Environmental Materiality review

Purpose

To identify and assess potential risks to achieve SHE management performance, improve our ability to identify opportunities and risks, maintain stakeholder trust, prevent losses, and continuously improve incident management.

Risk

1. Tightening of government legislation (Integrated statute, Regulation of total air, Wastewater TOC)
2. Increased quality requirements for pure / purified water
3. Increased environmental operating costs (waste, environmental pollution levy, self-measurement)
4. Risk of legal violations and accidents due to mixed waste discharge

Opportunity

1. Compliance with legislation by improving environmental prevention facilities
2. Improvement of yield through pure water quality management
3. Increase external recognition by reducing environmental pollutants (air/water quality)
4. Compliance with laws and regulations and accident prevention through waste separation and discharge

Internal Environment / External Environment	Strengths	Weaknesses
	1. Increase utility efficiency through continuous improvement 2. Real-time remote monitoring of air pollution control facilities for legal compliance 3. Reduced manufacturing, utility accident rates through improved PM activities 4. Effective EMS operation through ISO14001 certification 5. Compliance with laws and regulations by improving waste storage facilities	1. Increased wastewater pollution load due to frequent chemical changes 2. Unstructured communication system for manufacturing make-up 3. Increased risk of accidents when utility facilities become outdated 4. Potential legal violations due to mixed disposal of waste
Opportunities	**Strategy SO**	**Strategy WO**
1. Compliance with laws and regulations by improving environmental prevention facilities 2. Improvement of yield by improving the quality of pure / purified water 3. Compliance with legislations and accident prevention through waste separation and discharge 4. Raising external awareness by reducing environmental pollutants (air/water)	1. Installation of Integrated Law-compliant Air Pollution Prevention Facilities 2. Replacement of Dewatering Equipment 3. Installation of Inclined Plates in the thickener and Removal of Sand Filtration Equipment 4. Replacement of Water Quality Analyzer in Wastewater Treatment Plant 5. Replacement of Dust Collectors 6. Improvement of Waste Storage Facility	1. Minimize air pollution through agreements to reduce fine dust 2. Investigation of processes using high-concentration chemicals (general → outsourced) 3. Stabilization of wastewater treatment through compliance with make-up schedule 4. Strengthening worker waste separation and discharge education
Threats	**Strategy ST**	**Strategy WT**
1. Tightening of government legislations (Integrated statute, Total Air Emission Control, Wastewater TOC) 2. Increased quality requirements for pure/ purified water 3. Risk of legal violations and accidents due to mixed waste discharge 4. Increased environmental operating costs (waste, pollution levy, self-measurement)	1. Prevention of environmental harmful through SHE review 2. Expanding awareness of significant environmental impacts by conducting environmental impact assessments 3. Implement waste disposal, audit of chemical suppliers, and concentration management 4. Drills for emergency situations (chemicals, wastewater leakage accidents)	1. Improvement of Air Pollution Control Instrumentation 2. Enhancement of Air Pollution Control Scrubbers 3. Improvement of Outdoor Walkway (Stairs) 4. Upgrade of the Centralized Wastewater Treatment Plant 5. Enhancement of Facilities for Handling Hazardous Chemicals 6. Expansion of Pure water Manufacturing Units