Standard Recommendation
S.R. CEN/TS 16229:2011

Characterization of waste - Sampling and analysis of weak acid dissociable cyanide discharged into tailings ponds

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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English Version

Characterization of waste - Sampling and analysis of weak acid dissociable cyanide discharged into tailings ponds

Caractérisation des déchets - Échantillonnage et analyse des cyanures à acide faible dissociable déversés dans des bassins à stériles

Charakterisierung von Abfällen - Probenahme und Analyse von mit schwachen Säuren freisetzbare Cyaniden bei der Einleitung in Absetzteiche

This Technical Specification (CEN/TS) was approved by CEN on 14 May 2011 for provisional application.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (CEN/TS 16229:2011) has been prepared by Technical Committee CEN/TC 292 “Characterization of waste”, the secretariat of which is held by NEN.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, (Mandate M/395), which assigned the development of standards on the characterization of waste from extractive industries

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Introduction

As gold typically occurs at very low concentrations it is often extracted from the ore using a cyanide leaching process. The waste from which the gold was removed is referred to as residue or tailings material. Tailings, usually slurry, are pumped to a pond after treatment with for example hydrogen peroxide or sulfur dioxide to destroy cyanides.

In “Directive 2006/21/EC on the management of waste from extractive industries” [1] the following is addressed in Article 13; no.6:

In the case of a pond involving the presence of cyanide, the operator shall ensure that the concentration of weak acid dissociable cyanide in the pond is reduced to the lowest possible level using best available techniques and, in any case, at waste facilities which have previously been granted a permit or have already been in operation on 1 May 2008 that the concentration of weak acid dissociable cyanide at the point of discharge of the tailings from the processing plant into the pond does not exceed 50 ppm as from 1 May 2008, 25 ppm as from 1 May 2013, 10 ppm as from 1 May 2018 and 10 ppm at waste facilities which are granted a permit after 1 May 2008.

Methods for sampling and analysis have been selected to ensure the aim of this directive. Methods described here are either EN or ISO standards with consideration of the Cyanide Code [2].