

CERTIFICATE

The work group, formed under the Order No.V-63, of January 27, 2005, by the Minister of Health of the Republic of Lithuania, has considered whether the public health impact of the Vilnius County Regional Municipal Waste Landfill to be established in Kazokiškės (Elektrėnai Municipality) was duly assessed. By the Letter No.10-(11.3-19)-589, of January 31, 2005, the Ministry of Health requested the Ministry of Environment to present the Environmental Impact Assessment documents and other related information. By the Letter No.(1-15)-D8-912, of February 2, 2005, the Ministry of Environment provided the Environmental Impact Assessment (hereinafter referred to as *the EIA*) Report, conclusions by assessment entities and the detailed plan of Kazokiškės plot to the Ministry of Health: The work group visited the site of the planned Landfill, Alesnikai and Kazokiškės villages, Zelva Health Centre and met Ms. Staciokiene, Kazokiškės Neighbor and the authorized representative of Kazokiškės Community, and Kazokiškės inhabitants at Kazokiškės Neighborhood.

The work group, having evaluated the information presented, has found out the following:

1. Observing provisions of Art. 9.1 of the *Law on Amending Law on Environmental Impact Assessment of Planned Economic Activity of the Republic of Lithuania (Official Gazette, 2000, No.39-1092)*, the EIA Report must include exhaustive analysis of all issues provided for in the EIA programme. Kazokiškės Municipal Waste Landfill EIA Programme planned to assess the impact of environmental factors determining population health; such analysis was also obligatory under the *Regulations of drafting the Environmental Impact Assessment Programme and the Report* (hereinafter referred to as *the Regulations*), approved by the Order No.262, of June 30, 2000, by the Minister of Health (*OG, 2000, No.57-1697*); however, they were either not analyzed in detail or omitted; conclusions lack argumentation, and impact forecasting and assessment methods provided for by Clause 4 of the Regulations are unspecified.

2. The EIA Report includes no background ambient air pollution assessment taking into account entities operating around the planned Landfill and polluting ambient air with the same pollutants as the Landfill: Elektrėnai Power Plant, Vievis Poultry Farm, Zelvė Pig Farm, Elektrėnai and Vievis waste water treatment facilities, Vilnius Oil Repository, Vievis Fuel Repository. Environmental pollution generated by vehicles arriving to and leaving the Landfill, and machines to be operating within the Landfill was not calculated, as well. Clause 4.2 of the Regulations provides for the obligatory assessment of the background pollution and the one generated by mobile pollution sources, and standards of permissible ambient air pollution shall be specified with respect to the background pollution.

3. The EIA Report wrongly specified the permissible limit value for solid particles— $500\mu\text{g}/\text{m}^3$. Burning biogas generates solid particles with the diameter less than $10\mu\text{m}$ and they are emitted into the environment, therefore the ambient air pollution calculations should be revised in line with the ambient air pollution standards, approved by Order No.591/640, of December 11, 2001, by the Ministers of Environment and Health of the Republic of Lithuania (*OG, 2001 No.106-3827*), providing for the limit value of $50\mu\text{g}/\text{m}^3$ for up to $10\mu\text{m}$ solid particle concentration in ambient air. The EIA Report's ambient air pollution calculations omit formaldehyde generated when methane disintegrates, and as stated by the EIA Report 330 m^3 hourly uncontrolled emissions into the ambient air are expected.

4. Besides unpleasantly smelling municipal waste, dry municipal waste water treatment sludge with especially far-going unpleasant odor is to be dumped at the Landfill. The EIA Report fails to assess distances which unpleasant smell will float during the warm and the cold seasons of the year, and the odor reduction measures provided for may also be insufficient.

5. The EIA Report specifies that *vehicles bringing waste ... will cause noise only during the Landfill business hours, therefore it will not disturb inhabitants' repose*. This statement is contradicted by the data provided in the Appendix 6 to the EIA Report, specifying that waste will be transported 320 days a year (6 days a week), 10 hours a day, 10–11 vehicles per hour (i.e., vehicles shall arrive/leave every 3 minutes). The Report also specifies other noise sources: devices operating at the Landfill, waste water pumping station, power generators, etc. But noise caused by these sources has no assessment whatsoever.

