

## **MINERAL AGGREGATES POLICY AND MANAGEMENT: A COMPARATIVE ANALYSIS BETWEEN CANADA AND BRAZIL**

*Marcel Fantin<sup>1</sup>; Richard Poulin<sup>2</sup>; Hildebrando Herrmann<sup>3</sup>*

<sup>1</sup> UNIVERSIDADE ESTADUAL DE CAMPINAS; <sup>2</sup> UNIVERSITÉ LAVAL; <sup>3</sup> UNIVERSIDADE ESTADUAL DE CAMPINAS

**RESUMO:** The production of mineral aggregates is a segment of mining that is responsible for supplying raw materials for civil construction.

These mineral inputs are virtually irreplaceable and strategic for the construction industry. In relation to its productive aspects, mineral aggregates have two specific characteristics that distinguish it from other productive sectors. First of all, they have a low market value in relation to their large production volumes. It contributes to mineral aggregates production close to consumption centers, once the freight has played a central role in the delivered price. Additionally, they can only be found and exploited in areas where geological conditions permit their existence; typically, the sensitive areas in relation to environmental preservation. These characteristics have placed aggregates mining at the center of conflict scenarios, either because of advancing urbanization on the aggregates resources or because of pressures from civil society to impose restrictions on their development. The search for solutions to this problem has required from the public governments a large political capacity to negotiate and manage in order to reconcile the divergent interests and at the same time to ensure a regional balance between the supply and demand of these mineral goods. To this end, policy and management pursued by the government play a fundamental role since they are an efficient tool for planning and action. The aim of this work is to analyze and compare experiences of policy and management applied to mineral aggregates for two important world producers: Canada and Brazil. The two key points that define the effectiveness of the policy and management of natural resources were analyzed in each case study: policy and management instruments and government organizational design. The research results showed that the Canadian policies related to mineral aggregates are based on a strong provincial planning that seeks to protect the deposits of mineral aggregates from sterilization in order to meet future demand. On the other hand, the provinces have made great efforts to ensure the rehabilitation of areas degraded by mining, using, for this, economic instruments such as deposits and insurances. Such policies are more efficient in terms of their main goals and have a pro-active posture of the mineral aggregates producing sector. However, this model has been hotly contested by civil society, especially in the Province of Ontario, which has pressed the provincial government to change the traditional policy approach that focuses on the provision of mineral aggregates and the rehabilitation of degraded areas to a policy based on environmental conservation and the management of demand for these mineral inputs. In Brazil, the country's legislative basis allows a very pluralistic participation of the different spheres of power when it comes to drafting laws and policies for mineral aggregates. However, problems such as the lack of constitutional rules that clearly define the legislative and materials powers at the federal, state and municipal levels have led to the enactment of conflicting laws and disjointed actions between the public entities responsible for the implementation of policies related to mineral aggregates.

**PALAVRAS-CHAVE:** AGGREGATES; POLICY; MANAGEMENT.