

Terms of Reference

Damage to Roads and Houses

Introduction

Myronivsky Hliboproduct OJSC (MHP, or the Company) is Ukraine's largest agricultural production company. *Vinnitsia Poultry Farm Ltd* and *Zernoproduct MHP Ltd* engage in a wide variety of agro-industrial operations, including hatching, housing and slaughtering chickens, treating wastewater, and processing chicken feed.

The village of Olyanytsya, Trostyanets rayon is located on the main road of regional status P33 Vinnitsa-Turbiv-Haisyn-Balta-Velyka Mykhailivka, that serves as the main transportation channel for all kinds of transport. Some villagers from Zaozerne village also live along the road that serves as a transport corridor for heavy vehicles that cater surrounding enterprises.

Some villagers in Olyanytsya have complained of several impacts which they believe are related to MHP's operations, including constant, heavy vehicle traffic which villagers believe has caused damage to homes and the main road of regional status and will continue to do so as MHP local operations continue to expand. Villagers also have safety concerns related to heavy vehicles driving on damaged roadways, overall increase in road use, especially by large and heavy vehicles, in the absence of adequate sidewalks.

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 the Complainants mentioned in the Complaint (collectively "the Parties") have jointly agreed to engage experts to conduct a joint fact-finding study specifically to identify the impacts of heavy road traffic on local villagers' homes and local road infrastructure.

Objective of the Joint Fact-Finding Study

As part of the joint fact-finding process, an Independent Expert Team (the "Team") will be recruited to study issues raised by villagers in their Complaint relating to the impacts of heavy traffic on their lives, homes and local road infrastructure and whether or not those issues are specifically caused by and/or exacerbated by MHP-related traffic. The study will aim to answer the following questions:

1. Has heavy vehicle traffic caused or contributed to damage to buildings along the Olyanytsya road of regional status P33 and the road along Zaozerne village?
2. To what extent will the continued and expected future road usage cause or contribute to future damage to buildings?

3. To what extent has the damage to buildings/structures along the Olyanytsya road of regional status P33 as well as the road along Zaozerne village compromised building safety, weather and cold proof capacities, habitability and affected property values for each building?
4. How has the use of both roads caused or contributed to other impacts, such as safety hazards?

Some initial fact-finding has already been conducted by the interested villagers of Olyanytsya, which could be made available for the Team for its consideration. For example, on November 14, 2016, the commission comprised of Trostianets rayon state administration and local village council officials conducted a visual inspection of the technical conditions of 46 residential buildings and their surrounding territories located on the road of regional status P33 through Olyanytsya village (see Appendix 1 for visual of households surveyed). This survey documented the subsidence of foundations, splitting of foundations, splits and cracks of walls, wall displacement, cracks and sagging of ceilings, splits on the perimeter of the buildings, and destruction of plaster. According to the commission members the damage to the buildings was caused by a continuous heavy traffic of large and heavy vehicles, violations of the driving speed limits, continuous change of the driving speed conditions, absence of the good quality road surfacing, violations made by Olyanytsya villagers of the building construction norms with regard to the construction distance, violations of the construction norms related to the laying of buildings foundations as well as the use of poor quality construction materials.

Additionally, video footage was recorded over a week-long period in November 2017 to track and record the number and types of vehicles driving the road of regional status P33 through Olyanytsya village.

It is expected that the Team will conduct a field trip to collect necessary data to provide an assessment as to the cause of the damage, the extent of the damage, and measures to remedy the damage and prevent or mitigate any future damage.

The Parties have agreed that the Team's work should be guided by:

- the need for shared confidence among stakeholders regarding both the Team's expert composition and its methodology; and
- finding a balance between the necessary scope of relevant research, what is realistic and feasible considering the timeline for the study, and costs.

Parties agreed that the Team work should be guided by the need for mutual trust between interested parties with regards to the expert composition of the Team and its methodology.

Scope of Work

In addition to the overarching questions that compromise the objectives of this study, the Team should aim to address and provide recommendations related to the following questions:

Documentation of Current Damage to Buildings

1. Which buildings along the road of regional status P33 through Olyanytsa and the road along Zaozerne village show signs of structural damage?
2. What is the extent of the damage to each building?
3. What are the effects of damage on the safety, resistance to weather and cold, habitability, property values, and other relevant factors for each building?

Investigation of Causes of Building Damage

1. What factors have contributed to the damage identified in the buildings?
2. What impacts does heavy road traffic along the road of regional status P33 through Olyanytsa and the road along Zaozerne have on the buildings located alongside of that road?
3. What is MHP's contributing proportional share to traffic-related impacts along the road of regional status P33 through Olyanytsa and the road along Zaozerne?
4. Would the same damage to buildings along the road of regional status P33 through Olyanytsa and the road along Zaozerne if there had been no MHP's historical and/or current heavy vehicle road usage?
5. Will the continued and expected future road usage by all the users (including MHP transport) cause or contribute to future damage to buildings?

