



ENCAP Visual Field Guide: Healthcare Waste

for quick identification of serious environmental & biosafety concerns in management of waste from small health care facilities

About the ENCAP Visual Field Guide Series

ENCAP Visual Field Guides are intended for use during field visits by COTRs, activity managers, and M&E staff who are not environmental specialists.

They are intended to ensure that the most common serious environmental deficits in activity design and management are quickly and easily identified for corrective action.

They support evaluation of an activity's compliance with its environmental mitigation and monitoring plan (EMMP) and the adequacy of the EMMP. However, EMMPs and the IEE or EA conditions that they implement may contain additional provisions not captured in this document. Field visits are ideally conducted with the EMMP in hand.

The field guides complement the more detailed guidance found in the *Environmental Guide-lines for Small Scale Activities in Africa*, available at www.encapafrika.org/egssaa.htm.

Disclaimer: This field guide was prepared by The Cadmus Group, Inc. for International Resources Group, Ltd. (IRG) under USAID Africa Bureau's Environmental Compliance and Management Support (ENCAP) Program, Contract Number EPP-I-00-03-00013-00, Task Order No. 11. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

Also use the visual field guide for TOILETS/LATRINES when visiting a small health facility.

PROBLEMS. A "YES" answer to any of the following indicates **an environmental or biosafety deficit in activity design and/or management**. In USAID-funded activities, corrective action will be required. Notify the COP, COTR, and activity manager.

1. Are sharps, bandages, other clearly infectious medical waste or incinerator ash disposed of in open ground? In an unfenced burial pit?



- | | |
|-----|--|
| YES | Insect and animal vectors can spread the pathogens contained in the waste. |
| NO | Wastepickers are directly exposed to infectious agents. |

2. Is waste intended for burning or burial stored in the open, or in anything other than secure, tightly closed containers?



- | | |
|-----|---|
| YES | As above. |
| NO | (At left, "red bag" waste is piled outside a clinic. At right, medical waste is being stored in an open cage under a shelter) |

3. Is the incinerator (if present) clearly non-functional or damaged? Is it being used for waste storage?



- | | |
|-----|--|
| YES | As above.
(At left, vines grow out of the stacks of a non-functional incinerator. At right, an incinerator burn chamber is being used for waste storage.) |
| NO | |

4. Is personal protective equipment for waste handlers absent or show little signs of use? (includes masks, thick gloves, safety glasses, aprons and boots) → Significantly heightens infection risks for waste handlers	YES	NO

Check for minimum elements of an effective waste management program.

The key questions on page 1 and at right identify possible gaps in minimum good waste management practice.

Use your field visit to verify whether these additional minimum elements of a basic waste management program are in place:

Written waste management plan exists?	Y	N
Staff responsibilities for waste management are clearly assigned/ understood?	Y	N
Training. Staff trained in safe handling, storage, treatment and disposal?		
Good hygiene practices. All who handle medical waste follow good hygiene practices followed and wash stations with water and soap available?		
Staff vaccinated against Hepatitis B & Tetanus?		
Waste segregation is systematic? (Requires red-bag & general waste containers in each treatment area.)		
Infectious waste is disinfected prior to disposal (by incineration, autoclaving, etc.)		

For more information about the minimum elements of a complete waste management program, see the *Healthcare Waste* chapter of the *Environmental Guidelines for Small Scale activities in Africa* www.encapfrica.org/sectors/medwaste.htm.

5. Do general waste containers have sharps or obviously infectious waste (such as bandages) mixed in?



- YES Significantly heightens infection risks for waste handlers.
- NO As general waste is not disinfected, infection risks to communities and waste pickers rise.

6. Does the burn or burial pit contain standing water?



- YES Fosters the growth of pathogens contained in the waste. Substantially increases the risk of groundwater contamination. Provides breeding habitat for insect disease vectors.
- NO

7. Are sharps containers absent? If present, can they leak or be punctured? → Significantly heightens infection risks for waste handlers	YES	NO
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POTENTIAL PROBLEMS. A “YES” answer to any of the following indicates that an environmental concern may exist; follow-up is required. Notify the COP, COTR and activity manager.

1 Does waste for burning contain > 10% of plastics by volume?



Waste in this open burn pit contains a very high percentage of plastics

- YES Incineration of plastics can produce dangerous levels of airborne toxics.
- NO PVC plastics produce highly dangerous furans and dioxins even in high-temperature incinerators.

2. Are waste storage and disposal areas closer than 20m to treatment areas, wards, kitchens or canteens?



- YES Increases the risk that pathogens contained in waste will contaminate food and treatment areas
- NO Photo: Infectious waste is stored in open pails under the tree, visible ~15m away thru this hospital kitchen window.

3. Is a shallow well, stream or pond providing drinking water within 30m of a burn or burial pit? → High possibility that the burn/burial pit is contaminating drinking water. .	Yes	No
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