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WANHUA CHEMICAL GROUP CO., LTD

RESPONSIBLE CARE REPORT 2014



Foreword

Responsible Care is the initiative to continuously improve the performance of Health, Safety and Environment in global chemical industry. An additional objective is to increase the public's awareness of the chemical industry. For this purpose, the following report is published annually, to give a detailed overview of the efforts of Wanhua Chemical Group CO., LTD, to achieve the highest standards.

Responsible Care includes the promise to the public that the company acts with responsibility and prevents any negative impact on the community, the society, the environment or the employee's health.

There are six parts which are mandatory for effective Responsible Care:

- ◆ Community awareness & emergency response
- ◆ Distribution safety
- ◆ Pollution prevention
- ◆ Process safety
- ◆ Occupational health & safety
- ◆ Product stewardship

Wanhua Chemical Group CO., LTD, as one of the pioneers in global Responsible Care, promises continuous improvement in HSE performance and that they will assess the results of each step, as it progresses, to improve transparency and public insight.





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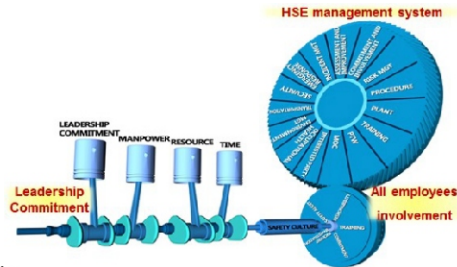
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1. Leadership & Commitment

1.1 Leadership

At Wanhua Chemical Group CO., LTD, the management are constantly giving examples and sharing experiences to ensure the full implementation of Responsible Care.



1.1.1 Safety Committee

Wanhua Chemical Group's Safety Committee, which is led by the Senior Leaders and has seven sub-committees, is the supreme decision-making body of the whole company. Diverse proposals are discussed and reasonable plans are put forward. Afterwards the results are tracked by various sub-committees.



1.1.2 Communication with the staff

At Wanhua Chemical Group CO., LTD, regular meetings are held between employees and senior management, to communicate the best practices learned and share other safety practices.

1.1.3 Coffee Time

Wanhua Chemical Group's management periodically holds face to face discussion with their staff to get feedback and in order to better understand any issues and difficulties faced in their daily work. This method has enhanced the management's ability to make quick strategy adjustments based on the feedback and thereby improves the safety of the employees.



1.1.4 Experience Share



All levels of management periodically share their experiences and understanding of safety management requirements with their employees to enhance each employee's understanding of safety. This also enables the management to find the most important safety management issues and how to implement new requirement much more effectively and with less deviations.

1.2 Commitment

1.2.1 Wanhua Chemical Group's commitment

Sustainable development is our continuous pursuit. While creating value for shareholders and the community, we also take the safety, health and environment of employees, stakeholders and the public as a sacred duty.

HSE Goal

Our goal is to develop an eco-friendly, modern chemical corporation with zero injuries, zero accidents and zero pollution.



Requirements

- ◆ We will strictly adhere to national, state and local laws, rules, codes, standards, guidelines and other requirements.
- ◆ We have to achieve sustainable development by decreasing emissions of waste water, gas and residue and at the same moment increase the energy efficiency.
- ◆ We need to provide a safe working environment to prevent injuries of our employees and the public.

1.2.2 The management' s commitment



Wanhua Chemical Group' s management team has committed and promised that they will support and implement Responsible Care in every level.

1.2.3 The employee' s commitment



Each employee at Wanhua Chemical Group CO., LTD, is committed to Responsible Care. To further enhance each employee' s awareness of Responsible Care and enable their families to get involved, Wanhua Chemical Group CO., LTD, hosted an activity whose theme is "Safety is My Commitment for My Family in 2014" .

2. Training

Wanhua Chemical Group CO., LTD, established an excellent corporate culture to enhance every employee' s safety awareness by providing suitable training.

2.1 The Accident Memorial Day

With the dramatic growth of our company and increase in the number of employees, Wanhua' s safety culture was not able to keep pace with these new developments. Measures are being undertaken again to improve the safety culture so that these develop simultaneously.



