

## **Terms of Reference Environmental impacts**

### Introduction

Myronivsky Hliboproduct (“MHP”, or the Company) is Ukraine's largest poultry producer. Its Vinnytsia Poultry Farm and Zernoproduct Farm engage in a wide variety of agro-industrial operations, which collectively include hatching, housing and slaughtering chickens, storing manure, treating wastewater, and growing and processing chicken feed. MHP is currently expanding its operations through the construction of “Phase 2” of its Vinnytsia Poultry Farm, which is expected to double its production capacity and add a new biogas energy plant to power its operations.

The villages of Olyanytsya, Zaozerne and Kleban are located adjacent to the above mentioned enterprises and have been impacted by their business operations. Some villagers have complained of dust, noise, and odors which they believe are related to operations of these businesses, and they fear potential pollution and health impacts from practices like pesticide spraying, manure storage and spreading, application of used water from poultry farms to irrigate cropland, and other aspects of MHP’s daily operations.

In an attempt to address and resolve their concerns, on 5 June 2018 community members (Complainants) filed Complaints to accountability offices of the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD). The IFC’s Compliance Advisor Ombudsman (CAO) and the EBRD’s Project Complaint Mechanism (PCM) have initiated a voluntary joint dialogue process between Complainants and the Company to answer the Complainants’ questions and address their concerns.

It is in the context of this dialogue process that MHP and Complainants impacted by MHP’s activities (collectively “the Parties”) have jointly agreed to engage experts to conduct a joint fact-finding study to identify the environment and health impacts of MHP’s local operations.

### Objective of the Joint Fact-Finding Study

As part of the joint fact-finding process, an environmental consulting firm or a self-formed team of experts (the “Team”) will be recruited to study issues raised by villagers in their Complaint relating to the environmental and health impacts of MHP’s local operations.

The Team is expected to conduct a field trip aimed to conduct documentation analysis with regard to relevant facts and aspects that need to be studied, followed by field tests to develop an independent fact base that addresses gaps and concerns in currently available data, and to provide recommendations as relevant. The Team’s study should include assessments of the following categories of impacts: impacts to air quality, water quality and quantity, soil quality, climate, noise, odor, and health.

The study will focus on answering the following questions for each of the above listed categories of impacts:

## Baseline

1. What are the aggregate environmental impacts of all businesses and business activities of local citizens of Olyanytsya, Zaozerne and Kleban villages in each of the above listed categories?
2. What are the cumulative environmental impacts of all local industrial facilities and business activities of local citizens of Olyanytsya, Zaozerne and Kleban villages in each of the above listed categories?

## Scope of the assessment:

- 1) What is the cumulative environmental impact of current local MHP operations (, the first stage of the Vinnytsia Poultry Farm and Zernoproduct Farm) in all of these categories?
- 2) What additional environmental impacts will result from MHP's planned expansion activities (Vinnytsia Poultry Farm Phase 2)?
- 3) What potential health impacts may arise from the identified environmental impacts in the course of the assessment?
- 4) Are MHP's current and planned operations in compliance with relevant environmental and health standards (See Methodology section)?
- 5) What steps can MHP enterprises, other local industrial facilities, local authorities and villagers of Olyanytsya, Zaozerne and Kleban take to eliminate or avoid, or where avoidance is not possible, minimize, any negative impacts of its operations (either existing or planned) on the local environment or health of community members?

## Membership and Selection Criteria

The Team will be composed of individuals with expertise and experience in conducting environmental impact assessments. Collectively, the Team is expected to have experience with applicable Ukrainian and European health, safety, and environmental standards.

Experts will be selected by mutual agreement of the Parties. Selections will be made on the basis of experts' independence, competence and credibility, as well as their ability to work constructively with the Parties and communicate their findings effectively to local community members.

