Zeon Chemicals L.P. (ZCLP)

**Company Profile**

**Business Description**
Manufacture and sales of synthetic rubbers, sales of other Zeon Group products

- **Manufactured and sold products:** Acrylonitrile butadiene rubber, acrylic rubber, hydrogenated nitrile rubber, epichlorohydrin rubber, Zeotherm®
- **Sold products:** Cyclo olefin polymer, styrene isoprene block copolymer, RIM (reaction injection molding) products, electronics materials

Established in 1989 from the purchase of the elastomer division of BF Goodrich Chemical Company combined with the new Zeon HNBR facility constructed the same year in Pasadena, Texas. The company operates mainly in North America, and is also expanding business in South America from the subsidiary Zeon do Brasil Ltda.

**Locations**
Louisville, Kentucky; Hattiesburg, Mississippi; Pasadena, Texas

**Subsidiary**
Zeon do Brasil Ltda

**Company Policy (Executive Message)**

Hello, my name is Bob Barlow. I am privileged to serve as President and CEO of Zeon Chemicals L.P., with responsibility for sales of Zeon manufactured products in the Americas. The ZCLP theme for 2017 is: “NOW IS THE TIME.” We believe that in the year 2017, ZCLP is positioned to achieve successful commercial launches of new products, realize sales expansion plans according to the SZ-20 Plan, finalize new product and process developments, and consolidate efficiency improvements in the plants. In previous years, ZCLP has put in place the systems and resources to demonstrate leadership in the world marketplace. My challenge to ZCLP members is for 2017 to be the year when ZCLP fully delivers planned results in the following areas.

- **R&D:** ZCLP is recognized as a technical leader with fast and effective R&D and applications development that anticipates what the market needs are.
- **Production:** All North American plants are running at full capacity and efficiency with competitive cost structures and supply chains. In addition, ZCLP is recognized as safety and quality leader with zero OSHA Recordables, Zero Customer Complaints, and superior environmental performance.
- **Sales and Marketing:** ZCLP has fully functioning Zeon sales and marketing operations in the U.S., Mexico, and Brazil, leading full commercial integration with the rest of Zeon Group.
Safety Initiatives

Policy
ZCLP’s safety policy is to achieve safety excellence with zero OSHA recordable injuries.

Specific Initiatives
During the annual safety awards ceremony for Zeon Group facilities held in Tokyo this year, two ZCLP facilities were recognized for their performance in 2017; the Mississippi Plant and Texas Plant had zero accidents. This level of performance is a result of the emphasis that company policy places on building a superior safety culture, which has been embraced by the workers in these locations.

Environmental Impact Reductions

Policy
ZCLP’s mission is to be a good neighbor in the neighborhoods in which we operate through superior environmental performance.

Specific Initiatives
Examples of environmental initiatives implemented by ZCLP in 2017 include measures to reduce the risk of wastewater emissions exceeding specified thresholds, to prevent spills, and to combat odors. Our Kentucky Plant has devised and instituted a pH regulation system, which has succeeded in reducing the risk of wastewater that exceeds specified threshold values being discharged. We have also implemented training in spill prevention, and have relaunched the “Walk the Line”* awareness-raising campaign. The aim of this campaign is to reinforce operatives’ awareness of the need to reduce errors in transport operations, which can lead to noticeable spills and production losses, by making sure they are aware of the locations of lines and valves and by checking levels in containers. With regard to measures taken to combat odors, the odor reduction team meets once every two weeks; the team has updated data on complaints from the local community, implemented surveys of odor sources, and examined strategies for bringing odor under control.

* i.e. Living an upright life and taking responsibility for your actions.

Environmental Data

* “0” indicates less than 0.5 tons, and “0.0” indicates less than 0.05 tons

<table>
<thead>
<tr>
<th>Kentucky Plant</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substances subject to the PRTR Act</td>
<td>No. of substances</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>7</td>
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<tr>
<td></td>
<td>Consumption (tons)</td>
<td>14,927</td>
<td>16,202</td>
<td>15,376</td>
<td>13,757</td>
</tr>
<tr>
<td></td>
<td>Emissions (tons)</td>
<td>20</td>
<td>10</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Industrial waste</td>
<td>Amount generated before compacting (tons)</td>
<td>505</td>
<td>344</td>
<td>532</td>
<td>551</td>
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<tr>
<td></td>
<td>Amount sent to landfills (tons)</td>
<td>478</td>
<td>332</td>
<td>526</td>
<td>539</td>
</tr>
<tr>
<td>Water resource consumption (1,000 m³) (industrial water + groundwater + waterworks)</td>
<td>957</td>
<td>1,014</td>
<td>685</td>
<td>722</td>
<td>779</td>
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<tr>
<td>CO₂ emissions (tons)</td>
<td>31,741</td>
<td>33,570</td>
<td>32,329</td>
<td>31,368</td>
<td>32,107</td>
</tr>
<tr>
<td>Energy consumption (crude oil equivalent, kL)</td>
<td>9,820</td>
<td>11,017</td>
<td>10,323</td>
<td>9,755</td>
<td>10,219</td>
</tr>
</tbody>
</table>
Relationship with the Local Community

ZCLP’s mission statement says that we will surpass the expectations of the community through world-class innovation and excellence in all of our activities. ZCLP employees have a concern for the community which is focused primarily on doing what we can do to improve opportunities for the less fortunate, primarily school-aged children. They are the future of our world.

Specific Initiatives

1. Donations to charities

In FY 2017, following a suggestion from the Riverport Warehouse team, ZCLP made a donation to the Disabled American Veterans (DAV) charity. The aim of the DAV is to make it possible for veterans to enjoy as high a quality of life as possible, and to enjoy both self-respect and respect from others. To raise money for the donation, ZCLP employees took part in the Kentucky Derby Festival Great Bed Races for the first time. ZCLP’s maintenance team created a bed-type racing car modeled on the Space Shuttle, and succeeded in achieving a great performance in the Races.

ZCLP’s Charity Committee also raised over US$11,000 for donation to the DAV through the holding of the traditional Holiday Raffle, Silent Auction and Santa Contest. Donations were also made to help Texas Plant employees who had been badly affected by Hurricane Harvey in 2017.
2. Support for neighboring elementary school
ZCLOP employees continued their long-standing support for the neighboring Cane Run Elementary School by once again donating Christmas gift bags containing healthy treats, as well as school supplies.