

## ZEON Group (Japan)

### ZEON Chemicals Yonezawa Co., Ltd.

#### Introduction to ZEON Chemicals Yonezawa Co., Ltd.

ZEON Chemicals Yonezawa Co., Ltd. was established as a fine chemical product production company in 1996 and began production of aroma chemicals which use leaf alcohol\* as a main ingredient in 1997.

The company also began production of liquid compounds for reaction injection molding which use dicyclopentadiene as a main ingredient in 1998. It also conducts consigned research work for the ZEON Corporation's new chemical research building opened in April 2006.

\*Leaf alcohol

Green note aroma chemical that uses 2-Buthyne extracted from C5 fractions as a starting material



President Ichiro Igarashi



ZEON Chemicals Yonezawa Co., Ltd.

#### Environmental and Safety Activities

##### 1. Conducting Safety Competitions

Competitions are held annually to improve on-site safety awareness and prevent activities from entering a stereotyped routine. This year another 4RKY\* Risk Assessment Competition was held. This competition was conducted from the viewpoint that every abnormality can only be discovered when the normal state of everything is grasped. As a result, other abnormalities besides those put in place for the competition were able to be found. ZEON Chemicals Yonezawa will continue to plan and conduct competitions and other such events for safety and environmental conservation.

\*4RKY

A risk assessment method whereby employees proactively eliminate risk by discussing and learning from each other about potential risk factors in their work environment and tasks as well as the circumstance those factors can create. The program consists of four steps, or rounds (R), hence the name 4RKY (KY is for "kiken yochi," or risk assessment).



A safety competition

## 2. Environmental Data

ZEON Chemicals Yonezawa Co., Ltd.		FY2007	FY2008	FY2009	FY2010	FY2011
<b>Substances covered by PRTR law</b>	Number of substances	4	4	4	2	5
	Consumption (tons)	18	17	13	1,231	1,897
	Amount emitted (tons)	0.0	0.0	0.0	0.4	0.5
<b>Industrial waste</b>	Amount generated (before volume reduction) (tons)	194	223	59	87	186
	Amount sent to landfill (tons)	8.5	10.0	4.2	0.4	0.4
<b>Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m<sup>3</sup>)</b>		-	-	-	-	14,165
<b>CO<sub>2</sub> emissions (tons)</b>		1,450	1,170	489	815	940
<b>Energy consumption (crude oil equivalent, kL)</b>		623	509	290	455	505

### Activities with the Local Community

#### Participation in local cleanup campaign

As part of its contribution activities for local communities, ZEON Chemicals Yonezawa is participating in local environment beautification activities around Yonezawa Hachimanpara Core Industrial Park. Trash was picked up and flower beds were planted around the park in the spring and autumn. In response to the illegal dumping problems of last year, security cameras/warning banners were installed and the illegal dumping of large items (refrigerators, TVs, etc.) was stopped. However, household waste unfortunately continued to be thrown out in an illegal manner. Nevertheless, a Yonezawa City Hall staff member has voiced that “illegal dumpings are decreasing every year thanks to the cleanup campaign,” and we realized that this activity was helping in the efforts to beautify the area. ZEON Chemicals Yonezawa will continue these efforts into the future.



A local environment beautification activity around Yonezawa Hachimanpara Core Industrial Park