

## Landfill site assessment checklist

Location/Site identification: \_\_\_\_\_

Date of site visit: \_\_\_\_\_

Persons interviewed and their roles:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C – compliance\*

PC - partial compliance\*

NC – non-compliance\*

NA – Not available

\*In relation to best available practices

Legend:

Cr. Nr.	Criteria	C	PC	NC	NA	Comments/recommendation
<b>1</b>	<b>Documentation</b>					
	Does the site have the necessary permits/authorizations (particularly environmental) and are they valid? Mention which permits are in place and which are missing, if any.					
	Is the list of Acceptable and Prohibited wastes indicated at the entrance					
	Copy of Permit displayed and accessible to facility personnel?					

Cr. Nr.	Criteria	C	PC	NC	NA	Comments/recommendation
	Permittee keeps records and reports of waste types and amounts of recyclables received					
	Is the documentation of the waste flow traceable, complete and consistent (identification form, single weighing bridge documents/estimation of incoming waste, landfill internal monthly list, report of type and quantity of waste to the competent authority)?					
	Do you have a plan for site closure?					
	Are the basic characterization documents kept as long as required by national legislation?					
	What is the frequency of compliance testing and what tests are routinely performed?					
	Have the analyses been performed by an independent and qualified person/institution?					
<b>2</b>	<b>Siting</b>					
	Distance from nearest dwelling					
	Distance from nearest water body					
	Is the landfill located on soils that have low permeability such as clays or silts?					
	Distance from main road					
<b>3</b>	<b>Ground water</b>					
	Geologic and hydro geologic conditions tested before the landfill was established					
	Water quality tested and monitored					
	Depth of water table below waste					
<b>4</b>	<b>Construction</b>					

Cr. Nr.	Criteria	C	PC	NC	NA	Comments/recommendation
	All landfill facility construction conforms to approved plans and specifications?					
	Pipes, culverts, ditches, swales, berms, dikes, straw bales, erosion control matting, riprap, and other structures are well maintained, constructed per approved design plans and specifications?					
	Perimeter flood control dikes are well maintained, structurally sound, in good condition?					
	Vertical wells and horizontal collectors are well maintained and sufficient in number to prevent excessive odors and subsurface gas migration? Header pipes, valves and associated equipment are functional and well maintained? Landfill-wide odors not excessive?					
	On-site structures setback adequately from the landfill or have engineering controls and monitoring to prevent and detect landfill gas intrusion and explosion hazards?					
	Is the working area designed in a way to minimize fugitive releases?					
<b>5</b>	<b>Operation</b>					
	What are the procedures and rules in place regarding acceptance of following types/streams of waste: a) hazardous waste b) liquid wastes, lead acid batteries, used oil, vehicles, waste tires c) source separated recyclables d) asbestos e) infectious waste f) large metal jacketed appliances g) explosives h) Waste electric and electronic equipment					-

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	Facility effectively minimizes leachate generation in active and inactive cells through systematic use of daily cover, intermediate (plastic) cover and phased final closure (close-as-you-go) strategies?					
	Is the landfill separated from nearest individual dwelling and well by at least 100m and from the nearest residential development by at least 300m?					
	Are there clearly designated areas for scrap metal, tires, wood, etc.?					
	If there is tire Storage. How many whole tires are stored at one time on site?					
	Is there any unacceptable waste deposited into the landfill (hazardous waste) and not in specially designated areas?					
	Is waste regularly compacted and covered?					
	Are there issues with illegal dumping?					
	Is landfill operating equipment suitable and well maintained?					
	Is there a Log Book for maintenance of landfill operating equipment?					
	Is it ensured that the accepted wastes have undergone appropriate treatment, if required?  How is this ensured?					
	Are the waste loads visually inspected by personnel trained to recognize waste that requires special handling?					
	Are procedures in place on how to deal with difficult wastes (e.g. very large objects, sludges, very light material, finely particulate material)?					

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	Are procedures in place to deal with particulate matter arising from the placement of wastes, traffic on site roads during periods of dry weather, site preparation and restoration activities, surface emissions and carriage of dust/mud onto the roads?					
	Do landfill attendants regularly inspect the site?					
	Are procedures in place to maintain a description of the types of odorous substances deposited and generated?					
	Do you have a landfill operation plan showing the order of waste disposal (where to place the waste, thickness of layers, instructions regarding waste compaction)					
<b>6</b>	<b>Health and Safety</b>					
	<p>A) HEALTH AND SAFETY POLICY</p> <ul style="list-style-type: none"> <li>Do you have a written Health and Safety policy? If so, please supply a copy.</li> <li>Supply a schedule (job categories/type and frequency of medical check-up) performed on the personnel who is providing work on this site</li> </ul>					
	<p>B) SAFETY STANDARDS</p> <ul style="list-style-type: none"> <li>Do you have any emergency procedures? If so, please supply a copy.</li> <li>What safety equipment is supplied to your employees? <ul style="list-style-type: none"> <li>Who pays for it?</li> <li>When is it replaced?</li> </ul> </li> </ul>					
	<p>C) SAFETY TARGETS</p> <ul style="list-style-type: none"> <li>What have you identified as the main hazards in the type of work performed on</li> </ul>					

