



NATIONAL ALUMINIUM COMPANY LIMITED

(A Government of India Enterprise)

A NAVARATNA Company

(AN ISO-9001, ISO-14001 & OHSAS-18001 CERTIFIED ORGANISATION)

ONSITE EMERGENCY PLAN

OF

S M E L T E R P L A N T



**ENVIRONMENT & SAFETY DEPARTMENT
SMELTER PLANT
ANGUL- 759 145**

Document No DOC/SH&E/OEPP/01

Issue 01, Rev 05

Date of issue: 01.11.2018

Emergency Command Structure

Introduction

The following emergencies have been identified in Smelter Plant. These are

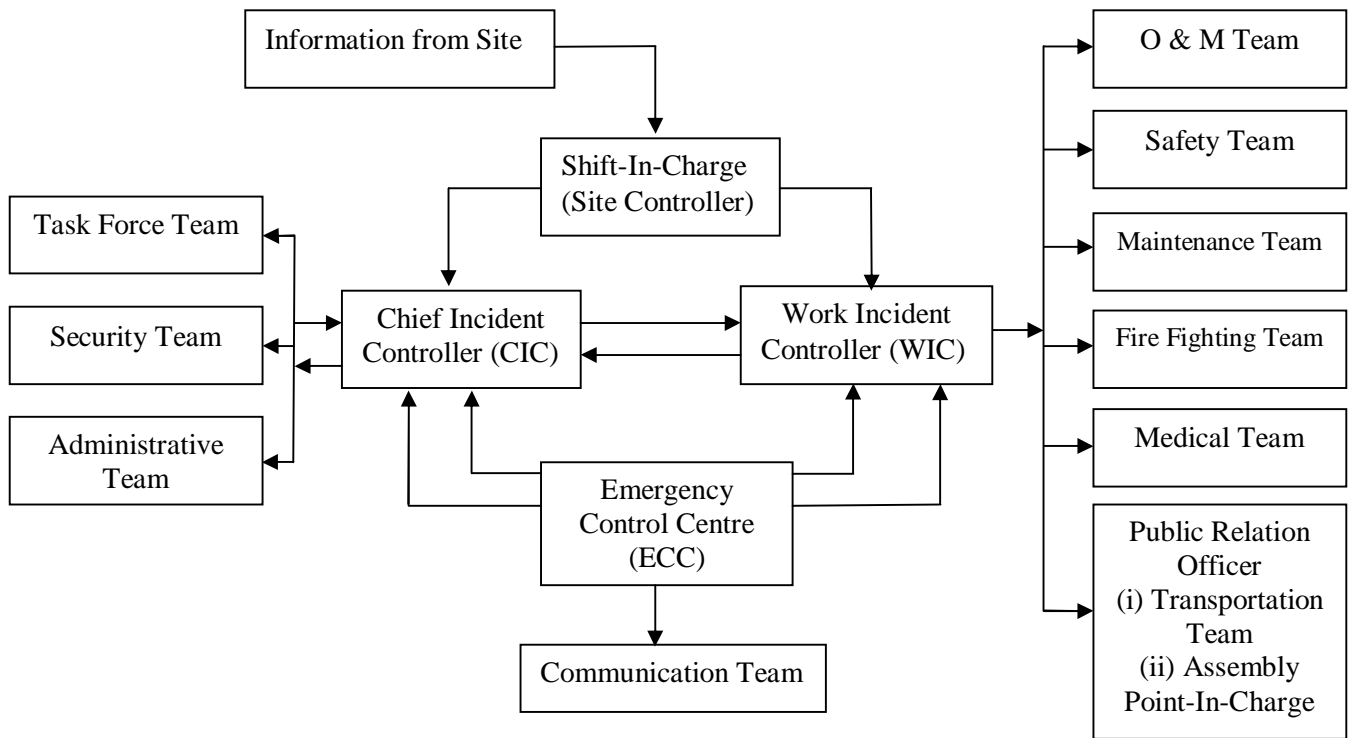
- i. Fire at HFO/LDO tank (Department Utility)
- ii. Fire at LPG go-down (Department Central Store)
- iii. Hydrogen fire at central store (Department Central Store)

MOCK DRILL

Mock drill is conducted every six months inside Smelter plant to assess the response of the concerned persons and healthiness of the related system and equipments and to take necessary corrective action. This is one of the methods to co-relate response of persons and systems during actual emergency.

The Chart 1 shows an organizational structure of handling major emergency/disaster at on-site in Smelter plant. This structure of handling on-site emergency is suggestive and the Smelter plant management updates it from time to time.

