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DENR ADMINISTRATIVE ORDER NO. 10
Series of 2006

SUBJECT: Guidelines on the Categorized Final Disposal Facilities
(Sanitary Landfills)

Consistent with Sections 37, 40, 41 and 42 of Republic Act 9003, otherwise known as the Ecological Solid Waste Management Act of 2000 and DENR Administrative Order No. 2001-34, the Implementing Rules and regulations of Republic Act 9003, the following guidelines on the categorized final disposal facilities are hereby promulgated:

SECTION 1. RATIONALE

RA 9003 specifically provides for the Closure of Open Dumps, Criteria for Siting, and Establishment and Operation of Sanitary Landfills, which require basic environmental and engineering safeguards.

These guidelines are based on the potential net residual solid waste generation for setting the entry level of LGUs into the various categories of disposal facilities, taking consideration the environmental, financial, socio-economic as well as the hydro-geological dimensions within the LGUs.

The categories in these guidelines are consistent with the overall objectives of RA 9003, which are to minimize waste, maximize diversion, and use disposal facilities and other ecologically-acceptable alternative technologies for the management of residual wastes.

Furthermore, these guidelines support the National Solid Waste Management Commission Resolution No. 6, the Guidelines on the Categorized Final Disposal Facilities (Sanitary Landfills, SLFs) which was approved on December 15, 2005.

SECTION 2. OBJECTIVE

These guidelines are promulgated in order to support Local Government Units in their planning and implementing strategies on ecological solid waste management through a set of categories on disposal

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facilities, specifying realistic categories and reasonable conditions for meeting legal requirements.

SECTION 3. SCOPE

The guidelines shall cover the different categories and requirements of Municipal Solid Waste (MSW) Disposal facilities and the necessary permits accorded for each category. These shall guide the LGUs, a cluster of LGUs and/or developers in the design, construction and operation of sanitary landfills.

SECTION 4. CATEGORIES OF FINAL DISPOSAL FACILITIES

The following categories of final waste disposal facilities have been developed and designed in consideration of the *net residual waste generation* of the LGUs, taking into account the environmental setting/condition of the site where the SLFs shall be established.

The category of SLF shall be based upon the determination of net residual waste, given the potential waste generation by the LGU, less waste diverted through composting, recycling and other recovery methods. It shall likewise consider the projected waste increase over a 10-year period.

Lower disposal categories may be maintained by LGUs implementing sustained and full scale diversion through recycling/ or various methods of composting.

Each LGU or cluster of LGUs may develop and operate their respective final disposal facilities and progressively move from a lower to a higher category as the amount of disposable residual waste increases over time.

4.1 Category 1

A final disposal facility applied to LGUs with net residual waste generated of less than or equal to 15 tons per day (TPD). It shall also apply to a cluster of LGUs with a collective disposable residual waste of less than or equal to 15 TPD.

4.2 Category 2

A final disposal facility applied to LGUs with net residual waste generated of greater than 15 TPD but less than or equal to 75 TPD. It shall also apply to a cluster of LGUs with a collective disposable residual waste greater than 15 TPD but less than or equal to 75 TPD.

4.3 Category 3

A final disposal facility applied to LGUs with net residual waste generated of greater than 75 TPD but less than or equal to 200 TPD. It shall also apply to a cluster of LGUs with a collective disposable residual waste greater than 75 TPD but less than or equal to 200 TPD.

4.4 Category 4

A final disposal facility applied to LGUs with net residual waste generated of greater than 200 TPD. It shall also apply to a cluster of LGUs with a collective disposable residual waste greater than 200 TPD.

