

- Inform concentration of toxic gases to Chief site coordinator, Incident controller, Chief Service Coordinator, SM (F&S) and Sr. Medical Officer.
- Remain in touch with overall Incharge – (P-O) and inform for any foreseen Dangers in plant operations and suggest remedial measures.

7.5.5. Chief Service Coordinator - DGM (HR)

- On getting information from the Medical Coordinator inform Railway Traffic Controller (GM-S&D) and Chief Material Coordinator-GM (Material). Rush to the Emergency Control Centre.
- Assess the situation in consultation with Chief Site Coordinator and Incident Controller and ensure that casualties get adequate transport / medical help.
- Make arrangement to shift all the persons to the safest place if called for.
- Assess 'Law and Order' situation.
- Inform press, TV / Radio, local authorities about the severity of situation in close co-ordination with Chief site Coordinator and in consultation with Over all In-charge -P (O).
- Arrange to close the school and shift all the persons to the safest place.
- Inform the District Authority / local police station in case their help is required for evacuation of personnel / preserving law and order.
- Evacuation of adjoining areas and villages, if required.
- Remain in touch with over all In-charge - P (O) and seek his advice for the critical decisions.
- Arrange help from NTPC (Anta)/ Kota and neighboring industrial units as per the requirement of Chief Site Coordinator.

7.5.6. Chief Railway Traffic Controller- GM (S&D)

- Rush to the ECC after getting information from Chief Service Coordinator / on hearing siren and inform SM(S&D) about the emergency.
- Contact SM (UPH) / Shift Incharge Bagging, assess the situation and take care of Railway traffic if required.
- Remain in touch with Overall Incharge (P-O) and seeks his advice for the critical decisions.

7.5.7. Chief Material Coordinator- GM (Materials)

- Rush to the emergency control centre on receipt of the message from Chief Service Coordinator / on hearing the emergency siren and inform DGM (Material) and Mgr. (Store) about the emergency.
- Get the stores opened for requirement of the Fire fighting/safety and other materials, which may be required during emergency.
- Assess the situation in consultation with Chief site coordinator & incident controller for any material requirement /help at the affected site.
- He will be responsible for the arrangements of trucks for movement of bulk material if required.
- Remain in touch with Chief site coordinator, Incident controller, and Chief maintenance coordinator.

7.5.8. IR Coordinator – SM(P&A)

- Rush to the Emergency Control Centre after getting information from the Chief Security Officer and inform In-charge GAIL Terminal & Mgr. (IR) about the emergency.
- Arrange for canteen services for personnel on duty as well as affected ones.
- Arrange help from NTPC (Anta)/ Kota and neighboring industrial units as per the requirement of Chief Site Coordinator
- Remain in touch with over all In-charge-P (O) informed about the situation and seek his advice for the critical decisions.

7.5.9. Operation Coordinator- DGM-(Prod.-I&II)

408. DGM-Prod.-I is the operation coordinator for Amm-I, Urea-I and O&U plants. DGM-Prod.-II is the operation coordinator for Amm-II, Urea-II and Bagging plants.

- Rush to the spot of emergency on receipt of message from Shift In-charge Concerned Plant and inform about emergency to Chief Site Coordinator GM (Prod.), Chief Technical Coordinator GM (TS&P) and Manager Concerned Plant.
- Assess the situation and take over the charge from Shift In-charge & report to Chief site coordinator about the anticipated hazard.
- Shutting down of any section of the plant or total plant in consultation with Chief Site Coordinator.
- Ensure that persons working in the area are safe and isolate source of toxic release if possible.
- Make sure that all hot jobs have been stopped and assist Mgr/ Shift In-charge plant in normalizing emergency.
- Advise and assist Incharge (F&S) for providing water curtains to contain toxic release with in the plant battery.
- Co-ordinate rescue operations and shift the casualties to health center
- Advise Chief Site Coordinator if any out side help is required.
- Report all significant developments to chief site coordinator.
- Preservation of evidence as far as possible without affecting the operation of emergency procedures to facilitate any subsequent inquiries into the causes and circumstances, which led to the emergency.
- Depending upon the severity of incident, ensure that adequate emergency services like Medical/Laboratory/Mechanical/Electrical etc. are summoned.
- Remain in touch with Chief Site Coordinator and other concerned officers.
- Coordinate with Chief maintenance / Chief material coordinators for assistance required at site.

