



**NATIONAL AUDIT OFFICE
OF THE REPUBLIC OF LITHUANIA**

PUBLIC AUDIT REPORT

**UNTAPPED POTENTIAL TO REDUCE THE AREA
AFFECTED BY QUARRYING**

21 December 2012, No VA-P-20-1-19
Vilnius

SUMMARY

Full audit report in Lithuanian is available on the website
of the National Audit Office: www.vkontrole.lt

The use of subsoil resources is an important element in meeting the needs of the society; however, this activity has a negative impact on the environment since open-pit mining of mineral resources (solid minerals, including peat) in industrial and small quarries and peat bogs damages those areas. Such affected but not rehabilitated areas spoil the landscape¹, pose a threat to people. Therefore, quarrying and peat extraction should not affect areas larger than required in respect of the mined resources and the mining technologies used; also, after the extraction of all mineral deposits the affected areas should be rehabilitated, restoring, to the extent possible, the former land use or converting these areas into more valuable ecosystems.

The extent of the areas damaged by quarrying depends on the environment, interaction and

¹ The importance of the landscape is discussed in the European Landscape Convention adopted by the Council of Europe on 20 October 2000.

process control of the activities of the Ministry of Environment and the Ministry of Agriculture as well as bodies reporting thereto, such as the Lithuanian Geological Survey, Environmental Protection Agency, Regional Environmental Protection Departments, National Land Service, municipalities, and entities having access to subsoil resources.

Currently, there is no exact information on the area of land damaged by quarrying and peat extraction, since the inventory of such territories was last drawn up in 1998. According to this significantly outdated information, the area of land damaged by quarrying was about 9,829 hectares and the area affected by peat extraction was 17,021 hectares of the country's territory. In fact, the amount of the affected areas is much larger because this amount does not include the land damaged by illegal mining.

The audit objective was to assess whether the organisation and control of extraction mining and rehabilitation of mineral resources provide for conditions for ensuring that only a minimum area of land is left unrehabilitated.

The audit examined whether there are excess land areas being affected, whether competent authorities have complete and reliable information about the affected land areas and their rehabilitation, and whether the affected land has been properly recorded, as well as studied planning, implementation and control of rehabilitation stages and management of funds required for the rehabilitation.

Having analysed the audit evidence, we present our conclusions and recommendations.

Audit conclusions

1. 1998 inventory data on the affected areas is inaccurate, no information about land areas damaged by quarrying and peat extraction, their status and reasons of the damage is currently collected and analysed. Absence of such information makes it impossible to effectively manage and control the processes of reduction of the affected areas and restoration of the landscape.

2. Excess² land areas have been affected by quarrying and peat extraction in the country because:

2.1. legislation provides for insufficient inter-institutional coordination and control of mining activities. There is no coordination system in place ensuring that all municipalities and the National Land Service under the Ministry of Agriculture duly perform their functions related to the

² Excess areas of affected land are areas affected by quarrying and peat extraction estimated by auditors of the National Audit Office to be larger than they should be according to the scope of open-pit mining of solid minerals and the mining technology used.

maintenance and control of mining of subsoil deposits and rehabilitation of land areas affected by quarrying;

2.2. legislation on mining activities does not provide for that only a reasonable area of the field of mineral deposits should be affected by industrial quarrying, the existing legislative provisions do not provide necessary conditions for rehabilitating the affected area immediately after mining the minerals contained therein;

2.3. legislative provisions do not provide necessary conditions so that it is useful for the owners or operators of small quarries not to uncover the entire field of mineral resources and to rehabilitate the mined part area by area;

2.4. the existing procedure for the establishment and control of small quarries and isolated man-made water bodies (ponds) does not ensure that subsoil resources extracted therein are not used for commercial purposes;

2.6. some municipalities have been failing to perform landscape maintenance and protection functions provided for in the Law on Self-Government. Consequently, not all quarries listed in the Plan of the Use of Exhausted Quarries for their Intended Purpose have been rehabilitated;

2.7. different requirements have been set in legislation for small and industrial quarries established by legal persons in relation to the use and rehabilitation of subsoil resources. Therefore larger areas have been affected by small quarries belonging to legal persons than it could be.

3. The insufficiently effective control system fails to prevent illegal mining. Administrative penalties for illegal mining are not tied to the damaged land area and the amount of illegally extracted resources, therefore they do not have a deterrent effect.

4. Insufficient maintenance of quarries which do not have a user and their delayed rehabilitation resulted in turning the land affected by such quarrying into illegal dump sites. As a result, their clean-up costs have increased about 15 times, or 35 million litas.

5. Funds of the Special Climate Change Programme and Environmental Support Programme can be used for rehabilitation of both quarries which do not have a user and peat lands, however, this possibility is not being used.

6. There are no financial instruments in place enabling rehabilitation of industrial quarries and peat lands in case of bankruptcy of their operators, which increases the risk of using state funds for this purpose.

Audit recommendations

To the Ministry of Environment of the Republic of Lithuania:

1. With a view to creating a database for due management of the rehabilitation process:

1.1. to adopt a procedure for accounting and for the collection and analysis of necessary information and to establish competent authorities;

1.2. to initiate inventory of land areas affected by quarrying (illegal quarrying included) in order to obtain information necessary for the management of rehabilitation of these areas.

2. Upon analysis of the updated inventory results of the land areas affected by quarrying:

2.1. to develop and adopt a programme for rehabilitation of areas which do not have a user, specifying the deadlines for measure implementation, responsible institutions, and funding sources, and to organise programme implementation monitoring;

2.2. to create financial instruments enabling rehabilitation of industrial quarries and peat lands in case of bankruptcy of their operators;

2.3. to reduce areas affected by industrial quarrying to the extent permitted by the technologies used and the mining scope, to supplement legislation on the establishment, operation and rehabilitation of industrial quarries with provisions ensuring that quarrying affects as small areas as possible and providing for conditions for their prompt rehabilitation.

3. With a view to reducing land areas affected by small quarries and ensuring more efficient use of the resources contained therein, to consider a possibility to supplement legislation on the establishment, operation and rehabilitation of these quarries with provisions on:

3.1. favourable conditions for rehabilitation of mined lands area by area;

3.2. uniform requirements for small and industrial quarries established by legal persons in relation to the use and rehabilitation of subsoil resources.

4. With a view to reducing land areas affected by illegal extraction of subsoil resources:

4.1. to initiate amendment of legislation so that administrative responsibility for illegal extraction of subsoil resources is tied to the amount of extracted resources and to the affected land area;

4.2. to provide for measures for ensuring prevention of illegal mining.

5. With a view to ensuring that subsoil resources extracted in small quarries and isolated water bodies are not used for commercial purposes and that it is more useful for miners not to violate the established requirements, to set a monitoring system which would ensure reduction and elimination in future of illegal underground mining carried out under the cover of the establishment small quarries and isolated man-made water bodies.

To the Ministry of Environment of the Republic of Lithuania and the Ministry of Agriculture of the Republic of Lithuania:

6. To establish a procedure for the registration of land areas affected by quarries and peat extraction and for information exchange between institutions.