## Safety and Disaster Prevention, Occupational Safety and Health

### **Safety and Disaster Prevention**

We carry out prior assessment for manufacture, process risk predictions, and facility risk predictions with the aim of ensuring safety, achieving stable operations, and improving our process safety capability. As a result, in FY2016 there were no explosion or leakage accidents, but there was a fire that is believed to have been caused by static electricity at Onoda Plant. The fire affected only a small area and did not develop into a serious accident, allowing recovery to be completed in around two months. To prevent a recurrence, we carried out complete inspections of similar tasks at all our plants.

To maintain zero serious accident level, we began to consider the idea of assessing the safety culture of plants in FY2014. We expanded the evaluations to all plants of Nissan Chemical in FY2015 and to laboratories and our affiliates' plants in FY2016. As a result, issues such as the communication gap between the management team, managers, and workers were identified and improvements are in progress at each location.

Our plants, laboratories and affiliates carry out various drills and training every year, such as comprehensive disaster drills, earthquake drills, initial fire-fighting drills, communication and reporting training. These drills and training sessions all take into account the characteristics of the location and region, and are designed to make us ready to respond to emergencies or accidents in a reliable manner.

#### TOPICS

#### **Central Awards for No-Accident**

We have introduced a system under which we grant an award to plants of Nissan Chemical and our affiliates involved in manufacturing that have achieved zero accidents for five consecutive years.

In FY2016, the award was granted to Nagoya Plant and Nissan Engineering, Ltd. for their achievement of zero accidents during the five years from FY2011 to FY2015. At the award presentation ceremony, a lecture was given by each winner about their countermeasures against accidents.



▲ Nagoya Plant

Nissan Engineering, Ltd

#### TOPICS

### **Group Safety Activities of the Laboratories**

Our young laboratory staff (who are in their first, second or third year at the company) engage in activities in groups for preventing work accidents, including safety-related research, discussions and presentations that are aimed at sharing knowledge and raising safety awareness. Under the instruction of their seniors, these laboratory staff members discuss the causes of accidents, countermeasures against them, and other issues based on past work accidents and books, external information, and other materials about HHK\* and safety. In FY2016, a total of 53 staff members in ten groups from the Chemical Research Laboratories, Materials Research Laboratories and Biological Research Laboratories engaged in the activities and held a reporting session in October. At the reporting session, an award of excellence was granted to the group that carried out the most excellent activities.

\* HHK stands for Hiyari-Hatto (near-miss incident) and Kigakari (alarming). It means the discovery of near-miss incidents that are not linked directly to serious injuries or accidents but could have resulted in such injuries or accidents.

Group	Summary of their reported activities
Chemical Research Laboratories	Activation of HHK through sharing of information Research on chemical accidents, optimization of experiment environment Investigation into causes of HHK→ Implementation of countermeasures  Investigation into HHK→Promotion of risk prediction before experiment task
Materials Research Laboratories (Funabashi)	Investigation into HHK→Identification of causes / implementation of countermeasures Safety patrol→Identification of risks and implementation of countermeasures Investigation into protective gear and SDS→ Risk prevention
(Toyama)	Investigation into protective gear→Suggestion of improvements
(Sodegaura)	Studying earthquake countermeasures and emergency response
Biological Research Laboratories	Risk assessment of chemicals





### **Occupational Safety and Health**

We make continuous improvements with regard to occupational safety and health as well, by implementing a PDCA cycle in our RC management system. We thereby prevent work accidents, promote the good health of staff, and build a comfortable workplace environment in our efforts to improve the level of safety and health at each business location.

In FY2017, we selected occupational safety and health as one of the RC material issues

At locations where work accidents have occurred, we investigate the causes and implement provisional or permanent measures. We also expand the measures across the entire group in our efforts to prevent similar accidents.

In addition, we became a member of the *Anzen Project* (safety project) of the Ministry of Health, Labour and Welfare in FY2016. We have applied for the *Visible* Safety Activity Competition and engage in safety activities.

Moving forward, we will strive to protect work accidents at our subcontractors as well.

### かあんぜんプロジェクト

あんぜんプロジェクトは、労働災害のない日本を目指して、他く方の安全に一生歴命に取り組み 「他く人」、「企業」、「安族」が元気になる無場を耐るプロジェクトです。

### **Safety Results**

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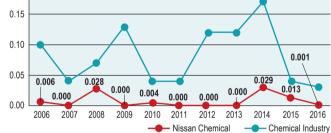
In FY2016, we had one case of an accident requiring staff time off from work and three cases of accidents not requiring staff time off from work. The number of cases of accidents requiring staff time off from work decreased (by two), resulting in an improvement in the frequency rate.

We believe that the improvement is attributed to measures taken at each business location by reflecting our assessment of the risks of potential hazards of tasks in which accidents occurred. We are carrying out a plan to invest a total of 350 million yen in measures for the safety of facilities during the three years from FY2016. We made capital investments to prevent fall accidents and falls. The prevention of these accidents enabled by the investments is believed to be a factor that contributed to the above improvement.

#### Lost work time accidents frequency rate [%]



# Lost work time severity rate [%]



### TOPICS

### **Occupational Safety Newspaper**

We have begun publishing an occupational safety newspaper as a measure for providing information about occupational safety, which is aimed at eliminating work accidents. The first issue of the newspaper included a message from the president regarding eliminating work accidents and data on work accidents that have occurred. It was distributed and posted at all our business locations. In the following issues, we introduced the safety initiatives taken at each plant, laboratory, and affiliate along with a message from the head of each in the form of a relay. We also provide information about heat stroke, falls, protective gear, GHS labeling, and other topics on a monthly basis in our efforts to raise safety awareness.

