



## Ensuring Safety

### Policy for Ensuring Safety

Idemitsu's policy for ensuring safety is (1) to ensure the safety of people as our highest priority; and (2) to reduce and eliminate risks through the appropriate allocation of management resources and the maintenance and improvement of facilities, processes and work mechanisms with the aim of eliminating accidents and injuries while also (3) making efforts to cultivate a safety-oriented culture. Ensuring safety based on this policy hinges on management efforts. We also recognize the realization of a zero accident/disaster status as the foremost goal to be accomplished through these endeavors. Based on this recognition, we have established the following specific policies clarifying that ensuring safety is of utmost importance and must be prioritized in the course of our judgements, no matter the type of task or action involved, through-out all aspects of business activities, including production, logistics, sales, and research and development.

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| 1. Ensure the safety of people                             | 4. Properly allocate and utilize management resources                |
| 2. Ensure the safety assurance of facilities and processes | 5. Cultivate a safety-oriented culture and promote safety management |
| 3. Ensure the safety of work mechanisms and procedures     |  |

### System for Promoting HSSE Initiatives

We have positioned "Safety, Health and the Environment" as a management foundation and have established the Safety & Environmental Protection Headquarters to promote initiatives to secure and preserve this foundation. Members of the headquarters consist of the General Manager and co-head of the Safety & Environmental Protection Headquarters, general managers of departments in charge of supervising business sites and other managers who are appointed by the General Manager, in addition to the secretariat. The executive in charge of safety and environment (Director) is appointed by the President and Representative Director to serve as the General Manager of the Safety & Environmental Protection Headquarters, overseeing the headquarters as the individual bearing the highest responsibility regarding safety, health, and the environment. Safety, Environment (HSSE) & Quality Assurance Department serves as the secretariat.

The role of the headquarters is (1) to determine the medium-term management plan, the annual basic policies, and priority issues associated with health, safety, security and the environment (HSSE), (2) to assess and evaluate performance through audits, (3) to maintain, review, and improve the Safety Management System and the Environmental Management System, and (4) to instruct all departments and major affiliated companies on how to secure the management resources necessary to establish, implement, maintain, and continually improve these Management Systems.

As a general rule, the Safety & Environmental Protection Headquarters Meeting is held once a year in December to confirm the progress of HSSE activities and decide on our group's annual basic policies for the next fiscal year.

Each department appoints a manager in charge of safety and the environment to manage and promote the overall HSSE activities of the department, including those of the business sites under its management.

In line with annual basic policies and priority issues determined by the headquarters, each department is autonomously engaged in HSSE activities by employing a PDCA cycle.

In addition, in order to confirm and promote the HSSE activities of each department, the General Manager of the Safety & Environmental Protection Headquarters or other top management representative conducts Safety and Environment related instructions or Safety patrols by visiting business sites. The secretariat of the headquarters also conducts Safety and Environmental audits at business sites. In particular, at our company's refineries and complexes, the General Manager of the Safety & Environmental Protection Headquarters conducts Safety and Environment related instruction and Safety patrol once a year, while the secretariat conducts Safety and Environmental audit on an annual basis.

At business sites other than those named above, Safety and Environmental audits are carried out once every three years in principle. Should safety- and/or environment-related issues requiring improvement be discovered by audits, the secretariat will conduct follow-up monitoring on each case and oversee the entire process from the planning of countermeasures to the completion of their implementation.

Furthermore, in order to prevent serious accidents at our business sites, we have established the Safety & Security Advisory Committee, whose membership includes external experts, as an advisory body to the Board of Directors or the President and Representative Director, with the aim of establishing more effective safety and safety assurance measures.

### Results of FY2019 Safety and Environmental Audits

Number of business sites subject to audits	22
Total number of issues commented on via audits	411
Major nonconformity	3
Minor nonconformity	50

\* Safety Management System: To promote safety management activities, safety management policies, objectives and targets are established. To achieve these objectives, a safety management plan is formulated, implemented, reviewed, and continuously improved.

