Experiences from professional geological supervision on remediation of site quarry Srđce

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Introduction

On the site quarry Srđce has been made professional geological supervision (PGS) as part of remediation program for the contaminated sites in Slovakia.

PGS was realized according to the requirements of the Act 369/2007 Z.z. on geological works.

The key PGS activities:
- Evaluation of work development, effectivity and quality
- Monitoring of spent resources required by project aims
- Providing feedback on ongoing activities
- Preparation of advices and proposal for corrective actions

Situation after removing gudrons from the quarry

Remediation process by removal of contaminated gudrons from the quarry

The total excavating amount of hazardous waste (acid tars and contaminated soil) was 18 400 m³ of acid tars and 14 150 m³ of contaminated soils including cover layers.

The final clean up works were controlling primarily sensorially in-situ. It was observed the presence gudron on the surface of each key sector: the quarry walls, surface of the quarry bottom, driveway, handling areas.

Representativeness of results was control by parallel sampling and analysis with contractor and also individually.

Within backfilling the quarry it was necessary to record the 'purity' of the imported soil material for revitalization of quarry to prevent unwanted contamination.

Sequence, management and coordination by the PGS in the course of all geological and remediation work at the site was carried out in collaboration with the contractor and customer.

Aim of remediation

The remediation itself consisted of removing contaminated material - "gudron" (odore, organic, acid petroleum residual products) from environment and revitalized the quarry.

The purpose of remediation activities was eliminating human and environmental risks resulting from possible exposures of contaminants by spreading them to the ambient environment.

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