

PEPSI CO. - Kashira, Moscow, Russia

ETP - Modernization & upgrade for snack production



WABAG Water Services SRL was awarded the refurbishment and extension of the WWTP of the KASHIRA snacks manufacturing site of PEPSI Co. Int., located near Moscow.

Since 2002 PEPSI Co. has been producing potato chips at Kashira, which represents the first snack-

production facility of the company in Russia. After roughly 15 years of operation, it is intended to expand the production capacity including its wastewater treatment plant, which also demands for some modernization works.

The order includes the renewal and extension of the electro/

mechanical equipment, comprising pre-treatment, anaerobic treatment and CAS and sludge treatment.

The capacity of 45 m³/h is to be increased to 60 m³/h. WABAG is responsible for the design, equipment supply, installation, commissioning and start-up.

Features

- Modernisation and extension of industrial effluent treatment plant
- Capacity: 1,460 m³/d (average)
- Turnkey completion



Client
PEPSI Co. International

Type of contract
EPC – turnkey execution

Award of contract
January 2017

Commissioning
2018

Capacity
Average: 1,460 m³/d
Maximum: 1,800 m³/d

Extension from 45 m³/h to 60 m³/h
(peak 105 m³/h)

Wastewater
Effluents from snack production

Technology
UASB, CAS

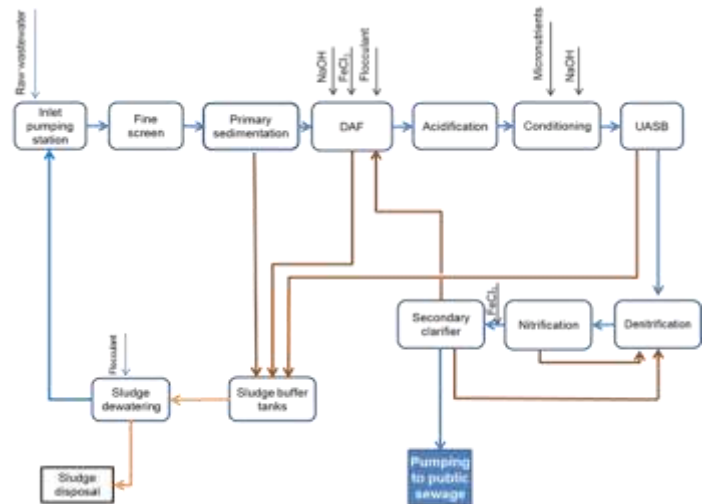
Scope
Design, equipment supply,
installation, commissioning and
start-up.

Main Components/Process Steps

- Inlet pumping station
- Parabolic screen
- Calamity tank (new)
- Primary clarifiers
- DAF unit
- Acidification tanks
- Conditioning tank
- Anaerobic treatment (UASB)
- Gas treatment
- Activated sludge tanks for nitrification-denitrification
- Secondary clarification
- Chemicals preparation and dosing stations
- Sludge dewatering

SCOPE

- Increase of capacity from 45 m³/h to 60 m³/h (peak 105 m³/h)
- Renewal and extension of the electro-mechanical equipment



Parameter Wastewater	Units	Inlet - Design values	Effluent limits
pH		5-12	6-9
COD	mg/l	9.984	305
BOD ₅	mg/l	632	140
TKN	mg/l	663	48
Ammonium-N	mg/l	228	26
Nitrites(NO ₂)ion	mg/l	6	0.4

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