



JI DETERMINATION REPORT FORM

(version 02)

(to be completed by an AIE requesting the publication of a determination pursuant to paragraph 33 of the JI guidelines)

Accredited independent entity (AIE) submitting form AENOR

Proposed JI activity

Reference number and title of proposed JI activity Collection and Utilization of Methane from Solid Domestic Waste Ground in Luhansk City
Project 0212

Host Party(ies) Ukraine

Parties involved in the JI activity Ukraine

Coordinating entity (*applicable to JI PoA only*)

Project participants "Nedra Luhanshchyny" Limited Liability Company

Type of JI activity: large scale small scale LULUCF PoA

Brief description of the JI activity

"Collection and Utilization of Methane from Solid Domestic Waste Ground in Luhansk City" project in Ukraine involves the installation of a LFG collection and flaring system to utilize the recovered LFG at Site 1 of the Luhansk Landfill located in Oleksandrivsk Town, Luhansk Region, Ukraine.

LFG will be collected from the area of the landfill that is already closed. 30 gas wells with an average depth of 10 – 25 m will be made across the landfill.

LFG will be collected through creating a vacuum in the gas well and sucking out the LFG. In order to increase the efficiency of LFG collection, it is expected that a polyethylene or other cover will be spread over the landfill. The collected gas will be cleansed from impurities before being destroyed in the enclosed flare.

The Project is expected to lead to emission reductions of approximately 46,962 tCO₂e during the first crediting period (2010-2012) or an average of 20,872 tCO₂e per year through capture and destruction of LFG in an enclosed flare.

Determination report

Please confirm that all requirements of Article 6 of the Kyoto Protocol, the JI guidelines and further relevant requirements defined by the CMP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines are met:

- ✓ **Yes**
No

General information on determination

Please describe:

- The scope of the determination process, including all documentation that has been reviewed and list the names of persons interviewed during the determination process, as applicable;
- The AIE's determination team, including a list of all persons involved in the determination process and a description of the functions assumed.

The Project Design Document (PDD) submitted by the Project Participant and additional background documents related to the project design and baseline, i.e. Guidelines for Completing the Project Design Document (JI-PDD), Approved methodology, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by a Accredited Independent Entity were reviewed, as listed below:

- Collection and Utilization of Methane from Solid Domestic Waste Ground in Luhansk City JI PDD (Version 01, version 02 and version 02.2)
- ACM0001 "Consolidated baseline and monitoring methodology for landfill gas project activities",

version 11

- Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site (version 05.1)
- Tool to determine project emissions from flaring gases containing methane (version 01)
- Tool to calculate baseline, project and/or leakage emissions from electricity consumption (version 01).
- Tool for the demonstration and assessment of additionality (version 05.2)
- Joint Implementation Determination and Verification Manual (version 01)
- Letter of Approval of Ukraine – 1344/23/7
- Letter of Endorsement of Ukraine – 1034/23/7
- Letter of voluntary withdrawal from Fortis Bank
- National Construction Standard DBN V.2.4-2-2005 General Construction Guidelines for Landfills [Nedra Luhanshchyny]
- Environmental Impact Assessment Study
- Technical studies of wastes composition 1979-2007
- IPCC (2006) Volume 5, Chapter 3: Solid Waste Disposal, page 19
- US EPA: a Landfill gas to energy development project handbook
- Emission reductions calculation spreadsheet
- Evidence on the average temperature and potential evapotranspiration in Lugansk.
- Financial calculations spreadsheet
- Scheme of Luhansk Landfill gas recovery engineering project and Technical specification equipment
- Investment and Construction Cost Plan and OM cost estimation
- Cost of electricity consumption
- Investment Contract N° 420/09.001 signed between the Luhansk City Council and Nedra Luhanshchyny LLC
- JI Glossary of Terms (version 02)
- Project chronogram
- Technical characteristics of the measurement and control equipment for the Collection and Utilization of Methane from Solid Domestic Waste Ground in Luhansk City Project
- State Construction Standards DBN A.2.2-1-2003
- Minutes of all the meetings
- Ukrainian GHG Inventory
- Technical Distribution Losses of the Ukrainian grid
- Evidence of the expected electricity consumption by the project equipment
- Report “Definition of qualitative and quantitative methane composition in Luhansk landfill based on experimental wells and collectors”.
- Pictures from Public discussion of Luhansk landfill gas recovery
- Invitation to visit Public Consultation of Luhansk Landfill gas recovery project
- Positive Conclusion of Correspondence of Luhansk Gas recovery project to normative acts
- Ecological Expertise of Luhansk Landfill Gas recovery project
- Set of legislation that assign Luhansk Authorities to be the regulators and owners of Luhansk Landfill
- Conclusion of Expertise regarding Industrial safety and labour Protection during execution of landfill Luhansk Gas recovery
- Overview of Electricity Market in Ukraine

The determination findings presented in this report relate to the project as described in the PDD version 02.2, submitted on 28 June 2011.

