J&A Bharat HSE Foundation,

(Thinking Globally... Acting Locally)

25th December 2021

Shri Narendra Modi ji Honorable Prime Minister of India South Block, Raisina Hill New Delhi-110011 New Delhi

Reference: Preventing deadly incidents in the workplace and creating a socially responsible corporate culture

Respected Sir,

Namaskar.

At the outset, I want to congratulate you for taking charge of handling COVID19 spread by timely actions and preventing a catastrophe that may have occurred under prior lackadaisical health minister's leadership. Your visionary and proactive leadership saved many precious human lives which developed countries like USA, UK could not do. Hopefully, under your dynamic leadership, India's voice "Vocal for Local" is gaining momentum, and India will strongly emerge as the Superpower out of these challenging times in the world.

We take this opportunity to introduce ourselves and our organization, most humbly, as Safety Specialists of Indian origin, Global Safety Institute, USA, Global Safety Consultants, LLC, USA, where "Safety Saves Lives" is the Moto. Towards a safer India, we have started the J&A Bharat Health, Safety and Environment (HSE) Foundation.

Our contribution to the "Vocal for Local" concept starts by bringing best global SAFETY practices to India. We have expertise in USA, Europe, and Middle East, as well as India, totaling a collective safety experience of over 300 Years. Our expertise comes from some of the most challenging and hazardous incidences that have occurred over the past decades. Our team of experts have a proven track record in many deadly incidents such as the Bhopal gas tragedy. We have expertise in road safety; fire hazards and prevention; and safety expertise in many diverse industries such as oil & gas, construction, chemicals, pharmaceuticals, as well as, healthcare sector, including saving lives during the ongoing Covid 19 pandemic caused by preventable fires and medical errors.

India has witnessed several major industrial accidents in the past like Bhopal gas tragedy in 1984, releasing approximately 40 tons of toxic methyl isocyanate (MIC) gas, exposing more than 500,000 people to toxic gases resulting in to over 25,000 deaths. India has introduced several legislations to avoid such accidents, and yet, the innumerable fatal incidents such as the gas leak at LG Polymers, including 29 major fatal hospital fires in the span of less than three months during peak period of COVID-19, in various major cities in India, reveal a pressing need for strict enforcement of safety standards and regulations in the nation.

Although, performance in HSE across the World has seen a positive trend, incidents world-wide suggest, that much work still needs to be done especially in India. A closer look at the practice of safety standards shows that HSE is a sham in many organizations. A timely and revealing book by Alpesh Patel, *Chalta Hai India*, aptly describes the pervasive attitudes of irresponsible Indians. Therefore, third party audits to verify compliance of the safety standards must be implemented to ensure that the *mandated* safety standards are indeed being practiced, and do not exist merely on paper. In addition, the culture across all industries is heavily focused on production and profitability, while human life and welfare is ignored.

Furthermore, it is a challenge to convince senior management on this critical and integral part of doing business. Most believe that "HSE is the HSE professionals' responsibility," while adequate training and funds are never allocated for proper implementation. The changing times demand corporate social responsibility with effective implementation of Safety Management Systems — "HSE is the now management's responsibility". Industries' efforts must continue to make "HSE excellence" as an integral part of daily operations. Successful HSE performance takes teamwork through engaging workers, supervisory production line managers, policy-making senior executive management AND the HSE professionals.

As per ISO standards, the concept of *Lead by Example* by Leaders in the field of HSE to engage with the employees and stakeholders is very much important. In line with this and also with your continued engagement of workers during the recent Varanasi Corridor Project inauguration, during your visit to Qatar, Saudi and UAE are truly remarkable and motivates many professionals. With this motivation, we are in the process of establishing J&A HSE Foundation in India, with the concept of *Think Globally and Act Locally*, to advance occupational safety, protecting the environment, and accountable healthcare by reaching out to private industries, academic institutions, and regulatory agencies, etc., in India. In collaboration with other like minded organizations, we have taken a lead in organizing and conducting frequent webinars in India on a variety of innovative topics and proactive programs in the field of HSE; we have engaged with technical and industrial community of India. Our main objective is to bring *global best practices* to India. Our key recommendations are stipulated in the attached in preventing repeated similar incidents.

We have subject matter experts, who are strategically located situated in different states of India. They can be contacted for any further clarifications on our recommendations.

With our expertise in this challenging domain possessing over 300 years of collective experience, we hope to offer the service to our nation, by setting the standards and implementing best practices.