### Activities and Results Based on the Annual Basic Policies on HSSE

#### Annual Basic Policies on HSSE in FY2019

Continue to take on the challenge of zero accidents, and aim for "Zero serious accidents," "Zero fatal and lost time injuries," and "Zero environmental abnormalities." Continue also to strive for "Strict adherence to Life Saving Rule" while "Supporting and encouraging colleagues."

#### Idemitsu Group's Safety, Health and Environmental Performance in 2019 (including partner companies)

(Unit: cases)

Serious accidents	1*	Accidents resulting in lost time injuries	13
Fatal accidents	0	Environmental abnormalities	0

\* Fire at an affiliated company

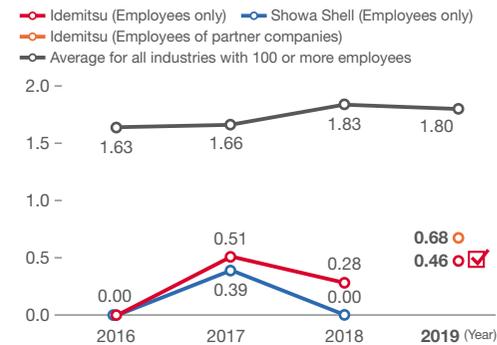
#### Occupational accidents frequency rate

Idemitsu's employees only	0.46
Employees of partner companies	0.68

#### Severity rate

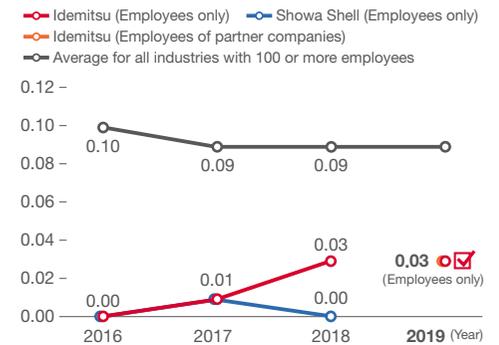
Idemitsu's employees only	0.03
Employees of partner companies	0.03

#### Frequency rate (Accident incidence frequency)



Notes: 1. The frequency rate refers to the number of fatalities and injuries due to occupational accidents per 1 million hours of actual work.  
2. Data for 2019 is based on accidents reported by Hokkaido Refinery, Chiba Complex, Aichi Refinery, Tokuyama Complex, Prime Polymer Co., Ltd. Anesaki Works, BASF Idemitsu Co., Ltd., Showa Yokkaichi Sekiyu Co., Ltd., TOA Oil Co., Ltd., and Seibu Oil Co., Ltd.  
3. Figures presented as averages for all industries with 100 or more employees are cited from the Ministry of Health, Labour and Welfare's Survey on Industrial Accidents.

#### Severity rate (Degree of accident severity)



Notes: 1. The severity rate refers to the number of lost working days due to absences attributable to occupational accidents per 1,000 hours of actual work.  
2. Data for 2019 is based on accidents reported by Hokkaido Refinery, Chiba Complex, Aichi Refinery, Tokuyama Complex, Prime Polymer Co., Ltd. Anesaki Works, BASF Idemitsu Co., Ltd., Showa Yokkaichi Sekiyu Co., Ltd., TOA Oil Co., Ltd., and Seibu Oil Co., Ltd.  
3. Figures presented as averages for all industries with 100 or more employees are cited from the Ministry of Health, Labour and Welfare's Survey on Industrial Accidents.

#### Annual Basic Policies on HSSE in FY2020

Continue to take on the challenge of zero accidents, and aim for "Zero serious accidents," "Zero fatal and lost time injuries," and "Zero environmental abnormalities." Continue also to place "Strict adherence to Life Saving Rule" as the highest priority, and promote "Keeping and making people follow the basics for safety rules" and "Caring for and encouraging colleagues."

