



WASTEWATER TREATMENT AND SLUDGE PROCESSING IN ŠILUTĖ DISTRICT

JSC „Šilutės vandenys“
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HISTORY

Activity field of **JSC „Šilutės vandenys“** is extraction and supply of underground drinking water to consumers, collection and treatment of sewage, sludge processing (draining and drying).

On 1 October 1991 Šilutė State Water Supply Company was established.

In 1994 construction of mechanical wastewater treatment plants was finished.

In 2001 construction of biological wastewater treatment plants was completed.

In 2009 initial radial precipitators were modernized.

In 2010 integrated quality and environmental management system has been installed.

In 2013 construction of sludge processing plant was complete.

JSC „Šilutės vandenys“ operates:

38 – watering-places (58 boreholes)

17 – wastewater treatment plants (4 – mechanical)

Insert a picture of tower

WASTEWATER TREATMENT

ŠILUTĖ WASTEWATER TREATMENT PLANTS

Mechanical and biological, with removal of nitrogen and phosphorus
(short telling)

Project Performance– 10400 m³/d

Factual figures:

About 2,1 mln. m³/year

Average of about 5700 m³/d.

Insert a picture

WASTEWATER TREATMENT

ŠILUTĖ WASTEWATER TREATMENT PLANTS

The average concentration of pollutants in coming wastewater

In 2013 BDS_7 - 440mg/l, N_b - 41 mg/l, P_b - 7 mg/l.

The average concentration of pollutants in treated wastewater

in 2013 BDS_7 - 440mg/l, N_b - 41 mg/l, P_b - 5 mg/l.

Efficiency of treatment

BDS_7 - %,

N_b - %,

P_b - %.



PROCESSING OF SEWAGE SLUDGE

01.2011 – 02.2013 CONSTRUCTION OF ŠILUTĖ SLUDGE PROCESSING PLANT

In 2013 for implementation of this project we were awarded “Lithuanian Product of the Year 2013” Gold Medal for ecology and environmental technology by Lithuanian Industrialists Confederation.



PROCESSING OF SEWAGE SLUDGE

ŠILUTĒ SLUDGE PROCESSING PLANT

45 800 m³ of liquid sludge has been processed a year,
Insert a picture of liquid sludge
out of which just 950 m³ of pellets is left after drying.



PROCESSING OF SEWAGE SLUDGE

ŠILUTĒ SLUDGE PROCESSING PLANT

Project parameters	Values	
Amount of primary sludge	24 m ³ /d	2,0 % SM*
Amount of excess sludge	100 m ³ /d	1,2 % SM*
Amount of liquid sludge brought	7,25 m ³ /d	2,0 % SM*
Amount of liquid sludge brought dried	1,62 m ³ /d	15 % SM*
Amount of putrefied sludge	32,5 m ³ /d	4,1 % SM*
Amount of drying sludge	480 kg/d	20 % SM*
Amount of dried sludge	1,75 t/d	90 % SM*
Amount of biogas	433 N m ³ /d	

USE OF SEWAGE SLUDGE

SEWAGE SLUDGE PRODUCED AT ŠILUTĒ SLUDGE PROCESSING PLANTS:

Used for fertilization

II category (add characteristics)

Moisture, %	2,91
Profitableness, %	30,27
C (coal), %	39,76
H (hydrogen), %	5,1
N (nitrogen), %	5,82
S (sulfur), %	1,52
O (oxygen), %	17,5
Upper calorific of wet fuel (2,91 %), kJ/kg	16229
Lower calorific of wet fuel (2,91 %), kJ/kg	15689





THANK YOU FOR YOUR
ATTENTION