

# Status of Health, Safety, and Environment Management

## I. Management Approach

Employees are the core for TSRC competitiveness. TSRC devotes efforts to provide a safe working environment, protect human rights and harmony between labor and the management, and enhance employee engagement. TSRC develops the TSRC Safety Culture to enhance employees' awareness and attention to workplace health and safety, reduce the occupational injury rate, and achieve zero accidents and zero injuries. We are committed to protecting employees' human rights, supporting the Universal Declaration of Human Rights (UDHR) and other relevant international human rights concepts, and implementing TSRC's human rights policy. We value employees' opinions and rights and establish a channel for feedback and communication. We organize activities to improve health and provide competitive remuneration and benefits to enhance employee engagement.

# II. Healthy and Safe Workplace

To increase the awareness and attention to workplace health and safety at all levels, TSRC has promoted the TSRC Safety Culture and TSRC HSE Core Value since April 2021. It consists of five core elements: people -centric, zero incidents, commitment, discipline, and compliance. We further formulated the TSRC safety and health policies and convert into the safety culture: we pursue zero accidents and zero injuries with a people centric approach through technology, safety and health culture, responsibility, and communication.

In pursuing employee workplace safety and health and maintaining zero accidents and injuries among stakeholders, Taiwan and mainland China factories have implemented ISO 45001 Standard with verification of effective date to January 26, 2025. Taiwan factories also adopt CNS45001 Occupational Safety and Health Management Systems and obtain certifications. We establish a Responsible Care Committee at our headquarters in Taiwan. Subsidiaries in different regions set up a dedicated committee or department responsible for labor safety and health matters in accordance with the Occupational Safety laws and regulations. The person in charge of the business operation or his/her designated representative holds labor safety and health meetings on a regular basis.

In accordance with Taiwan's Occupational Safety and Health Management Act, TSRC's global corporate headquarters has set up the Occupational Safety and Health Division as the dedicated occupational safety and health management unit, which is responsible for



implementing the safety culture, conducting compliance audits every three years for all the Group's factories (whether or not ISO45001 is implemented), developing promoting activities (such as Safety Culture Initiatives), and supporting employees and contractor to embed the culture in daily operations. TSRC establishes a unified HSE management mechanism with standardized definition and a platform for event reporting, investigation and correction to prevent recurrence, to achieve the goal of "Disaster-free and harmfree".

In 2022, TSRC officially launched its HSE incident reporting and database system, which allows for more efficient data collection, analysis, and review. This system contributes to effective reporting and investigation of incidents, as well as the identification of prevalent incident types and trends to formulate corresponding strategies. In 2022, TSRC established the Global HSE Annual Award. Sites which have excellent HSE performance are recognized and rewarded. The peer competition improves the HSE culture and implementing outcomes.

### **III.** Occupational Injury Prevention and Improvement

In accordance with the provisions of the ISO45001 management system and local laws and regulations, the Taiwan and China plants have established comprehensive occupational safety and health hazard identification and risk assessment procedures. The assessment results are managed in a hierarchical manner using matrix, and priority is given to improving high-risk operations. Management plans are formulated for unacceptable risks and reviewed at management meetings to achieve continuous improvement through the PDCA cycle.

TSRC follows the ISO45001 management system and schedules annual health examinations for employees facing potential long-term health risks. TSRC adopts early warning system to identify occupational hazard factors and carry out preparations to reduce hazards through better management, process changes, methods improvement, work hours adjustment, separation, and personal protection measures.

TSRC particularly manages five occupational hazard factors: noise, carbon disulfide, benzene, dust, and butadiene. Employees that expose to the five factors are classified into four levels and periodically examined by a doctor to determine if they have any abnormal health conditions. As all sites have noise as an occupational hazard factor, TSRC requires employees to properly use PPE to effectively manage the impact of noise on the health. TSRC does not use chemicals such as hepatotoxins, nephrotoxins, neurotoxins, and sensitizers. TSRC focuses on the potential hazards to employees from corrosive substances and suspected carcinogens. The Company conducts monitoring twice a year to identify actual risks, improve the working environment, and change employees' behavior to reduce exposure to chemicals. In addition, through annual special health examinations, TSRC regularly assesses the potential hazards to employees; with monthly visits from physicians dedicated to work-related illness and long-term health check, the impact and potential for disease are well monitored.



To provide better care for employees' health, TSRC continuously organizes health promotion activities, such as health examinations, health education promotions, and sports activities. We invite occupational medicine specialists to provide on-site services, improving employee health management performance.

