# ACTION PLAN 2014-2015 ON CRISIS MANAGEMENT APRIL - 2014





Public Health Engineering Deptt / Dte Government of West Bengal

# **Public Health Engineering Department**

## 1. Objectives of Crisis Management Plan:

The main objective of this Plan is to minimize loss of human lives, livestock, social and community assets etc due to natural disaster. The objectives may precisely be articulated as;

- To provide an efficient system for cooperation and collaboration with other Departments, Local Authorities, Agencies, NGOs and other organisations at State, District, Block Level.
- ii) Ensure preparedness, response and relief at all levels.
- iii) To ensure prompt and effective response to deliver the services during any crisis situation, thereby to minimise causalities and enable quick recovery, restoration and rehabilitation of water supply.

### 2. Institutional mechanism of PHED:

PHED is the nodal Department at State level for safe and quality drinking water supply service to the communities. The Department is responsible for providing management and technical services while responding to natural calamities for restoration of damaged water supply infrastructure and sanitation requirements, including meeting up emergency drinking water needs to the affected people caused by natural disaster.

To respond any disaster Institutional mechanism of PHE Dept. / Directorate are as below:

- 2.1 **State level :** Principal Secretary, in-charge of the Department supported by Engineer in-Chief & Ex-Officio Secretary and Chief Engineers of PHE Directorate .
- 2.2. Control Room operating at Head Quarter Level: Control Room headed by OSD (Superintending Engineer), Monitoring Cell and functions round the clock during the declared period of emergency.
- I.E.C. Activities: Planned, coordinated and implemented by WSSO of PHE Department during and after emergency period including regular post disaster awareness.
- 2.4. Linkage to other organization: PHE Department / Directorate maintain active linkages with State UN (UNICEF) Office, WHO and other relevant organizations who extend all supports and management services available to them during and after the disaster.

### 3. Preparedness:

As PHE Dept./ Directorate is the nodal Department/Directorate responsible for water supply to the community, the Department/Directorate keeps itself prepared to implement emergency support function relating to drinking water and to some extent on emergency sanitation equipments. The Department/Directorate keeps constant touch with Disaster Management Department and Chief Minister's designated disaster management group including detail reporting on services and supports extended, requirement of support and services from other Departments and linkage organizations.

Preparedness activity ensures following;

- a) Linkage with WSSO (Water and Sanitation Support Organization) for framing technical guidelines and IEC & HRD planning for managing and combating disaster.
- b) In case of drought or like situation ground water table monitoring and necessary steps for crisis management.
- c) Ensure that minimum inventory of water supply and emergency sanitation materials and spare parts as may be required by Executive Engineers in an event of disaster and have a roaster of RWS Staff to be deployed during the disaster.
- d) Ensure issue of alert notices to District and Block level Officers.
- e) Ensure specific attention to water users group.

### 4.0 Standard Operating Procedures (SOP):

PHE Department / Directorate follows Standard Operating Procedures (SOP) of MDWS of GoI in terms of preparedness, preparation of Action Plan, management, coordination, implementation and monitoring of disaster mitigation activities for water supply and emergency sanitation.

# 5.0 State level emergency inventory of PHED / PHE Dte:

As West Bengal has a considerable stretch of coastal zone, the common disaster, the state experiences is flood. Even overflowing of Tista River System, Damodar River System, Kansabati River System, Subarnasrekha River System etc sometimes causes flooding of large area in the State every year. This results scarcity of drinking water during the disaster by flood. Occasional occurrence of drought, mainly in the ground water stressed Blocks of West Bengal are also common. Considering above facts and to combat the disaster in terms of water supply during last couple of years, PHED/ PHE Dte had been procuring Mobile Water Treatment Units (MTU), which is able to treat and produce 500 ml. of drinking water pouches for supplying to affected people. PHED has been carrying out the service since 2006-07. During last financial year (2013-14) PHE Dte installed 7(seven) nos.Water bottling plant one each in North 24 Parganas, Nadia, Murshidabad, Barddhaman, Malda, Jalpaiguri and Coochbehar Districts in addition to existing one water bottling plant at Dakshin Roypur

in South 24 Parganas District. Except North 24 Parganas, all the water bottling plants are in operation and each having capacity of producing 3600 bottles per hour of 1000ml or 500 ml capacity.

**Annexure** – I showing list (15 nos.) of Mobile Water Treatment Units (MTUs) and **Annexure** – II showing list of Water Packaging Plants possessed by PHE Dte, its location, production capacity and controlling division with contact telephone / mobile phone nos.

### 6. District Level Institutional Mechanism:

As PHED has constituted DWSM at all Districts, Executive Engineer of PHED being the Member Secretary of DWSM will function as nodal officer under the supervision of District Disaster Management Authority (DDMA) headed by District Magistrate, to carry out management and combating services related to water supply and emergency sanitation.

Usually, Executive Engineer of normal PHE Division of the District attends and reports DDMA preparedness meetings and post disaster meetings, as frequently as may be necessary. Executive Engineers also send daily reports to District Disaster Control Rooms and implement and monitor functions entrusted by DDMA, regularly reviews status of essential water supply and emergency sanitation services and procurement of essential supplies etc. Under the guidance of DDMA, Executive Engineer also monitors emergency response at the Block and Panchayet levels and impact thereon.