Event "520" was a very severe process accident which took place twelve years ago at Wanhua Chemical Group CO., LTD, and it is also a turning point. Thereafter, Wanhua Chemical Group CO., LTD, set this day as the warning day and took a series of safety activities and measures in 2014, with the intention to let the staff learn from this accident and thus enhance their safety awareness.

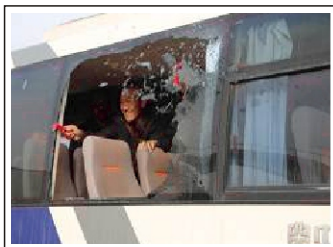
2.2 5-mins Safety Share among shifts members



The 5-mins Safety Share among differet shifts and their members was introduced in order to share their safety concerns, accidents, new regulations and other emerging issues, to enhance the operator' s safety awareness and to establish a good safety atmosphere.

2.3 Special Drill

Each year Wanhua Chemical Group CO., LTD, carries out emergency drills in various situations to enable employees to experience and master how to handle these emergency events, such as escaping from a vehicle in case of an accident, dealing with toxic gas leaks, etc.



2.4 HSE Annual Meeting

The HSE annual meeting is a professional platform for the HSE management to exchange information. The 2014 annual meeting, which focused on the theme "Guide Safety Culture & Focus on Safety Basic



Management", was successfully convened in Yantai. The HSE management team from the various sites, attended this meeting to discuss the safety management direction and key goals in the future.

3. Community Awareness

Wanhua Chemical Group CO., LTD, believes that the development of the enterprise must meet the public' s demand. Therefore, Wanhua Chemical Group CO., LTD, has always been people-oriented in their efforts.

Wanhua Chemical Group CO., LTD, focuses on communication with the public and therefore publishes an annual activity plan. For specific issues, Wanhua Chemical Group CO., LTD, will give immediate feedback to the public to eliminate any concerns. Meanwhile, Wanhua Chemical Group CO., LTD, invites the public to visit the Industrial Park every year to enhance mutual understanding and trust.

3.1 Information Exchange with other Companies

To share the best practice of Wanhua Chemical Group' s Responsible Care with other companies, Wanhua Chemical Group CO., LTD, did invite about one hundred companies' representatives to visit the industrial park in April 2014. Wanhua Chemical Group CO., LTD, introduced its leadership & commitment, process safety, distribution safety, safety culture among the shifts and best practices of HSE management. Wanhua Chemical Group CO., LTD, not only shares his experience with others but also promotes the development of Responsible Care in China.



3.2 Beautiful Chemical Campus Tour Speech

The Beautiful Chemical Campus Tour Speech aims to promote the idea of Green Chemical and to enhance communication among enterprises, universities and the public.

The first tour speech took place in Beijing University of Chemical Technology. Wanhua Chemical Group CO., LTD, was invited to make a speech on the topic of Green World, and introduced his efforts and contribution of implementing sustainable development, improving living standard and promoting Responsible Care as the way of development.



3.3 The Opening Day

To enhance the understanding and trust between communities and the enterprise, Wanhua Chemical Group CO., LTD, invited the resident representatives, who came from 27 communities near Yantai industrial park, to visit the plant.



3.4 The Tomorrow Chemist

Wanhua Chemical Group CO., LTD, believes that chemistry promotes the improvement of human life. Therefore, Wanhua Chemical Group CO., LTD, organized many interesting experiments to develop children's interest and curiosity in chemistry beginning with childhood.



3.5 The Safety Painter

On the Children's day, Wanhua Chemical Group CO., LTD, organized "The Safety Painter" activity with the theme of safety, health and environmental protection and invited the employee's family to paint with safety in mind. Wanhua Chemical Group CO., LTD, hopes that each attendee could learn more about safety from this activity.