## Ensuring Safety

### Safety and Health Initiatives

#### Our Response to the COVID-19 Pandemic

From the perspective of preventing the spread of COVID-19 infection, we levelled the number of mobilization by reduction of the scale and extension of construction period in shutdown maintenances undertaken at refineries and complexes. Moreover, we placed priority on utilizing workers from local communities to minimize the workers from remote areas. We have implemented thoroughgoing health management along with stringent countermeasures aimed at safeguarding the workers from COVID-19 infection during their working times as well as during their commutes in all construction works.

#### Efforts for Zero Accidents

In 2019, a serious accident (a fire) occurred at an affiliated company. This accident forced said company to suspend operations for approximately four months. In response, Idemitsu assisted this company in its efforts to investigate the cause of the accident and formulate recurrence prevention measures. We will continue to strengthen our initiatives to prevent serious accidents.

The number of occupational accidents in the Group in 2019 was approximately 20% higher than the number in 2018. This increase is due in part to accidents involving workers at partner companies performing such tasks as shutdown maintenance. With this in mind, we will step up safety initiatives to strictly adhere to Life Saving Rule while identifying hazards and implementing countermeasures in non-routine operations and works. We will also strongly assist partner companies in their efforts to ensure workers safety.

In FY2020, with the aim of achieving the "Challenge of zero accidents," each department is promoting the PDCA cycle for safety and environmental management on its own initiative, and is working to continue safe and stable operations. To this end, each department takes a comprehensive approach to identifying any potential hazards, including those associated with processes and equipment, while implementing countermeasures via appropriate risk assessment measures.

#### Safety & Security Advisory Committee

At the FY2019 Safety & Security Advisory Committee, we reviewed the Earthquake Risk Management Guidelines we have had in place since 2005. In an effort to reduce the likelihood of the Company suffering serious damage due to the occurrence of a major earthquake, this review involved the reevaluation of our traditional guidelines in short-period seismic motions with varying intervals of recurrence. As part of this review, we have also incorporated risk assessment for both long- and short-period seismic motions at the maximum seismic intensities to strengthen our disaster response capabilities. Based on these risk assessments, we launched discussions regarding countermeasures to be implemented to ensure our preparedness for these disasters. In addition, the committee is striving to draw on takeaways from the Hokkaido Eastern Iburi Earthquake in 2018. At the same time, as for disasters including mega typhoons and high tides, studies of the consequence and countermeasures for its reduction are currently under way at our refineries, complexes, oil depots and lubricant-related facilities.

#### Reinforcement of Earthquake Resistance of Existing Facilities

Our refineries and complexes have worked to strengthen our measures in preparation for natural disasters. As for earthquakes, we have periodically assessed the earthquake resistance of our facilities based on the standards required by law to secure resilience against the expected earthquake magnitudes, and strengthen them, if necessary. In addition, having learned lessons from the Tokachi-oki Earthquake and other disasters, we have assessed and enhanced the earthquake resistance of our facilities against expected earthquake magnitudes to an extent that exceeds the standards required by law.

Following the Great East Japan Earthquake on March 11, 2011, laws concerning high-pressure gas equipment were tightened and the standards of earthquake resistance were reviewed. In response to these changes, we have been systematically reinforcing the spherical tanks and other relevant facilities that store LPG at the Group's refineries and complexes in order to improve the earthquake resistance of their support structures.

In FY2019, we reinforced our facilities at refineries, complexes and oil depots by employing subsidy programs offered by the government under the banner of building national resilience. Looking ahead, our group will consider the further enhancement of earthquake resistance.

- LPG tanks with reinforced support structures (Tokuyama Complex)



- Reinforcement of marine jetty with a view to strengthening disaster response capabilities (Yokkaichi Refinery of Showa Yokkaichi Sekiyu Co., Ltd.)





## Ensuring Safety

### Safety Education

#### Companywide Education

As part of company-wide education efforts, we use videos of serious accidents that have occurred at Idemitsu in safety training for new employees as part of their orientation every April, thereby instilling a persistent awareness that putting safety first is the foundation of management. Furthermore, during training for newly appointed management-level employees, which is carried out every time personnel are reassigned, we provide effective education about the legal role of management-level employees in safety and environmental management.