7.5.10. Incident Controller Concerned Plant - SM Concerned Plant

- Rush to the site of emergency after getting information from Shift In-charge assesses the situation and immediately inform
 - Manager (Concerned)
 - GM – Prod.
 - GM (TS&P)
- Take over charge from shift in charge.
- Ensure that persons working in the area are safe and isolate source of toxic release if possible.

- Make sure that all hot jobs have been stopped and assist Mgr/ Shift in-charge plant in normalizing emergency.
- Advise and assist Incharge (F&S) for providing water curtains to contain toxic release with in the plant battery.
- Remain in touch with Chief Site Controller and other concerned officers
- Coordinate with Chief Maintenance / Chief Material coordinators for assistance required at site.
- Call AM and other shift in-charges from colony if required.
- Depending upon the severity of incident, ensure that adequate emergency services like Medical/ Laboratory/ Mechanical/ Electrical etc. are summoned.
- Preservation of evidence as far as possible without affecting the operation of emergency procedures to facilitate any subsequent inquiries into the causes and circumstances, which led to the emergency.

7.5.11. SM (UPH) / Mgr. (Bagging) / Shift in-charge (Bagging)

- Rush to the plant after getting information from the DGM (Prod.) and assess the situation and appraise GM (S&D) about the emergency.
- Remain in touch with Chief Site Coordinator.
- Help in evacuating the personnel from bagging plant if required.

7.5.12. Manager Concerned Plant:

- Rush to the emergency site after getting information from SM (Concerned Plant) and inform Chief Maintenance Coordinator (GM-Maint.) and DGM (prod.).
 - Remain in touch with SM (Plant).
 - Coordinate with Service depts. for assistance required at site.
 - Call other Shift In charges & Sr. Engineers from Colony if required.
 - Act as Assembly point Coordinator. Take a roll call and account for missing personnel (Including contract labor / visitors).

7.5.13. Shift In charge (Concerned Plant):

- Immediately proceed to the site of emergency and assess the situation:
 - Emergency Control Room at 101/123 (with name and location of emergency)
 - Sr. Manager (Concerned plant).
 - Shift In-charge (Environment and Quality Control Lab)
- During odd hours/till arrival of Chief Fire Coordinator, shift I/C should act as chief fire coordinator.
- Initiate the shutting down operations for controlling the hazard if unavoidable.
- Cordon off the area and do not allow any body to enter the affected area without respiratory protection (In case of toxic gas leakage).
- Direct rescue operations with the help of fire and safety staff.
- Open safety Almirah for the use of plant personnel.
- Have regard to the need for preserving evidence that could facilitate subsequent inquiry.
- Advise manager of the plant to take roll call and account for missing personnel.

- Hand over charge of the operation to the Sr. Manager when he arrives at site.
- During emergency involving total failure of power and telephone system, the concerned Shift In-charge will inform the Sr. Security Officer on duty, Sr. Security Officer on duty / CSO will organize transport for sending messages (as per guidelines of Shift In-charge) through messengers / Security guards on duty.
- Ensure service agencies like Electrical, mechanical, instrumentation are mobilized to handle the emergencies.

7.5.14. Chief Security Officer / Dy Mgr. (Security) Vehicle Control and Security

Personnel Deployment at the Locations

- Rush to the spot of emergency on getting information from Security Officer on duty and inform SM (P&A) about emergency.
- Arrange one emergency vehicle immediately for ECC.
- Keep in touch with Chief Service Coordinator, Chief Site Coordinator and Incharge (F&S).
- He will act as a special rescue Coordinator at the time of evacuation of employees and others if required.
- Alerts complete staff under his control and make it available at a known point, as per the guidance of Chief Site Coordinator / Chief Service Coordinator.
- He will be responsible for public announcement of the hazard on public address system if hazard spreads beyond CFCL's battery limits. (CSO will keep the Public address system ready at all the time for the same)
- Anticipate and arrange vehicles required at emergency site in consultation with Incharge (F&S) and Chief Site Coordinator and Chief Service Coordinator.
- On request send vehicles for getting plant personnel / fire personnel required for emergency.
- Arrange vehicle in consultation with Medical Coordinator / Chief Service Coordinator for shifting injured to Kota hospital.
- During emergency arrange for opening of relevant gates/ barriers for easy movement of vehicles. Security Guards should be posted on these gates / barriers to prevent unauthorized entry.
- During emergency involving total failure of power and telephone system, the concerned Shift Incharge will inform the Dy Mgr. / AM (Security), CSO will organize transport for sending messages (as per guidelines of Shift Incharge) through messengers / Security guards on duty.
- Arrange transport and temporary shelters for evacuated personnel and inform the relatives of the affected personnel if required.
- During off-site emergency the CSO will direct district authorities to report to Overall in-charge / Chief Service Coordinator / Chief Site Controller.
- In case bomb threat:
 - Inform to Overall in-charge / Chief Service Coordinator / Chief Site Controller, Police Station Similia & Incharge (F&S).for necessary action.
 - Cordoned-off the area & inform District authorities.