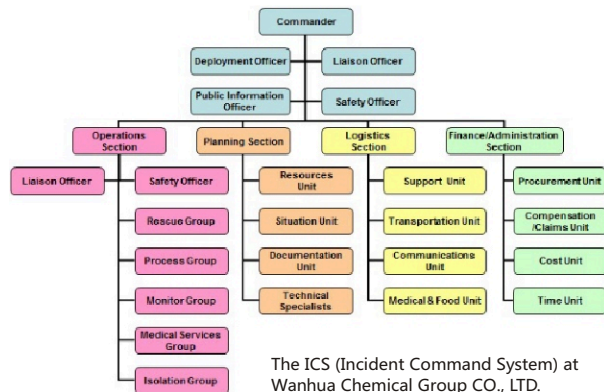


4. Emergency Response

A complete Emergency management system was built at Wanhua Chemical Group CO., LTD, to reinforce Emergency management in the areas of emergency reply, control and rescue in unexpected events. The strong Emergency management system will alleviate any negative effects to the company and to the surroundings in any unexpected events.

4.1 Emergency response system

The emergency response system at Wanhua Chemical Group CO., LTD, is comprised of 17 integrated emergency plans, 206 specific emergency plans, 368 on-site disposal schemes based as well as the ICS (Incident Command System) emergency management network. The newly-built ICS network has a real-time monitoring system for major hazards. Drill systems are simulated to coordinate and direct the rescue forces available of each unit. With the effective integration of the emergency plan system and the artificial intelligence system, a quick and accurate response to emergencies was achieved.



4.2 Facility & Equipment

There is a newly-built emergency rescue center in the Wanhua Yantai Industrial Park built with a total investment cost of ¥ 100,000,000. It covers an area of 8,400 m² and has three main components: the fire station, the gas station and the emergency command center. There are 72 firefighters and 8 gas agents in the on-site fire brigade, equipped with 11 emergency vehicles and 150 rescue devices. Meanwhile, a medical center was built with a cost of ¥ 2,000,000, covering an area of 450 m². There are 16 clinic rooms with 15 beds in the medical center. Eleven employees work in there on a 24-hour service which guarantees medical aid around the clock. The medical center is also equipped with various medical equipment, decontamination equipment and vehicles.



4.3 Joint Drill Mechanism



A joint drill mechanism was also established by Wanhua Chemical Group CO., LTD, with the help of the local government, along with neighbouring companies and communities to further enhance the capability of joint emergency response.

4.4 Active Participation in the Local Rescue



Wanhua Chemical Group CO., LTD, takes an active part in the rescue operations of the local communities and companies. Since its establishment, the fire brigade in the Yantai Industrial Park has participated in various community rescues and has gained great social reputation for its excellent equipment, skills and good manners from the local companies and communities.

5. Distribution Safety

As one of the CFLP (China Federation of Logistics & Purchasing) member, great efforts were made to LSP (Logistics Service Provider) management, risk assessment, pre-qualification, supervision & inspection and communication with the interested parties.

A complete product storage & transportation safety management system was therefore established. A regular qualification review is performed for all the LSPs in order to determine qualified LSPs. Only the qualified LSP are permitted to participate in the bidding. Meanwhile, relevant information, concerning the transfer, storage and transportation of the chemicals, is provided to all interested parties in the distribution chain, including the local communities.



5.1 Carrier seminar

At Wanhua Chemical Group CO., LTD, based on the carrier communication mechanism, a carrier seminar is held annually, in order to inform all the carrier responders of the new administrative policies and to promote the implementation of new or emerging logistic safety principles.



5.2 The First Unloading from the Liquefied Chemical Tanker to the Yantai Port

In Aug. 23rd, 2014, to commensurate the opening of the Yantai port, the first liquefied chemical tanker berthed along the Yantai Port successfully and safely unloaded Methanol. The unloading of Methanol for the first time from a ship to Yantai port since the establishment of the Wanhua Yantai port would also be recognized in history as the first successful practice accomplished.



6. Pollution Prevention

It is well known at Wanhua Chemical Group CO., LTD, that the enterprise growth and development will be increasingly constrained by resources, if no efforts will be made for resource saving and environmental protection or no changes will be made to the traditional growing mode of high input, high consumption and low efficiency.

Therefore, following the "3R (Reduce, Reuse, Recycle)" principle, Wanhua Chemical Group CO., LTD, makes full use of all the resources, minimizing raw material consumption to reduce or avoid any kind of pollution to the fullest extent and effectively controls the generation and the emission of pollutants, in order to fully achieve HSE goal of "zero injury, zero accident, zero emission and to build a modern green ecological chemical enterprise" .