CHART 1 : Emergency Command Structure for handling On-Site Emergencies in Smelter Plant



ROLE AND RESPONSIBILITIES OF EMERGENCY CONTROL TEAM

In the event of an emergency, certain members of works management team during any time of day or night assume certain specific roles and responsibilities and take up their respective strategic and tactical positions within the site of incident in an attempt to control and exterminate the emergency.

As per this plan in the event of an emergency, certain members of management team assume certain specific roles and responsibilities and take up these strategic positions within the site of the accident to deal with the emergency situations.

Main Controller is a very senior person usually of DGM rank on site at the time of emergency. He assumes absolute control on the site following declaration of emergency and sits in the plant control room.

Incident Controller (IC) is normally the Shift In-charge of an Unit who goes to the scene of emergency and supervises the action taken to overcome emergency.

Roll Call Coordinator is mainly responsible to account for all personnel on duty. Normally, Head of Plant HRD is assigned this responsibility.

In an on site emergency plan, the Assembly Points are prominently displayed at predestinated locations of the plant indicating the entry and exit route in case of emergency. Once emergency is declared, siren will be blown and all employees in the affected area will assemble at Assembly Point to be roll called.

Head of Plant HRD coordinates and informs hospital, police station, District Magistrate, Angul and CISF of Smelter Plant about emergency. Fire fighting and rescue team headed by Central Industrial Security Forces carry out rescue operation

LIST OF EMERGENCY CONTROL STRUCTURE

Sl.No.	Emergency duty	Persons designated
01.	Site Main Controller	Sri P. Sahu, DGM(Elect.) SH&E - 7515
02.	Site Incident Controller	The respective area shift in-charge
03.	Roll call Leader	Respective area supervisor(s) (Persons nominated by shift in-charge)
04.	Roll call coordinator	Sri S. S. Panda, DGM (HRD) -7026
05.	Personnel Manager	Sri S. N. Sahu, GM (H&A - 7007
06.	Security controller	Assistant Commandant, CISF - 7767 Smelter Main Gate (CISF) I/c- 7766
07.	Fire fighting search and rescue	CISF (Fire wing)- Requirement of additional team personnel is decided by Officer-in -charge Smelter Fire Wing.
08.	Emergency Medical Officer	Nalco Hospital Casualty - 6600 1. Dr. (Mrs) J. Ghosal - Team leader- 6613 2. Dr. M. K. Wagji -6637
09.	Location of siren	Pot room-A, Central Passage Main entry of Cast House (near shift office) Entry of Rodding shop.
10.	Location of assembly points	A1= A-room entrance (Central passage) A2= Between potline lunch room-II & Cathode Sealing Shop A3= Between LPC& Raw Material Godown (RMG) A4= End of Central Passage (D-Room) A5= Main entry of Cast House (near shift office) A6= In front of HFO Day Tank of GAP A7= Bake Oven (Near Control Room) A8= Rodding Shop Shift Office A9=Main entrance of Rolling plant Site
11.	Location of emergency plan	09 nos. of such boards have been displayed at display boards different locations in Potline, Cast House, Carbon Area and emergency control room to show the position of working person and the safe route to escape in the advent of emergency.

Activation and Closing Procedure for On-site Emergency

Declaration of emergency at Smelter plant is to be made through ECC only after getting instruction from CIC. Announcement is to be made in Oriya, Hindi and English language. Example:

A major emergency due to outbreak of fire has occurred at fuel oil storage area at Smelter Plant of NALCO. All the workers and employees are instructed to be assembled on the nearby assembly points. If found necessary, we may evacuate you and be prepared for it.

At the end, an all-clear signal is to be sounded after getting “Emergency over” instruction from CIC.

In a major emergency, it would certainly be necessary to evacuate personnel from affected areas. As a precautionary measure, evacuation of non-essential workers, in the first instance, from areas likely to be affected is required. The evacuation will be effected on getting emergency declaration message from CIC

i) Responsibilities of Task Force

- To identify source of hazard and try to neutralize/contain it.
- To isolate remaining plant and keep that in safe condition.
- To organize safe shutdown of plant, if necessary.
- To organize all support services like operation of fire pumps, sprinkler system etc.

ii) Responsibilities of Maintenance Team:

- To attend to all emergency maintenance jobs on priority.
- To make steps to contain or reduce the level of hazard created due to disaster.
- To organize additional facilities as desired.

iii) Fire Fighting and Rescue Team: CISF (Fire wing) (Ph: 06764220323 / 6333 / 7333)

Responsibilities:

- To rush to the fire spots and extinguish the fire.
- To seek help from outside fire fighting agencies under Mutual aid scheme.
- To evacuate persons affected due to whatever reasons.

