Learn about SMM

Occupational Health and Safety

Basic Approach

In its CSR Policy, SMM states "According safety the highest priority, SMM shall provide safe, comfortable working environments and seek to eliminate occupational accidents," and we are aiming to achieve this.

Therefore, the Vision for 2020 depicts "a company that accords safety the highest priority and provides comfortable working environments," stipulating concrete targets.

To ensure safety, we promote safety-related activities under a basic policy that nurtures a safety culture and enhances line safety management.

Moreover, to provide comfortable working environments, we ascertain the level of dust in the air, the intensity of noise, the levels of specified chemicals and organic solvents, make necessary improvements to those environments, and enhance occupational health management.

Ensure safety

- Make our final target zero occupational accidents
- Reduce occupational accidents to three or fewer per year by 2020 and establish frameworks for achieving this target (Japan)
- · Halve the frequency rate of occupational accidents by 2020 (Worldwide) Reduce the frequency rate from 1.28 (CY2011) to 0.60 (CY2020)
- Provide comfortable working
- Provide healthy working environments
- (1) Achieve zero new cases of employees with occupational disease (requiring treatment) (Worldwide)
- (2) Achieve zero Control Class 3 workplaces (excluding locations stipulated in guidelines, etc.) and reduce Control Class 2 workplaces (Japan)
- Implement other working environment

Occupational Health and Safety Management System

The executive officer supervising the Safety & Environment Control Department is responsible for matters relating to health, safety and the environment, and coordinates health and safety management for the SMM Group. Also, each sector of our Head Office organization and each business site will have assigned a health and safety officer in charge of functional coordination relating to health and safety issues.

The general manager of each business site is appointed health and safety manager for that site, as provided for by the Japanese Industrial Safety and Health Act. Health and safety management is advanced within the organization according to instructions given by the health and safety manager of each business site.

Constructive discussions on ways to improve health and safety in the workplace take place during meetings of the Occupational Health and Safety Committee comprising representatives from both labor and management.





The annual meeting of health and safety officers Holding improvement case study presentations, lectures, and training intended to be

Assuring Health and Safety

Health and Safety Activities in Business Sites

Safety-related activities in CY2016 were conducted with a focus on the following measures:

- (1) Management-led internal risk management development
- (2) Priority-oriented accident risk reduction
- (3) Improvement and entrenchment of residual risk management¹
- (4) Improvement and entrenchment of education for lessexperienced employees2
- (5) More effective use of Anzen Dojo trainees
- (6) Enhancement of safety management of contractors

To improve the effectiveness of measures, we implement safety activities in conjunction with education through group activities with training content from the Anzen Dojo. Safety activities are also advanced by employees of the SMM Group together with contractors.

Health-related activities during 2016 were pursued under the

(1) Improving work environment practices through the sharing of skills and knowledge

- (2) Reducing time individuals are exposed to harmful substances
- (3) Thorough implementation of the three occupational health
- (4) Enhancing awareness of, and communication about, the dangers and hazards of chemical substances
- (5) Promoting stress checks
- (6) Providing a comfortable working environment

Under a labor-management agreement concerning dust. visual display terminals (VDT), lead and noise, etc., procedures for preventing illness and taking action when illnesses occur are

In FY2016, antimony trioxide became a specified chemical substance. We notified divisions affected by this legislation in advance of the change and encouraged the required response. Going forward, we will continue to obtain information on revisions of laws and regulations that will continue to toughen, including adding risk assessment obligations and expansion of chemicals subject to the risk assessment.

- Residual risks: Risks remaining after measures are implemented
 Less-experienced employees: Employees with less than five years' experience

Hazard Simulation Courses (Activities at the Oji-kan Facility)

The SMM Group's practical training facility, the Oji-kan, commenced a range of hazard simulation courses in January 2010. By December 31, 2016, a period of roughly seven years, a total of 8,300 Japan-based SMM Group employees and 3,700 contractor employees had undergone training there.

To make it possible for all employees, from top management down, at each of our business sites to take part in training at the same time, Oji-kan started conducting on-site practical hazard simulations in July 2013. In 2016, 1,200 people took part in on-site courses. Business sites also use the Oji-kan's facilities for independent safety training courses.