6.1 The Establishment of the Environmental Protection Management System

Required by the national laws and regulations, as well as the ISO 14001, the environmental protection management system, featuring "1+X" ("1" represents one main managing method of environmental protection procedures, "X" represents 12 managing elements of environmental protection rules), was established at Wanhua Chemical Group CO., LTD. In 2014, in order to quantify the environmental protection indicators to achieve the continuous improvement of environmental performance, 50 basic environmental data and 22 environmental KPIs (Key Performance Indicators), covering operation performance, management performance and environment conditions, were established and are optimized continuously.

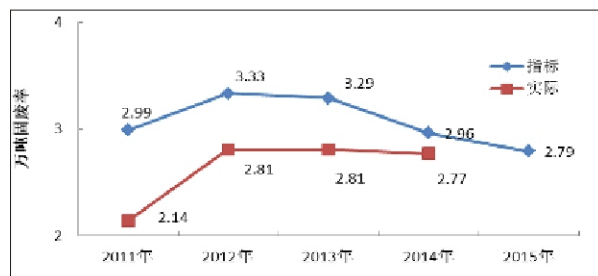
Meanwhile, in order to effectively prevent and control the environmental risks in the production operation and to reduce them to a reasonable level, a trinity environmental risk prevention & control system was established. The system is based on the best environmental protection practices all over the world, as well as our own exploration. It can achieve the integrative environmental risk prevention and control by preventing the cause, effective controlling in the process and risk management in the end.

6.2 Energy Saving

In 2014, based on the huge area recycle concept, a recycling economic construction was implemented in the industrial park. In our new recycling economic production, waste salt water produced by the MDI production is treated as raw material for chlor-alkali production. Hydrogen (H₂), a low-cost by-product in the chlor-alkali production, is used to produce aniline after recycling. HCl, another by-product, is used as the raw material for the production of PVC and PO to prolong the production chain. The HCl oxidation process is also imported to convert the low-value HCl to the high-value Cl₂. The slags and ashes are collected to produce cement, blocks and other building materials.

6.3 Emission Reduction

Based on the waste solid disposal principle of emission reduction, resource recovery and harmless conversion, the reduction and integrative utilization of the solid waste was implemented at Wanhua Chemical Group CO., LTD. For example, the slags from the thermal plant can be used to produce building materials. Useful



components extracted from aniline tar are recycled. The waste gas and liquid is burnt via harmless incineration process, which generates steam for the normal production. After continuous effort, the waste solid rate per 100,000 tons is being reduced year by year.

The Claus sulfur recycle process is utilized at Wanhua Chemical Group CO., LTD, converting the acidic waste gas from the production to sulfur and by using this waste treatment, Sulfur Dioxide (SO₂) in the exhaust gas has been reduced to 80 mg/Nm³, far lower than the national standard of 400 mg/Nm³. 2,700 tons of sulfur can be recollected via this process, indicating the removal of 5,400 tons of SO₂ emission to the atmosphere.

In addition, advanced ammonia desulfurization process is employed in the thermal plant. 11,000 tons of high quality fertilizer, ammonium sulfate, can be produced by the adsorption of the emitted SO₂ in ammonia as one of our by-products further reducing 5,500 tons of SO₂ from emitted to the atmosphere.

6.4 R&D for Environmental Protection

With China's advancement in information technology, barcodes, electronic locks and monitoring systems were installed at Wanhua Chemical Group CO., LTD, in order to monitor the whole process of the generation, transfer and harmless disposal of solid waste.

Great efforts are made in the reuse of waste process water and sewage at Wanhua Chemical Group CO., LTD, as the waste water reuse rate increased year by year. In 2014, ¥ 120,000,000 was invested to build a facility to reuse waste water and reclaimed water, which saved 900,000 tons of water and reduced the waste water discharge by 90 tons. The integrative technology of waste salt water treatment and reuse was also developed, to effectively convert the valueless waste salt water to the raw material which is ¥ 100/ton.

