

# Part II

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## **Environmental Health Rapid Needs Assessment for Floods in the Caribbean**



# Introduction

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An Environmental Health Rapid Needs Assessment (EHRnA) is conducted to determine immediate resource needs of an affected area. The EHRnA is designed to provide a snapshot of the potential need for resources, so that decisions can be quickly made about how much and what resources should be activated. An EHRnA is undertaken, by a small team whose objective is, to provide information that will determine critical resource requirements to support emergency response activities.

Environmental Health Rapid Needs Assessment tools are the basic operational data gathering instruments used by the EHRnA team to collect information in an uncomplicated but precise manner. The structure and design of the assessment forms must reflect this.

The EHRnA tools are used within an operational plan. This plan must include:

- Linkages and relationships with the national health sector disaster management plan and the national disaster response agency.
- Primary and secondary target assessment areas
- Assessment of priorities
- Fastest method available for undertaking the assessment (e.g. air, ground)
- Identification of assessors
- Team roster
- Reporting timeframes
- Communications procedures
- Safety and security procedures
- Emergency action procedures
- Dispute resolution procedures

### **EHRnA TEAM OPERATIONAL PLAN TEMPLATE**

Incident:	Flood conditions – give quantitative and qualitative details where possible. Include estimates of flood period, recovery period, aquatic vegetation development etc.
Location:	Give coordinates, dimensions of affected area. Ensure that there is an estimate of the affected population – Description of Land use (housing, agricultural, etc)
Date:	Self-explanatory
Team:	Indicate members and areas of expertise
Objectives:	Determine primary and secondary targets after full consultation and agreement with national disaster response agency.
Strategies:	Designate lead assessors
Clearly identify assignments of the assessors	
<ul style="list-style-type: none"> <li>• Note method of transportation</li> <li>• Record reporting times</li> <li>• Include safety and security concerns</li> <li>• Document any unusual circumstances or instructions</li> </ul>	

## **EHRnA Team Reporting**

Three reports are required for any EHRnA team. These are:

1. Assessment forms
2. Consolidated report
3. Final report

## **EHRnA Assessment Forms**

The assessment form is the principal tool used to collect and relay information to decision makers who in turn will put into operation the mobilization of adequate resources to address the immediate needs of the affected area (s). It is vital therefore, that information in the assessment forms is complete and concise. Templates of these forms are included in this document.

## **EHRnA Consolidated Report**

The EHRnA team leader and the coordinator of the National Health Sector have responsi-

bility for taking the information from the various assessor forms and collating the findings into a Consolidated Report. The Consolidated Report should provide an overview of the impacted area resource immediate needs and the issues faced by the flood-affected areas and must be directed to the appropriate body that will immediately mobilize resources as recommended. It is important that the reports be forthcoming within 24 hours of the occurrence.

### EHRnA TEAM CONSOLIDATED REPORT TEMPLATE

Report Number:

Event:

Date, time and Location:

Reporting Period:

Overview:

Describe the area affected by the flood, indicating the boundaries of the most severely affected areas.

Situation Assessment:

This is a narrative that outlines the most critical issues, as determined by team leader and the National Disaster Response Agency designee. Some emphasis should also be placed on other imminent hazards that could exacerbate the situation and cause additional response requirements.

Key areas to be reported on include: Population affected, general health situation, basic health needs, (water, food).

Recommendations:

The recommendations are extracted from the Assessment Forms. The focus must be placed on the most critical issues identified during the assessment phase, clearly identifying the resources required.

Annexes:

Any additional information that would enhance the content of the report should be attached. The individual Forms should also be attached to this report.

Verification:

Team leader and the National Disaster Response Agency designee must sign the document.

## Final Report

Each EHRnA Team deployed after the flood event must submit a final Report within the time frame specified by the Team Leader. The Team Leader compiles this report, which is used to assess how effectively and efficiently the assessment operation was undertaken. The report should seek to identify impeding factors to the deployment and suggest corrective measures for the future.