Specifically, the proposed independent Team is to be collectively vetted against the following qualifications:

- **Academic Credentials and experience**
  - Academic degree and/or other document that certifies experience for the type of work sought.
  - Has conducted on-the-ground research, academic research, peer-reviewed science-based impact assessments meeting international standards, document reviews, etc.
  - Experience working with multiple stakeholders (government, industry, multilaterals, and affected communities) on complex issues.

- Experience working with community groups.
- Experience in the areas below is desired:
  - Technical data collection and monitoring of various types of environmental pollution, including water, groundwater, air, soil, odor and noise pollution.
  - Data interpretation, graphing, and statistics.
  - Environmental impact mitigation measures, particularly for the agribusiness industry and communal farming enterprises.
  - Application of International / European environmental standards.
  - Effectively conveying technical details and conclusions to layperson audiences.
- **Ability to be Objective and Credible**
  - Past work shows candidate does not “advocate” for or against a position, and provides neutral, objective evidence/recommendations/opinions based on professional assessments.
  - Candidate has never been directly involved in any design, development or implementation of any work for MHP, CEE Bankwatch Network, Centre for ecological initiatives «EcoAction» NGO, National Ecological Centre of Ukraine NGO nor has otherwise worked for them, nor taken clear positions on any of MHP’s business activities.

### Scope of Work

To adequately answer the above listed study questions, related to air quality, water quality and quantity, soil quality, climate, noise, odor, and health impacts, the Team should address and provide recommendations related to:

- Historical, current and future anticipated air, water and soil quality in Olyanytsya, Zaozerne and Kleban and at each MHP facility surrounding those 3 villages, including, but not limited to:
  - The level of nitrates and other potentially harmful substances<sup>1</sup> in local well water in Olyanytsya, Zaozerne, Kleban and factors that have or may contribute to those levels;
  - The level of harmful water-related illnesses<sup>2</sup> in local well water in Olyanytsya, Zaozerne, Kleban and factors that have or may contribute to those levels;
  - The concentration of harmful substances<sup>3</sup> in the air (including qualitative and quantitative measurements) and factors that have or may contribute to those levels;
  - The level of harmful substances<sup>4</sup> in the soil in Olyanytsya, Zaozerne, Kleban and factors that have or may contribute to those levels;

---

<sup>1</sup> See the list of pollutants attached as Annex 1.

<sup>2</sup> The list of diseases in focus should include such illnesses as: cardio-vascular, allergies, oncological, respiratory, endocrine, gynecological, bone diseases (arthritis, arthrosis, etc.)

<sup>3</sup> See the list of pollutants attached as Annex 1.

<sup>4</sup> See the list of pollutants attached as Annex 1.

- The water quality in the South Bug, Sib, Silnytsa Rivers and factors that have or may contribute to any pollutants in the river;
- Historical and current water levels in South Bug, Sib, Silnytsa Rivers, wells and boreholes in Olyanytsya, Zaozerne or Kleban and factors that have or may in the future contribute to a decrease in those levels;
- The aggregate level of greenhouse gas emissions into the climate from MHP enterprises, other local industrial facilities, local municipal enterprises and villagers of Olyanytsya, Zaozerne and Kleban business operations in the local area;
- The levels of noise and odor reaching the villages of Olyanytsya, Zaozerne and Kleban, and their connection to MHP enterprises, other local industrial facilities, local municipal enterprises and villagers of Olyanytsya, Zaozerne and Kleban business operations, including its transportation activities;
- The appropriateness of current technical designs and mitigation measures employed by MHP for reducing impacts to air, water, soil, climate, noise and odor resulting from its local operations in and around the villages of Olyanytsya, Zaozerne, and Kleban;
- Any alternatives or modifications to MHP activities that would avoid or reduce impacts on air, water, soil, climate, noise, odor and health resulting from its local operations in and around the villages of Olyanytsya, Zaozerne, and Kleban;
- The cumulative environmental impact of all present and planned operations of MHP and other enterprises in the area, including local municipal enterprises and those of Olyanytsya, Zaozerne and Kleban villagers.

