Flow of response to the pH meter alarm in the experiment wastewater storage tank at the department

Exceeded legal standard values

After the real-time monitoring is in place, the Environmental Safety Center will send out automatic e-mails.

First discoverer

First report contact

Department Office Manager

Environmental Safety Center

(1) Shut down the water supply (use of water supply) for the laboratory in the building (because the drainage pump will automatically shut down and the drainage water may overflow).
(2) Collect wastewater and measure its pH to determine the cause (abnormal wastewater or pH meter).

(If measurement is not possible, ask the Environmental Safety Center (ext. 3234) or an outside vendor.)

Prompt remedial measures

Abnormal drainage

(1) **Dilution** (In case of minor exceedance of 0.1, dilute with water. *1)
(2) **Neutralization** (Neutralize with acid or alkali. Because of the need for caution in terms of neutralization heat and toxic gas generation, this should be done under the direction of the person in charge of the response.)
(3) **Extraction** (request an external contractor to extract the wastewater.)

*1 A 10-fold dilution is required to change the pH by 1.
(If you have any questions, please contact the Environmental Safety Center at (ext. 3234) or an outside vendor.)

Abnormal pH meter

(1) Operate drainage pump
(2) Maintenance or repair (request to Facility Management Division)

(If you have any questions, please contact the Facility Management Division (at ext. 3234) or an outside vendor.)

Measures to prevent recurrence

(1) Identify the source (investigate the chemicals and detergents)
(2) Review the collection and cleaning methods for the experimental liquid waste (refer to the "Cleaning Manual" on the website of the Environmental Safety Center.

(1) Periodic cleaning and calibration of electrodes
(2) Periodic inspection by the manufacturer (if necessary)

Each department, etc. should appoint a person in charge of the response (a person with knowledge of chemicals) in advance, and the response should be carried out at the discretion of the person in charge.