

# Dealing Emergencies / Fire at Neighbouring Industries & Vice Versa

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Head-Corporate EHS

M/s. Granules India Limited

# AGENDA

- About Granules India Limited
  - Emergency preparedness at Granules India
  - Dealing emergencies at neighbouring industries
  - Extending support for fire fighting in neighbouring industry
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- A decorative graphic consisting of numerous small white dots arranged in a pattern that tapers from left to right, set against a background that transitions from orange on the left to pink on the right.

# Speaker Bio

## Nagalla Srinivas

Head-Corporate EHS

Granules India Ltd.

[Srinivas.Nagalla@granulesindia.com](mailto:Srinivas.Nagalla@granulesindia.com)

- M.Sc., M. Tech – Environmental Management, Diploma in Ind. Safety and Ind. Hygiene
- 25 years of multidisciplinary experience in EHS in pharmaceutical industry (R & D, API & Intermediates manufacturing and formulations)



# About Granules India Limited



## Business Divisions

- Core Business
- Emerging Business
- US Generics



## Revenue Mix & Global Reach

- Over 80% of revenues through exports, through regulated markets like USA, Europe and Canada
- 60+ countries
- 250+ customers



## Regulatory Approvals

- USFDA, EDQM, EU GMP, COFEPRIS, INFARMED, TGA, WHO GMP, CDCSO, KFDA, DEA, CFDA, TFDA, MHRA, MCC, Health Canada, HALAL

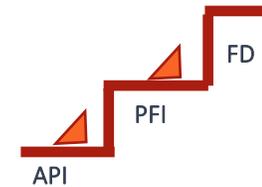


## Building Blocks & People Strength

- Regulatory Compliance
- Operational Efficiency
- Customer Centricity
- Scale of Operation &
- 3029 people as on 31<sup>st</sup> March, 2020



## Product Verticals



Vertically integrated across value chain

### Granules India

Incorporated in 1991, this is the only listed entity.  
1 FD site, 02 PFI sites, 04 API Sites & 01 intermediate site

### Subsidiaries

#### Granules USA

100% subsidiary, for front-end marketing in the U.S  
01 FD site

#### Granules Pharmaceuticals

100% subsidiary with manufacturing setup at Chantilly, USA focused on advanced formulation development.

#### Granules Europe

100% subsidiary, for front-end marketing in Europe.



“To be the global leader in pharmaceutical manufacturing by process innovation and unparalleled efficiencies.”

# Emergency preparedness at Granules India

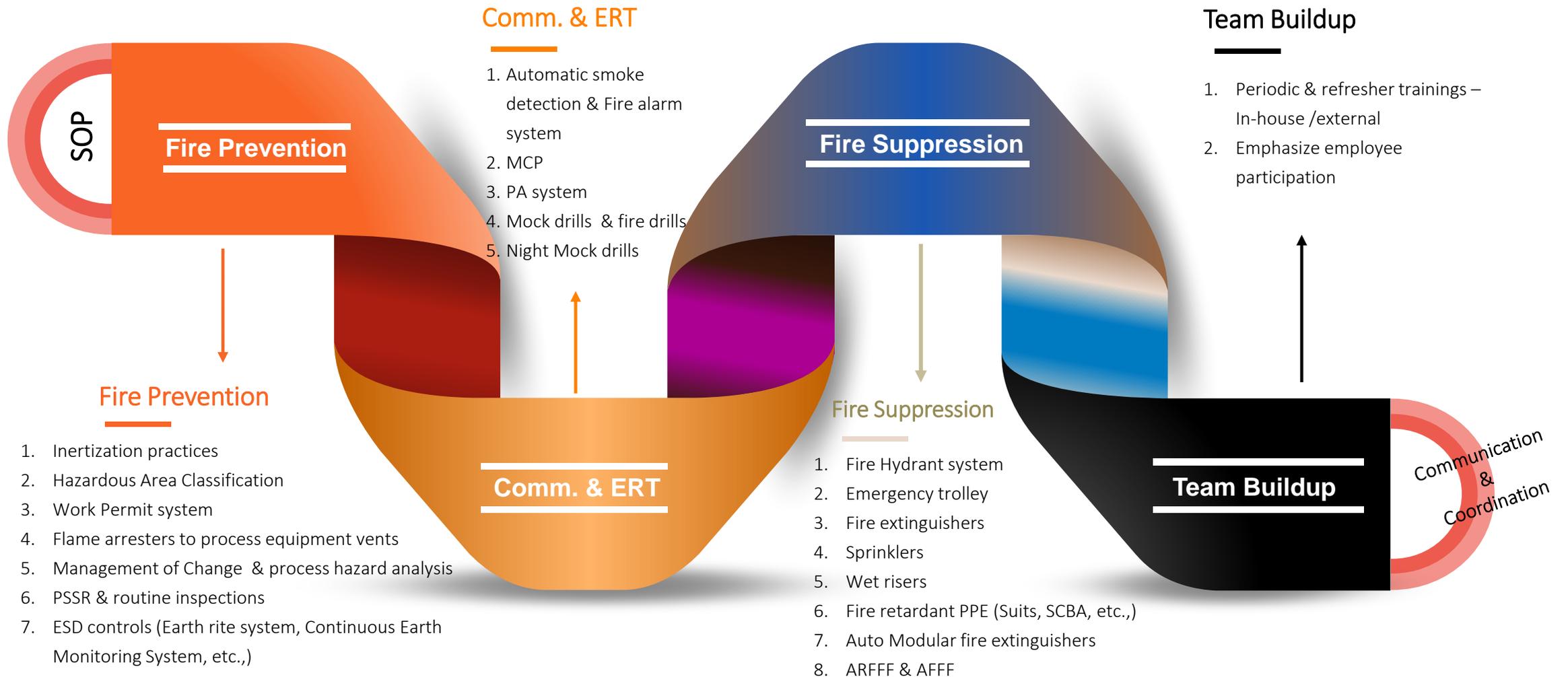
We at Granules India, work proactively developing an effective onsite emergency plan and strictly adhere to mock drills and fire drills .

