

January 16, 2018
Furukawa Electric Co., Ltd.

Notice Concerning a Gas Leak that Occurred at Chiba Works (2nd Report)

This is to inform you of our 2nd report on the status of the gas leak that occurred at around 12:35 on January 10, 2018 (Wednesday) inside the factory of Furukawa Fitel Optical Device Co., Ltd., which is located at Furukawa Electric's Chiba Works. Once more, we apologize deeply to all concerned for the trouble this caused.

We hereby inform you as follows of the situation clarified as of 9:00 on January 16 (Tuesday) (the parts underlined are the main updated details).

1. Place of occurrence

6 Yawatakaigandori, Ichihara City, Chiba Prefecture
Furukawa Electric Co., Ltd., Chiba Works

Manufacturing plant for optical semiconductors of Furukawa Fitel Optical Device Co., Ltd.

2. The course of the accident

The initial status upon occurrence of the accident has been partly revised as stated below and we have added the latest information as of 9:00 today.

Around 12:35, January 10 (Wednesday)

Black smoke was detected from the detoxification column of the clean room of the manufacturing plant for optical semiconductors. Because a leak of toxic gas was possible, all employees inside the plant evacuated. As a result of measuring for toxic gas, it was confirmed that a leak had occurred outside of the clean room so all employees from other buildings linked to the plant were also made to evacuate.

January 10 (Wednesday)

(Prior to revision) Around 15:10, it was confirmed that the leakage of toxic gas had already stopped.

Please note that gas concentrations in the manufacturing plant for optical semiconductors and linked buildings are below the environmental standards at the present time.

(After revision) From about 18:19, the municipal fire brigade entered the room and measured the concentrations of toxic gases. After that, we received instructions to take regular measurements. Please note that gas concentrations in the manufacturing plant for optical semiconductors and linked buildings were below the internal work environment

standards as of 15:00, January 11 (the time of the previous announcement).

The equipment estimated to be the source of the toxic gas was carried out of the plant at around 16:15 on January 13 (Saturday). A disposal contractor completed the disposal of the equipment appropriately. We have continued to take regular measurements for toxic gases and no abnormal values have been observed.

3. The cause of the gas leak

A Countermeasures Headquarters established at Chiba Works is currently investigating the cause.

4. State of damage (as of 9:00, January 16)

(1) Human damage: 4 Furukawa Electric and Furukawa Electric Group employees complained of feeling unwell on the day of the accident and rested at the Works. Although they recovered, they were placed under observation at the judgment of an industrial physician and public health nurse. After that, 1 of those employees undertook a medical examination at a hospital on January 12 (Friday), but the diagnosis was that no abnormalities were apparent. In addition, on the same day, 2 people reported that they had felt unwell on the day of the accident and had subsequently recovered so they received medical examinations by an industrial physician and were placed under observation.

(2) Property damage: Part of the detoxification column of the clean room of the manufacturing plant for optical semiconductors was broken (estimated).

(3) The state of current operations

[1] Manufacturing of chips for optical semiconductors has ceased. About 400 Furukawa Electric Group employees of adjacent facilities evacuated to separate buildings and returned home in order on January 10.

[2] Other plants on the Works' premises are currently operating as normal.

(4) Forecast for resumption of manufacturing: The optical semiconductor plant is scheduled to restart operations sequentially by around the end of January.

5. Cause and countermeasures

There are no changes to the existing report. The cause is currently being investigated by the related authorities. A Countermeasures Headquarters has been set up at Chiba Works and will do everything it can to advance its investigation of the cause, etc.

When the cause becomes clear, we will implement appropriate countermeasures while looking to the guidance of the related authorities.

6. Details of the leaked toxic gas

- Phosphoric gas, arsenic gas

It is estimated that harmless products reacted chemically with air in the detoxification column,

with phosphoric gas (including phosphine) and arsenic gas (including arsine) generated as a result.

Details: Inorganic compounds used when manufacturing optical semiconductors such as indium gallium arsenide phosphide (InGaAsP), etc. Both arsine and phosphine are used as raw materials in semiconductor manufacturing processes.