Our goal is to prevent the occurrence of future incidents all together at best; and at least, reduce morbidity and mortality, and prevent loss of property, livelihood, and revenue.

It is our sincere hope that with your pragmatic and positive approach to all important issues, and with our expertise and efforts, India will succeed in stopping deadly mishaps, and save precious human lives. We, the HSE professionals, are looking forward to close collaboration or assistance in making positive and favorable contributions for the betterment and improvement of safety and health of the public, and socially responsible corporate world in India, aiming to ensuring incident-free operations.

Please depute the right officers in the Central government to work with us, so that, together we could take our mission of 'Safe India – Swachh (clean) India' to every nook and corner of the country through your good offices —with your blessings and guidance.

If you need further information, Jitu Patel could be contacted on tel: +1 623-581-8881 or M. +1 480-580-7667 or e-mail: pateljc2002@yahoo.com and/or Ashok Garlapati on +91-9866784338 or +965 6673 4058 or at e-mail ashokcpcl@yahoo.com.

Kindest warm regards,

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"In pursuit of Protecting People, Property and the Environment"

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OPEN RECOMMENDATIONS TO PREVENT INDUSTRIAL ACCIDENTS LIKE LG POLYMERS GAS LEAK AT VIZAG – ANDHRA PRADESH

A. Specific Recommendations

While appreciating the swift action both State and Central Governments have taken on the gas leak incident at LG Chem, Visakhapatnam, we put forth the following points for consideration

i. Context of Visakhapatnam

Visakhapatnam has a unique place in terms of geography having a natural harbor, a strong naval base and a large and diverse industrial base for about 4000 industries ranging from steel and iron to refineries to pharmaceuticals. In fact, it is now also the hub for manufacturing of Contactless COVID 19 kits at AMTZ. This combination of naval base and diverse industry, many of which, handle flammable and toxic materials, puts it in a vulnerable position. This explains the need for an extremely strong and well-coordinated effort to protect the district that is not only of local, but also national and international importance.

ii. Disaster Management Scenario

The district is susceptible to cyclones, the last one of which was Hud Hud. In addition, the current wave of COVID-19, the security risks and recent incident of gas leak (that could have much more severe and wider devastating impact to human and animals and other living creatures with larger potential due to the presence of many other toxic materials storage facilities in the district and the industrial developments are growing). Hence, there is a need for cognitive emergency preparedness and response, where various combinations of multiple emergency situations at the same time are evaluated and response plan prepared accordingly i.e. mutual-aid program well planned and practiced for its effectiveness by conducting announced and unannounced drills/mock runs to determine their effectiveness for the readiness of handling any such eventualities promptly. These are common industry practices supported and coordinated by the Government Authority in many countries in the world including the Middle East and Western World nations.

- 1. As per orders by Andhra Pradesh High Court there is a need to formulate and strengthen the Crisis Management Group, the State Crisis Group all the further down to the local crisis group. Similar arrangements have proven their success in other states like Odisha.
- 2. Offsite emergency with trainings necessary for preparedness by residents, where presently factories are located should be held by NDRF and fire services regularly

- 3. All new units should be sanctioned based on their risk assessment report which shall cover consequence analysis, and additional land to be given based on basis of hazard on land, which is to be vacant. No encroachment of land for dwellings to be permitted BY STATE TOWN PLANING. There should be a Land Use Permit procedure and plans, as a requirement. The approval process must be adhered to prior allowing any new project or any modification or expansion of the existing facility in the area.
- 4. Third-Party Pre commissioning audits are to be made mandatory conducted by independent professional organization. Corrective actions on the recommendations made must be completed timely and the actions taken must be verified by the Third Party,
- 5. Competence of the Officers of Dept of factories Dept. can only be determined by keeping their knowledge up to date with the state-of-the-art technology advancement by making them to upgrade their technical knowledge by attending refresher training and by updating their certification on various applicable relevant education programs as continuous education. Similarly, recruitment of officers to be in those lines with minimum RLI passed and 4 years intern experience with various industries to gain subject proficiency. Additionally, he/she should also be made aware of the associated knowledge on the environment Engineering to safeguard workers, general public and the Globe!
- 6. The Fire Services should also reorganize by having technical officers of BE (fire) IFE (UK) etc, who can understand the risks, study drawings, evaluate hydraulic calculations of design, well versed with UL & FM property loss details from the post of DFO to Director. Station fire officers and ranks up to ADFO should be BE (FIRE Also Each fire Station to be equipped with necessary equipment for disaster management tools to assist NDRF) The role of Fire Advisor to Govt of India is to be reviewed as they seem to be more of ornamental posts, and no good work is taken up for the country. Also, a high-ranking Fire officer with credentials should be in the post of DG (Fire) and not appointing IPS officers, who are not knowledgeable about the associated facility hazards and their safe handling procedures as well as about the fire protection equipment and systems.
- **7.** Pollution Control board also to have more knowledgeable officers who are aware of industrial safety, Industrial Environment knowledge and bio-diversity planning.
- **8.** Industry Tribunals with eminent officers, well versed with industrial acts, laws, rules and regulations, should be set up in each state of our country to deal with matters of Industries. Local courts should not have any jurisdiction as the judges have no knowledge on the industrial scenario and work based on papers submitted by either parties and decisions boomerang.
- 9. Industry Tribunals with eminent officers well versed with industrial acts, laws, rules and regulations should be set up in each state of our country to deal with matters of Industries specially to focus on Hazardous and polluting industries under the scope of Safety and

