Executive summary

This briefing identifies fire safety challenges and opportunities to reduce or eliminate the risks to workers of workplace fires.

In this briefing:
- Insights from Sedex on top line trends and non-compliances related to fire safety in global supply chains.
- A spotlight on Bangladesh, to provide a broader context on some of the root causes of fire safety issues.
- Recommendations of the type of actions that can be taken by purchasers and suppliers in order to improve the safety of suppliers.

A chronic issue

A century before the Tazreen Fashion tragedy occurred in Dhaka, the Triangle Shirtwaist Factory fire in New York, killing 146 people, shocked factory owners and legislators out of complacency. A hundred years later people are questioning whether practices have really changed as fires continue to injure and kill workers worldwide at an alarming rate. In the past year alone over 500 workers perished in four major factory fires, caused by well known and controllable risks.

Fire safety is how a company prevents, prepares for and responds to fire. It includes measures that are planned during the design and construction of a building or implemented in structures that are already in use, and those that are taught to occupants of the building. This means:

- Designing and constructing buildings according to local building and fire codes;
- Taking steps to prevent fires, such as by eliminating sources of ignition and controlling the storage of flammable and combustible materials;
- Installing and maintaining fire fighting systems and equipment including automatic fire sprinkler systems and hand held fire extinguishers;
- Providing fire detection and alarm systems to provide early warning for workers;
- Ensuring an adequate number of properly designed and maintained fire exits to enable workers to evacuate quickly and safely; and,
- Implementing fire response plans and evacuation procedures, including worker training and regular evacuation drills.

Recent industrial fires

More than 500 workers have died in factory fires in the past year.

- “Over 100 die in fire at Chinese poultry plant” (New York Times, 3 June 2013)
- “Eight killed in Bangladesh garment factory fire” (CNN, 9 May 2013)
- “Up to 15 dead after fertilizer plant blast in Texas” (The Guardian, 18 April 2013)
- “Bangladesh textile factory fire leaves more than 100 dead” (The Guardian, 25 Nov 2012)
- “More than 300 killed in Pakistani factory fires” (New York Times, 12 September 2012)
Fires: A persistent problem
Data from Sedex identifies critical safety issues at factory sites in Bangladesh. Fire safety problems, including blocked aisles/exits and fire fighting equipment inadequately installed or missing, appear at the top of the list of health and safety concerns identified by audits in Bangladesh. At the same time, concerns relating to improper building certificates, standards and controls are also logged in the country.

Source: Sedex data, April 2013

The Ready Made Garment Sector of Bangladesh

The RMG industry accounts for 70 percent of exports. The sector exports 60 percent of its products to the European Union and 20 percent to USA.

High capacity and low wage rates make the industry attractive to foreign buyers. With a total of 5,000 factories, its capacity is higher than that of Indonesia and Vietnam.

Minimum wage rate is $1.2 and average wage rate in the RMG industry is $9.28 an hour. Workers lack productivity as no vocational training institutions are present.

Why must the collapsible gates be locked while we work inside the factory? Are we inmates of prisons? Why are we treated like convicts when we come to earn an honest living? Oh god, so many of us would be alive today only if the gates weren’t locked!

I survived, but many did not! Everything else burned to ashes right before my eyes. All our dreams have been swept away with the smoke!

Angry moans of two female factory workers the day after the Tazreen fire

Complicating factors

● The Ready Made Garment (RMG) sector is now the largest contributor not only to overseas trade but also to the national economy.

● To meet rapid growth in demand business owners saw an opportunity and converted office premises to factories never constructed to bear the weight of factory machinery.

● According to the 2008 building law, any new structure, for any purpose, has to obtain an occupancy certificate from a government agency before it can be used; only six certificates have been issued since 2008, although it is estimated 4 – 5,000 new buildings are built every year.

● The heavy weighting of the RMG sector in the Bangladesh economy means that permits and other legal requirements are often ignored.

● Quality of construction is often poor, resulting in widespread safety problems.

● Keeping manufacturing costs low is a key concern of RMG’s and many have failed to invest appropriately in worker safety.

● Many factory owners are members of government or powerful trade associations in influential positions that allow them to sidestep legal requirements.

● Freedom of association is not widely respected and so workers cannot freely monitor or report safety hazards.

● There are insufficient number of government inspectors for the entire industry.

● Workers, workers’ organisations, women’s and labour NGOs are currently often marginalized in the industry’s audit process.

● With elections looming, Bangladesh faces a difficult political climate.