### **6.1.** Preparedness:

As Executive Engineer of PHE Dte is the District level Nodal Officer for coordinating emergency operation with respect to deliver of safe water supply and emergency sanitation services, he has to ensure that all Rural Water Supply System in the District works properly and in the event of disaster by carrying out timely repairs where necessary. For doing this Executive Engineer use to maintain proper inventory in terms of materials, spare parts and skilled human resources and those are as follows:

- 6.1.1 Proper inventory of materials, spare parts, bleaching powder etc both for PWSS and Spot sources.
- 6.1.2 Trained and skilled team for repairing and disinfection of PWSS and spot tube wells.
- 6.1.3 Proper action plan for repairing and re-sinking of tube wells, lowering of deep well pumps in drought, rising of platform in flood etc.

- 6.1.4 Action plant for new sinking of spot tube wells if and where necessary.
- 6.1.5 Maintain proper inventory of Mobile Water Treatment Units (MTUS) and Water Bottling Plants, including timely overhauling of the Units for proper running condition.
- 6.1.6 Executive Engineers produce daily report on implementation of activities, assessment of impact etc and submits the same to State Level Control Room during disaster.

### 7.0 Block Level Institutional Mechanism:

Sub-Assistant Engineer - RWS, Mechanic and Helper posted at Block level function under the control of Block Development Officer/Panchayet Samity. Team engaged for disinfection works, repairing, re-sinking, new sinking, lowering of a deep well pumps, raising of platform etc for spot sources work under the guidance of Block Level SAE of PHE Dte with physical assistance by Mechanic and Helper. Block Level S.A.E. will also produce and submit daily performance report of service to Control Room operated by Executive Engineer of PHE Dte at District level.

# 8.0 IEC & HRD activity on safe water and sanitation:

WSSO is a dedicated unit under PHE Department which plans, organizes and implements IEC & HRD activities on safe water supply and sanitation including awareness generation among the communities. IEC & HRD is a routine activity of WSSO and carries out the same throughout the year at State, District and Block levels. In any natural disaster WSSO used to carry out IEC activity and awareness generation on safe water supply and sanitation. The programme usually implemented through distribution of leaflet, direct interaction with beneficiary groups/affected people, VDO and Poster shows, miking, publicity through electronic media, radio and printing media etc. WSSO always remain alert to generate awareness due to natural disaster whenever it occurs.

WSSO (Water and Sanitation Support Organisation) also engages NGOs and CBOs to deliver support services to PHE activities to the affected people.

# 9.0. Service provided by UN Organisations:

In every occurrences of natural disaster UN Organisations like UNICEF, WHO etc always extend supporting hands for management and combating impacts caused by natural disaster.

UNICEF West Bengal Office is associated in different activities of PHE Department and since long back a few of the milestone achievements of joint activities of UNICEF and PHED West Bengal are Joint Action Plan on (a) Arsenic Mitigation (b) Fluoride Mitigation and (c) Water Quality Management & Surveillance through setting up of laboratories all over West Bengal. UNICEF used to share its experience in other countries with PHED West Bengal on disaster management and other resources including support from International Experts. UNICEF also extends human resources and material support and works hand to hand with PHED. It is expected the same joint effort will also be available in future incidents.

# 11.0 Water Quality Monitoring:

In any natural disaster safe drinking water supply and emergency sanitation are most important activities for combating the impacts. Spread of communicable diseases are common at post disaster period and water quality monitoring and sanitation plays most crucial role for the prevention of spread of communicable diseases and to avoid occurrence of epidemic. As such PHE Department use to carry out comprehensive water quality monitoring through its 120 nos. laboratory network and take appropriate measures where necessary for ensuring safe water supply to the affected people. Field Testing Kits (FTKs) will also be used for prompt water quality monitoring and in remote areas.

Water quality monitoring reports will be generated daily basis and placed to Block, District and State level Disaster Management Committees.

# 12.0 Daily Reporting:

In every disaster management daily reports are produced by PHE Divisions and reported to the District Level & State Level Committees and Disaster Management Department. Daily reports usually covers activities performed by concerned divisions including supply of water pouches, disinfection, repairing, re-sinking and new sinking of spot Tube Wells, construction of latrines, awareness campaign etc. The same modalities will be followed in future occurrence of disaster, if any.

In nutshell PHE Department / Directorate coordinate and monitor pre, during and post disaster affairs every year.

### 13.0 Conclusion:

PHE Department/Directorate looks after essential and emergency utility services like water supply to the community and all infrastructure including human resources are groomed to attend any sorts of emergency services in the field of water supply and emergency sanitation. Previous experience of PHED/Directorate to manage and combat any natural disaster proved highly efficient and effective and based on such strong foothold it could be assured that PHED/Directorate would deliver ameliorative service in any kind of crisis if occurs , though the same is unwanted.