With the people-centric approach, TSRC not only focuses on employee safety but also values operational safety for contractors. Therefore, TSRC has established the "Contractor Management Procedures" to regulate contractors' qualification inspection, training, hazard notification, construction safety precautions, penalties, and assessments for contractors. The engineering contractors must apply for a construction permit before starting work, and a toolbox meeting is held with the functional unit and contractors to ensure that all contractors understand the steps, hazards, and control measures.

The engineering contracting unit conducts on-site inspections to ensure that contractors comply with occupational safety and health regulations and safety precautions. TSRC also attaches great importance to the occupational safety of suppliers. Through the TSRC Supplier Code of Conduct, TSRC requires suppliers to implement safe operating procedures and provide employees with appropriate personal protective equipment, and requires suppliers to identify, evaluate, and control the effects of exposure to chemical, biological, and physical factors on employees through the hierarchical management control. TSRC conducts regular supplier evaluations and audits to ensure that suppliers comply with relevant regulations.

TSRC has Responsible Care Committee, which is established for the safety and health of all employees and contractors, and is the highest management committee for TSRC's environmental, safety, and health. The Responsible Care Committee is composed of the Product Specification and Distribution Safety Sub-committee, Process Safety and Energy-saving Management Sub-committee, Regulation and Contractor Safety Management Sub-committee, and Emergency Response Sub-committee. It is responsible for the management and review of the ISO45001 Occupational Safety and Health Management System. The Responsible Care Committee convenes quarterly meetings and is chaired by the vice president of the Production Operations Division.

The Committee members include labor representatives, who participate in discussions on the planning and implementation of occupational safety and health policies. Duties of the committee include:





- Implement and integrate the Company's environmental protection, safety and health policies, and carry out measures for safety, health, and environmental protection.
- Incorporate and meet the six management requirements <sup>Note</sup> of Taiwan Responsible Care Association (TRCA).
- Implement the core values of our people-centric safety culture and aim to be the benchmarking.
- Track and reduce chronic health risks of employees.

Note: The six management standards are process safety, contractor safety, emergency response, waste management and reduction, product management, and distribution management.

## IV. Occupational Injuries Suffered by Employees of TSRC Group

## 2022 Occupational Injuries and Illness of TSRC Employees (by Subsidiaries)

		TSRC Kaohsiung Factory	TSRC Gangshn Factory	Global Business Headquarter	TSRC Corporation	Shen Hua Chemical	Nantong Industries	TSRC-UBE	Shanghai Industries	TSRC (Vietnam) Company Limited	TSRC Specialty Materials LLC	Polybus	TSRC Lux	TSRC Group
Total working hours of cmployees		993,189	175,389	153,005	1,321,583	703,064	734,325	265,123	157,014	63,745	159,586	3,852	28,872	3,437,164
Total recordable incidence rate (TRIR)	Number of recordable occupational injury cases among employees	5	0	0	5	0	1	0	0	0	0	0	0	6
	Number of employees in-volved in the recordable oc-cupational in-jury cases	5	0	0	5	0	1	0	0	0	0	0	0	6
	Total recordable incidence rate (TRIR)	1.01	0.00	0.00	0.76	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.35

#### Note:

- 1. Employees are defined as full-time and part-time workers who have signed indefinite-term contracts with TSRC. In 2022, TSRC did not employ temporary workers or workers without guaranteed working hours.
- The total working hours of TSRC employees are the sum of the working hours of employees at the TSRC Kachsiung and Gangshan Factory, and the Global Business Headquarters. The Total Recordable Incidence
  Rate (TRIR) is calculated as the total number of recordable occupational injuries among TSRC Kachsiung and Gangshan Factory, and the Global Business Headquarters employees divided by the total working hours
  and multiplied by 200,000.
- 3. The Total Recordable Incidence Rate (TRIR) is calculated as "Total number of recordable occupational injuries divided by the total working hours, multiplied by 200,000." The definition of recordable occupational incidence includes death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, loss of consciousness, or a significant injury or illness diagnosed by a physician or other licensed healthcare professional (even if it does not result in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness).