- environmental regulations. Matters pertaining to judicial arbitration /cases need to be managed with subject matter experts duly providing valuable/ unbiased inputs to judges /judiciary to arrive at decisions / judgements.
- 10. Even committees formed, should be with third party qualified safety professionals with relevant exposure and experience in that industry and risk assessors. It should not be just filled with Retired Govt / University HOD's, who have no industrial experience on process safety management.
- 11. Political intervention should be completely cut off for smooth progress of industries.
- 12. There is a need for a holistic approach- integrating, economic, environmental, security, health and safety labor welfare issues so as to prevent a catastrophe. Otherwise, we will start running after one and the other and forming committees to study and report without any proactive approach and no lessons learnt from such incidents.
- 13. Our statutory act and rules are archaic. The outdated Acts and rules are to be changed which do not apply to many new lines of business. The industries need to take initiative to work the requirements for the best standards available globally. Hazardous. Industries must be mandated to have ISO 14001 and 45001 certifications within 2 years of commissioning or by 31st December 2021 at the earliest.
- 14. Industries/establishments to be linked to fire services/Police thereby alarm is raised in an emergency. Similarly, mass communication for public safety is to be installed in the colonies near existing factories to alert citizens instantaneously
- 15. Industries are burdened complying to outdated regulations. Many of them either evade or do not comply.
- 16. Equally the State and Central Govt officers of statutory bodies on safety, environment, labor, are passively responsible for the mishaps which are occurring. No action is being taken against them and industries. Judicial process is lethargic and is a slow grind.
- 17. It is hard earned money of citizens being paid as taxes and in return given as salaries to the Govt officers
- 18. Also, in Vizag, Government enterprises, such a HPCL/BPCL/IOCL/ONGC/VSP etc where major accidents have occurred in the past, and no action is taken, nor the units are heavily penalized/sanctioned. Why are Governments and judges not reacting to such events?

While various rules and regulations are in place compliance is very cumbersome and totally Unfriendly to the Entrepreneur. The present rules are "One Shoe Fit for All "makes compliance practically impossible to industries, especially the small, medium ones engaged in High Risk / Hazardous operations.

A. GENERAL RECOMMENDATIONS:

- 1. Rules have to adapt to factor the size of the unit, production capacity, Number of employees, etc. This can be fixed based on the Investment /Project cost. Rules have to be more friendly and make it easier for compliance with guidelines, international standards being referred to comply and forms part / scope of III party audit norms.
- 2. Timelines for approvals. Applications gather dust for years, so industries cant wait for approval and go ahead with projects based on data submitted without any validations inputs from government.
- 3. Periodic 3rd party safety audit for such units. Professional Risk Managers and Hazor experts to be in involved. Safety and Audit should focus on Loss Prevention rather than a Fire fighting exercise.
- 4. Too many departments and agencies: Fire, PCB, Inspector of factories etc. Have a single window for such clearances and approvals; make rules which are implementable and not impossible to comply with.
- 5. Govt. can form a panel of Risk Management and HAZOP Experts specialized in various industries like chemicals, Pharma, Power Plants, and Refineries etc. This panel will be mandated to conduct periodic Safety audits and Inspections. The findings can be shared with the Govt and the unit. The expert committee will revisit the unit after a reasonable time to verify compliance. Such a panel can be funded jointly by the industry as well as the Govt. In the event of a major accident, it is the government that ends up paying compensation. Strictly enhance the terms of Public Liability Insurance Act to work compensation.
- 6. Most units specially the small and midsized units do not have a sound insurance policy and a Public Liability policy. Hence in the event of a catastrophic accident they become sick and unable to repay the Bank Loans, Insurance claim is insufficient and very small settlement, nor can they pay compensation to the victims.
- 7. Renewal of Licenses of the unit should be based on the report of the Panel and compliance of the panel recommendations and a good Insurance policy.
- 8. At some stage, a national level Safety Advisory body like USA CCPS or UK HSE which are subject authority to support industries and act as bridge between industries and regulators need to be established. The CCPS came in to existence post Bhopal in USA to

