DISASTER MANAGEMENT PLAN

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Noida Special Economic Zone

Subordinate Office of

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Executive Summary

The office of Noida Special Economic Zone (NSEZ) administers and provides approvals to the Special Economic Zones (SEZs) in the seven states namely Delhi, Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh and Uttarakhand as well as three Union Territories of Chandigarh, Jammu & Kashmir and Ladakh. It implements the SEZ regulatory framework namely the SEZ Act, SEZ Rules, Instructions and clarifications.

The Disaster Management Plan (DMP) for NSEZ is based on the overall regulatory framework of the Central Government. The apex framework is the Disaster Management Act 2005. Then there is the National Policy on Disaster Management 2009. The are a set of thirty National Disaster Management Authority(NDMA) Guidelines from 2007 onwards dealing with different risks. Some of the relevant ones for NSEZ are those related to earthquakes, chemical disasters, floods, urban flooding, training of fire services. Moreover, there are NDMA reports relating to training, capacity building, best practices, guide for safety etc.

The presence of a unit of the National Disaster Response Force (NDRF) inside the administrative premises of NSEZ is the biggest asset for the office. It enables NSEZ to be better prepared in case of

management of any disaster. The presence of NDRF is supplemented with the security and fire-fighting personnel who are part of the utility services of the zone.

The constitution of a Committee for Disaster Management (CDM) would be effective in the administration of this Disaster Management Plan. Moreover, by co-opting an officer from NDRF, this would ensure better co-ordination with the unit of NDRF. The Committee has been given the flexibility for co-opting others and have a broader scope of work related to disaster management.

NZEZ has its own set of prevention and mitigation measures for disaster management. These include the monitoring of hazards and threats, assessment of risks, regular review of disaster management measures, monitoring of arrangements, conducting of mock drills etc. Finally, NSEZ would be ensuring adequate capacity building through training and skill development of stakeholders in the context of disaster management. This would be done through the skill development centre which would start functioning from early 2024.

Chapter 2:

Introduction

- 2.1 Noida Special Economic Zone (NSEZ), the only Central Government SEZ in northern India, headed by a Development Commissioner, was set up in 1985 in Noida Phase-II on a 310-acre plot of land. Prior to its conversion into an SEZ in 2000, it was one of the seven Export Processing Zones (EPZs) of the country and was known as the Noida Export Processing Zone (NEPZ).
- 2.2 The total investment initially spent on the development of the zone was Rs.1,114.96 crore. NSEZ provides state of the art infrastructure, supportive services including security and a sustainable ecosystem for development of units in the manufacturing, services, trading and warehousing space. There are a number of IT/ITES service units in NSEZ which are primarily into software development, testing, back office operations related to services. Some of the key subsectors in manufacturing include gems and jewellery, electronics hardware, handicraft, chemicals, pharmaceuticals, textiles, apparel, madeups etc. This is a land locked SEZ, with the nearest point of exports being the Integrated Container Depots (ICDs) like Dadri, Tughlakabad and Patparganj as well as the airport in Delhi. The coming up of the new international airport at Jewar in 2025 would give further fillip to the development of the zone. Its proximity to

Delhi and availability of skilled and dedicated manpower makes it ideal for setting up manufacturing and services facilities.

- 2.3 NSEZ has 202 developed plots of varying sizes on which the units can setup their facilities. Apart from this, there are thirteen Standard Design Factory (SDF) complexes that can accommodate 208 units. The SDFs are ready to move in warm shells.
- 2.4 NSEZ units have been logging impressive exports despite the difficult circumstances like the pandemic, volatile freight costs, distance from the ports etc. Exports of goods and services from the zone during 2022-23, even during this tough period, has been Rs.8,540 crores. Employment in the zone has gone up from 32,550 in 2009 to 40,176 (as of 30 June, 2023) while the investment was Rs.16,501 crores. During the same period, number of operational units in the zone has increased from 245 to 275. There are 38 SEZs under the jurisdiction of NSEZ, whose exports for software and services are Rs 70,377 crores in 2022-23, and exports of goods was Rs 12,300 crores.
- 2.5 Export Oriented Units are standalone units which are governed by the provisions of the Foreign Trade Policy. While the policy on EOUs is formulated by the office of DGFT, the administration of the EOUs is also under the jurisdiction of the Zonal NSEZ. Exports from Exports Oriented Unit (EOU) in the jurisdiction of NSEZ have been

to the tune of Rs. 10,006.6 crores during the financial year 2020-21 (as per the figures obtained from CBIC).

2.6 The territorial jurisdiction of Noida Special Economic Zone is spread over seven states namely Delhi, Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh and Uttarakhand as well as three Union Territories of Chandigarh, Jammu & Kashmir and Ladakh. The three State Government SEZs where the developer is a State Government entity are the Moradabad SEZ and two SEZs in Sitapura, Jaipur. In the case of Mahindra SEZ located near Jaipur, the Developer is an SPV between a State Government and a private entity. The rest of the SEZs are all by private developers. Some of the SEZs are captive wherein the developer and the units are under the same entity.

