

## **Information on the use of hazardous chemicals**

### **Mustamäe cogeneration plant**

#### **Kadaka tee 181/ Vinkli 6, Tallinn**

AS Utilitas Tallinna Soojus has been part of the Utilitas Group, whose main activities are the production of electricity and heat and the provision of district energy solutions, since 2012. AS Utilitas Tallinna Soojus manages the city's district heating network of approx. 500 kilometers, the Mustamäe cogeneration plant, three central boiler houses connected to the main network (Mustamäe, Kristiine and Ülemiste), and 31 local boiler houses.

Two production units are located in the Mustamäe cogeneration plant located at Kadaka tee 181/Vinkli 6, Mustamäe district, Tallinn:

1. A cogeneration unit where wood chips are used as the main fuel for heat production, and natural gas as the start-up and reserve fuel;
2. Gas boiler house, where natural gas is used as the main fuel for heat production, and fuel oil as a reserve fuel.

Fuel oils are used as reserve fuel at the Mustamäe cogeneration plant: light fuel oil/diesel fuel or shale oil.

The handling and storage of large quantities of fuel oil can be dangerous to health and the surrounding environment, which is why the Mustamäe cogeneration plant, where the company's largest reserve fuel tank park is located, is qualified as a B-category major accident hazard company in terms of the Chemicals Act.

The company has coordinated the Risk Analysis and Emergency Management Plan of the Mustamäe gas boiler house and cogeneration plant with the competent state authorities (Rescue Board, and the Consumer Protection and Technical Regulatory Authority) and has an operating license for the handling of hazardous chemicals. An exception for non-compliance with emission limits of pollutants when using reserve fuels has been agreed upon with the Environmental Board. Information about when the last on-site national supervision was carried out, can be found on the website of the Rescue Board (<https://www.rescue.ee/et/ohtlikud-ettevotted>) and detailed information about the last supervision operation, the inspection plan, and additional information can be obtained from the competent authorities: The Rescue Board ([rescue@rescue.ee](mailto:rescue@rescue.ee), phone +372 628 2000) and the Consumer Protection and Technical Regulatory Authority ([info@ttja.ee](mailto:info@ttja.ee), phone +372 667 2000).

We confirm that the company has submitted the documents required under the Chemicals Act to the competent authority and has a corresponding license under the Industrial Emissions Act.

Additional information on safety measures can be obtained from: The operator of the control center, phone +372 6107 153.

#### **The danger of fuel oil**

Fuel oils are flammable liquids. At temperatures above 56°C (above 61°C for shale oil), and when in contact with air vapors an explosive mixture may form, which may ignite on contact with a spark, flame, or hot surfaces.

Liquid vapor irritates the eyes and respiratory tract and causes nausea and headaches. It is toxic if swallowed or comes in contact with skin, harmful if inhaled, and causes severe skin corrosion and eye damage. If it gets into the environment, it pollutes the soil and groundwater and damages aquatic

animals. The handling of shale oil can cause odor disturbances even in very small concentrations (the presence of the substance in the air cannot be detected by smell).

Hazard pictograms:



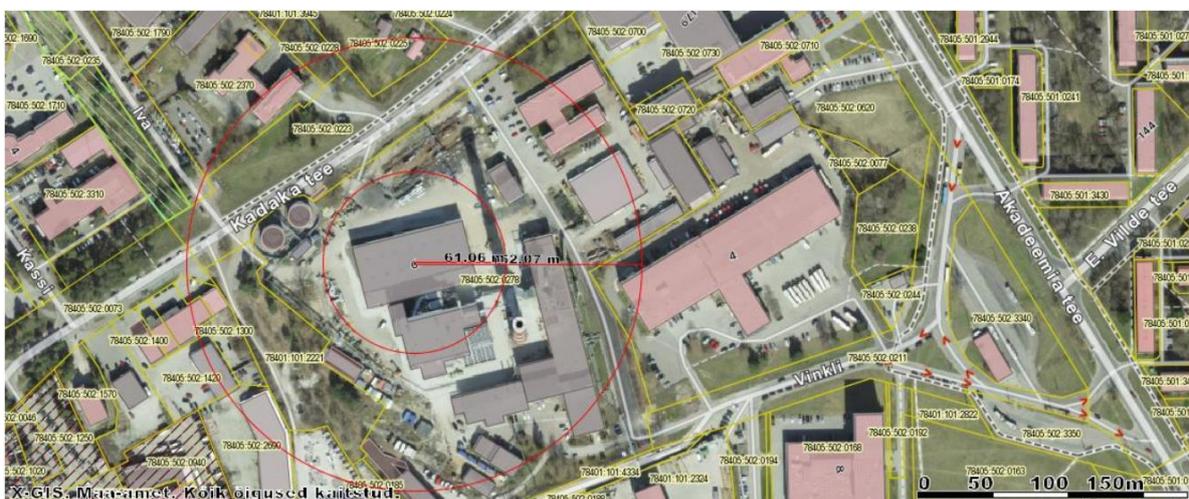
Based on the conducted risk analysis, a major accident can be caused by a fuel oil tank leaking and the spilled liquid igniting into the rampart, which forms a hazard area with a radius of up to 129 m.

**Hazard area**

In tanks storing fuel oil, accidents with more serious consequences are the breakage of the tank, fuel oil leaking into the rampart, and ignition. The maximum radius of the hazard area is 129 m.



The piles of wood chips stored in the passive part of the biomass warehouse can overheat and spontaneously combust after standing for a long time. All stored wood chips may be destroyed, and nearby buildings may be partially damaged. People can safely evacuate from the fire, but the loader (including the driver) may be located in the hazard area. To minimize the risk, there is a storage plan (instructions for the driver of the loader in Mustamäe cogeneration plant). The maximum hazard area radius of a fire in wood chip piles is 152 m.



## **Readiness**

All the fuel oil tanks of the cogeneration plant are placed inside a protective rampart. The size of the rampart is based on the volume of the largest tank. The loading point of the trucks from which fuel oil is received is located in a concrete tub. The buildings of the cogeneration plant are equipped with a fire alarm system, which ensures faster detection of fire. A supply of foam is stored on site to extinguish fire. To reduce odor disturbances, when loading shale oil into the tank, only the pumps of the receiving unit are used. When loading shale oil into the tank, the fuel oil vapors coming out of the vents of the tanks are directed through special ventilation pipes into the combustion device, where they are burned. The emergency response plan of the cogeneration plant specifies responsible persons, operating instructions, and resources for an adequate and quick response to possible emergency situations. Necessary pieces of training are regularly organized for employees, and we also cooperate with rescue services (for example, in joint training) in order to be ready to act in the event of a major accident and minimize the consequences.

## **Notification**

Companies permanently located in the hazard area are informed in writing about the existing dangers. In the event of a possible major accident, the senior operator organizes the verbal notification of persons located in hazard area. A security guard and/or security patrol can also be used to inform people.

Information about the accident is transmitted to the Rescue Board and the media. We recommend listening to ERR radio and TV news and following our website [www.utilitas.ee](http://www.utilitas.ee)

## **How to behave in the event of an accident**

- Upon receiving information about a fire or seeing smoke or fire near the tanks of the boiler house, leave the hazard area immediately, moving against the wind to a distance of at least 40 m.
- In the case of smoke spread or strong odor disturbance (an unpleasant smell of rotten eggs), go indoors if possible, and close windows and doors, vents, and ventilation.
- If in the car, close the windows and doors, turn off the ventilation and move out of the hazard area.
- Inform nearby people about the hazard and danger and, if possible, help those in trouble.
- Call the Emergency Response Centre (112) only in the case of serious need, so as not to hinder the emergency calls of those who need immediate help.
- Follow ERR radio and TV news, and the instructions of rescue officials.

## **Additional information**

Additional information on safety precautions and emergency response:

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