6. Potable water provision to Alesnikai village and Kazokiškės settlement and the impact on the water quality is neither considered, nor assessed. When considering underground water sources, impact only on Vievis waterworks was analyzed stating that only Vievis has a central water supply system. According to data supplied by Kazokiškės Neighbor, inhabitants are centrally supplied with water from the water well in Kazokiškės.

7. No account is taken of potential influence of birds, insects, rodents to the population health and life quality during the Landfill operation time, no measures to reduce their negative impact are provided for.

8. According to requirements of Clause 4.7 of the Supplement to the Regulations, EIA Report failed to analyze the impact on the socio-economic environment: it includes no impact analysis on the population distribution by age and sex, possible devaluation of their property and potential society conflicts due to the operations.

The EIA Report provides partial assessment of the impact on the population health based on the following data: *Population density is low at Kazokiškės Neighborhood, the number of population reduces, socioeconomic recession is caused by non-existing central water supply and no sewer systems in villages*. All the above statements are unjustified with any statistical or official information and neither [demographic] research nor inhabitant surveys were done.

The work group members, having visited Kazokiškės Landfill and the surrounding territories, having made familiar with the demographic statistical data submitted by Kazokiškės Neighbor, have found out that half of Kazokiškės Neighborhood inhabitants live in Kazokiškės [village] (there are 22 villages in the Neighborhood) and their number is increasing: from 321 inhabitants in 2002 to 359 inhabitants in 2004. Retired inhabitants account for slightly below 1/6 of the population; 85 inhabitants are children up to 16, and since 2002 their number still increased to 92. Kazokiškės Village is the centre of the Neighborhood, it has a central water supply and sites of social purpose attracting inhabitants from all over the Neighborhood: a school, a church, provision of primary health care services. These indicators were not taken into account, though they are significant to forecast the impact on socioeconomic environment, health and life quality.

9. The EIA Report states that the planned Landfill will have no negative impact on the population health and the quality of living on the grounds that that residential buildings are outside the 500 m sanitary protection zone (hereinafter – SPZ) and that the closest residential country house is in 680 m of the Landfill boundary. The EIA Report misstates that the 500 m

SPZ is established to regional landfills. The indicative 500 m SPZ size is established by Clause 28.4 of the Appendix to *the Procedure of Establishing and Supervision of Sanitary Protection Zones* approved by the Order No. 10, of January 5, 2001, by the Minister of Health of the Republic of Lithuania (OG 2001, No. 5-152), for solid municipal waste landfills with ordinary capacity, but the planned Regional Landfill, in addition to municipal waste, intends to dispose construction waste and municipal waste water treatment sludge.

10. Observing Clause 4.2 of the Regulations and provisions of Chapter 4 of *the Procedure of Establishing and Supervision of Sanitary Protection Zones*, the size of SPZ should be revised to take into account environmental and human health impact of the planned activities.

Conclusions and proposals:

1. Population health impact assessment of the planned Vilnius County Regional Municipal Waste Landfill is not exhaustive.
2. Drafters of the EIA Report have found out many environmental factors determining population health: the increase in ambient noise, ground water pollution, attraction of "landfill people" and birds, the unavoidable impact on the high aesthetic value landscape, reduction in customer flows of Zelvė Health Centre, however, the conclusion they made was that *direct impact on the population health due to the planned economic activities is impossible.*
3. The key criteria used to assess the impact on public health was the 500 meter sanitary protection zone of the Landfill proposed by the EIA Report drafters, which had to be revised in line with the requirements of the legislation in force.
4. We hereby propose to re-assess the impact of the environmental factors of the planned Vilnius County Regional Municipal Waste Landfill on public health according to the gaps listed herein.

Work Group Leader

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