learn lessons and make sure that USA do not have a Bhopal incident at their backyard. CCPS was instrumental in establishing the process safety management standard OSHA 1910.119 which is now mandatory standard for US process industries.

B. ACHIEVING HSE EXCELLENCE IN INDUSTRIES

The focus of appointed higher-lever Govt. Authority should be on achieving HSE excellence in all industries such as oil, gas & petrochemicals, pharma, steel, Mining and other manufacturing and construction industries. The following are some tips compiled of some top suggestions for consideration that the appointed officers are capable to direct and guide in ensuring the safety of the facilities under their jurisdiction:

- 1. Exert efforts in engaging senior management and employee involvement in implementing HSE initiatives and programs from concept to execution stages.
- 2. Ensure and identify applicable HSE regulations for respective operations and identify international best practices / applicable standards wherever regulations are not in place.
- 3. Conduct Hazard identification and risk management mapping process of all operations and evaluate control measures to mitigate risks.
- 4. Conduct a gap analysis of applicable regulations and current status of its compliance; develop programs to ensure the full compliance of regulations.
- 5. Establish HSE roles & responsibilities for senior management, line management and all key personnel and integrate these responsibilities through HSE KPIs into their operational KPIs.
- 6. Ensure empowerment of workforce to handle unsafe conditions, effective implementation of stop work authority. Shortcuts to be avoided, involve all concerned workers in reviewing and development of relevant job safety analysis job hazard analysis etc.
- 7. Establish a proper training and awareness mechanism to educate senior management, line management and workforce at all levels on applicable HSE issues.
- 8. Establish a mechanism within the organization to share best practices, learnings from incident investigation recommendations, state-of-art technologies of risk reduction processes along with similar organizations on local, regional and international levels.
- 9. Check and analyze the best practice applicable for the industry by reviewing them on technical, economical, commercial and organizational issues and implement them as applicable.
- 10. Provide detailed technical specifications in contract / tender documents and ensure its compliance by contractors, so that even lowest bidding contractor also complies

- with relevant technical specifications and ensure its compliance during the execution / operation for safe completion of any construction or maintenance & repair projects / operations. educate management for their good understanding that it is more important to focus on mechanically safe completion and not pressure contractors to beat the schedule which could lead to short cuts with potentially unsafe sloppy completion of projects.
- 11. Carry out a bridging of Contractor HSE documents / procedures with Company HSE procedures and ensure their compliance during all phases of project including operational phases.
- 12. Avoid blame culture, encourage reinforcement of positive behavior among the workforce, encourage reporting of unsafe conditions, near misses etc.
- 13. Provide reward and disciplinary process for positive HSE behaviors and at the same time for HSE violations of company / contractor HSE procedures respectively
- 14. Ensure senior management of company and contractors are conducted periodic site visits, understand workforce HSE concerns, issues and provide directives and required resources in improving workplace safety
- 15. Establish a mechanism to review the HSE performance of company & contractors with senior management.
- 16. Establish a networking mechanism among all HSE professionals within the Company (between the Company and Contractor), engage respective government agencies in this process and also enlarge this networking to local, regional and international levels to have a bench marking process in improving HSE performance.
- 17. Engage senior management and line management to participate in local, regional and international HSE conferences, symposiums, workshops etc to learn, share and gain best practices/ understand latest HSE standards / developments etc.
- 18. Carryout a benchmarking of the HSE performance with piers and consider appropriate corrective actions to comply with piers / for further improvement.
- 19. Always adopt a concept of "think Globally... act locally" in implementing new technologies for continuous improvement of HSE performance, provide an opportunity for local HSE professionals to have a local chapter / forums / association with international reputed HSE professional societies like ASSP, IOSH, AIHA etc.
- 20. HSE excellence is a journey and not a destination and senior management, line management, workforce and contractors need to be engaged in this process at all levels.

One must remember that production, profits and HSE go hand-in-hand together". on a long run, this approach would be prudent socially, morally, legally, and financially.

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