7.5.15. Medical Coordinator- (Mgr –Medical Services)

- Rush to the medical centre on getting information from Health Centre.
- Depute one Medical Assistant for spot first aid.
- Remain in touch with Chief Service Coordinator / Incident Controller for any help required.
- Ensure availability of adequate first-aid/medical help and coordinate for further medical help from outside hospitals at Kota/Simliya.
- Liaison with Chief Material Coordinator for procurement of additional emergency medicines.
- Liaison with CSO for transportation of the injured to KOTA hospital.
- Take note of injured, coordinate with CSO for their shifting to health centre/ KOTA, Hospital.

Note: After receiving emergency message from ECC, Nursing assistant will send ambulance at emergency site.

7.5.16. Fire & Safety Controller- Incharge (F&S) / Dy Mgr. (F&S)

- Rush to the spot of emergency after getting information from ECC and inform to Dy Mgr. (F&S)/ AM (Fire).
- Direct rescue operations under the guidance of Chief Site Coordinator/ Incident controller if required
- Ask additional help from C.S.O. for cordoning off the area and advise fire personnel for rescue / fire fighting if required
- Arrange to provide water curtains, water monitors, at affected locations if required.
- Organize and supervise fire-fighting operations if called or.
- Provide necessary respiratory equipments to plant personnel for emergency use.
- Advise Chief Site Coordinator to arrange additional help from NTPC (Anta) / Kota if required.
- Give safety precautions to the personnel at rescue work.

7.5.17. Environment Coordinator- SM (E&QC)/Dy Mgr. (E&QC)

- Rush to the spot of emergency after getting information from Laboratory and assess the situation looking the wind direction
- Arrange for monitoring the area with in the range of 1~2 Km in the wind direction for accurate assessment depending upon the type of emergency.
- Inform the result to Chief Site Coordinator, Chief Technical Controller and Overall Incharge.
- Remain in touch with Chief Site Coordinator and Chief Technical Controller

7.5.18. Civil Coordinator- Mgr (Civil)

- Rush to the ECC after getting information from Chief Maintenance Coordinator./ on hearing emergency siren.
- Make sufficient number of contractors, workers available to do civil jobs like filling sand bags, making bunds, closing drains, excavation etc. as required for emergency.
- Remain in touch with Chief Maintenance Coordinator & Incident Controller for any assistance to them.

7.5.19. Mgr. IR- To work for Public Relations under SM(P&A)

409. If disaster takes place after General Shift hours DGM (Admin) will inform Mgr. (IR). He will rush to 'OFFSITE EMERGENCY CONTROL CENTRE' Aerodrome circle office at Kota) for liaison with District Authorities as per requirements at site and remain in touch with Chief Service Coordinator / SM (P&A) for the instructions / advise. **During General Shift hours, he will assist SM(P&A)**

7.5.20. In-Charge GAIL Terminal

- On getting information about emergency from SM (P&A) or / hearing siren, rush to Gail Terminal to assess the situation.
- Act as assembly point coordinator. Take roll call and account for missing personnel, if any.
- Remain in touch with Chief Site Coordinator / Chief Technical Controller.
- In case of emergency at Gail Terminal, inform to ECC [Phone no. 101/123], E&QC laboratory [Phone no. 2544/2545] and Chief Site Coordinator.

7.5.21. Fire Control Room In-Charge –Dy Mgr. (F&S)/ AM (Fire)

410. (Provide safety/fire support as per guidelines of shift in-charge/shift manager) On receiving emergency message from the Incharge (F&S)/ on hearing siren. Rush to ECC and take charge of Fire Control Centre from the fire operator / fire supervisor.
- Assess the situation and Call fire staff from fire barrack.
 - Immediately rush Fire Tender along with the fire crew to emergency spot.
 - Inform Medical Centre for sending ambulance to emergency site.