SECTION 5. DEVELOPMENT AND OPERATIONAL FEATURES OF THE CATEGORIZED FINAL DISPOSAL FACILITIES

5.1 Matrix of the Implementation Features

Features	Category 1 ≤ 15 TPD	Category 2 > 15 TPD ≤ 75 TPD	Category 3 > 75 TPD, ≤ 200 TPD	Category 4 > 200 TPD
Daily and Intermediate Soil	√	√	√	√
Cover				
Embankment/ Cell Separation	√	√	√	√
Drainage Facility	√	√	√	√
Gas Venting	√	√	√	√
Leachate Collection	√	√	√	√
Leachate Treatment	Pond System	Pond system	Pond system	Combination of physical, biological & chemical
Leachate Re-circulation	At a later stage of operation	At a later stage of operation	At a later stage of operation	Treatment
Clay liner	√ ¹	√ ²		
Clay liner and/or synthetic liner			√ ³	√ ⁴

¹ Clay liner be at least 60 cm thick and has a permeability of 10^{-6} cm/sec

² Clay liner must be at least 75 cm thick and has a permeability of 10^{-6} cm/sec

³ Clay liner at least 75 cm thick clay liner with a permeability of 10^{-7} cm/sec or better, if not available, an equivalent replacement would be a composite liner consisting of at least 1.5mm thick HDPE membrane over at least 60 cm thickness of compacted fine materials with permeability no more than 10^{-6} cm/sec.

⁴ Synthetic liner at least 1.5mm thick HDPE membrane over at least 60 cm thickness of compacted clay materials with permeability no more than 10^{-7} cm/sec.

5.2 Facility Development and Operating Requirements

All waste disposal facilities, regardless of category, shall satisfy the Basic Siting Criteria stated in Section 40 of RA 9003 and its IRR, and shall meet the following operating requirements, unless when otherwise specified.

1. Planned capacity with phased cell development.
2. Site preparation and containment engineering.
3. Compaction of waste to minimum specified target densities.
4. Specified operational procedures to protect amenities.
5. Fence, gate and other site infrastructure with surfaced primary access road.
6. Full record of waste volumes, types and source.
7. Separate cells for municipal solid waste, treated toxic hazardous waste (THW) or health care waste (HCW). Handling and management of THW and HCW should be in accordance with the provisions of Republic Act 6969 and Joint DENR-DOH Administrative Order No. 02, respectively.
8. Facility operation by a pool of fully-trained staff.
9. Prohibition of open burning.
10. Provision for aftercare following site restoration and closure.
11. Prohibition of waste pickers at the immediate disposal area.

SECTION 6.

PERMITTING REQUIREMENTS

The establishment and operation of the different categories therein shall be consistent with Section 38 of RA 9003 and the requirements stipulated in the Procedural Manual for DENR Administrative Order No. 30 Series of 2003 and Memorandum Circular No. _____ Series of 2006.

- 6.1 For Categories 1 and 2, the application for an Environmental Compliance Certificate (ECC) shall require the submission of an Initial Environmental Examination (IEE) Checklist. The IEE Checklist may be secured from the regional offices of the Environmental Management Bureau (EMB).
- 6.2 For Categories 3 and 4 however, the documentary requirements for the application and issuance of the ECC shall be an Initial Environmental Examination (IEE) Report.
- 6.3 In view further of the provisions of the Procedural Manual for DENR Administrative Order No. 30, ECC application for sanitary

landfill projects with a daily capacity of 1,000 metric tons and above shall be required an Environmental Impact Study (EIS).

SECTION 7. SEPARABILITY CLAUSE

If any section of these guidelines is held or declared unconstitutional or invalid by a competent court, the other sections or provisions hereof shall continue to be in force as if the sections or provisions so annulled or voided have never been incorporated herein.

SECTION 8. REPEALING CLAUSE


All pertinent guidelines, rules and regulations or portions thereof inconsistent with these Guidelines are hereby revised, amended and/or modified accordingly.

SECTION 9. AMENDMENTS

These guidelines may be amended and/or modified in whole or parts hereof from time to time by the DENR.

SECTION 10. EFFECTIVITY

This Order shall take effect fifteen (15) days after publication in two (2) newspapers of general circulation and filing with the office of the National Administrative Register.


ANGELO T. REYES
Secretary, DENR and
Chairman, NSWMC



Republic of the Philippines
DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES

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