6.5 Response to the Global Climate Change

An active response to the global climate change was made at Wanhua Chemical Group CO., LTD, to reduce the greenhouse gas emission. In Ningbo, there is a

further purification process for the CO₂ in the exhaust gas to produce food-grade CO₂. By this practice, the CO₂ emission can be reduced by 150,000 tons, saving 600,000 tons of coal annually.

A goal of “zero fugitive emission, 100% complied organized emission” was set at Wanhua Chemical Group CO., LTD. Based on the concept of intrinsic safety, the breathing gas from the storage and the volatile waste gas from the waste water treatment and loading/unloading is sealed, collected and treated intensively. In 2014, by comparing to the waste gas emission standard in the USA and the EU, continuous efforts were made to the process optimization and the gradual promotion of LDAR (Leakage Detection and Repair), which plays a leading role in the whole industry.

6.6 The Full Environmental Protection Awareness

Each year a series of public activities concerning environmental protection are organized by Wanhua Chemical Group CO., LTD, by which the environmental protection concept can be transferred to the employees and the society. Full environmental protection awareness can be achieved only when employees and the society are fully aware of the importance of environmental protection.

U Can Stoop

During the worldwide environment day in 2015, an activity called “U Can Stoop” was organized by Wanhua Chemical Group CO., LTD. In this activity, participants were appealed to stoop to pick up the trash around their feet. By doing this, the environmental pollution can be reduced and the public awareness of “care for our environment and to our earth” could be raised.



Arbor Day

At each Arbor Day, Wanhua Chemical Group’s employees organize tree planting in the industrial park, with the aim of encouraging our employees to protect the ecology and the environment. It makes our industrial park greener as well.



“Love the Earth · My Action”

This activity was organized by the Wanhua Environmental Protection Volunteers Association, aiming at leading an active role in the public, raising the public environmental protection awareness, and therefore, making a better earth together. In this activity, the volunteers introduce the hazard and disposal information about waste batteries and also trade their waste batteries with environment-protective bags.



6.7 Green products

TPU (Thermoplastic Urethane)



In global market, Wanhua Chemical Group CO., LTD, supplies TPU under the brand name of WANTHANE, including polyester-based TPU, polyether-based TPU, polycaprolactone-based TPU, polycarbonate-based TPU and aliphatic TPU for broad range of applications, including shoes, hoses, films & sheets, wires & cables, conveyor belts and other personal consumption and industrial fields.

As the biggest TPU manufacturer with various products in the Asian & Pacific region, Wanhua Chemical Group CO., LTD, owns the world-class production lines and the State Certificated Enterprise R&D Center in Polyurethane Industry. On that basis, we can provide integrated technical service and business support.

Water-based material



The main water-based products in Wanhua Chemical Group CO., LTD, are PUD, PUA, acrylic emulsion, OH-PA, curing agents, water-based photocuring agents and thickening agents, all of which have excellent physical properties, low odors and zero organic solvents such as formaldehyde or ammonia. The environmental performance and material safety play a leading role in the world. The products are widely used in paints for buildings, industrial coatings, adhesives, textiles, synthetic leathers and personal care field.

Modified polyurethane

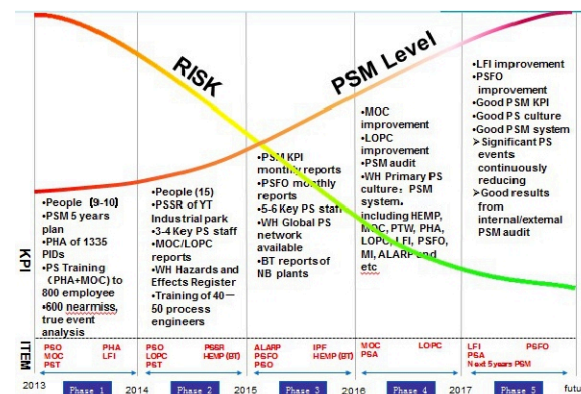


At Wanhua Chemical (Beijing), modified polyurethanes are being researched, for automotive interior decorations, including super comfortable fully modified MDI systems, high forming and tolerable MT systems and low density TM systems, for a long time. For example, the research team in Wanhua Beijing developed a more environment-friendly, low mold seat assembly product, which decreases the minimum mold temperature from 50 ° C to 35-40 ° C. This saves 63,000 kJ heat per cubic meter of recycle water, therefore saving energy as well as protecting the environment. It can be even produced with cold mold instead of a water bath heating system in (sub) tropical region, which dramatically reduces the cost. For the polyether, it uses water foaming systems instead of other physical foaming agents, while for the isocyanate, it uses the low volatile modified MDI, which makes the product safer to produce and more environment friendly.