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	the site and what steps have you taken, and do you continue to take to avoid accidents in these aspects of your activity?					
	<b>D) SAFETY INSPECTIONS AND AUDITS</b> <ul style="list-style-type: none"> <li>Do you conduct regular safety audits or inspections? If so, state how often they are performed, who does them and provide a copy of a typical report.</li> <li>How do you make sure that findings are acted upon?</li> </ul>					
	<b>E) SAFETY TRAINING</b> <ul style="list-style-type: none"> <li>State what safety training you provide for your personnel in the various job functions.</li> </ul>					
	<b>F) ACCIDENT INVESTIGATION</b> <ul style="list-style-type: none"> <li>In case of an accident, how do you report and investigate it?</li> <li>If you have a written procedure, please supply a copy, otherwise please provide a description of the process.</li> </ul>					
	<b>G) EFFECTIVE MOTIVATION AND COMMUNICATION</b> <ul style="list-style-type: none"> <li>What safety meetings do you have?</li> <li>How often do each of these meetings take place, who attends and what do they discuss?</li> <li>How do you inform new employees of your safety requirements?</li> </ul>					
	Signs, fences, barriers clearly define waste unloading areas?					
	Active landfill area has minimal birds, insects, rodents?					

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	How are these insects and rodents controlled?					
	Dust, odors and noise controlled?					
	Weather conditions are documented? How are they used in planning and operations? (Rainfall data etc.)					
	How is wind-blown litter controlled?					
	Area for refueling Landfill Equipment is adequate and safely managed?					
	Entry roads are safe, provide all weather access and are well maintained?					
	Entrance signs indicate facility name, emergency phone #, schedule, acceptable and prohibited wastes, and restrict site access?					
	Adequate security, prevents unauthorized entry and dumping?					
	Do landfill attendants regularly inspect the site?					
	Is there developed and implemented a training program for the employees who manage hazardous waste?  Provide training records and training program for current year					
	Are eye wash fountains and safety showers provided in areas where corrosive chemicals are handled?					
<b>7</b>	<b>Fire prevention/control</b>					
	Open Burning. Does it occur?					

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	If yes, with what frequency and how is it dealt with?					
	Facility provides adequate on-site fire control measures?  Has the facility arranged for assistance from local Fire Department if needed? Is there an official protocol/procedure in place?					
	Are fire extinguishers selected and provided for the types of materials in areas where they are to be used?					
	Is there safety equipment for staff and site?					
	Has the staff been instructed in matters of fire prevention? Were there practical exercises performed with the relevant staff? With what frequency?					
	Communications equipment is available for emergencies?					
<b>8</b>	<b>Hazardous waste storage</b>					
	Is there a hazardous waste storage at the landfill?					
	Is it lockable?					
	Is the capacity sufficient?  Size in m <sup>2</sup> ?					
	Do you have adequate containers, barrels or boxes for the intermediate storage of hazardous waste?					



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	Do you transport equipment (fork lifter or similar) for those bins?					
	Is there trained staff on site for handling hazardous waste?					
	Is the storage emptied regularly?					
	Is incoming and outgoing hazardous waste registered (type of waste, date, quantity, name of deliverer)					
	Is there maneuvering area for trucks in front of the storage?					
	Do you have water supply at the landfill?					
	Do you have electricity supply at the landfill?					
<b>9</b>	<b>WAREHOUSE/ STORAGE</b>					
	Good housekeeping is being maintained, and all areas, are free from debris, such that no situation exists that could create a fire, accident or egress hazard					
	Are all containers, such as vats and storage tanks labelled as to their contents					
	Waste labels and markings are clearly visible					
	Are Storage racks marked with the maximum loading weight per shelf unit					
	Are all pallets in good condition					
	Items are safely stored and unlikely to fall					
	Large, heavy objects (that can be manually handled) are stored below shoulder level					

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	Shelving/ racking is secure and has guards to prevent items falling					
	All aisles and exits are free from debris					
	A "DO NOT USE" warning sign is in place on all non-operational equipment and machinery. In addition, lockout/tag out is employed as applicable.					
	Is there a Quarantine area?					
	Appropriate signs are posted in all areas where PPE is required to be worn					
	Steps non-skid and free of slipping hazards?					
	All confined spaces are clearly marked and secured					
	Weekly, monthly inspections are completed					
	Waste is stored in suitable and compatible UN approved containers					
	Waste containers are in good condition					
	Waste are segregated according to regulatory requirements or other requirements					
	Necessary space for inspection and movement of loads is available					
<b>10</b>	<b>SPILL PREVENTION &amp; RESPONSE</b>					
	Spill collection systems are available for liquid waste					
	Have standard operating procedures been established and are they being followed when cleaning up chemical spills?					
	Are liquid substances stored in drip trays or sealed bunds					

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	Is there site free of the signs of leaks or pools of a substance that has not be cleared up promptly					
	Is there a spill response plan available on site?					
	Spill kits are available and marked					
	Unbounded liquids not stored by drains or open ground.					
<b>11</b>	<b>INFORMAL ACTIVITIES</b>					
	Are there informal workers on the site?  If Yes, how many (approximately)?  How often are they present on site?  Male/Female ratio  Average age					
	What operations do informal workers perform on site?					
	What were the engagement activities with informal workers performed so far?  What were the results of such activities?					