iv) Responsibilities of Communication Team:

- To maintain the communication network in working condition.
- To attend urgent repairs in the communication system, if required.
- To arrange messengers for conveying urgent messages when needed so.
- To help Smelter authorities to communicate with external/internal officials.

v) Security Team: CISF wing (Ph: 06764-220264)

- To man all gates.
- To bar entry of unauthorized persons.
- To permit, with minimum delay, the entry of authorized persons, outside agencies, who have come for help.
- To allow the ambulance/evacuation vehicles etc. to go through the gates without normal checks.

vi) Safety Team

Sl.	Name	Position Address	Contact Numbers (Intercom / Mobile / Landline)
1.	P. Sahu	DGM(Elect.) SH&E	7515 / 9437026365 / 225657 (R)
2.	K.C. Sahoo	AGM(Safety) & CSO	7529 / 9437055538 / 220228 (O) / 221166 (R)
3.	S.Ravichandran	AGM(Met)-Safety	7114/9437075013/ 221013 (R)
4.	Alok Singh	Sr. Mgr. (Safety)	7214 / 9437566337
5.	Surya kanta Mishra	Mgr. (Met.) Safety	7052/ 9437029394
6.	S. K. Mishra	Dy. Mgr. (Safety)	7212 / 9437155610
7.	G. Dash	DM (Mech.) Safety	8214 / 9437015216
8.	T. Samal	DM (Mech.) Safety	7061 / 9437966954

Responsibilities:

- To arrange required safety equipment.
- To measure gas concentration at various places, in case of leakage.
- To record accidents.
- To collect and preserve evidences in connection with accident inquires.
- To guide authorities on all safety related issues

vi) Medical Team

Sl. No.	Name	Position / Address	Contact Numbers (Intercom/Mobile/Landline)
1	Dr. J. Ghosal,	AGM (MS) –HOD Nalco Hospital	6613 / 9437017264
2	Dr. M. Wagji	I/C -OHS, Nalco Hospital	6637 / 9437158725
3	CASUALTY I/C	Nalco Hospital	6600,6066 / 220350
4	First Aid Centre	Smelter Plant	4222

Responsibilities:

- To arrange first-aid material/stretchers immediately and reach to the site of incident.
- To arrange for immediately sending the casualties to various hospitals etc.
- To ask specific medical assistance from outside medical specialist, if required in consultation with CIC/WIC.

vii) Nearest Firebrigade:

Sl. No.	Station Location	Telephone / Fax nos.
1.	Firestation, Smelter	220323
2.	Fire Station, CPP	220424
3.	Orissa State Fire service, Angul	230222
4.	NTPC, Kaniha	243205
5.	TTPS fire Station	246666

viii) Nearest Police Station:

Sl. No.	Station Location	Distance in Kilometer	Telephone / Fax nos.
1.	Angul	10	230444
2.	Nalconagar	03	220232
3.	Banarpal	05	229260
4.	Talcher	16	240236

ix) External agency:

Sl. No.	Name	Position / Address	Contact Numbers	
			P&T	Mobile
01	Mr. S. Nayak	DGM (SH&E), CPP	06764-220462	9437039649
02	Mr. U.Samantray	Asst. Director Factories & Boilers, Angul Zone-I, Nalconagar	06764-220164	9437686256
03	Mr. A. Mallick.	Regional Officer, Orissa State Pollution Control Board, Angul	06764-236389	9437006727

Emergency Command Structure during Silent Hour

Silent hour refers to the time during the period beyond general shift hours on working days and on all holidays. During this period, only shift-in-charge/plant-in-charge will take the initial whole-sole responsibility and communicate to WIC/ECC/Site Controller through the available landline or mobile phones. On arrival at the accident site, Site Controller or his alternate assumes the charge and activates the same command structure to combat the emergency.

Activation and Closing Procedure for On-site Emergency

Declaration of emergency at Smelter plant is to be made through ECC only after getting instruction from CIC. Announcement is to be made through PA system in Oriya, Hindi and English language.

Example:

A major emergency due to outbreak of fire has occurred at fuel oil storage area at Smelter Plant of NALCO. All the workers and employees are instructed to be assembled on the nearby assembly points. If found necessary, we may evacuate you and be prepared for it.

At the end, an all-clear signal is to be sounded from FCC after getting “Emergency over” instruction from CIC.

In a major emergency, it would certainly be necessary to evacuate personnel from affected areas. As a precautionary measure, evacuation of non-essential workers, in the first instance, from areas likely to be affected is required. The evacuation will be effected on getting emergency declaration message from CIC.

MOCKDRILL SCHEDULE OF Smelter Plant:

Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.
√						√					