7.5.22. Fire Supervisor should also ensure the following:

- Supervisor on the fire tender should park the vehicle at safe location looking to the wind direction and cordon off the area.
- Use water monitors/hydrants/water curtains in consultation with incident/Chief site controller.
- Provide respiratory equipment's to the plant personnel.
- In case of liquid ammonia spillage at site, put foam (HAZMAT)/ sand on the spillage area.
- Remain in touch with Incharge (F&S)/Dy Mgr. (F&S) /AM (Fire)
- Chief Site Co-coordinator will instruct Fire Control Room In-charge for operation of "All Clear Siren" when the disaster is contained / controlled.
- However, regular testing of siren & emergency buzzer plant control rooms for 2 minutes on every Monday at 13.00 hrs is being done. All clear siren will sound for 2 minutes with a continuous sound.

7.6. Post Emergency Recovery

411. The post-emergency procedures discussed briefly below are designed to successfully manage the damage / losses of an emergency event. The focus of these procedures is to move the plant back into normal operating mode as quickly and efficiently as possible.

412. Immediately after the "ALL CLEAR" an emergency meeting will be held in emergency control centre to assess the loss both for men & materials, where in following will be present with attendance records, details of injured, out side situation and preparation of press release (if felt necessary)
- Overall In charge
 - Chief Site Coordinator
 - Chief Maintenance Coordinator
 - Chief Technical & Environment Coordinator
 - Chief Service Coordinator
 - Chief Railway Traffic controller
 - Operational controller
 - Incident Controller
 - Material Coordinator
 - DGM (Admin)
 - CSO
 - Medical Coordinator
 - Fire & Safety Controller
 - Env. Coordinator
 - Assembly point In-charges

7.6.1. Accident Investigation

| | |
|----|---|
| a. | As soon as possible after the emergency is over and plant operation has become normal, the investigation and analysis is to be carried out to determine the cause of the event. |
| b. | Representatives from various disciplines will be members of the investigation and analysis team. |
| c. | The areas of the events are to be sealed off so that tempering or alterations of the physical evidence are not likely to occur. |
| d. | Key components are to be photographed and logged with time, place, direction etc. |
| e. | Statements are to be taken from those who were involved with the operation or who witnessed the event. |

7.6.2. Damage Assessment

413. This phase of recovery establishes the quantum of replacement machinery considered necessary for bringing back plant to normal operation; property and personnel losses accounted and culminates in a list of necessary repair, replacement and construction work.
414. Insurance companies will be informed of the damage and requested to pay the compensation as per claim.

7.6.3. Cleanup and Restoration

415. This phase will only begin once the investigation is complete. Reporting documentations are to be prepared and forwarded to appropriate authorities. Repair, clean up and restoration work to begin.

ANNEXURE - I

COMPLIANCE REPORT OF PREVIOUS ENVIRONMENTAL CLEARANCE

**MOEF ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT
PHASE- I, II & REVAMPING OF PHASE-I & PHASE-II PLANTS**

(Period October'2008 - March '2009)

PART-I [DATA SHEET]

| | | | |
|----|---|---|---|
| 1. | Project type : River - valley / Mining Industry / Thermal / Nuclear / Others (specify) | : | Industry (Fertilizer) |
| 2. | Name of the Project. | : | Chambal Fertilisers and Chemicals Ltd., Gadepan |
| 3. | Clearance letter (s)/OM No. dates | : | i) J-11011/8/87-IA dt.15.11.88 (Phase-I) ii) J-11011/2/96-IA-II(I) dt.24.07.96 (Phase-II) iii) J-11011/152/2006-IA.II(I) dt.21.05.2007 & corrigendum dated 18.09.2007 issued by MoEF, New Delhi |
| 4. | Locations a) District (s) b) State (s) c) Latitudes | : | a) : Kota b) : Rajasthan c) : 25° 8' North and 76° 11' East. |
| 5. | Address for Correspondence a) Address of Concerned Project Chief Engineer, | : | Managing Director, Chambal Fertilisers and Chemicals Ltd., International Trade Tower, F-Block 3rd Floor, Nehru Place, New Delhi- 110 019, Phone No.011-26462162 Fax No.011-26280639 |
| | b) Address of Executive Project Engineer / Manager (with Pin code & Telephone /Telex/Fax) | : | President -Operations Chambal Fertilisers And Chemicals Ltd., Gadepan -325208, Distt: Kota (Rajasthan) Phone :0744-2782021 Fax No.07455-274130 |