Chapter 3:

Hazard Risk and Vulnerability Assessment

- 3.1 Vulnerability profile of India
- (a) The 2019 Analytical Study of "Disaster Risks and Resilience in India" jointly by the Ministry of Home Affairs and UNDP, examines the various hazard parameters. These are earthquakes, cyclones, flood, drought, landslides, tsunami, avalanche, heat wave, cold wave, coastal erosion, forest fires, fires and industrial hazards.
- (b) As per the report of the National Institute of Disaster Management (NIDM), India has been vulnerable, in varying degrees, to a large number of natural, as well as, human-made disasters on account of its unique geo-climatic and socio-economic conditions. Out of 35 states and union territories in the country, 27 are disaster prone. Almost 58.6% if the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12% of the land area) are prone to floods and river erosion; of the 7,516 km long coastline, close to 5,700km is prone to cyclones and tsunamis; 68% of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches.
- (c) Further the NIDM report states that India is one of the ten worst disaster-prone countries of the world. The country is prone to disasters due to number of factors; both natural and human induced,

including adverse geo-climatic conditions, topographic features, environmental degradation, population growth, urbanization, unscientific development practices etc.

3.2: Locational hazards

- (a) In terms of earthquake hazard, the entire country has been divided into four zones starting from Zone II which has low damage risk to Zone III which is moderate damage risk; Zone IV which is the high damage risk and Zone V where there is a very high risk damage.
- (b) Some parts of Jammu & Kashmir, Himachal Pradesh, Punjab and Uttarakhand are in the seismic Zone V which is classified as the most seismically prone region.
- (c) Noida, Greater Noida, Moradabad and some parts of Uttar Pradesh as also Ladakh is located in the seismic zone IV which represents areas characterized by high seismic activity. On the other hand, most of Rajasthan including Jaipur is in the low damage risk Zone II.
- (d) In terms of the other hazard parameters for the States under the jurisdiction of Zonal NSEZ; the 2019 Analytical Study points at risk for some of these States. These include flood hazard and high composite index for heat waves in Uttar Pradesh. Moreover, UP, Rajasthan and Haryana figure in the top ten States for industrial hazards.

- 3.3: Vulnerability Assessment:
- (a) The vulnerability assessment for SEZs could be looked at from two perspectives, namely the event based vulnerability and structural vulnerability. The former looks at external events like floods, earthquakes, fires etc while the latter looks at the structural stability of buildings and soil structure of the zone.
- (b) In an analytical paper on "Assessment of the Socioeconomic Vulnerability to Seismic Hazards in the National Capital Region of India Using Factor Analysis", socio-economic vulnerability index has been measured by four specific parameters. These are the social economic status (age, literacy, type of work and building materials), working population (work and non-working female and male population), building typology and family size. All these four factors were assessed for various regions within the National Capital Region. In the analytical study above, one can assess the region in which most of the SEZs under the jurisdiction of Zonal NSEZ exists. These are the Gautam Buddha Nagar and Gurugram. For the former, the four factors were in the category of low, low, moderate and very low respectively. In the case of Gurugram, the factors were in the range of very low, low, very low and low respectively.
- (c) In the same analytical study above, on a composite basis, this socioeconomic vulnerability index was low for Gautam Buddha Nagar and low for Gurugram. Another aspect is the exposure to

seismic hazard, wherein it was low for both Gautam Buddha Nagar and Gurugram.

(d) The Committee for Disaster Management of NSEZ (referred to in the next chapter) would also consider entrusting an independent study on the vulnerability assessment of the zone. The mitigation measures can then be considered based on this assessment.

Institutional Arrangements

- 4.1: The office of the Noida SEZ has its own mechanism including security personnel and firefighting responders in the premises. They take preventive measures and mitigate the risk of any fires or industrial hazards. They undergo regular training in the premises for ensuring timely response to any disaster.
- 4.2: There is a National Disaster Response Force (NDRF) unit which is stationed in the Noida SEZ. They are located next to the administrative office and have around 20 personnel and state of the art communication equipment. The office had provided them space free of rentals based on the request made by the Headquarters. The personnel deployed there have made Noida as their base for tacking any disasters. The personnel undertake regular training and drills inside the campus.
- 4.3: The office has also created a Committee for Disaster Management (CDM) which is would have the following officers:
 - a. Joint Development Commissioner Chairman
 - b. Deputy Development Commissioner- Member
 - c. Representative of NDRF Member
 - d. Any other Member who may be co-opted with consent of Chairman

- 4.4: The functions of this Committee would be to:
 - a. Implementation of the Disaster Management Plan
 - b. regular stock of preparedness for disaster management
 - c. Inspect the premises for ensuring that equipment and personnel could be effectively used in case of any disaster
 - d. Coordination with relevant authorities in Noida relating to disaster management
 - e. Assessment of hazard risks and vulnerability assessment including assigning any studies
 - f. Supervision of the mock drills and training routines of the utility providers in NSEZ
 - g. Outreach programmes and training on disaster management for the units in SEZ
 - h. Reporting of its activities to the NSEZ Authority.
 - i. Any other work that the NSEZ Authority might delegate

