

Environmental Control Plant Consolidated Division

Our division produce plants and equipments for sewage treatment, drinking water treatment, sludge recycling treatment and wastes incinerator. We contribute to environmental conservation activities through our supplying above products and propose "Environmental-friendly Business".

- We contribute to society by developing useful technologies for improving such as pollution Control, save energy and resources.

Dioxins Decomposition Units

Kubota Corp. developed unique dioxin decomposition units with original "photochemical technology". (PAT. 2874126) Dioxins in water can be decomposed under detective limit by the unit.

In addition to high dioxin decomposition performance, the units can operated with low running cost, under the ordinary temperature and atmospheric pressure. The units have been operated since 1998 Oct. for leachate treatment as the first dioxin decomposition equipment in Japan. A few leachate treatment plants with this dioxin decomposition units are under construction.

The units can also solve high concentration dioxin contamination problem like a scrubber waste. Kubota's "photochemical technology" is highly estimated and adopted in "The technologies manual for decomposing and treating high concentration dioxin contamination" edited by Ministry of Health and Welfare.

In addition, Kubota's dioxin decomposition units was selected to treat environmental water for Toyono-gun contaminated site clean up project which was first dioxin pollution site remediation project in Japan.

Dioxin concentration in treated water was under 0.1 pg-TEQ/l which value

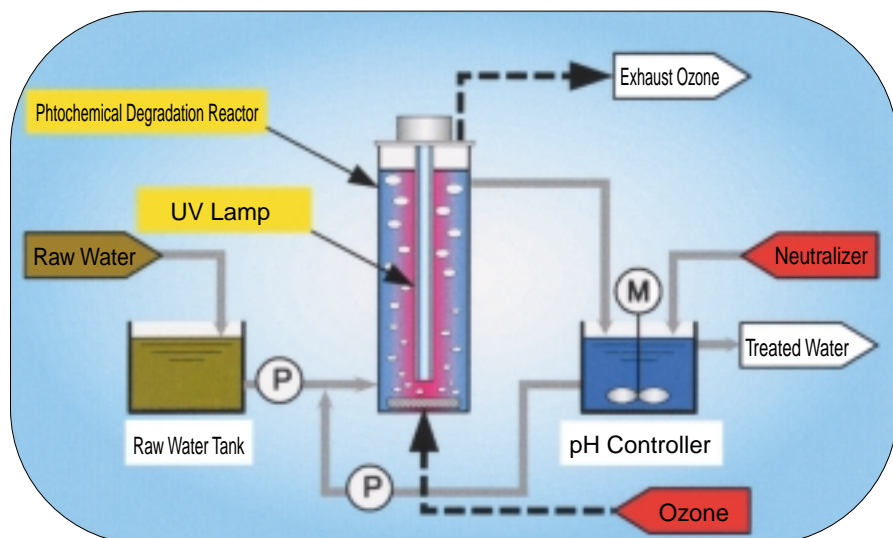
was one tenth of environmental quality standard for public water bodies decided by "Law Concerning Special against Dioxins".

Executive Managing Director
and Representative Director
General Manager of Environmental
Control Plant Consolidated Division

Takeshi Oka



- This year, our division acquired ISO14001 certificate this year. We are continuously promoting the pollution prevention in all of our business activities including construction, sales, research, technology, design, and procurement to reduce the load to environment.



Basic Flow of Photochemical Decomposition Units



Dioxin Decomposition Tower

Sewage sludge circulating fluidized bed incineration system

The final disposal of sludge generated in the sewage treatment plants is one of the serious problems, as the sewer system and advanced sewage treatment become popular.

Our sewage sludge circulating fluidized bed incineration system incinerates the sludge at a high temperature, and it becomes harmless and stable.

In the circulating fluidized bed furnace, the most important part of the system, we realized the complete combustion in which incineration is stable, and toxic substances such as dioxins generate little.

The system follows-up sludge property change well.

And the system also shows the power for stable incineration of high calorie sewage sludge, and for mixed combustion with screen residues and grit.

The system contributes to the reduction of CO₂ emission, by energy saving such as reduction of electricity and auxiliary fuel consumption.



Circulating fluidized bed furnace

Sludge recycling treatment center (Resource recovery and wastes recycling system)

We have treated night soil and kitchen wastes, which have high values as resources, using external energy.

We at Kubota can generate electric energy or heat energy such as hot water, from co-generation system using methane gas that is converted efficiently from these organic wastes, in the center.



Shimoina-gun recycling treatment center "West Clean Hill" in Nagano prefecture (completed in March 2000)

Gasification and melting system

Wastes incineration technologies for the reduction of load to the environment (reduction of exhaust gas, recycling of slag and so on) are progressing rapidly.

Our gasification and melting facility has been developed as a system that can maximize the energy saving rate and recycling rate.



Gasification and melting furnace

The Shimoina-gun West Sanitation Association has introduced our newest resource recovery and wastes recycling system, to reduce the load to environment.

The system is highly estimated, awarding several prizes from some organizations (Japan Waste Research Foundation, WESTEC, and the Japan Society of Industrial Machinery Manufactures).

In addition to this new system, we are going to contribute to further environmental conservation by advanced municipal solid wastes and industrial