

BIO-CEL® MBR RMA INFORMATION FORM

General Project & Contract Data

Module Type	_____	Total No. of Modules	_____
Wastewater Type	_____	No. Affected Modules	_____
Module Installation Date	_____	Modules Operated Since	_____
Project Number	_____	Location	_____
OEM	_____	End-User	_____
OEM Contact	_____	End-User Contact	_____
Phone	_____	Phone	_____
Email	_____	Email	_____

BIO-CEL® MBR Manual

In case of product issues, please refer to the BIO-CEL® MBR Manual, Chapter 12 - Troubleshooting. If any of the problems discussed in this chapter persist, or other difficulties arise, the operator should contact MANN+HUMMEL Water & Fluid Solutions. Complete operational data (see following pages) is necessary to determine the source of the problem.

Serial Numbers

Please list the serial numbers of the affected modules/cassettes. The serial numbers can be found in the delivery note or on the module itself. Please refer to the BIO-CEL® MBR Manual for the position of the serial number.

Failure Description

Operational Data

Please fill in as much data as possible. If possible, attach trend graphs of these parameters.

<u>Performance Parameter</u>	<u>Operating Range</u>	<u>Comments</u>
Normalized Permeability [LMH/bar]	_____	_____
Filtration Tank Temperature [°C]	_____	_____
Filtration Flux [LMH]	_____	_____
Backwash Flux [LMH]	_____	_____
Average Filtration TMP [mbar]	_____	_____
Average Backwash TMP [mbar]	_____	_____

* $TMP = P_p(\text{Header Pressure}) - P_s(\text{Hydrostatic Pressure})$

** $Permeability_{Normalized} = \frac{Flux \cdot 1000}{TMP} \cdot 1.024^{(20-T[°C])}$

<u>Biological Parameters</u>	<u>Operating Range</u>	<u>Comments</u>
COD Aeration Tank Influent [mg/L]	_____	_____
COD Filtration Tank Influent [mg/L]	_____	_____
MLSS Filtration Tank [g/L]	_____	_____
Sludge Time to Filter (TFF) [s]	_____	_____
Sludge Filterability Test (SFT) [mL]	_____	_____
Sludge Volume Index (SVI) [mL/g]	_____	_____

<u>Cleaning Parameters</u>	<u>Operating Range</u>	<u>Comments</u>
Date of Last NaOCl Cleaning	_____	_____
NaOCl Concentration [mg/L]	_____	_____
Date of Last Citric Acid Cleaning	_____	_____
Citric Acid Concentration [mg/L]	_____	_____

Pictures

Please include any relevant pictures that illustrate the issues.

Description: _____

Description: _____

Description: _____

Description: _____

Europe
Germany: +49 611 962 6001
Italy: +39 0721 1796201
info@microdyn-nadir.com

Americas
USA: +1 805 964 8003
info@microdyn-nadir.com

Asia
China: + 86 592 677 5500
China: +86 10 8413 9860
waterchina@mann-hummel.com