7. Process Safety

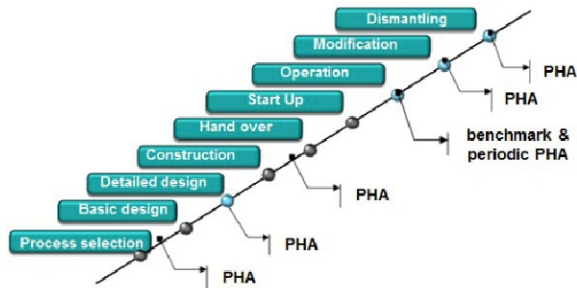
Process safety is a key element in the chemical industry. The safe production can only be achieved by proper management of the process design, the equipment, the process procedure and the intrinsic safety.

Therefore, the safety concept of “zero accident” is applied at Wanhua Chemical Group CO., LTD. Based on this concept, a complete process safety management system was built and a series of process safety management standards and procedures were published in order to change the traditional managing method, which only focuses on the behavioral safety. Meanwhile, a process safety assessment and mechanism was also built, to ensure that the production is always in proper condition and under constant effective supervision.

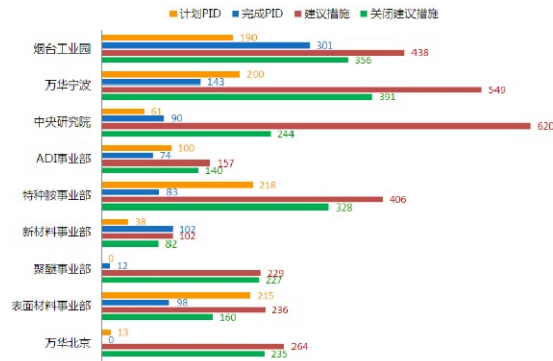


7.1 PHA (Process Hazard Analysis)

In order to promote the intrinsic process safety at Wanhua Chemical Group CO., LTD, PHAs are required to be conducted at all stages, i.e. design, handover, production, storage and dismantling.



A standard PHA procedure was established for all the process stages at Wanhua Chemical Group CO., LTD. For the professional conductor, great efforts were made to train the personnel, build the PHA specialist database and evaluate their skills annually. In 2014, there are 5,565 PHA recommendations to the Yantai Industrial Park project under construction, of which 4,799 items (86.2% of all) have been corrected and closed. In 2014, the average correcting rate is 94.4%.

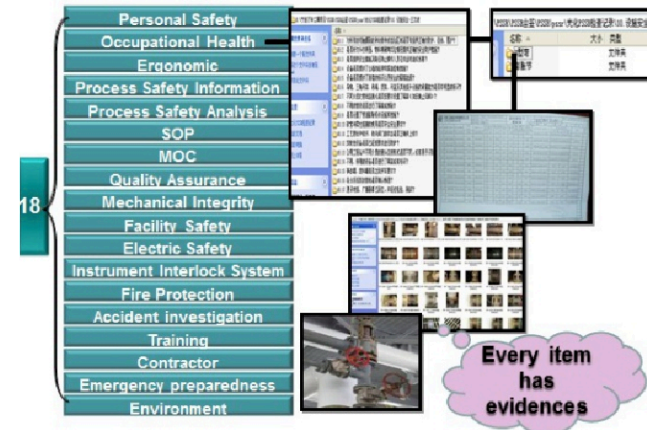


7.2 PSSR (Pre-Startup Safety Review)

In order to ensure smooth and safe operation of all devices, equipment and facilities, Wanhua Chemical Group CO., LTD, mandates that a PSSR has to be conducted before the operation of new/revamped/expanded projects, after equipment maintenance, significant process equipment change, overhaul or long-time storage.