On 23-24th February 2010 AENOR performed interviews with:

“NEDRA LUHANSHCHYNY” LIMITED LIABILITY COMPANY- UKRAINE:

- Yuriy Kononov – President
- Leonid Malashkin – Director
- Vadim Kostuchenko – Manager
- Aleksandr Shilo - Manager

UNDP

- John O’Brien
- Sergei S. Volkov
- Alexander Severin

Public Community of Luhansk Town

- Sergey Kravchenko
- Zaza Zuhbaya

Public Community of Oleksandrivsk Town

- Snegko Aleksandr

DFP – National Environmental Agency of Ukraine

- Mykhailo Chyzhenko

Academy of Sciences of Ukraine.

- Boris Kostynkosvky

The determination team and its functions is the following:

María Carmen González Galán	AENOR	JI Chief Determiner- Technical Expert
Jose Antonio Gesto Vilacoba	AENOR	JI Determiner –Technical Expert
Luis Robles Olmos	AENOR	JI Determiner – Technical Expert
Mercedes García Madero	AENOR	JI Determiner
Lyudmila Illarionova	AENOR	Translator

The technical reviewer for this determination process is:

José Luis Fuentes Pérez (AENOR)

Description of determination process

Please briefly describe and refer to:

- The review of the JI PDD/PoA DD and additional documentation attached to it;
- The assessment against JI requirements, e.g. by using a determination protocol;
- The report of findings by the AIE, including the use of different types of findings (e.g. corrective action requests, clarifications or observations etc.).

Statements or assessments should be included in section “Conclusions, final comments and determination opinion”.

The determination process starts with appointment of team covering the technical scope(s), sectoral scope(s).

The first JI PDD version and additional background documents related to the Project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross-check between information provided and information from other sources have been done as initial step of the determination process.

AENOR determination team performed interviews and physical site inspection with project stakeholders to confirm relevant information and to resolve issues identified in the first document review.

The project assessment applies standard auditing techniques and internal procedures to assess the correctness of the information provided by the PPs. The assessment is based on the DVM.

During the determination process, the team makes reference to the available information related to similar projects or technologies as the proposed JI Track-2 project activity. The documentation has also been reviewed against the approved methodology(s) applied with several adjustments to confirm the

appropriateness of formulae and correctness of calculations.

In order to ensure transparency, a specific determination check list was applied for the project. The check list shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The determination check list serves the following purposes:

- It organizes, details and clarifies the requirements JI project is expected to meet;
- It ensures a transparent determination process where the determiner will document how a particular requirement has been validated and the result of the determination. The completed determination protocol is enclosed in Annex I to the determination report. The determination findings for each determination subject are presented as follows:

1) The findings of the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Determination check list in Annex I.

2) Where AENOR determination team had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination check list in Annex I. The conclusions for determination subject are presented. The next step is a resolution of clarification and corrective action requests. The objective of this phase of the determination is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for AENOR's conclusion on the project design.

The CARs and CLs raised by the determination team were resolved during communication between the client and AENOR.

Comments received from Parties, stakeholders and UNFCCC accredited observers

Please:

- Summarise the comments received pursuant to paragraph 32 of the JI guidelines; and
- Provide a report of how due account was taken of these.

There are no comments received from Parties, stakeholders and UNFCCC accredited observers.

Conclusions, final comments and determination opinion

Please provide:

- Conclusions describing how each of the requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the CMP or the JISC, in particular those referred to in paragraph 33 of the JI guidelines, have been met, including assessments and findings (e.g. corrective action requests, clarifications or observations) related to each requirement, and statements on whether all issues raised have been addressed to the AIE's satisfaction;
- Final comments and a determination opinion.

AENOR has performed a Determination under "Track 2" of "Collection and Utilization of Methane from Solid Domestic Waste Ground in Luhansk City" in Ukraine. The Determination was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation, the on-site visit and the subsequent follow-up interviews have provided AENOR with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the JI and all relevant host country criteria. The Letter of Approval from the DFP of Ukraine is a confirmation of a Project assists in achieving sustainable development of Ukraine.

Once the Letter of Approval has been accordingly obtained, the project is recommended by AENOR for registration with the UNFCCC.

An analysis as provided by the applied project specific methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as

specified within the final version of the JI PDD.

The Determination is based on the information made available to us and the engagement conditions detailed in this report. The Determination has been performed using a risk based approach, as described above.

The only purpose of this report is its use during the registration process as part of JI project cycle. Hence, AENOR cannot be held liable by any party for decisions made or not made based on the Determination opinion, which goes beyond the purpose.

List of documents attached to the determination report form

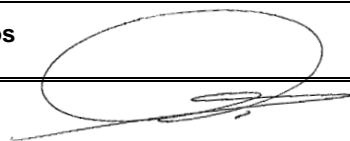
Please attach relevant documents used in the determination process and check mark below accordingly

- ✓ **PDD/PoA DD of the proposed JI activity**
- ✓ **Determination report**
- ✓ **Written approvals by the Parties involved, listed in the JI PDD/PoA DD**
- ✓ **Other relevant documents:**
 - ✓ **Determination protocol**
 - ✓ **List of persons interviewed**
 - ✓ **Any other documents (please list): Spreadsheet**

The AIE herewith declares that undertaking the determination for the proposed JI activity referred to above does not constitute a conflict of interest which is incompatible with the role of an AIE

Authorized officer signing for the AIE

Luis Robles Olmos



Date and signature

2011-07-27