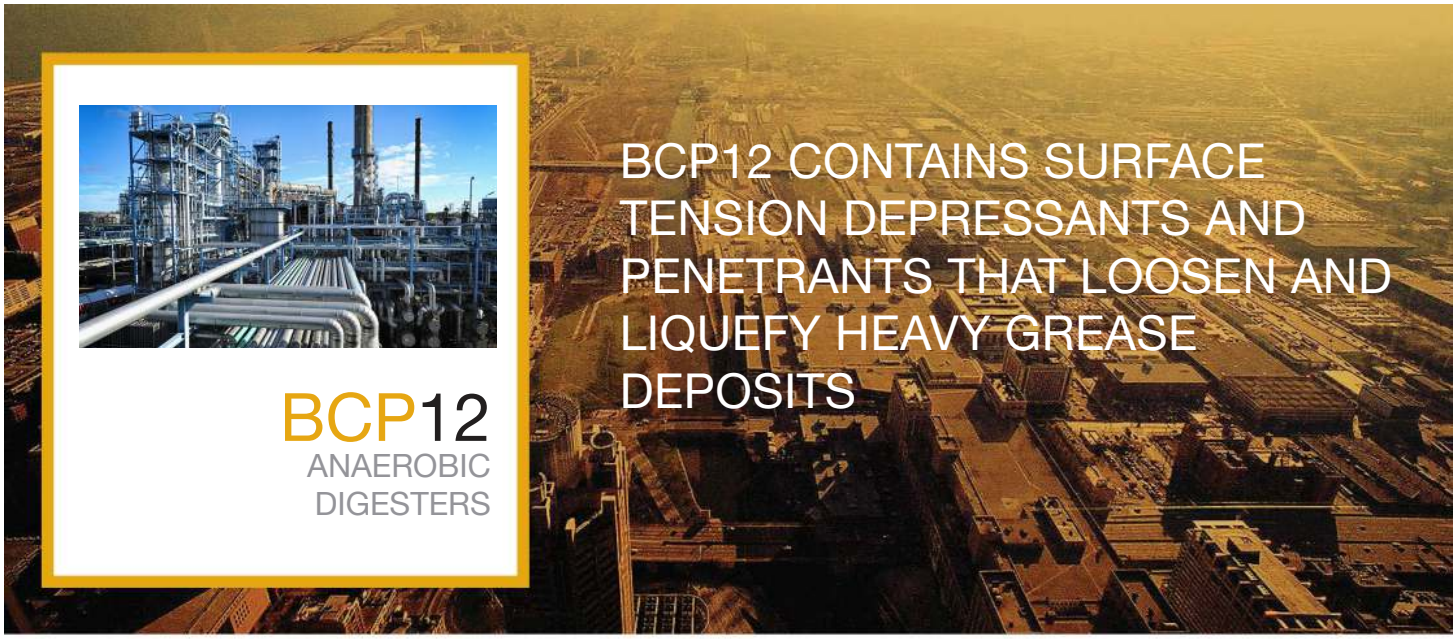

BCP12
ANAEROBIC DIGESTERS

BCP12 CONTAINS SURFACE TENSION DEPRESSANTS AND PENETRANTS THAT LOOSEN AND LIQUEFY HEAVY GREASE DEPOSITS

BIOAUGMENTATION WITH BCP12 CAN:

- Control grease caps and FOG build-up
- Prevent the blocking, ponding, and possible collapse of filter bed media
- Increase the efficiency of overloaded treatment systems
- Be used to reseed after plant upset
- Reduce unpleasant odours
- Speeds up biogas production

PRODUCT TEST

Introduction — A city in Northern Ontario owns and operates a Water Pollution Control Plant (WPCP). This plant provides primary treatment, phosphorus removal, and anaerobic sludge digestion for the serviced area of the city. Disinfection of the effluent occurs on a seasonal basis, from April to October. The treatment facility has a design capacity of 109 million litres/day. The population served by the WPCP is approximately 100,000.

The digesters retain the sludge for 30 days. The temperature in the digesters is maintained at approximately 35°C and the digester contents are mixed and heated to support the breakdown of the sludge by anaerobic bacteria. Methane gas is produced during the anaerobic digestion process and is pumped back into the digesters to provide mixing. Excess methane gas is piped to the four plant boilers for fuel, supplying heat for the digestion process and plant buildings.

Generally, gas production had been poor. Reduction of the volatile component of the sludge has been good; it is the conversion to methane that has been poor.

Treatment — A trial was performed using the digester additive BCP12 to boost conversion to methane formers. The additive was added to digesters 1 & 2 exclusively.

Results — During the period when the digester was added, there was an increase in gas production. The cost of the additive used in all four digesters would be $25 per day and the reduction in natural gas use would save the plant conservatively $200 per day. Therefore, during heating season the plant should begin daily dosing of digester enhancement BCP12.

PRODUCT SPECIFICATION

Description:	Tan color free flowing powder
Packaging:	Bulk, water soluble pouches (200 x 56g, 400 x 28g, 40 x 250g), custom packaging available
Bulk Density:	0.5 – 0.7 g/ cm^3
Stability	Max. loss of 1 log/yr
pH	7.0-8.5
Nutrient Content:	Biological nutrients and stimulants
Bacteria Count	5 billion per gram
Storage and Handling	DO NOT FREEZE! Store in a cool dry location. Do not inhale dust. Avoid contact with eyes. See SDS. Bionetix® will not be held responsible for quality issues after 6 months of storage.

Bionetix INTERNATIONAL
A Subsidiary of Cortec® Corporation
ISO: 9001 Certified Quality System Registered
We work for nature
Bionetix® International Corporation, Inc.
21 040 rue Daoust, Ste-Anne-de-Bellevuem Quebec, Canada HH9X 4C7
T 514 457 2914 • F 514 457 3589 • www.bionetix-international.com

BCP12
ANAEROBIC
DIGESTERS

APPLICATION INSTRUCTIONS

Treatment Plants—

Flow Rate	Initial* Dosage	Maintanance**
Up to 1.2 million L/day	7 kg	114g/week
Up to 2.4 million L/day	12 kg	227g/week
Up to 5.0 million L/day	25 kg	454g/week
Up to 25.0 million L/day	5kg/million L/day	100g/week/ million L flow
Up to 60.0 million L/day	5kg/million L/day	75g/week/ million L flow
Up to 500 million L/day	5kg/million L/day	75g/week/ million L flow

*Spread this initial dosage out over the course of 10 days.
** Add as regularly as possible. If one day is missed, double the daily dosage the next day.

Dosage rates will vary with flow rates, retention times and system variations. The rates above are for a typical, well-maintained system.

Anaerobic Lagoon Systems—

BCP12 is applied to the primary digester of an anaerobic sludge digestion plant. The application rate is based on the total volume of the primary digester.

<450,000 L	454g/22,500L, twice a week
>450,000 L	140g daily

Contact your BIONETIX® wastewater specialist before applying BCP12 to a digester that has stopped methane production.

For individual consultation about your system, contact your BIONETIX® technical representative