after mixing with the biogas slurry to become the high quality organic fertilizer. After the treatment of the wastewater treatment plant of the steam water separator, the municipal sewage pipe network was discharged into the Dongxing sewage treatment plant in Kenli district for deep treatment, and the sedimentation sludge was circulated to the regeneration pool to ensure the number of desulphurizing bacteria in the regenerated pool, and the low noise equipment was selected to take effective isolation and sound insulation facilities to avoid as much as possible. And reduce the collision and noise between parts, and strengthen the management of production workers and environmental education workers and normal operation of equipment, avoid the equipment conditions of operation, set up equipment regular maintenance maintenance management system, in order to prevent equipment failure form of non normal production noise, while ensuring that the most effective play the function of environmental protection measures.

7. Environmental management plan and staff to implement the plan

The project has developed a complete EMP, detailed planning of environmental mitigation measures, environmental management, environmental supervision, environmental monitoring and other aspects.

The EIA administration agencies are as follows:
- Environmental Protection Office of Shandong Province: In accordance with the requirements of relevant domestic laws and regulations, is responsible for project supervision of the whole process;
- Dongying Municipal Environmental Protection Bureau: In accordance with the requirements of the Office of Environmental Protection, Shandong Province, the project supervision of the whole process;
- Dongying Environmental Monitoring and Supervision Agency: help build a party responsible for to supervise the implementation of environmental protection measures on the construction site, while assist the project to develop the environmental management guidelines for routine environmental monitoring during operation of the biogas plant;
- Environmental staff: Besides the monitoring and supervision from the governmental agencies, 2 technicians from the Qingdao Jierui Environmental Protection Technology Service Co., Ltd. will be engaged for implementation of the environmental management plan to monitor and mitigate the impacts of the environmental pollutions during the periods of project construction and operation.
| 8. IEE approval date and agency (attach a photocopy of the approval letter) 初始化环境
| IEE approval date: June 14, 2018
| Agency: Qingdao Jierui Environmental Protection Technology Service Co., Ltd.

注：建设期：指项目启动到完工; 运行期：指项目建设结束投入实际运行至还款结束的期间。

执行人员指：负责环境管理与监测的人员
审批意见：

垦环建审[2018]049号

经我局建设项目联审会议研究，对山东万得福实业集团有限公司提交的《集中式沼气工程项目报告表》批复如下：

一、该项目总投资426.53万元，环评投资426.53万元，占地13800平方米，建设地点在东营市垦利区丁二路以东、运河以北，广兴路以南（山东万得福实业集团有限公司厂区内）。

该项目主要建设内容为更新原《万得福工业园大豆分离蛋白生产线项目》（垦环建审[2014]051号）中沼气处理设备（更换为一套生物脱硫沼气净化系统），新建6台沼气发酵机组，原料沼气经生物脱硫系统脱硫后进入发酵，同时建设公用水池，以满足生产需要。项目建成后，日处理沼气3600m³，年利用沼气发电量1944万kWh。

二、污染物排放标准按本报告表所列“污染物排放标准”执行。

三、项目施工过程中必须认真落实报告表提出的各项污染防治和生态保护措施，并着重做好以下工作：

1、水污染物控制措施：厂区实施雨污分流、自流系统将沼气废水经沉淀池处理后，混合于上清液回用于循环水系统，沉淀池出水经提升排入沉淀池中，同沼液混合后在浓缩烘干机内成为优质的有机肥。污水处理站尾气经污水处理后通过市政污水管接入垦利区东兴污水处理厂处理。

2、大气污染物控制措施：挥发性有机物废气通过15米高烟囱排放，确保排放浓度满足《山东省火电厂大气污染物排放标准》（DB 37/ 664—2013）（SO2：100mg/m³，NOx：100mg/m³，烟尘：5mg/m³）的规定。

3、固废控制措施：脱硫固体废弃物中的含硫污泥沉淀后到再生池内，不外排。

4、噪声控制措施：采取减振、隔声等措施，加强厂区绿化，确保厂界噪
声符合《工业企业厂界环境噪声排放标准》（GB12348-2008）2类声环境功能区要求。

5. 总量控制：本项目不分配总量。

四、该项目必须严格执行环境保护设施与主体工程同时设计、同时施工、同时投产使用的环境保护“三同时”制度，“三同时”制度的落实情况由垦利区环保局大队长监督。项目竣工后，按照规定程序进行建设项目竣工环境保护验收，验收合格后，方可正式投入运行。违反本规定要求的，由建设单位承担相应的法律责任。

五、建设项目发生重大变动的应当重新报批项目的环境影响评价文件，不发生重大变动的纳入竣工环境保护验收管理。项目在运行过程中产生不符合经我局批准的环境影响评价文件情况的，应当开展后评价，采取整改措施并报我局备案。