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Classification Method fo Urban Solid Waste Disposal Sites

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ABSTRACT

One of the environmental liabilities left by abandoned urban waste disposal sites, closed without the correct procedures, is the risk of exposure to their effluents, whose emissions may occur for many years. The purpose of the proposed methodology, referred to as SISTAVAFE, an assessment system of a closed landfill, is to contribute in the risk assessment of exposure to leachate as well as to suggest procedures for site monitoring, according to different levels of care and urgency. The method is based on four matrices that help make an initial evaluation of the risk source, potential target and the surface and underground environmental paths. This paper only addresses the contamination caused by liquid effluents.

KEYWORDS

Environmental Impact, Solid Waste Landfill, Later Occupation, Risk of Exposure, Leachate, Classification Tool, Multi-Criteria Analysis

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References

- [1] Brazilian Technical Standards Association, " Non-Hazardous Waste Landfills—Criteria for Design, Implementation and Operation—Procedure (NBR-13896)," ABNT- Associação Brasileira de Normas Técnicas, Rio de Janeiro, 1997.
- [2] G. Andreottola and P. Cannas, " Chemical and Biological Characteristics of Landfill Leachate," In: T. H. Christensen, R. Cossu and R. Stegman, Eds., *Landfilling of Waste: Leachate*, 1997, pp. 65-88
- [3] O. A. Filho, L. E. S. Cerri and C. J. Amenomori, " Geologic Risks. Conceptual Aspects," I Simpósio Latino-Americano sobre Risco Geológico Urbano, São Paulo, 1990, pp. 334-341. (in Portuguese)
- [4] R. Fell, " Landslide Risk Assessment and Acceptable Risk" . *Canadian Geotechnical Journal*, Vol. 31, 1994, pp. 261-272.
- [5] R. Fell and D. Hartford, " Landslide Risk Management," *Proceedings of the International Workshop on the Landslide Risk Assessment*, Hawaii, 19-21 February 1997, pp. 51-109.
- [6] S. Heitefuss and K. Turk, " Additional Processing Notes for Establishing Regional Lists of Priorities and Regional Waiting Lists by the Regional Commission for Assessment A. Old Landfill Facts: First assessment of Old Landfill Disposal at Proof Level 1," 1994, 8S., 7 Abb. (in German)
- [7] IPT/CEMPRE " Local Waste: Handbook on Integrated Management," Institute of Technological Research, 1st Edition, São Paulo, 2000.
- [8] Mahler, C. F.; Lima, G. S. A. " Applying the value analysis and fuzzy logic to select areas for installing waste fills. *Environmental Monitoring and Assessment*" (EMA), 2002.
- [9] A. T. Ogura, " Riesgos Geológicos Urbanos" . *Clases Dictadas en el Curso Formación en Aspectos Geológicos de Protección Ambiental*. Instituto de Geociencias de la Universidad Estatal de Campinas - UNICAMP, São Paulo, Vol. 1, 1995, pp. 89-101.

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- [10] A. S. Schueler, " Case Study and Proposed Assessment of Degraded Areas by Disposal of Urban Solid Waste" Ph.D. Thesis, Coppe-Federal University of Rio de Janeiro (UFRJ). Rio de Janeiro, 2005.
- [11] A. Pires, G. Martinho, N.-B. Chang, " Solid Waste Management in European Countries: A Review of