



GREEN MUD, CONTROVESIAL WASTE RESULTED FROM WINEMAKING INDUSTRY

Mihai Nicu¹, Ioan Nema^{2*}

¹Technical University Iași, Faculty of Industrial Chemistry, Department of Environmental Engineering, Iasi, Romania, ²National Environmental Guard, Commissary Vaslui, Romania

Abstract

This paper presents the reasons why it is necessary to eliminate metals from wine using the blue fining process and the resulting wastes called "green mud". Quantities of that waste have been stockpiled in three important winemaking districts and the environmental impact of ferrocyanides in the green muds are not adequately managed. By stoichiometry calculation, the approximate concentration of cyanide compounds from the wastes were determined that resulted using blue fining methods at SC VASCOVIN SA Vaslui from the periods 1990 – 2002. There are several methods for treating those muds, some with recovery of Prussian blue and others compounds, and others based to destruction of the hexacyanoferrate ions, thermally or by using the oxidizers. These methods currently do not have industrial applications. At present the wastes are stockpiled vessels at the winemaking factories, generally outdoors exposed to the elements. Therefore it is important and necessary to improve proceedings for treating green muds, at the best hand for environment and economic too.

Keywords: wine, metallic casse, ferrocyanide, blue fining, hexacyanoferrates, green mud, stocks, cyanides compounds concentration, environment

* Author to whom all correspondence should be addressed: e-mail: ioanema@yahoo.com