### EHRnA TERMINAL REPORT TEMPLATE

Event:

Date:

Introduction: The following Final Report is that of the EH Rapid Needs Assessment team that conducted an initial EH assessment following:

Issue: A one sentence statement

Background: Give a brief description of the issue, context, disaster response and list of challenges – Public Health problems

Recommendations: Detail recommendations in relation to challenges outlined, specifically the issues outlined below.

1. The activation process
2. The mobilization process
3. On-site operations
4. Reassignment and/or demobilization
5. Post-mission activities
6. Organisational effectiveness
7. An assessment of the EHRnA tools used
8. An assessment of policies and procedures

*The Team Leader must sign the document*

## The EHRnA Team

An EHRnA team should be deployed immediately during flood event, as long as conditions permit (e.g. an approaching tropical storm) and immediately after the occurrence of a flooding episode. The team should be comprised of small groups of competent experts.

Each team may be comprised of three sections. Specifically, these are (1) a management unit, (2) an assessment unit and (3) a support unit.

## Management Unit

The Management Unit supervises and coordinates the assessment and support units and bears responsibility for the coordination of the EHRnA. The unit comprises:

- A team leader, the chief officer responsible for environmental health
- A member of the National Health Disaster Management Coordination Unit
- The Environmental Health Officer with responsibility for the flooded region.

The team leader has overall responsibility for EHRnA operations and provides the linkages to the national health emergency response agency.

The Environmental Health Officer is responsible for providing local knowledge of the flooded area.

## Assessment Unit

The Assessment Unit should include experts that can be drawn from a cross section of the society. These are the individuals that actually perform the EHRnA.

In each case the designated expert within the unit must determine or estimate the resources required to ensure the maintenance of acceptable environmental health standards.

The Assessment Team could be comprised of up to six persons:

- ***A water and sanitation expert***

The water and sanitation expert assesses the distribution status and safety of the potable water supply where appropriate he/she will take water samples. In addition he/she is required to assess the status of excreta and solid waste disposal systems, as well as the number, type and capacity for disposal of dead animals and cadavers. He/she must clearly identify and estimate the immediate needs.

- ***A food safety and hygiene expert***

The food safety and hygiene expert assesses the state of food supplies, availability, safety and distribution within the flood-affected region. In addition they are responsible for assessing the requirements for personal domestic hygiene and survival within the flood-affected zone. They must clearly identify and estimate the immediate needs of this sector and where necessary take samples for laboratory analysis.

- ***A vector and rodent control expert***

An infectious disease professional or entomologist if possible holds responsibility for assessing the resource requirements for vector and rodent control in the immediate and near

future. They must clearly identify and estimate the immediate needs.

- ***A hazardous materials expert***

The hazardous materials expert assesses hazardous materials sites and facilities and their potential for impacting the public in the flooded area. This expert identifies the type of hazard, the contamination threat and the areas under threat. They must clearly identify and estimate the immediate needs.

- ***Logistician***

The logistician determines the immediate requirements for the provision of food, shelter, water and sanitary needs for displaced members of the affected population. In addition they assess the amount of relief and emergency first aid along with volunteer capacity. Logicians must also assess needs related to clean-up operations.

- ***A public health doctor, medical/epidemiological expert***

The medical expert assesses all relevant health care infrastructure and primary care systems, emergency medical services along with any special medical requirements. They must be able to set up ASAP epidemiological surveillance system for affected populations.

## **Support Unit**

The support unit provides both logistical and administrative support to the assessment unit.