Overseas business sites are also making use of the Oji-kan. To date, 15 employees from Coral Bay Nickel Corporation (CBNC) and THPAL in the Philippines have visited the facility to take part in hazard simulation courses. The Pogo Gold Mine in Alaska, the United States, also sends a number of officers each year to tour the facility and apply what they learn to

safety activities at the mine. Tours of the Oji-kan facility are also actively provided to other companies and organizations. Every year, a large number of them come to visit the facility to exchange information.



On-site hazard simulation

SMM Anzen Dojo

Our Safety & Environment Control Department has held the SMM Anzen Dojo (lit. safety training center) since 2013 with the aim of entrenching participation in safety activities by all employees through the enhancement of group activities, and continuously improving the level of safety activities at each business site. The Anzen Dojo trains personnel to become safety experts and leaders at their respective sites. These safety leaders, with knowledge and sensibility, return to their respective business sites to hold group-based safety education and discussion sessions, and take part in the planning, and running of safety activities. This makes it possible for business site safety activities to be implemented more effectively and efficiently.

In 2016, we held two seven-hour SMM Anzen Dojo courses, in spring and fall respectively, at each business site to upgrade and maintain the level of current safety leaders and improve



spring course) in the Head Office area

their level of activity. We also held a short SMM Anzen Dojo "New Safety Leader Training Program" with three sessions aimed at supplementing and increasing the number of safety leaders. This resulted in 47 new safety leaders.

Incidence of Occupational Accidents

In Japan in 2016, there was a total of 22 occupational injury accidents at business sites (frequency rate per one million hours worked: 1.65) and there were five lost time accidents, a significant increase on 2015.

There were 11 injury accidents (frequency rate: 1.20) at

overseas business sites. The combined frequency rate for Japan and overseas was 1.46. However, there were no new instances of occupational illnesses at business sites either in Japan or overseas. Note that this data was collected during the calendar year, January to December 2016.

Data on Occupational Accidents in Japan

Year	Item	SMM non- consolidated	Group companies	Total
2016	All accidents	3	19	22
	Fatalities	0	0	0
	Lost time accidents	1	4	5
	Working days lost	66	77	143
2015	All accidents	3	5	8
	Fatalities	0	0	0
	Lost time accidents	1	1	2
	Working days lost	2	74*	76*
2014	All accidents	5	8	13
	Fatalities	0	0	0
	Lost time accidents	1	3	4
	Working days lost	50	118	168
2013	All accidents	5	11	16
	Fatalities	0	0	0
	Lost time accidents	0	1	1
	Working days lost	204	97	301
2012	All accidents	3	8	11
	Fatalities	0	0	0
	Lost time accidents	0	3	3
	Working days lost	9	172	181

Scope: SMM, subsidiaries in Japan, Nippon Ketjen Co., Ltd., N.E. Chemcat Corporation, and the Mie

Initiatives to Fortify Accident Countermeasures

The number of accidents in the SMM Group has been falling over the long term as a result of various safety-related activities. However, due to complacency following an all-time best safety record in 2015, there were many accidents in 2016. This was due to various factors, such as the creation of new businesses and rapid increases in production, safety activities not being implemented sufficiently for both new employees and veterans alike, and accidents recurring due to similar unsafe activities and unsafe situations.

In 2017, in addition to taking even stronger leadership on health and safety by the general manager of each business site and fully utilizing safety leaders and group activities, we will continue to implement site-specific safety-related activities in line with the role of each level of our organization to nurture a culture of safety.

Additionally, on May 30, 2017, a worker at a business site in Japan entered an area with intermittently operated machinery and was caught between machines and suffocated to death. The SMM Group has focused on making its equipment safe, primarily through risk assessment. The revelation that there is still equipment that can result in a fatal accident has prompted us to declare a state of emergency and we are engaged in increasing safety efforts by demanding the inspection of every single piece of equipment within the Group that is thought to pose a risk of serious accident

^{*}The number of "working days lost" for "group companies" and "total" in 2015 were revised following