The response
In March 2013, the Bangladesh Ministry of Labour and Employment launched the ‘National Tripartite Plan of Action on Fire Safety’, which focuses on improving fire safety legislation and policy, administrative processes and procedures, and practical activities, such as factory improvement plans, training programs and a worker hotline.

Since then, two industry-sponsored initiatives were launched: the Accord on Fire and Building Safety in Bangladesh and the Alliance for Bangladesh Work Safety. The two initiatives will align with the National Action Plan and each other to inspect factories to identify and quantify risks, implement improvements, and train and empower workers to identify and report fire and building safety issues.
Top 10 fire safety NCs globally
(also shows what % of all fire safety issues each NC represents)

<table>
<thead>
<tr>
<th>NC Issue title</th>
<th>% of all Fire Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exit signage missing or inadequate</td>
<td>10%</td>
</tr>
<tr>
<td>No, or inadequate, functioning emergency lighting</td>
<td>8.2%</td>
</tr>
<tr>
<td>Signs &amp; instructions (a lack of visibility / appropriate languages)</td>
<td>7.6%</td>
</tr>
<tr>
<td>Blocked aisles / exits preventing use</td>
<td>6.9%</td>
</tr>
<tr>
<td>Fire fighting equipment inadequately installed/ not installed</td>
<td>5.8%</td>
</tr>
<tr>
<td>Electrical wiring not adequately encased or secured</td>
<td>5.6%</td>
</tr>
<tr>
<td>No regular evacuation drills appropriate to the fire safety risk</td>
<td>5%</td>
</tr>
<tr>
<td>Fire service inspection certificates missing or out of date</td>
<td>4.7%</td>
</tr>
<tr>
<td>Lack of appropriate or distinctive fire alarm</td>
<td>4.5%</td>
</tr>
<tr>
<td>Facility with insufficient usable exits, inadequate fire doors or escape routes</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Key insights from Sedex data
- Fire safety NCs collectively represent the highest occurring H&S issue, representing 32% of H&S NCs globally.
- Exit signage missing or inadequate is the highest occurring single NC for fire safety, representing 10% of the fire safety NCs globally.
- Africa, as a continent, on average, has the lowest proportion of fire safety NCs raised out of total issues (6.6%), compared with North America (11%), South America (11.8%), Asia (12.7%) and Europe (13.5%).
- By country, Romania, on average, has the highest proportion of fire safety issues out of all issues raised at 33.2%, followed by Portugal (25.5%), the US (24.2%), Czech Republic (22.7%) and Italy (20.1%).
- By sector, we found only minor differentiation in the proportion of fire safety issues, however the manufacturing sector has the highest at 15.2%
- We had the same findings when looking at the proportion of fire safety by industry; Drugs and Pharmaceutical products had the highest proportion of fire safety issues, at 20% but there is little differentiation.

Key insights
- Issues of Fire Safety are widespread and persistent across industry sectors and geographies.
- Fire safety issues are closely aligned with other health & safety issues (such as maintenance, chemical safety), and so a holistic approach to risk evaluation and control is essential.

Source: Sedex database, 2011-2013, 19,300 audits
Elements of Fire Safety risk control

Companies should take a risk-based approach to fire safety. A formal process to identify, assess and rank fire safety hazards should be used, with the highest priority given to issues that endanger workers.

**Design and construction**
- Design and construct buildings in compliance with applicable codes and standards.
- Provide at least two exits per floor.
- Exits empty and lead to a safe location outside the building.
- Exit doors open in the direction of travel and equipped with panic hardware.
- Enclosed exit staircases separated from work areas by fire-rated walls and self-closing fire doors.
- Fire detection and alarm systems for all work areas and living quarters.
- Fire suppression equipment and systems (fire extinguishers and automatic sprinkler systems).
- Hazardous storage and production areas separated by fire-rated walls and doors.

**Maintenance**
Regular inspections and maintenance to ensure:
- Exit aisles and stairwells are maintained free of any storage or obstructions.
- Proper functioning of fire detection and alarm systems and of automatic fire sprinkler systems.
- Fire extinguishers are charged and readily available.
- ‘No Smoking’ within production buildings.
- Proper storage of flammable and combustible materials.

**Emergency response plan and procedures**
- Documented employee notification and evacuation procedures.
- Designated and trained response team to alert staff, perform basic firefighting and assist in evacuation.
- Conduct regular fire drills for all work shifts.
- Conduct regular fire safety assessments to evaluate the risk to life and property.