#### Education via the Safety & Environmental Protection Headquarters

Safety, Environment (HSSE) & Quality Assurance Department as the secretariat of the Safety & Environmental Protection Headquarters conducts training for key persons involved in safety and environmental management, such as the managers in charge of safety and environment of each department, major affiliated company and business site, on their roles and the basics of safety and environmental management based on internal rules. This training develops the leadership abilities participants need to proactively operate PDCA cycles for environmental and safety management in their own divisions and complexes (carried out 10 times in FY2019).

#### Education Organized by the Manufacturing & Technology Division's Technical Training Center

##### ● Production Facility Operator Education

Based on the medium-term education plan, the Technical Training Center is carrying out education aimed at developing all operators as production engineers (PEs). PEs are operating division engineers who have a logical understanding of processes, facilities, and systems and the ways that these are interrelated. They are able to synthesize this knowledge to make comprehensive decisions and carry out optimized and efficient operations of the Group's refineries and complexes, thus playing an important role in ensuring the safety of such facilities.

##### ● Reinforcing Process Safety Education

The Technical Training Center is working to reinforce process safety education. For example, the center provides training for foremen or their proxies (assistant foremen) with the aim of enhancing their abilities as leaders to make decisions about measures to be taken in emergencies. This training, in which participants form operating teams, utilizes a training plant created by modifying decommissioned desulfurization facilities within the Tokuyama Complex. Developed by Idemitsu, it is the only high-level training of its kind in Japan. The training program is designed to be realistic, thrusting participants into scenarios where irregularities occur at night or on days off, so they must take such steps as reporting and implementing first response, emergency shut-down, and disaster prevention measures as the situation develops.

In addition, we provide safety process management training for newly appointed technical managers at refineries and complexes. This training is conducted in two sessions. First, in the basic training, participants go over the key points of safety process management. Follow-up training then fosters an awareness of the urgency of reinforcing process safety and goes over action plans. In addition, as part of experiential training for local authorities and organizations and human resource development in coordination with local communities, we hold seminars to raise safety awareness using our danger simulation facilities and virtual reality, in cooperation with outside training centers. These activities have been well received by our external partners.

### Practical Fire-Fighting Training

#### ● Training for Disaster Prevention Personnel at Refineries and Complexes

In the event of a fire or explosion, first-response firefighting and containment measures are extremely important to minimize harm within the effected refinery or complex, as well as external damage. As such, we focus efforts on training disaster prevention personnel. We believe that ongoing, repeated practical drilling (based on the fundamentals of firefighting theory) is crucial. For example, participants learn the basics of disaster prevention in lectures and practice handling actual equipment and extending fire hoses according to response plans. In particular, the Hokkaido Refinery, Chiba Complex, and Aichi Refinery conduct firefighting training with real fire in training facilities.

#### ● Training with Real Fires at the Niigata Disaster Prevention Training Center

The Safety, Environment (HSSE) & Quality Assurance Department maintains the Niigata Disaster Prevention Training Center. This facility provides training on an ongoing basis to many participants each year, not only from within the Company, but also from other companies in the industry. The training comprises scenarios based on fires occurring at different types of complex facilities and includes both theory (lectures) and practice (drills with real fires) to teach participants about first-response firefighting methods suited to the characteristics of oil fires in order to reinforce first-response firefighting systems at complexes. The training center has been widely praised as providing valuable experience and firefighting skills.

### Utilizing External Training

#### ● Training for Top Management

To prevent serious industrial accidents and disasters, it is vital that the top management of worksites, such as the general managers of refineries and complexes, maintain a strong awareness of process safety and that accident prevention measures are carried out under their strong leadership. In light of this, oil and chemical industry organizations and related companies, including Idemitsu, communicated the importance of fostering process safety awareness among top management to an external training center. In response, the center has held a special seminar about safety and the role of top management going forward on a regular basis since March 2016. The general managers of Idemitsu's refineries and complexes and the top management of its Head Office manufacturing and technology divisions participate in this seminar every year, working to strengthen production process safety leadership together with the general managers of the refineries and complexes of other companies, mainly those in the region near the training center.