## Key areas:

- ❖ Incident control organogram & responsibilities
- ❖ Categorization of emergencies
- ❖ Emergency response team
- ❖ Fire fighting systems
- ❖ Occupational health centre
- ❖ Agreement with hospitals
- ❖ Emergency shutdown & general start up procedures
- ❖ Agreement with vendors to supply water on need basis
- ❖ Risk evaluated through process reviews and significant risks with effective control measures(incl. MOC/PHA/PSSR/JSA)
- ❖ Periodic review & updation of OSEP (incl. offsite emergencies)

GRANULES INDIA LIMITED												
LIST OF EMERGENCY RESPONSE TEAM (ERT)												
FIRE FIGHTING TEAM					RESCUE/ EVACUATION TEAM				FIRST AIDERS TEAM			
S.No	Name	Dept.	Ext. No.	Plant	Name	Dept.	Ext. No.	Plant	Name	Dept./Ext. No.	Plant	
1		PB-I	7113	OUT		PB-I	7113	OUT		PB-I	7113	IN
2		PB-I	7113	OUT		PB-I	7113	OUT		PB-I	7113	OUT
3		PB-I	7113	IN		PB-I	7113	OUT		PB-I	7113	OUT
4		PB-I	7113	OUT		PB-III	7116	IN		PB-I	7113	OUT
5		PB-I	7113	OUT		PB-III	7116	OUT		PB-III	7116	OUT
6		PB-III	7116	IN		PB-III	7116	IN		PB-III	7116	IN
7		PB-III	7116	OUT		PB-III	7116	IN		PB-V	7115	IN
8		PB-III	7116	OUT		PB-V	7115	OUT		PFI	7168	OUT
9		PB-III	7116	OUT		PB-V	7115	OUT		PFI	7168	IN
10		PB-III	7116	IN		PB-V	7115	IN		PFI	7168	OUT
11		PB-III	7116	OUT		PB-V	7115	OUT		ESD	7179	IN
12		PB-III	7116	OUT		ESD	7179	IN		ESD	7179	IN
13		PB-V	7115	OUT		ESD	7179	OUT		ESD	7180	OUT
14		PB-V	7115	OUT		ESD	7179	IN		ESD	7180	OUT
15		PB-V	7115	OUT		ESD	7179	OUT		QA	7105	OUT
16		PB-V	7115	OUT		HR	7102	OUT		QA	7105	OUT
17		ESD	7179	IN		PFI	7168	OUT		WH	7164	IN
18		ESD	7179	OUT		QC	7130	OUT		EHS	7176	OUT
19		ESD	7179	IN		QC	7130	IN		HR	7173	IN
20		QC	7130	OUT		WH	7164	IN				IN
21		QC	7130	IN		QA	7105	IN				OUT
22		WH	7164	IN		HR	7102	OUT				IN
23		EHS	7176	IN		EHS	7176	OUT				OUT
24		EHS	7176	OUT		EHS	7176	OUT				IN
25		EHS	7176	OUT				IN				OUT

# Emergency Preparedness at Granules India



# Dealing Emergencies at Neighbouring Industries

Are we prepared for the fire ??

How about offsite/  
neighbouring  
industries?

Have you ever faced  
any emergencies  
pertain to neighbouring  
industries

# Dealing Emergencies at Neighbouring Industries

How effective we are in combatting the emergencies??