| | | |
|----|--|---|
| | <p>[Revamping Project for Phase-I & Phase-II Plants] c)Name and Address of Nodal officer/ Project Officer</p> | <p>Mr. U.R.Singh Dy General Manager (Projects) Chambal Fertilisers And Chemicals Ltd., Gadepan -325208, Distt: Kota (Rajasthan) Phone :0744-2782500,07455-274039 Fax No.0744-2782072,07455-274130 E-mail: upendra.singh@chambal.in</p> |
| 6. | <p>Salient Features a) Of the Project b) Of the environmental Management Plans.</p> | <p>: Already submitted --do--</p> |
| 7. | <p>Break-up of the Project area Submergence-area (Forest-& Non - Forest).</p> | <p>: NA</p> |
| 8. | <p>Break-up Project affected population, with enumeration dwelling unit only agricultural land only, both dwelling units and agricultural land and agricultural land and land-less laborers/ artisans. a) SC, ST / Adivasi b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures. If a survey is carried out give details and year of survey).</p> | <p>: Revamp project is executed in the existing plant areas. No new land is involved or acquired.</p> |
| 9. | <p>Financial Details a) Project cost as originally planned and subsequent revised estimates and the years of price reference. b) Allocation made for environmental management plans, with item wise break-up. c) Benefit cost ratio/internal rate return and the year of assessment d) Whether (a) includes the cost of environmental management as shown in (b) above</p> | <p>: Rs.1267 Crores for Phase-I (1993) Rs.1324 Crores for Phase-II (1999) Revamping of Phase-I & Phase-II Plants: Stage-I Initially cost Rs.293 Crores Revised cost Rs. 481.60 Crores Rs.34.0 Crores (Phase-I) } Capital Rs.22.0 Crores (Phase-II) } Cost Rs.3.22 Crores for Revamping of Phase-I & Phase-II Plants Fertiliser Industry (Urea) is under subsidy of GOI. Yes</p> |

| | | |
|-----|---|---|
| | e) Actual expenditure incurred on the project so far. | : Rs.1267 Crores (Phase-I) (1993) Rs.1288 Crores (Phase-II) (1999) Rs.445.90 Crores up to June,2009 for Revamping of Phase-I & Phase-II Plants |
| | Actual expenditure incurred on the environmental management plans so far. | : Rs. 69.428 Crores (Phase-I up to March.'09) Rs. 39.286 Crores(Phase-II up to March.'09) Revamping of Phase-I & Phase-II Plants Rs. 4.095 Crores Due to installation of new technology KRES in Ammonia-I Plant production has been enhanced without any additional fuel requirement in existing process. The cost incurred on KRES is approximately Rs. 29.5 Crores. |
| 10. | Forest Land Requirement | |
| | a) The Status of approval for diversion of forest land for non-forestry use. | : 169.73 hectares of forestland was diverted for this project vides MOEF letter No.8-153/88 FC dt. 18.11.1988.(Pl . see 8 above) |
| | b) The status of compensation afforestation, if any | : Rs.30, 69,600/- were deposited with DFO, Baran Distt. Vide DD No. 260903 dt.17.08.89 for forestation. |
| | c) The status of clearfelling. | : N.A. |
| | d) Comments on the viability and Sustainability of compensatory afforestation Programme in the light of actual field experience so far. | : Rajasthan Government is implementing afforestation Program. Status is not known to Project Authorities. |
| 11. | The status of clearfelling in non-forest areas (such as submerged area of reservoir approach roads), if any, with quantitative information. | : Nil. |
| 12. | Status of Construction | |
| | a) Date of commencement (actual) | : November, 1989 (Phase-I) July,1997 (Phase-II) February ,08 (Revamping of Phase-I & Phase-II Plants) |
| | b) Date of Completion. | : December 1993 (Phase-I) August,1999 (Phase-II) Stage-I schemes for Gadepan-I revamp were commissioned on 31.03.2009 and Gadepan-II revamp on 28.04.2009 |
| 13. | Reasons for the delay, if the project is yet to start. | : Not applicable. |
| 14. | Date of site visits. | |