# Forms

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## Environmental Health Rapid Needs Assessment: Drinking Water Quality and Quantity

Water Quality and Quantity	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural <input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Debris Removal</b>			
Are areas where you need emergency access covered by debris? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Is there local capacity to remove debris? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Have all emergency routes been identified? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Estimated quantity of debris to be removed: _____			
<b>Drinking Water Quality and Quantity</b>			
Is distribution system operational? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Has water been contaminated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Will potable water be required? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Is alternative water supply available? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Is chlorine available for disinfection? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Are field kits available for water testing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
How much potable water will be needed? (20L/person/day) _____			
Are tankers/trucks available to transport water? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
<b>Potable Water Systems</b>			
<input type="checkbox"/> Wells <input type="checkbox"/> Springs <input type="checkbox"/> Reservoirs <input type="checkbox"/> Cisterns <input type="checkbox"/> Desalination Plant			
<input type="checkbox"/> Water Treatment Plant <input type="checkbox"/> Other (Please specify) _____			
Number of facilities affected (specify types): _____			
Name of Facility: _____			
Location: _____			
Extent of damage: <input type="checkbox"/> Most destroyed <input type="checkbox"/> Major damage <input type="checkbox"/> Minor damage <input type="checkbox"/> In use			
Risk of downstream impacts: <input type="checkbox"/> High <input type="checkbox"/> Moderate <input type="checkbox"/> Low			
Time to return to service: _____ Hours _____ Days _____ Weeks			
Is commercial power available at facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Is generator power available at facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Service area of facility: _____			
Service population of facility: _____			
<b>Response Actions</b>			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:

## Environmental Health Rapid Needs Assessment: Vectors and Vermin

Vectors and Vermin	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural <input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Vectors Status</b>			
Are rodent populations obviously present in the affected area? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
If yes, give details of most prevalent locations and estimate numbers: _____			
_____			
Estimate the number and type of bait stations required to control rodent populations: _____			
_____			
Are flies, mosquitoes and other insect pests present in large enough numbers to cause concern?			
Flies	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Mosquitoes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Other insect pests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
Identify "other insect pests": _____			
Recommend control measures for these insect pests, and provide details such as quantities of substances to be used where applicable and necessary equipment: _____			
_____			
<b>Removal of Potential Vector Habitat</b>			
Is there significant water settlement in areas adjacent to or close to areas of human habitation?			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure			
If yes, indicate : Est. size of area: _____ Longitude: _____ Latitude: _____			
If yes, can contingency action be taken to remove water? Outline required action(s) below, giving estimated resources required. _____			
_____			
Are there exposed piles of refuse, dead animals or putrescible material? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure			
If yes, estimate the amount of debris to be removed, and indicate below the resources required for such: _____			
_____			
<b>Response Actions</b>			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:

## Environmental Health Rapid Needs Assessment: Food Safety

Food Safety	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area: <input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural	<input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Food Handling Establishments</b>			
No. storage sites <input type="checkbox"/> No. preparation sites <input type="checkbox"/> Other processing site <input type="checkbox"/>			
Has there been flood damage to any of the facilities? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
If yes, describe the extent of the damage: _____			
_____			
_____			
Can operations continue? <input type="checkbox"/> Yes <input type="checkbox"/> No    Is power available? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Requirements to optimize/resume operations? _____			
_____			
_____			
Est. quantities of food by weight:			
requiring processing/heating <input type="checkbox"/>		requiring refrigeration <input type="checkbox"/>	
ready to serve cold <input type="checkbox"/>		lost due to poor storage/power failure <input type="checkbox"/>	
lost due to contamination <input type="checkbox"/>		at risk if no remedial action is taken <input type="checkbox"/>	
Are quantities sufficient for the number of persons requiring food assistance?			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure			
Estimate food requirements if necessary: _____			
_____			
<b>Operations</b>			
In records of food operations monitoring, have any critical points been identified?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
Can remedial action be taken in the short term?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
What would be required to achieve this? _____			
<b>Risk from Sewage/excreta</b>			
Is there a sewerage system?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, has the system been damaged?		<input type="checkbox"/> Yes	<input type="checkbox"/> No                      Unknown <input type="checkbox"/>
Est. no. of houses with septic tanks <input type="checkbox"/>	How many damaged? <input type="checkbox"/>		
Est. no. of houses with pit latrines <input type="checkbox"/>	How many damaged? <input type="checkbox"/>		
<b>Risk from Industrial Activity</b>			
Is there industrial activity in the area?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, describe location and possible types contamination: _____			
_____			
_____			