Prevention and Mitigation

Monitoring of Hazards and Threats

- 5.1 One of the functions of the internal Committee would be the evaluation of hazard risk and monitoring. Some of the major hazard risks for units in Noida SEZ are: a) industrial fire b) earthquake c) floods, d) Chemical, Biological, Radiological and Nuclear (CBRN) as well as terror attacks.
- a) In the case of industrial fires, while the units have their own fire safety equipment, there is an internal firefighting unit. They have the basic equipment for tackling small fires. Normally they are the first responders. Help is also sought from the nearest fire station if the fire cannot be doused by the internal personnel.
- b) In the case of earthquakes, the NSEZ has undertaken suitable mitigation measures by ensuring the structural stability of the buildings. All structures with cracks are monitored by the internal staff. Help of the NDRF stationed in NSEZ is also taken.
- c) In the case of floods, the internal housekeeping staff is adequately trained for the exigency. There is a regular check up of the drains to ensure adequate outflow of this water. There are pumps for draining out waterlogging.
- d) The responsibility for monitoring and responding to CBRN and terror attacks are with specially designated agencies in Delhi and

Noida. There is an internal security force which is adequately trained. One can also depend on the police force in Noida in case of any exigency.

- 5.2 There is a continuous exercise for assessing and monitoring the hazard risks relevant at each location. Some of the measures taken by Noida SEZ for mitigation and prevention of hazards are the following:
- Regular monitoring and review for the housekeeping personnel, so that they are adequately equipped to tackle any hazards and other disaster exigencies.
- Review of the safety and fire control arrangements in the units, common areas and utilities.
- Periodic review of the actual peak electrical load, rebalancing offload if necessary, the electrical wiring and the quality as well as adequacy of the distribution boards, junctions, switches, plugs and integrity of the safety devices used in the electrical circuits.
- Reconfiguration of UPS, battery banks, and major equipment to minimize any electrical faults.
- Monitoring of the fire safety arrangements efficiency of fire hydrants, availability of water in the fire hydrants.
- Review of the deployment of different types of fire extinguishers at various locations in the building and provide portable, light and easy to use fire extinguishers inside rooms, especially in rooms where equipment such as heavy-duty printers, photocopying

machines, air conditioners and UPS are installed.

- Assess the risks from the use of electrical appliances and examine ways to minimize risks (i.e. appliances such as electric hot cases, room heaters, air filtering systems).
- Review of the exit routes, elimination of blockages from passages to allow easy evacuation, review of current seating arrangements and exit routes. Removal of scrap and waste on a regular basis to leave open spaces for undertaking any emergency actions.
- Review the evacuation arrangements at the common exit.
- Review floor coordination in the eventuality of complete evacuation of all from the building.
- Ensure entire staff is familiar with use of firefighting equipment and evacuation plans.
- Periodically conduct drills.
- Review the coordination plans at the floor-level and between floors in the offices and SDFs.
- Dedicate an area or room where certain emergency response equipment, first aid kits, wheel chairs, stretchers to carry seriously injured, and other materials are kept for quick and easy access.

Capacity Development

- 6.1 The mainstreaming of disaster management into administration of subordinate offices like SEZs is an important aspect for mitigation. The employees of the units, developers, utility service providers, administrative office are all critical stakeholders in this endeavour. It is important to expose them to general training on this.
- 6.2: The presence of the unit of NDRF within the administrative premises is a plus point for Noida SEZ. They undertake their own training and programmes on a regular basis. They conduct mock drills in order to keep up their efficacy in case of any exigency. The NDRF would thus be central to any disaster management in the zone. The office is in regular touch with the NDRF so that their utility providers can be provided inputs on tackling disasters.
- 6.3: The utility providers such as the security and firefighting officials of NSEZ also conduct regular drills to keep them ready. There are mock fire and security drills which are overseen by the administrative office of NSEZ. With the constitution of the CDM, this would be regularly monitored.
- 6.4: Noida SEZ also plans to have outreach programmes with the units and utility providers. These would be conducted on a regular

basis. The skill development centre which is being set up in the zone with the help of one of the units is expected to be operational by early 2024. This centre would be where the training on disaster management is intended to be provided.

6.5: The modules for these trainings would be prepared in close coordination with the NDRF unit in the zone. There would also be emphasis on practical training too. The equipment required for this would once again be decided based on close co-ordination with the skill development centre.

Action and Recommendations

The summary of the actions that would be taken by the office of NSEZ for disaster management under its DMP would be the following:

- a) Closer co-ordination with the unit of NDRF stationed in NSEZ for ensuring effective response
- b) Regular meetings of the Committee for Disaster Management (CDM) so that it can monitor the implementation of this plan
- c) Continuous measures for mitigation and prevention of hazards in NSEZ
- d) Capacity building initiatives for the stakeholders, including in the skill development centre for ensuring preparedness.