**Training**
- How to identify fire hazards, such as propped open fire doors and blocked exits, for all workers.
- Specialized training for fire inspection teams and response personnel.
- How to report and respond to fire emergencies.
## Concluding remarks

Recent tragedies in the supply chain highlight the numerous and dangerous conditions inherent within the world’s supply chain. Data from Sedex confirms that fire safety is not a new issue. **Fire safety non-compliances (NCs) collectively represent 32% of the H&S NCs collected on the Sedex database globally.** Moreover, risks relating to fire safety are pervasive and persistent across industry sectors and geographies. In looking at the political, economic and cultural root causes of fire safety issues, it is short-sighted to assume that buyers alone can make the changes necessary to ensure worker safety. Certainly buyers can encourage change through more responsible and consistent practices, but ultimately local government, suppliers and all actors in the supply chain need to commit to, and work together towards, real changes that will set the stage for ongoing and effective changes in worker safety. Vitally, we need empowered workers with the capacity to be their own best advocates for change.

### Recommendations for buyers

- Map the entire supply chain, including subcontractors, to gain visibility of risks and opportunities to improve standards.
- Routinely evaluate and track supplier performance on controlling fire safety risks.
- Empower, and build the capacity of, suppliers to manage their own fire safety programs.
- Work with multi-stakeholder initiatives to develop common approaches to fire safety to increase leverage and reduce duplication of effort.
- Ensure purchasing practices and pricing that support factory renovations and investments in worker safety.
- Make sure fire safety programs are part of other ethical sourcing initiatives that ensure respect for worker rights, such as freedom of association.
- Invest in local institutions to promote and protect worker rights in countries of operations.

### Recommendations for suppliers

- Implement and continually improve a health & safety management system.
- Engage qualified professionals to evaluate fire safety risks at all workplaces and ensure that any issues identified are quickly remediated.
- Implement effective and transparent building and fire safety audits of subcontracted suppliers.
- If workplaces are closed for renovations, make sure workers do not suffer any loss of pay or benefits.
- Recognize and respect the role of worker representatives in upholding worker safety standards.
- Ensure that workers are trained on their rights, including the right to withdraw from dangerous work.
- Provide workers with access to credible grievance mechanisms to report hazards without retaliation.
- Support access to remedies and provide financial support, where needed whenever workers suffer injury or death as a result of a safety incident.

### Fire safety resources

- **Sedex Supplier Workbook**
- **Sedex Members Ethical Trade Audit (SMETA) Best Practice Guidance**
About this briefing:

This issue briefing is the latest in a series of films, publications, resources, briefings, webinars and in-person events by Sedex Global and partners. These focus on a range of topics including; key emerging trends for sustainable supply chains by region and emerging CSR topics, risk and performance management in global supply chains, highlighting companies’ achievements of good practice and best practice, impact, collaboration and convergence in responsible business.

Find out more at: www.sedexglobal.com/insights/briefings

“Because of our garment workers, Bangladesh is now a key player in apparel [...] The industry has grown here because labor is “cheap”. There is a race to make production cheaper by cutting corners. But the toll is on the workers. All the neglect and oversight on workplace standards emanates from this perception of “cheap labor.” Just because these workers are paid low, it does not make them cheap and dispensable! There needs to be change in this mindset. Please give them their dignity.”

Sayeeda R Khan, Founder & Director, Sheva

“The outrage over the Tazreen fire, in which at least 117 workers died, is no less intense than the Triangle Shirtwaist Factory fire in New York, killing 146 people, but the response appears less focused. Workers need actions that result in immediate impact.”

Michael Vaudreuil, Director of Consulting and Training, Verité

About the partner author organisations:

Sedex Global (sedexglobal.com)
Our mission is to drive collaboration, increase transparency and build the capacity that’s needed to raise standards across all tiers of the supply chain. We offer the world’s largest collaborative platform for managing and sharing ethical supply chain data, along with leading-edge services which multinational companies use to understand, monitor and manage supply chains risks and improve standards.

We collaborate with a range of stakeholders including UN bodies, trade organisations, government agencies and NGOs to share insights and promote best practice on responsible supply chain issues.

Sedex provides in-depth, analytical reporting services to highlight trends, alert to potential risks and to help prioritise resources. Find out more: http://www.sedexglobal.com/member-services/reporting/

Verité (verite.org)
Verité is an international not-for-profit consulting, training, and research organization that has been a leader in supply chain social responsibility and sustainability since 1995. Verité’s holistic approach is based on an extensive, applied understanding of common obstacles and effective strategies for managing supply chain risks. Verité services help companies and other stakeholders fully understand labor issues, overcome obstacles, and build sustainable solutions into their supply chains, benefiting companies and workers alike.

Disclaimer:

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