

## ZEON Group (Overseas)

### ZEON Chemicals L.P. (ZCLP)

#### Introduction to ZEON Chemicals L.P.

ZEON Chemicals L.P. was established in 1989 from the purchase of the BF Goodrich Elastomers Division combined with the new ZEON HNBR facility in Pasadena, Texas. ZCLP manufactures Nipol<sup>®</sup> NBR, HyTemp<sup>®</sup> PA (acrylic rubber), Zetpol<sup>®</sup> (HNBR), Hydrin<sup>®</sup>, and Zeotherm<sup>®</sup> polymers in North America. The company also provides sales and market development support in North America for cyclo-olefin polymers, styrene isoprene block polymers, reaction injection molding, and electronic materials. It also includes ZEON Brazil, a wholly owned subsidiary serving South America. ZCLP has grown steadily since 1989 and has renewed its efforts to promote growth by implementing the ZEON Innovation Process with the aim of driving new product development and new applications for ZEON polymers. The success of this growth plan has resulted in a major expansion of the ZEON HNBR during 2011.



President and CEO Tom Gettelfinger



Kentucky Plant

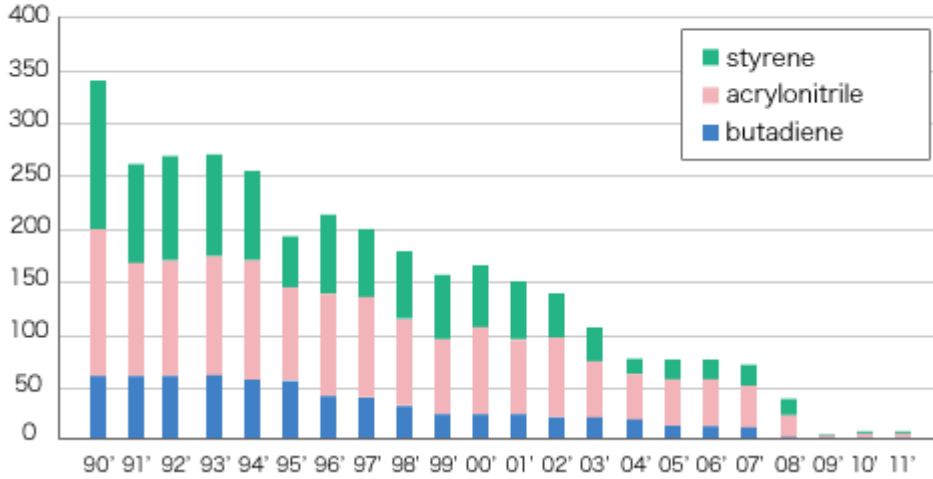
#### Environmental and Safety Activities

##### 1. Environmental Impact Reduction at the Kentucky Plant

The long term reduction of emissions from the Kentucky Plant has been an important effort of ZCLP to not only improve efficiencies, but to also become better neighbors in the community. Shown below is the trend of SARA 313 emissions in Klbs. per year. In addition to reduction of these high profile emissions, the plant has also been implementing process improvements to reduce emissions of all substances, including wastes going to landfills. The startup this year of a biomass powered steam generating plant to supply the Kentucky Plant complex with steam is further evidence of the efforts of ZCLP to be a leader in sustainability and environmental stewardship. These improvement results require innovative thinking and hard work to obtain success, and the Kentucky Plant team members are dedicated to the task for the long term.

**Reduction of Hazardous Chemical Substance Emissions into the Atmosphere (Kentucky Plant)**

Emissions to the atmosphere  
(1 000 pounds)



ZCLP has been focused on improving safety performance in all facilities. A bright spot in safety performance has been the Texas Plant. The Texas Plant has recently achieved two significant safety milestones: 20 years without a Lost Time Accident, and 6 years without an OSHA Recordable Accident. Shown in the above photo are members of the Texas Plant team celebrating these achievements.

Representatives from each ZCLP facility met together in late 2011 in a “safety roundtable” meeting to review the Texas Plant success story and identify important factors in achieving sustained world class safety performance. According to Gary Owens, Texas Plant Safety Coordinator, one of the keys to the excellent performance has been the emphasis on hazard recognition by all employees. Each month the Texas Plant safety committee reviews all submitted hazard recognition report submissions and chooses the best for recognition. Participation by all Texas employees in the hazard recognition program has become an essential element of the safety culture at Texas.



Photo of Texas Plant safety leaders celebrating 20 years of no lost-time accidents

**2. Environmental Data**

ZEON Chemicals L.P. (USA): Kentucky		FY2007	FY2008	FY2009	FY2010	FY2011
Substances covered by PRTR law	Number of substances	8	8	7	7	8
	Consumption (tons)	30,768	18,835	6,459	17,691	18,189
	Amount emitted (tons)	62	56	33	39	43
Industrial waste	Amount generated (before volume reduction) (tons)	394	721	671	770	720
	Amount sent to landfill (tons)	350	679	645	736	689
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m <sup>3</sup> )		-	-	-	-	1,080
CO <sub>2</sub> emissions (tons)		35,196	35,996	22,799	34,648	34,755
Energy consumption (crude oil equivalent, kL)		11,389	11,870	6,909	11,170	11,048

ZEON Chemicals L.P. (USA): Texas		FY2007	FY2008	FY2009	FY2010	FY2011
Substances covered by PRTR law	Number of substances	0	0	0	0	0
	Consumption (tons)	0	0	0	0	0
	Amount emitted (tons)	0	0	0	0	0
Industrial waste	Amount generated (before volume reduction) (tons)	33	34	24	42	39
	Amount sent to landfill (tons)	1.4	1.4	3.9	1.4	1.0
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m <sup>3</sup> )		-	-	-	-	1,646
CO <sub>2</sub> emissions (tons)		8,639	8,118	5,419	10,426	10,325
Energy consumption (crude oil equivalent, kL)		2,526	2,332	1,509	3,093	3,065

ZEON Chemicals L.P. (USA): Mississippi		FY2007	FY2008	FY2009	FY2010	FY2011
Substances covered by PRTR law	Number of substances	3	3	3	3	3
	Consumption (tons)	4,538	3,923	2,633	5,466	5,160
	Amount emitted (tons)	56	53	39	76	70
Industrial waste	Amount generated (before volume reduction) (tons)	100	50	57	53	41
	Amount sent to landfill (tons)	100	50	57	53	41
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m <sup>3</sup> )		-	-	-	-	152
CO <sub>2</sub> emissions (tons)		16,500	15,099	13,097	22,375	19,256
Energy consumption (crude oil equivalent, kL)		6,987	6,323	5,350	9,652	8,157

### Activities with the Local Community

ZEON Chemicals L.P. has continued involvement in the local community through the local public schools. ZEON has directed funding for numerous projects to enhance the educational opportunities of the students as well as upgrade the educational facilities. The projects have included:

- Technology Upgrades: Install Smartboards, establish iPad labs, Mini Notebooks and student laptops
- Outdoor Classrooms: outdoor learning stations, planting beds, and field study programs
- Facility upgrades: Fitness track and playground upgrades
- Supplemental Staffing: Special tutoring, behavioral intervention, and classroom assistants
- Environmental/Science Club: Exploring Energy, Global warming, Sound and Music

ZEON Chemicals has continued the annual tradition of a Holiday Charity program that provides funding and donations from the company and employees toward a selected charity. In 2011 the charity was the Salvation Army. The company and employees provided contributions of clothing, toys and money for over 100 families.



Tape-cutting ceremony for new IT equipment sponsored by ZCLP



"iPad Lab" held as part of an IT equipment support program