

The safety targets and results for FY2018 and safety targets for FY2019 are as listed below.

Item	Priority Issues (Target)	Implementation Status for Fiscal 2018	Evaluation	Planned Implementation Items for Fiscal 2019
Management-System	1. Continuous improvement and implementation of the health and safety management system	<ul style="list-style-type: none"> Communication by the plant manager and division heads of their commitment and active involvement Appropriate implementation of the PDCA cycle¹ based on the health and safety management system Promotion of effective safety activities through substantial discussions during internal audits 	◎	<ul style="list-style-type: none"> Communication by the plant manager and division heads of their commitment and active involvement (ongoing) Appropriate implementation of the PDCA cycle based on the health and safety management system(ongoing) Promotion of effective safety activities through substantial internal audits (audit the effectiveness of PDCA cycle and safety activities)
	2. Qualitative improvement of environmental safety audits	<ul style="list-style-type: none"> Appropriate follow-up on the matters pointed out during environmental safety audits Qualitative improvement of environmental safety audits at affiliated companies in the plant area Active involvement at overseas manufacturing bases through guidance and auditing 	◎	<ul style="list-style-type: none"> Appropriate follow-up on the matters pointed out during environmental safety audits (ongoing) Qualitative improvement of environmental safety audits at affiliated companies in the plant area (ongoing) Active involvement at overseas manufacturing bases through guidance and auditing(ongoing)
	3. Thorough change management	<ul style="list-style-type: none"> Confirmation of application of MOC² rules at the plants and thorough compliance with them Risk assessment at the time of 4M³ change 	◎	<ul style="list-style-type: none"> Confirmation of application of MOC² rules at the plants and thorough compliance with them (ongoing) Risk assessment at the time of 4M³ change(ongoing)
Process Safety and Prevention Plan	1. Zero serious accident	<ul style="list-style-type: none"> Achieved target of zero serious accident 	◎	<ul style="list-style-type: none"> Zero serious accident
	2. Facility and process safety improvement	<ul style="list-style-type: none"> Process risk assessment, including periodic reviews Safety measures for non-routine work and unsafe operations, as well as continuing to consider accident trouble cases Obtain and examine information on internal and external accidents and disasters related to one's division Investigation of application of guidelines for the handling of combustible powder and liquids Application of Security Evaluation System by the Japan Safety Competency Center 	○	<ul style="list-style-type: none"> Implementation of planned process risk assessment(ongoing) Safety measures for non-routine work and unsafe operations, as well as continuing to consider accident trouble cases (ongoing) Maintenance and utilization of safety basic information Proper operation of alarms and interlocks
	3. Improvement of facilities and maintenance management	<ul style="list-style-type: none"> Thorough investigation of equipment trouble causes, recurrence prevention and design technology improvement Implementation and improvement of equipment maintenance (conservation management for aging piping and equipment through activities like planned repairs) 	○	<ul style="list-style-type: none"> Thorough investigation of equipment trouble causes, recurrence prevention and design technology improvement (ongoing) Improvement of equipment maintenance (Construction of function maintenance and management method of safety equipment and safety system and planned repair of old pipes and equipment)
	4. Reliable emergency response	<ul style="list-style-type: none"> Consider estimating and minimizing damage if the worst situations such as serious accidents and massive earthquakes occur Maintenance of emergency-response criteria / manuals Review and implement business continuity planning training 	○	<ul style="list-style-type: none"> Consider estimating and minimizing damage if the worst situations such as serious accidents and massive earthquakes occur(ongoing) Maintenance of emergency-response criteria/manuals (ongoing) Review and implement business continuity planning training (ongoing)
	5. Plant security enhancement	<ul style="list-style-type: none"> Strengthen prevention measures against external intruders Provide visitors to the plants with risk information and inform them of evacuation methods if an accident or disaster occurs 	○	<ul style="list-style-type: none"> Strengthen prevention measures against external intruders (ongoing) Provide visitors to the plants with risk information and inform them of evacuation methods if an accident or disaster occurs(ongoing)
Occupational Safety	1. Achieve zero labor accidents requiring an absence of a day or more	<ul style="list-style-type: none"> The Shin-Etsu Group: four people Shin-Etsu Chemical: one person 	×	<ul style="list-style-type: none"> Achieve zero labor accidents requiring an absence of a day or more
	2. Rate of labor accidents not accompanied by an absence of a day or more: 0.5 or less	<ul style="list-style-type: none"> The Shin-Etsu Group achieved its goal with a rate of 0.74 Shin-Etsu Chemical: 0.67 	×	<ul style="list-style-type: none"> Rate of labor accidents not accompanied by an absence of a day or more: 0.5 or less
	3. Human error reduction	<ul style="list-style-type: none"> Prevent accidents caused by human error 	○	<ul style="list-style-type: none"> Prevention of accidents and disasters due to human errors (ongoing)
	4. Improve work safety	<ul style="list-style-type: none"> Promoting "zero accident" activities (practiced Hazard prediction activities, pointing and calling, and 5S³ activities) Implemented improvement and promotion of close-call incident proposals and improvement proposals (set promotion goals) Implemented assured horizontal expansion of accident examples of the Group companies Cultivate a safety culture in which rules and manuals are followed 	○	<ul style="list-style-type: none"> Promoting "zero accident" activities (practiced Hazard prediction activities, pointing and calling, and 5S activities) (ongoing) Activation and promotion of close-call incident proposals and improvement proposals (set promotion goals) (ongoing) Implemented assured horizontal expansion of accident examples of the Group companies (ongoing) Cultivate a safety culture in which rules and manuals are followed(ongoing)