## Environmental Health Rapid Needs Assessment: Food Safety (cont.)

<b>Equipment/Supplies</b>			
Are field kits available for analysis of floodwater?	<input type="checkbox"/> Yes	No <input type="checkbox"/>	Unknown <input type="checkbox"/>
If no, what is required? _____			
_____			
Have food supplies encountered floodwater?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>
If yes, is there equipment to ascertain contamination in the food?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
If no, indicate resources required: _____			
_____			
Are there adequate supplies of cleaning products and apparatus?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
If no, list requirements: _____			
_____			
_____			
<b>Drinking Water Quality and Quantity</b>			
Is there risk of microbiological contamination of drinking water?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Is there risk of chemical contamination in drinking water?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Is sufficient water stored (20L/person/day)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
<b>Response Actions</b>			
_____			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:

## Environmental Health Rapid Needs Assessment: Sanitation and Hygiene

Sanitation and Hygiene	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural <input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Water Supply Management</b>			
Is regular water supply present? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Has the water been tested for: Residual Chlorine <input type="checkbox"/> Turbidity <input type="checkbox"/> Microbiological Quality <input type="checkbox"/>			
Indicate values:	Chlorine	Turbidity	MicroB
Do values indicate acceptable quality? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If no, suggest disinfection method: _____			
If there is no regular supply, how is water supplied? truck <input type="checkbox"/> tanker <input type="checkbox"/> Other <input type="checkbox"/>			
Is a field test kit available for water testing? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Water has been tested for: Residual Chlorine <input type="checkbox"/> Turbidity <input type="checkbox"/> Microbiological Quality <input type="checkbox"/>			
Indicate values:	Chlorine	Turbidity	MicroB
Do values indicate acceptable quality? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If no, suggest disinfection method: _____			
Are shelters being used/occupied? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have the water containers been examined? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is volume adequate to supply 20 L/person/day? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is the storage container clean? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is the storage container free from cracks? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is the storage container covered at all times? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Has disinfection responsibility been assigned to a specific person? <input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Response Actions</b>			
_____			
_____			
_____			
_____			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:

## Environmental Health Rapid Needs Assessment: Sanitation and Hygiene

Excreta Disposal and Personal Hygiene	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area: <input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural	<input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Excreta Disposal and Personal Hygiene</b>			
Is there a sewerage/excreta disposal system? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, has the system been damaged? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Est. no. of houses with septic tanks?                      How many damaged?			
Est. no. of houses with pit latrines?                      How many damaged?			
Have existing toilets been repaired where necessary? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have exposed pit toilets been treated? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have damaged septic tanks been rehabilitated? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have chemical toilets been used where required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are basic sanitation services available? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If no, what type of latrine is recommended for construction?			
<input type="checkbox"/> Individual <input type="checkbox"/> Collective <input type="checkbox"/> Portable			
For construction of latrines, have the following been considered:			
<input type="checkbox"/> Soil conditions <input type="checkbox"/> Topographical conditions <input type="checkbox"/> Proximity to coastal environment			
<input type="checkbox"/> User access <input type="checkbox"/> Presence of surface or groundwater			
Are the ground conditions suitable for latrine construction? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If no, are latrines with removable tanks recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are facilities available for the transport of the excreta to a suitable site for burial? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are the no. of latrines suitable for the no. of persons at the shelter?			
(1 latrine per 25 women; 1 latrine & 1 urinal per 35 men) <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are basic handwashing facilities provided? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are these facilities easily accessible or located within close proximity to latrines? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are handwashing facilities adequate for the number of people? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have provisions been made for washing, cleaning and bathing? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is water available in adequate quantities? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are the shelters overcrowded? <input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Response Actions</b>			
_____			
_____			
_____			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:

## Environmental Health Rapid Needs Assessment: Sanitation and Hygiene

<b>Solid Waste Management</b>	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural <input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Solid Waste Management</b>			
Access routes been restored?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Debris has been cleared from roadways etc.?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Waste collection services are available?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
A public advisory been issued to provide guidance for waste handling?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Shelters been assessed for requirements for waste collection and disposal?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are solid waste containers well placed in the shelter e.g. on a wooden platform?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is garbage adequately stored in containers temporarily until the service resumes?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are all solid waste containers fitted with covers?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are the containers of suitable size?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are the numbers of solid waste containers adequate?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have arrangements been made for the removal and disposal of carcasses?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
An inspection been carried out to determine the presence of hazardous materials?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have arrangements been made for refuse collection from the shelter/households?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If collection & disposal services not available, has temporary site been identified?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Response Actions</b>			
_____			
_____			
_____			
_____			
_____			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:



# Environmental Health Rapid Needs Assessment For Floods in the Caribbean

## Environmental Health Rapid Needs Assessment: Chemical Hazards

<b>Chemical Hazards</b>	Type/Cause of Flood	Reporting Unit	Form
Flood # (for area this year):	Operations Period:	Date/Time Prepared:	Prepared by:
Location:	No. of Households	Est. Size of Pop	
Type of Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Sub-urban	<input type="checkbox"/> Rural <input type="checkbox"/> Industrial
<b>Observation Operation</b>			
Agency/Organization: _____			
Survey Method: <input type="checkbox"/> Aerial <input type="checkbox"/> Ground Survey <input type="checkbox"/> Interview			
GPS Location: _____			
<b>Release Information Source</b>			
<input type="checkbox"/> Highway <input type="checkbox"/> Air Transport <input type="checkbox"/> Railway <input type="checkbox"/> Pipeline <input type="checkbox"/> Fixed Facility <input type="checkbox"/> Offshore <input type="checkbox"/> Underground Storage Tank <input type="checkbox"/> Above Ground Storage Tank <input type="checkbox"/> Unknown			
Name of Fixed Facility: _____			
Other: _____			
<b>Material Type: (indicate type of container chemical is contained in e.g. plastic, metal drum etc.)</b>			
	Type of substance	Type of Container	State of Container
Hazardous Substance			
Oil			
Unknown			
Other			
<b>Estimated Quantity: (categories determined by criteria developed nationally)</b>			
<input type="checkbox"/> Catastrophic <input type="checkbox"/> Major <input type="checkbox"/> Minor <input type="checkbox"/> Unknown			
<b>Media Affected:</b>			
<input type="checkbox"/> Air <input type="checkbox"/> Land <input type="checkbox"/> Water <input type="checkbox"/> Unknown			
Type of water body (e.g. sea, freshwater lagoon etc.): _____			
<b>Responders Present:</b>			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, whom?			
<b>Release contained:</b>			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, how?			
<b>Response Actions</b>			
* is container leaking _____			
* call authorities in charge _____			
* decontamination needs _____			
_____			
_____			
_____			
_____			
Priority: <input type="checkbox"/> High <input type="checkbox"/> Low			
Team Leader	Date	Time	Distribution:



# Acronyms

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<b>CEHI</b>	Caribbean Environmental Health Institute
<b>CP</b>	Contingency Plan
<b>CPT</b>	Contingency Planning Team
<b>EH</b>	Environmental Health
<b>FPA</b>	Flood Prone Areas
<b>FRU</b>	Field Reporting Units
<b>HACCP</b>	Hazard Analysis of Critical Control Points
<b>NDMC</b>	National Disaster Management Committee
<b>PAHO</b>	Pan American Health Organization