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SELECTION AND USE OF EMAS III INDICATORS AND AHP METHODOLOGY IN ANALYSIS OF ORGANIZATION ENVIRONMENTAL PERFORMANCE

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Abstract

The paper presents a Multi-Criteria Decision Analysis (MCDA) methodology to analyze environmental performance indicators of an organization designed according to Eco-Management and Audit Scheme III - Regulation (EMAS III). The newly proposed indicators are intended to achieve Best Environmental Management Practice (BEMP) to facilitate and harmonize the way the environmental performance is reported and analyzed periodically within the Environmental Management System (EMS) of the organization. During each environmental management analysis, the state regarding the accomplishment of the proposed objectives stated in the organization environmental policy should be checked. This way, adequate and timely measures should be taken to meet the objectives and improve environmental performance. While referential documents ISO 14000 standards series and European legislation - EMAS III Regulation requirements are well explained within environmental management literature, the instruments for their implementation at organizational level need yet improvements. One such improvement endeavor is the release of BEMP sectoral documents which include new EMAS III indicators for environmental performance analysis. Instruments that should be used in order to analyze those environmental performance indicators can also be improved to help in managing the significant environmental impacts of organization and the associated environmental risk. Using results from operational research field and applying them to the environmental management can produce reliable scientifically based methodologies. General considerations about how to use the Analytical Hierarchy Process (AHP) methodology as a MCDA tool for environmental management analysis are presented.

Key words: Analytical Hierarchy Process, Environmental Management System, environmental indicators, Multi-Criteria Decision Analysis

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