	5. Review and reorganize work manuals and ensure strict compliance	<ul style="list-style-type: none"> Implement of planned review of work manual maintenance Work manual content enhancement Confirm the compliance of work manuals 	◎	<ul style="list-style-type: none"> Implement of planned review and content enhancement of work manual maintenance (routine, non-routine, emergency response etc.) (ongoing) Confirm the compliance of work manuals
	6. Work risk assessment	<ul style="list-style-type: none"> Implement work risk assessment based on plans Risk assessment as stipulated in the Industrial Safety and Health Act Risk assessment for dangerous and non-routine work at one's workplace Appropriate reflection of risk assessment results in future work Improvement of work risk assessment skills 	○	<ul style="list-style-type: none"> Implement work risk assessment based on plans(Central Labor Accident Prevention Association⁵ method or procedure HAZOP⁶) Risk assessment as stipulated in the Industrial Safety and Health Act Risk assessment for dangerous and non-routine work at one's workplace
	7. Safety measures of construction and non-routine work	<ul style="list-style-type: none"> Clarify work instructions and procedures and implement hazard prediction activities Apply thorough construction rules Clarification of responsibilities of divisions that request construction work and those which perform it, and reliable implementation of work for which they are responsible 	○	<ul style="list-style-type: none"> Clarify work instructions and procedures and implement hazard prediction activities (ongoing) Clarification and solid performance of implementation matters such as construction start permission, safety management during construction, delivery, completion confirmation, etc. Providing safety information to construction contractors, thorough education of plant rules, etc.
	8. Training and drill promotion	<ul style="list-style-type: none"> Planned implementation of education and training Promote acquisition of qualifications 	○	<ul style="list-style-type: none"> Plan promotion of education and training (ongoing) Promote acquisition of qualifications (ongoing) Active introduction of awards and prize systems for voluntary safety activities
	9. Ensuring subcontracting safety	<ul style="list-style-type: none"> Stronger guidance for and follow-up on safety management at companies to which, as a manufacturer, the Company outsources its operations Provide and review safety information such as the results of work environment measurements, danger and hazardous information (SDS) and work manuals 	○	<ul style="list-style-type: none"> Active involvement in safety management at companies to which, as a manufacturer, the Company outsources its operations Implementation of sufficient safety education
Occupational health	1. Create and maintain a comfortable workplace environment	<ul style="list-style-type: none"> Implemented working environment measurements and promote working environment improvements based on the results Implement chemical substance handling education and strict wearing of chemical protective equipment as well as confirmation of compliance status for wearing protective equipment Appropriate implementation under the Industrial Safety and Health Law Appropriate reporting, communication, and consultation, as well as promotion of good communication 	◎	<ul style="list-style-type: none"> Implemented working environment measurements and promote working environment improvements based on the results (ongoing) Implement chemical substance handling education and strict wearing of chemical protective equipment as well as confirmation of compliance status for wearing protective equipment (ongoing) Appropriate implementation under the Industrial Safety and Health Law (ongoing) Appropriate reporting, communication, and consultation, as well as promotion of good communication(ongoing)
	2. Promote physical and mental health wellbeing	<ul style="list-style-type: none"> Implement concrete guidance, etc., and effective utilization of health check results Appropriate compliance with additional inspection criteria due to regulatory amendments Promotion of specific activities to build mental and physical health (such as stress check) 	○	<ul style="list-style-type: none"> Implement concrete guidance, etc. and effective utilization of health check results (ongoing) Appropriate compliance with additional inspection criteria due to regulatory amendments (ongoing) Promotion of specific activities to build mental and physical health (ongoing)

1 PDCA cycle
One of the method to smoothly carry out management tasks such as production control and quality control in business activities. To improve business operating continually by repeating the four steps such as Plan (P) → Do (D) → Check (C) → Act (A).

2 MOC
Management of change

3 4M
It is the first letter "M" of four words for man, machines, media and management.

4 5S activities
It is the first letter "S" of five Japanese words for seiri seiton (organize and order things), seiso (cleaning), seiketsu (cleanliness), and shitsuke (bringing-up).

5 Central Labor Accident Prevention Association

A corporation for the purpose of public interest established in 1979 with the approval of the Minister of Labor (currently: Minister of Health, Labor and Welfare) under the Labor Accident Prevention Group Act. It aims to improve safety and health and to eliminate occupational accidents through promotion of voluntary occupational accident prevention activities by business owners.

6 HAZOP
Hazard and Operability Study. Standard process hazard analysis methods in the chemical process industry.

* Evaluation standards

◎: Goal achieved ○: Goal basically achieved △: 50% achieved ×: Far from achieved