Zeon Chemicals Singapore Pte. Ltd. (ZCS)

Introduction to Zeon Chemicals Singapore Pte. Ltd.

[Establishment]
December 2010

[Business content]
Manufacture of synthetic rubber (primarily for fuel-efficient tires)
・S-SBR: Solution-polymerized styrene butadiene rubber
・Terminal modified butadiene rubber

[Base]
Jurong Island, Singapore

Company Policy (Executive Message)

In March 2016 we completed our second production line, which will double the production capacity of ZCS. The plant is full of vibrancy as we greet new colleagues as workers on the second production line. The experienced employees (local staff) are training our new colleagues in the initial start-up phase. The leaders of each team have gained a confident look as they increase in experience. We wish to continue stable and safe production and keep delivering high-quality products to the world.

Safety Initiatives

[Policy]
With the aim of zero loss time incidents and zero serious security abnormalities, we are deciding the required action items and taking steps.

[Concrete efforts]
・Monthly safety patrol
・Planned certification of employees
・Regular safety video training
・Regular checks of safety indicators decided by each department
**Efforts to Reduce Environmental Impact**

**[Policy]**
Environmental policies are established as part of the HSE Policy.

* HSE Policy
Health, Safety, Environment policy

**[Concrete efforts]**
As a Singapore-specific challenge, we started efforts to more efficiently utilize water resources (reduce industrial water use per production quantity)

<table>
<thead>
<tr>
<th>Environmental data</th>
<th>Zeon Chemicals Singapore Pte. Ltd. (ZCS)</th>
<th>FY2014</th>
<th>FY2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial waste</td>
<td>Amount generated (before volume reduction) (tons)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Amount sent to landfill (tons)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m³)</td>
<td>312</td>
<td>402</td>
</tr>
<tr>
<td></td>
<td>CO₂ emissions (tons)</td>
<td>39,181</td>
<td>43,533</td>
</tr>
<tr>
<td></td>
<td>Energy consumption (crude oil equivalent, kL)</td>
<td>17,575</td>
<td>19,227</td>
</tr>
</tbody>
</table>

**Quality Assurance Efforts**

**[Policy]**
Stabilization and continuous improvement of quality

**[Concrete efforts]**
Improvement of process capability index, reduction of defective products

**Relationship with Employees**

**[Policy]**
Consider human resources as valuable resources for the success of the business, perform recruitment, placement, training, evaluation and treatment accurately and fairly, and execute fairly to form a firm foundation for our business activities.

**[Concrete efforts]**
Implement local hiring with an open door, regardless of gender or race. Started appointment of local employees to the main posts, promoted the training and use of managers and supervisors in the field. In addition, incorporated training using instructors from the plants in Japan and dispatching employees to Japan for training.
Living Together with the Local Community

[Policy]
We follow the Zeon Group CSR Policy

[Concrete efforts]
As more than 90% of the workforce consists of local employees, ZCS is contributing to the local community by means of employment. And, with the second production line, we are creating new local employment opportunities in 2015. In addition, 30% of employees who have an important role in operating the Plant received plant operation management training at our Plant in Japan, and contributed to the transfer of technology.