# 2022 Occupational Injuries and Illness of TSRC Non-employees (by Subsidiaries)

		TSRC Kaohsiung Factory	TSRC Gangshn Factory	Global Business Headquarter	TSRC Corporation	Shen Hua Chemical	Nantong Industries	TSRC-UBE	Shanghai Industries	TSRC (Vietnam) Company Limited	TSRC Specialty Materials LLC	Polybus	TSRC Lux	TSRC Group
Total working hours of non employees		443,922	15,486	2,304	461,712	214,055	254,767	96,727	24,096	42,500	103,195	N/A	N/A	1,197,052
	Number of recordable occupational injury cases among non omployees	3	0	0	3	1	0	0	0	0	1	N/A	N/A	5
Occuptional Injury Rato (Total recordable incidence rate, TRIR)	Number of non omployees involved in the recordable occupational injury cases	3	0	0	3	1	0	0	0	0	1	N/A	N/A	5
	Total recordable incidence rate (TRIR)	1.35	0.00	0.00	1.30	0.93	0.00	0.00	0.00	0.00	1.94	N/A	N/A	0.84
	Number of sovere recordable occupational injury cases among non omployees	0	0	0	0	1	0	0	0	0	0	N/A	N/A	1
Severe Occuptional Injury (encluding fatalities)	Number of non employees involved in the severe recordable occupational injury cases	0	0	0	0	1	0	0	0	0	0	N/A	N/A	1
	The severe occuptional injury rate of non omployees	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.17

#### Note:

- 1. Non-employee workers are defined as those whose job content is monitored by TSRC Group alone or jointly with other organizations, but who are not directly employed by TSRC Group.
- The total working hours of non-employee workers at TSRC Group is the sum of the working hours at the TSRC Kachslung and Gangshan plant, and the Global Business Headquarters. The Total Recordable Incidence Rate (TRIR) is calculated as the total number of recordable occupational injuries among non-employee workers at the TSRC Kachslung and Gangshan plant, and the Global Business Headquarters, divided by the total working hours of non-employee workers, multiplied by 200,000.
- 3. The Total Recordable Incidence Rate (TRIR) is calculated as "Total number of recordable occupational incidence includes: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, loss of consciousness, or a significant injury or illness diagnosed by a physician or other licensed healthcare professional (even if it does not result in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness).



#### TSRC Process safety Incidents, Process Safety Total Incident Rate, and Process Safety Incident Severity Rate in 2022

	TSRC Kaohsiung Factory	TSRC Gangshn Factory	Global Business Headquarter	TSRC Corporation	Shen Hua Chemical	Nantong Industries	TSRC-UBE	Shanghai Industries	TSRC (Vietnam) Company Limited	TSRC Specialty Materials LLC	Polybus	TSRC Lux
Process safety incidents count (PSIC)	2	0	0	2	0	0	0	0	0	0	0	0
Process safety total incident rate (PSTIR)	0.42	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Process safety incident severity rate (PSISR)	0.84	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### Note:

- 1. The data of TSRC Corporation is the sum of TSRC Kachslung Factory, Gangshan Factory, and Global Business Headquarters.
- The accidents counted in this table are in accordance with the definition of ANSI/American Petroleum Institute (API) RP. 754 PSL
- 3. The Process Safety Incident Count (PSIC) is defined as the total number of incidents in a year.
- 4. Process safety incident severity rate (PSTIR) is defined as the cumulative (annual) severity-weighted rate of process safety incidents, and is calculated as the Total Severity Score for all Process Safety Incidents multiplied by 200,000 and divided by the total annual hours worked by employees, contractors, and subcontractors.
- 5. Process safety incident severity rate (PSISR) is defined as the cumulative (annual) severity-weighted rate of process safety incidents, is calculated as the Total Severity Score for all Process Safety Incidents multiplied by 7. TSRC Corporation including the Global Business Headquarters, Kachslung Factory, and Gangshan Factory.

200,000 and divided by the total annual hours worked by employees, contractors, and subcontractors. TSRC Group did not have any transportation accidents during production in 2022.

- Transport incident is defined as:
  - a death or injury leading to intensive medical treatment, a stay in hospital of at least one day, or an absence from work of more than three days
- Incidents involving releases of more than 50 kilograms/liters of hazardous substances or more than 1000 kilograms/litres of non-hazardous substances
- Transportation accidents resulting in losses exceeding 50,000 Euros (including environmental clean up)
- Incidents that result in direct intervention by government authorities or emergency services, evacuation of personnel or closure of public transport routes for at least three hours

#### The Emergency Response Process

TSRC sets emergency response procedures for raw material leaks, industrial pipeline leaks, fire accidents, and process safety incidents that may result from operating activities. It has also specified the rights and obligations of employees and contractors in terms of safety standards, education and training, health guidance, first aid and rescue, and incident reporting in the relevant regulations. TSRC conducts annual drills and labor safety education and training.

# Number of Emergency Response Drills