# <u>List with location of Mobile Water Treatment Units (MTU) and Water Package Plants under Public</u> Health Engineering Directorate

A. ANNEXURE-I

Sl. No.	Name of Place	Name of District	Capacity of Mobile Treatment Unit	Controlling Division
1	Baranagar-Kamarhati	North 24	2000 Ltr/hr i.e. 4000 No. of	Eastern Mechanical
	W/S Scheme	Parganas	Pouches	Division.
			[each 500 ml] per hour	Mobile: 9434351597
2	Baranagar-Kamarhati	North 24	2000 Ltr/hr i.e. 4000 No. of	Eastern Mechanical
	W/S Scheme	Parganas	Pouches	Division.
			[each 500 ml] per hour	Mobile: 9434351597
3	Baranagar-Kamarhati	North 24	2000 Ltr/hr i.e. 4000 No. of	Eastern Mechanical
	W/S Scheme	Parganas	Pouches	Division.
			[each 500 ml] per hour	Mobile : 9434351597
4	Baranagar-Kamarhati	North 24	2000 Ltr/hr i.e. 4000 No. of	Eastern Mechanical
	W/S Scheme	Parganas	Pouches	Division.
			[each 500 ml] per hour	Mobile : 9434351597
5	Baranagar-Kamarhati	North 24	2000 Ltr/hr i.e. 4000 No. of	Eastern Mechanical
	W/S Scheme	Parganas	Pouches	Division.
			[each 500 ml] per hour	Mobile : 9434351597
6	Dongaria Water	South 24	Water Pouch Plant @ 4 X 5000	Executive Engineer,
	Treatment Plant	Parganas	No. pouches (each 500 ml)	South 24 Pgns. W/S
				Divn-I
				Mobile : 9836823344
7	Berhampur	Murshidabad	1500 Ltr/hr i.e. 3000 No. of	Berhampur Mech/Elecl
			Pouches	Division.
			[each 500 ml] per hour	Mobile : 9475702731
8	Raiganj	Uttar Dinajpur	2000 Ltr/hr i.e. 4000 No. of	Malda Mechanical
			Pouches	Division.
			[each 500 ml] per hour	Mobile : 9836384440

		Total:	74, 000 Pouches/hour	
		1	[each 500 ml] per hour	Mobile: 9475646097
		Medinipur	Pouches	Division.
15	Kharagpur	Paschim	2000 Ltr/hr i.e. 4000 No. of	Midnapore Mechanical
			[each 500 ml] per hour	Mobile: 9830276691
			Pouches	Division.
14	Burdwan	Burdwan	2000 Ltr/hr i.e. 4000 No. of	Central Mechanical
			[each 500 ml] per hour	
			Pouches	Mobile: 9434473365
13	Kamarkundu	Hooghly	2000 Ltr/hr i.e. 4000 No. of	Electrical Division.
			The second process of the second	9434473365
	Science University		Pouches [each 500 ml] per hour	Division.Mobile :
12	Bengal Engg. &	Howrah	2000 Ltr/hr i.e. 4000 No. of	Electrical
			[each 500 ml] per hour	Mobile : 9831416619
	51115011	Zanjeening	Pouches	Division.
11	Siliguri	Darjeeling	2000 Ltr/hr i.e. 4000 No. of	Northern Mechanical
			[each 500 ml] per hour	Mobile : 9836384440
10	Iviaiua	Maida	Pouches	Division.
10	Malda	Malda	[each 500 ml] per hour 1500 Ltr/hr i.e. 3000 No. of	Mobile: 9836384440 Malda Mechanical
		Dinajpur	Pouches	Division.
9	Balurghat	Dakshin D:	2000 Ltr/hr i.e. 4000 No. of	Malda Mechanical

# List with location of Water Bottling Plants under Public Health Engineering Directorate

B. <u>ANNEXURE-II</u>

Sl.	Name of place where located	Name of District	Capacity	Controlling Division with Mobile No.
1	Dakshin Roypur Water Treatment Plant complex	South 24 Parganas	Hourly production 1500 Bottles of 1000 ml / 500 ml.	South 24 Pgns. Mech. Divn Mobile: 9433096617
2	Mangal Panday Water Treatment Plant complex at Barrackpore.	North 24 Parganas	Hourly production 3600 Bottles of 1000 ml / 500 ml.	North 24 Pgns. W/S Divn-I Mobile: 9434139740
3	Haringhata Water Treatment Plant complex at Kalyani.	Nadia	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Nadia Arsenic Divn-I Mobile : 9831444353
4	Central Sector-I Water Treatment Plant at Lalbag	Murshidabad	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Berhampore Divn-I Mobile: 9477448489
5	Purbasthali-II	Burdwan	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Burdwan Division Mobile : 9433171600
6	Dariapur Water Treatment Plant complex at Dariapur.	Malda	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Malda Arsenic Area W/S Divn-I Mobile : 9434065075
7	Fulbari (Near Siliguri)	Jalpaiguri	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Northern Mechanical Division Mobile: 9831416619
8	Chakchaka	Coochbehar	Hourly production 3600 Bottles of 1000 ml / 500 ml.	Northern Mechanical Division Mobile: 9831416619