The PSSR is based on a precise PSSR schedule, and conducted by a PSSR team, which includes technical staff, main operation staff, operation management staff,

HSE specialist and other related personnel. Meanwhile, the PSSR is conducted in 18 categories, 289 specific items, and there are specific PSSR checklists for each. All the items in the checklist are checked and confirmed onsite and in case of a problem, it is managed hierarchically and tracked for correction. For each correction, there are corresponded control measures, which are recorded for further use.



7.3 The Successful Operation of the First Equipment in Yantai Industrial Park

In Feb. 28th, 2014, the first equipment, the main fire pump, was successfully put into operation, indicating the operation success of the high pool and pump in the water utility system in the industrial



park. As the heart in the industrial park, it brings "blood" to flush through every part of the park, providing fire-fighting water, industrial water and domestic water. This was the starting point for the coexistence of operation and construction in the industrial park.

7.4 The Successful Operation of MDI Plant

In Nov. 7th, 2014, the MDI integration, removed from the old factory, was successfully put into operation, and qualified MDI product was produced afterwards. This is a huge step towards the goal of "building integrative industrial park with industries clusters" at Wanhua Chemical Group CO., LTD. This also acts as the firm foundation for the company to transfer from Wanhua Polyurethane to Wanhua Chemicals and from a Chinese Wanhua to a global Wanhua.



8. Occupational Health & Safety

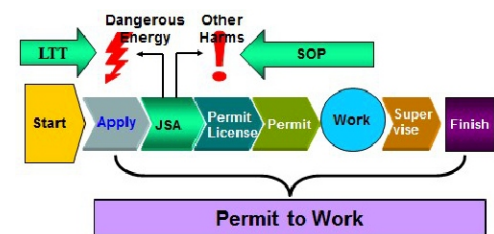
Wanhua Chemical Group CO., LTD, always focuses on his employees' health and safety and safety is the paramount of all jobs.

8.1 Occupational Health Management

Besides establishing health management systems, Wanhua Chemical Group CO., LTD, provides the public with information on various trainings as a way to protect the public's right to know information through pamphlets, the post and the internet.

8.2 Control of Work

The Control of Work (CoW) Standard is a formal approach to manage work risks at Wanhua. For normal work, there are all kinds of standard operation procedures (SOP) which have to be followed step



by step by the staff. With job circle checks (JCC), Wanhua analyses the reasonability of the SOPs and assesses the risk of worker's behavior to continuously improve the SOP.

However, the Control of Work Standard does not apply to activities for which adequate risk-assessed Operating Procedures for normal operation of the plant and equipment exist. Wanhua Chemical Group CO., LTD, established the permit to work system (PTW). The operator has to do a job safety analysis (JSA) to identify risks and take protective measures.

Wanhua Chemical Group CO., LTD, also audits the implementation situation of PTW and assess the result of that on the basis of PTW qualified rate to improve the performance.



014 PTW Qualified Rate at Wanhua

8.3 Contractors and Suppliers

Wanhua Chemical Group CO., LTD, established the contractor management system which included the contractor qualification check, the safety preparation for work and control of work. Wanhua Chemical Group CO., LTD, has developed a database of qualified contractors and future selection. Whether the cooperation continues, mainly depends on their safety performance. Wanhua trains the contractors every year in order to help them to improve their safety performance.

Wanhua Chemical Group CO., LTD, has also established a supplier management system which included the supplier qualification check and the supplier selection standard. Wanhua Chemical Group CO., LTD, audits the suppliers and assess the situation based on manufacturing, storage, transportation and disposal. Suppliers who have promised to implement Responsible Care would be given the priority.

In November 2014, Wanhua Chemical Group CO., LTD, convened the kick-off meeting with the contractors just before the overhaul in Ningbo Industrial Park. Some of the topics discussed with the contractors were about mutual responsibility, organization, cost control, key work and HSE requirements. Wanhua Chemical Group CO., LTD, also held a final meeting with them after the overhaul to share the best practices and rewarded excellent contractors.