Investigation of Other Road Use Impacts

6. How has the use of the road of regional status P33 and the road along Zaozerne village affected pedestrian safety and the overall road safety?
7. What impact will the future use of the road of regional status P33 and the road along Zaozerne village have on pedestrian and overall road safety?

Repair Assessment and Mitigation Recommendations

1. What measures are necessary and recommended to repair the damage to each building?
2. What are the estimated costs associated with these repairs?
3. What measures are necessary and recommended to prevent or mitigate future damage to the buildings?
4. What measures are recommended to eliminate or mitigate the negative safety impacts from MHP transport road use?

These questions are a starting point, and we expect that further refinement may be necessary in consultation with the Team of experts, after reviewing and discussing a methodology for the study.

Membership and Selection Criteria

The Team will be composed of 3-5 experts, with expertise in geotechnical engineering, structural and buildings construction, and traffic engineering. Collectively, the Expert Team is expected to have experience with applicable European building, safety, and environmental standards and knowledge of relevant Ukrainian standards and rules and common practices within Ukraine.

We expect that a geotechnical engineer will be needed to provide information relevant to the question of whether vibrations from heavy vehicles may have caused or contributed to building

damage. We expect that a structural engineer will be needed to assess building structures and identify likely causes of damage; assess the strength, safety, and habitability of the houses; and, identify measures needed to fix the damage in buildings (including approximate cost estimate), among other tasks. We expect that a traffic engineer will be needed to study and assess traffic along the road of regional status P33 through Olyanytsa and the road along Zaozerne village, in particular the past, current and future road usage, as well road safety questions, among other tasks.

Experts will be mutually agreed upon by 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.

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

- **Academic Credentials and Experience**
 - Academic degree, corresponding expert credentials recognized in Ukraine, experience for the type of work sought;
 - Has conducted on-the-ground research, academic research, peer-reviewed science-based impact assessments meeting European and Ukrainian standards, document reviews, etc.
 - Experience of working with multiple stakeholders (government, industry, multilaterals, and affected communities) on complex issues;
 - Experience with common construction practices and road conditions in Ukraine
 - Specific expertise in the areas below is desired:
 - How building structures can be affected by vibrations, such as from heavy road traffic, and how vibrations travel through subsurface materials;
 - How large cracks and structural deformations may compromise building safety and resistance to weather and cold;
 - European and Ukrainian vibration standards;
 - Basic monitoring methods;
 - Data interpretation, graphing, and statistics;
 - Ability to deliver the results of complicated technical findings in a simple way allowing clear understanding of the reasons for caused damage to the buildings etc.
- **Ability to be objective and credible**
 - Past work shows candidate(s) do(es) not “advocate” for or against a position, and provide(s) neutral, objective evidence/recommendations/opinions based on professional assessments;
 - Candidates have 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 and never worked for them as well as didn't work for the above mentioned organizations in any other capacity, nor taken clear positions on any of MHP's business activities.

Methodology

Once selected, members of the Team should develop and propose a methodology for the study, which must take into consideration European best practices for this type of assessment. The proposed methodology will be presented to the Parties for approval prior to the commencement of the study.

At minimum, the proposed methodology should include:

- A desk review of existing documents, photos, video and other available materials relevant to the stated research questions and objective of the study.
- A scoping process to decide which houses and buildings will be included in the assessment of building damages. At minimum, any residents of Olyanytsya living along the P33 road, who believe their property has been impacted as well as villagers of Zaozerne village residing along the road should be invited to participate.
- Detailed visual and instrumental study of the road of regional status P33 through Olyanytsa and nearby households (47+ households) as well as the road along Zaozerne village and the adjacent households.
- Comparison to a “control” area (to help assess whether road traffic is the primary cause of building damage).
- Geotechnical assessment of the household’s area and roads (including physical and mechanical properties and dynamic characteristics of the soil, etc.).
- Interviews with residents of both villages, relevant offices of local and central government ministries and agencies, and relevant MHP personnel.
- Analysis of vehicle traffic along the roads through Olyanytsa and Zaozerne as well as the level of traffic related to MHP’s activities, both before and after the bypass road opening. Assessment of the Olyanytsya bypass road design and capacity.
- Assessment of measures needed to fix the building damage (including approximate cost estimate) and measures needed to mitigate any future damage.

The Team will prepare a final report that summarizes its findings and answers the Research Questions outlined above. It should provide recommendations as appropriate.

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, though certain aspects pertaining to individual Complainants or other community members may be redacted to preserve individuals’ privacy.

Appendix 1

