



MITSUBISHI GAS CHEMICAL COMPANY, INC.

January 27, 2003

MGC's Fluoride Wastewater Treatment Agent Diafresh Efson Is Well-Received

Mitsubishi Gas Chemical Company, Inc. (hereafter referred to as MGC ; Head Office: Chiyoda-ku, Tokyo, Japan; President: Hideki Odaka) commenced sales of Diafresh Efson, an advanced agent for the treatment of various contaminants in wastewater, including fluoride, in June 2002 (Distributor: Ryoko Chemical Co., Ltd; Head Office: Chiyoda-ku, Tokyo, Japan; President: Akio Kaneko).

Regulations governing wastewater discharged into public bodies of water have been strengthened, so that acceptable fluoride levels in wastewater will be lowered from 15 parts per million (ppm) to 8 ppm starting on July 1, 2004, following a provisional period of three years. Half of the provisional period has already elapsed, and during that time, companies have investigated various approaches to deal with the stricter standards. Companies will have to determine which new technology to adopt during the current fiscal year in order to comply with the new standards by next summer, and many have begun to choose MGC's popular wastewater treatment Diafresh Efson.

Currently, isolating and removing fluoride from wastewater is generally done through the sedimentation method using calcium (usually calcium hydroxide). However, this single-stage treatment can lower the concentration of fluoride ions to only several dozen ppm. Theoretically, the treatment could be repeated (making it a two-stage treatment) to reduce fluoride concentration below the acceptable limits, but many companies have reconsidered adopting two-stage treatment plans because they increase running costs and sludge treatment costs, and are very expensive, requiring large-scale initial investment and high construction, operation and maintenance costs.



mitsubishi gas chemical company, inc.

In addition to the two-stage treatment, there are many other types of fluoride treatment technology, but they are not sufficiently effective at lowering fluoride concentration at the actual manufacturing facilities, and users are dissatisfied with the high initial investment required.

On the other hand, using Diafresh Efsion to treat wastewater stably reduces fluoride levels by simply adding another formula to the current calcium-based single-stage process. This minimizes the amount of new investment required by enabling companies to continue using existing single-stage treatment facilities, shortening the time needed to renovate equipment to a matter of months. Furthermore, Diafresh Efsion stabilizes or decreases running costs, even for treatment of wastewater with a fluoride concentration of several thousand ppm.

With a limited amount of time remaining before the new standards take effect, MGC is substantially strengthening its technical services network in order to shorten response time to customers.

[Inquiries]

Yasuhisa Kuriyama

Hiroshi Takamiya

Planning & Development Division

Specialty Chemicals Company

Mitsubishi Gas Chemical Company, Inc.

Tel: (03) 3283-4765

Environmental Relations Division

Ryoko Chemical Co., Ltd

Tel: (03) 3862-1338

Taro Miyoshi

Corporate Communications Division

Mitsubishi Gas Chemical Company, Inc.

Tel: (03) 3283-5041