8.4 Event Management

8.4.1 Reward the mistake

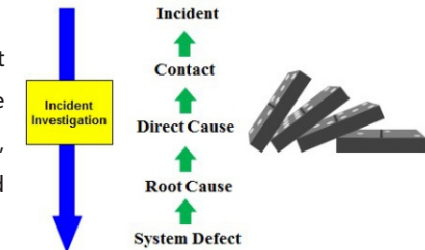
There is a new rule called Reward the Mistake in Federal Aviation Administration (FAA). It mandates that there will be a reward instead of punishment for reporting mistakes at work.

Wanhua Chemical Group CO., LTD, uses similar strategy in rewarding the staff if they report mistakes at work and it is also a way to encourage and motivate staff to report incidents and near misses which would help establish the accident database.



8.4.2 Incident Investigation

Wanhua has organized an incident investigation panel solely to investigate incident, analyze root causes, understand management defects and improve the HSE management system.



8.4.3 Monthly Accident Share

In order to avoid similar incidents from happening in the future, Wanhua Chemical Group CO., LTD, shares gathered experiences from accidents among the managers every month.



9. Product Stewardship



Product stewardship is an integrated business management process for identifying, managing and minimizing the environmental, health and safety (HSE) impacts at every stage of a product's life cycle.

At Wanhua Chemical Group CO., LTD, product stewardship demonstrates our commitment to responsible HSE management through active assessment of our products at every stage in their life cycles, from the sourcing of raw materials, through manufacture and use, to eventual disposal. This involves working very closely with our customers, suppliers and others in the supply chain to ensure that they understand the HSE opportunities relating to our chemicals.

We believe that an effectively managed product stewardship process shows our commitment to HSE management and enables us to meet the increasing demands for safer and more environmentally sustainable products.

9.1 Product Design and Development

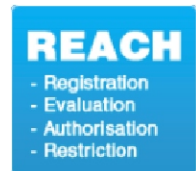
A positive approach to product stewardship is critical at the early design and development stage of a new product, because environmental benefits, positive health and safety features can be integrated into the product by our development teams. If we get it right at this stage, the product stewardship task becomes much easier through the rest of the product life cycle.

Water-based resin product is a new product belonging to Surface Materials of Wanhua Chemical Group CO., LTD, which was developed by using water instead of organic solvent to enable the product to be non-toxic. It did reduce the environmental contamination, improve the work condition and avoid the inhalation of the toxic substance.

Wanhua Chemical Group CO., LTD, is the first to develop world-leading technology to dispose brine of MDI and chlor-alkali by further recycling the salt and water. Wanhua Chemical Group CO., LTD, also successfully developed the gas-phase phosgenation technology which could reduce the phosgene usage by 20% and effectively lowering the risk of exposure.

9.2 REACH

REACH is not only concerned with compliance with regulation, but also a good opportunity for Wanhua Chemical Group CO., LTD, to continuously improve the product design level and progressively eliminate or replace hazardous substances identified by ECHA.



The REACH team of Wanhua Chemical Group CO., LTD, is composed of experts coming from different fields, such as R&D, process and HSE. Depending on the professional background of the team, Wanhua Chemical Group CO., LTD, effectively complies with each requirements of REACH.

By 2014, Wanhua Chemical Group CO., LTD, had registered 31 substances. Wanhua Chemical Group CO., LTD, will keep close contact with the client, the partner and ECHA to enable REACH to be handled effectively in the future.

9.3 24 Hours Service



Wanhua Chemical Group CO., LTD, provides a "24 Hours Service" for its client which includes a) providing 24 hour emergency telephone service, b) giving the customer feedback within 24 hours, c) arriving at the site of the customer within 24 hours and d) delivering the goods in 24

hours. Wanhua Chemical Group CO., LTD, believes that the key to this concept will speed up customer response and improve customer satisfaction.



9.4 Walk the Talk

Walk the Talk is a program developed by the members of European Diisocyanate & Polyol Producers Association (ISOPA) with the aim of improving safety, health and environmental standards across the European polyurethanes

industry. The "Walk the Talk" program focuses on the behavioral safety of industrial and professional users involved in the industry through an ongoing process of information exchange and dialogue.

Based on this concept, Wanhua makes the "Walk the Talk plan" every year.