- Rescue the threat casualties and safeguard the people
- Minimize damage to property and environment

## Deciding Factors

- Mutual aid agreement between neighboring industries
- Contact details of key personnel of neighbouring Industries
- Information about the abutting industries operations and storage of materials of higher threshold volumes



- To combat and contain the disaster.
- To evacuate & protect the affected areas.
- Coordination & communication.
- To inform the public for necessary self-protection measures

- To rehabilitate displaced victims
- Ensure the emergency is under control
- Treatment of affected people at OHC/nearby hospitals



# Extending support for Fire Fighting in neighbouring industry

## Case Study-1

Reactor Explosion near site-1

- ✓ Initial observation from security and prompt communication to site team alerted the management and activated the ERT .
- ✓ On getting concurrence with the neighboring industry, our ERT and EHS personnel rushed to incident spot and skillfully acted on the incident.
- ✓ Senior management coordinated with abutting industries and analyzed the situation to arrange for necessary support
- ✓ HR team were quick in coordinating with water suppliers and managed to reach the spot in time.
- ✓ Wind direction created a ruckus at one point of time in both the incidents.
- ✓ ERT members swiftly and dexterously initiated the precautionary measures; wetted our common boundaries, switched off power, utilities, relocated the solvent drums, activated MCP and evacuated our site people.
- ✓ In complete coordination with fire tender team our ERT members have meticulously brought the fire under control.
- ✓ In view of any sudden outburst of fire again, ERT & EHS personnel maintained adequate stock of fire extinguishing equipment and the accessories.

## Case Study-2

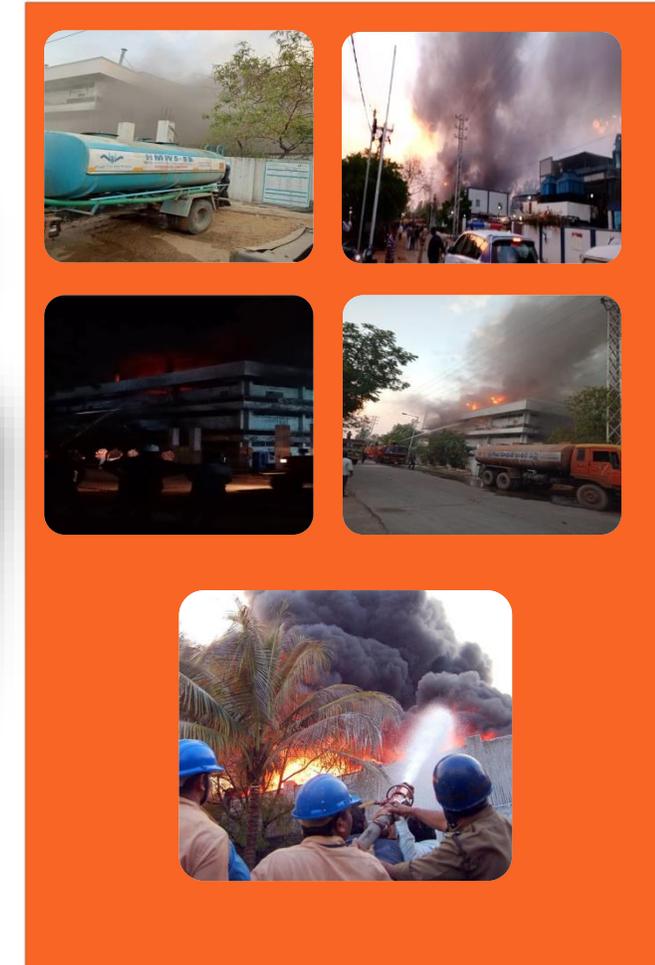
Fire broke out near site-2

# Extending support for Fire Fighting in neighbouring industry

## Case Study -1



## Case Study -2



# Take home

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- Significant points to be considered while dealing emergencies at neighbouring Industries
  - Active mutual aid programme
  - Contact details of key personnel of neighbouring industries
  - Maintain updated information of the neighbouring industries hazardous materials storage and operations.
  - Know your neighboring industries fire protection capabilities
  - Incorporate the changes in on-site emergency plan wrt. offsite/neighbouring industries accident history.
  - Annual / periodic schedule on collective mock drill between hazardous chemical industries with common boundary

# Discussion Forum

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- Line of control (LOC) for our ERT to enter the neighbouring industry.
- What should be included in mutual aid agreement to further strengthen it?



# CONTACT



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#### About the Secretariat

Carnstone Partners Ltd is an independent management consultancy, specialising in corporate responsibility and sustainability, with a long track record in running industry groups.

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