Hazardous waste management as an approach for conservation of nature and urban Environment

Abdoli M.A.*

prof. Environment Faculty, Tehran University, Tehran, Iran

Tavakoli B.

Lecturer. Guilan University, Dep. of Environment, Rasht, Iran

Menhai M.H.

Assistant Prof, Guilan University, Dep. of Environment, Rasht, Iran

Received: 7/12/2010 Accepted: 15/9/2011

Extended Abstract

Introduction

One of serious problems facing country's environment especially in urban areas is the ongoing trend of hazardous waste mismanagement. The mismanagement of hazardous waste makes a lot of risks to the human health and the nature considering combustion, reactive, corrosive and toxic characteristics. In order to reduce these side effects the country needs a more comprehensive hazardous waste disposal program (e.g. legislation and regulation).

Research Methodology

In this study, to overcome these challenges with regard to social - economic conditions and a better commitment by the manufacturers an appropriate legislation has been provided. The purpose of the revision and development of specific regulations for hazardous waste could be described based on the reduce of the severe damage caused by illegal disposal of pollutants into the urban environment as well as filling the existing gaps in state law to preserve nature and the environment. The study also criticized the existing law and administrative regulations of the Waste Management and following a comparison with some of the laws of developed countries, the topics for special legislation for the legal disposal was determined.

*Responsible Author:

Mabdoli@ut.ac.ir

Results

Consisted of 23 articles and 19 notes, as well as a regulatory counterpart including 87 article and 64 notes have been compared.

As a result, following a thorough and careful investigation, a piece of legislation In this revised regulations, a special attention is given based on the decrease of production and considering a recycling and reuse program. In addition to the applicable responsibilities, supervision for the implementation of the commitments is considered. This piece of legislation is annually audited by EPA with its divisions. In this regard, there is an especial emphasis by EPA on the private sector for the Waste Management. Site selection is carried out by EPA based on Land Use Planning and Environmental Impact Assessment. However, the Waste Management programs could be done by the private sector as a long contract. To transport and disposal of waste materials by the private sector, a maximum support by EPA has been considered. To reduce of environmental costs, a recycling and reuse program is emphasized. Meanwhile, the producer is responsible for disposal costs. In this proposed piece of legislation, in order to reduce the disposal costs and waste volume, some encouragements have been determined through ISO 14001. In addition, some solutions for business income and updated database are considered by the proposed piece of legislation. Overall, an organized educational program is proposed for public and private sectors.

Conclusion

This research revealed that to protect the urban environment, a specialized law should be codified. With regard to economic, social, cultural and political situation, a draft law for Waste Management has been developed. The illegal disposal of hazardous waste material is the most important problem in developing countries (e.g. Iran). To address this failure, the Special Waste Management Act and Regulations were presented. The advantages of this new legislation could be described in terms of the establishment of environment, and the view points of citizens on decision making processes the found could provide money for financing the costs associated with environmental recovery, primary evaluation of different legal disposal sites, and study the different environmental aspects for making decision about urgent reaction or improvement actions.

Key Words: Waste management, Hazardous waste management legislation, environmental survey, Legal disposal.

References

- 1. Abbaspour, M., 1993, Environmental Engineering. Azad University cultural-publication Center, pp. 25-54.
- 2. Amirsoleymani, H & Tavakoli. B., 2010, **An inquiry to hazardous waste management for Guilan province**, The First Iranian Conference on Natural Resources, Kurdistan University.pp.241.

- 3. Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal Act, 1992, Cited in: http://www.basel.int/text/con-e-rev.doc
- 4. Boyle, C. A., 2005, **Solid waste management in New Zealand**, Waste Management, 20:517-526.
- 5. Eriksson, O. Olofsson, M. & Ekvall, T., 2003, how model-based systems analysis can be improved for waste management planning, Waste management and research, Vol. 21, No. 6, 488-500.
- 6. Ferdosi, S. & Ghodsi, F., 2006, **Environmental impact assessment: issues**, trends and practice. Dayereh Sabz cultural-publication Center, Iran. pp. 164.
- 7. Jafarzadeh haghighi fard, N. Yaghmaian, K. Hoseyni, M. & Bahrami H., 2009, **Integrated solid waste management**, Khaniran cultural-publication Center, Iran. pp. 1192.
- 8. Morris, J.R., Phillips PS, Read AD., 1998, **The UK Land Tax: an analysis of its contribution to sustainable waste management**. Resources, Conservation and Recycling 20:259-270.
- 9. Russell, C.S., 2008, **Economic Incentives in the Management of Hazardous Wastes, Law Journal Library**,13:257-264.
- 10. Saed, N. & Tila, P., 2009, **A survey of Iranian environmental law and Regulation**, Khorsandi cultural-publication Center, Tehran, Iran, pp. 464.
- 11. Tavakoli, B., Abdoli, M A. & Menhaj, M H., 2010, A note on existing piece of legislation for hazardous waste management and proposing economical and environmental resolutions for revision of the existing laws, The 5th national congress on waste management, Mashhad, pp.171.
- 12. Tavakoli, B., Abdoli, M A. & Menhaj, M H., 2010, **To draw up a draft of legislation for hazardous waste management**, The 4th Conference and Exhibition on Environmental Engineering, Tehran University .pp.556.
- 13. U.S. Environmental protection Agency, 2008, Experiences of Hazardous waste generators with EPA's phase I RCRA program, Washington, D.C. pp.118.
- 14. U.S. Environmental Protection Agency, 1997, **Safer Disposal for Solid Waste:** The Federal Regulation for Landfills.pp.37.