To the extent possible, this should be accomplished through a series of individual studies, each with their own final report. This design is intended to allow for final results on some issues to be reported and shared with the parties even while the studies related to other issues are still ongoing.

### Methodology

The Team should develop and propose a methodology for the study, which must apply international best practices appropriate for this type of assessment and all relevant standards, including the IFC Sustainability Framework, World Bank Environmental, Health and Social Guidelines, the EBRD Environmental and Social Policy, European Union standards and World Health Organization standards. The proposed methodology should be sufficient to achieve the objectives of the study and address all items in the scope of work. The proposed methodology will be presented to the Parties for approval prior to the commencement of the study.

The proposed methodology should include a proposal for a series of self-contained studies, to be conducted simultaneously, to answer the research questions and objectives of this joint fact-finding study. For each individual study, the proposed methodology should include, at minimum:

- A desk review of existing documents, photos, video and other available materials relevant to the stated research questions and objective. For this purpose experts should submit enquiries and receive responses from MHP and local authorities to make available all relevant past studies and other materials, including baseline assessments, for the experts' review;
- A scoping of the geographic area to be included in the study, encompassing at a minimum the villages of Olyanytsya, Zaozerne and Kleban and the local MHP operations as well as other enterprises (17 settlements within 11 village councils);
- Independent data collection and testing activities to be conducted onsite in the geographic area of study to answer the assigned questions;
- Identification of relevant standards that will be used for the assessment;
- Interviews with villagers, relevant local government authorities, and relevant MHP and other industrial facilities personnel;
- Interpretation of data and assessment of relevant impacts against standards and best practices;
- Development of recommendations regarding measures needed to eliminate/avoid or minimize any harmful environmental or health risks and a cost estimate to implement those measures; and,
- A timeline for completing each individual study report and for completing the entire study.

The Team will prepare a series of final reports that convey its findings and answers to the research questions which comprise the objective of this study. The Team will additionally prepare an overall final report that includes a summary of the findings and recommendations across all categories. The final reports should provide recommendations to address any concerns identified in the study findings.

The Team should present a draft report to the Parties and give an opportunity to comment on factual errors, but not on findings or recommendations, before finalizing its report.

The final report will be made public and available for peer review.

## Annex 1. List of pollutants

<b>Pollutant</b>	
<b>Code</b>	<b>Name</b>
06000 337	Carbon oxide
07000 11812	Carbon dioxide
12000 410	Methane
05002 333	Hydrogen sulphide (H <sub>2</sub> S)
05001 330	Sulphur dioxide
11048 1071	Phenol
11049 1325	Formaldehyde
04001 301	Nitrogen oxide (in terms of nitrogen dioxide [NO + NO <sub>2</sub> ])
04002 11815	Nitrogen (1) oxide (N <sub>2</sub> O)
04003 303	Ammonia
03002 2603	Substances in the form of suspended solid matters of and under 2,5 micrometers
03001	<i>Substances in the form of suspended solid matters under 10 micrometers, including:</i>
03001 2903	Ash
03000	Substances in the form of suspended solid matters (micro particles, fibers), including:
03000 2920	Fur dust (wool, down)
03000 150	Sodium hydroxide (lye, caustic soda)
05000	<i>Sulphur dioxide and other components with sulphur, including:</i>
05000 1707	Dimethyl sulfide
05000 1715	Methyl mercaptan
10000	Organic amines, including:
10002 1819	Dimethylamine

11000	<i>Non-methane volatile organic compounds, including:</i>
11000 11705	Mix of saturated hydrocarbon. C <sub>2</sub> -C <sub>8</sub> and mix of saturated and non-saturated hydrocarbons C <sub>1</sub> -C <sub>4</sub>
11000 1314	Propionaldehyde (propanal)
11000 1328	Glutaric dialdehyde
11000 1531	Caproic acid
15000	<i>Chlorine and its compounds (in terms of chlorine), including:</i>
15000 349	Chlorine