

Explanatory note on Section 4.5 - Potential impact, subsurface geology

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Detailed Contents:

1. Review of impact of the change in the relevant legal framework on the Project and/or EIA Report

The legal framework applicable to chapter 4.5 regarding geology refers on one side to the mining concession license and on the other hand to the statutory requirements regarding the environmental impact assessment procedure (i.e. Order No. 863/2002¹) which suffered no changes. In terms of the mining concession license, chapter 4.5 refers to the Mining Law No. 61/1998 (currently abrogated by Mining Law No. 85/2003) as well as to the legal documents regarding the approval of the license. These references are still valid since they represent the framework applicable at the time the mining concession license was issued. In relation to the above, the changes following the issue of a new legislative mining framework do not affect the Project.

Following the release of chapter 4.5 of the EIA Report, in 2007 there were 2 laws issued that set forth specific environmental aspects regarding soil and subsoil (namely GD No. 1048/2007²). A presentation of these two laws is included in chapter 4.4. 4.4 Soil; we note however in this context that the new provisions are not of a nature to affect the Project and conclusions of the EIA Report.

2. Updates on Chapter 4.5 - "Geology"

2.1. Introduction

Does not require updating due to time or changes in the legal framework.

2.2. Baseline

As stated in the EIA Report, the waste rock leaching tests that are conducted on site were continued. This testwork, designed to monitor the rate and period of ARD generation under concrete site conditions started in August 2003 and continued further on after 2006.

As also shown in the EIA Report, leaching testwork under site conditions are conducted on 26 bottles filled with waste rock representative for each predicted petrographic type, the same being exposed to site specific atmospheric condition. The majority of the samples were taken from excavations in Cetate and Carnic areas (11 samples from each area). A few samples come from Orlea area (1 sample) and Jig area (2 samples). The sample batch also includes a sample taken from the existing waste rock dump. The number of bottles for each type of waste rock is weighted against the estimated proportion of the respective lithologic type as a result of the Project development. The bottles used for site testwork are open at the top and have side aeration holes. Each bottle has access at the bottom for sampling the fluid that was in contact with the waste rock. This sampling is done on a regular basis, depending on rainfalls. The initial sampling was finalized in October and November 2003 followed by new sampling campaign in June, August and November 2004, April, July, October 2005, May, August, November 2006, June, August 2007 and October 2008. The water quality parameters associated with the site testwork updated with the latest test results are presented in Appendix NE_Chapter 4.1_03 Potential of ARD generation (figures 4.5.7 and 4.5.8 in Chapter 4.5 - 2006 EIA Report) The data provided by subsequent investigations fully confirmed the conclusions presented in the 2006 EIA Report.

The results of the kinetic tests indicate again that generally the waste rock behaves as predicted by the findings of the acid-base accounting. Data collected during this period of time when the test columns were exposed to atmospheric conditions find, as in 2006, that out of the 10 columns considered as having material with ARD potential only 9 generated and continued to generate ARD. Other 10 test columns were found as having no ARD potential. Of the same, one column generated ARD as from the beginning of the testwork and continued to do so throughout the testwork and another column which generated ARD after one year of exposure to atmospheric conditions, no longer generated ARD on subsequent tests.

Continuation of these testwork during the time before the submission of the EIA Report show that, in terms of ARD generation, the samples behaved as initially determined and characterized in the EIA Report. The rest of the chapters and sections of the Plan do not require updating due to time or changes in the legal framework.

¹ Ministry of Waters and Environmental Protection No. 863/2002 on the approval of the methodological guidelines applicable to the environmental impact assessment procedure -framework stages, published in the Official Gazette, Part I, No. 52 of 30 January 2003.

² Government Decision No. 1408/2007 on the investigation and assessment of soil and subsoil pollution published in the Official Gazette, Part I, No. 802 of 23 November 2007.