



# CERTIFICATE OF ACCREDITATION

*This is to attest that*

## **ECOGESTION AMBIENTAL LTDA.**

PROGRESO PASAJE 1 NO 1560, CHIGUAYANTE  
CONCEPCION 4100000, CHILE

Testing Laboratory TL-873

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation maintained on the IAS website ([www.iasonline.org](http://www.iasonline.org)).

*This certificate is valid up to October 1, 2020.*



*This accreditation certificate supersedes any IAS accreditation bearing an earlier effective date. The certificate becomes invalid upon suspension, cancellation or revocation of accreditation. See [www.iasonline.org](http://www.iasonline.org) for current accreditation information, or contact IAS at 562-364-8201.*



A handwritten signature in black ink that reads "Raj Nathan".

**Raj Nathan**  
President



# SCOPE OF ACCREDITATION

IAS Accreditation Number	TL-873
Company Name	Ecogestión Ambiental Ltda.
Address	Progreso Pasaje 1 N°1560 Chiguayante, Concepción 4100000, Chile
Contact Name	Alex Aguilera G. - Gerente de Administración y Gestión
Telephone	+56 412492200
Effective Date of Scope	September 27, 2019
Accreditation Standard	ISO/IEC 17025:2017

<b>MARINE CHEMISTRY</b>	
<b>Soils, Sediments</b>	
S-EN-01 (Versión 02)	Granulometry in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-EN-02 (Versión 02)	Total organic matter in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-EN-03 (Versión 02)	Taxonomy (benthic macrofauna) in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-ME-01 (Versión 04)	In situ measurements of reduction oxide potential in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-ME-01 (Versión 04)	In situ measurements of hydrogen potential in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-ME-01 (Versión 04)	In situ measurements of temperature in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments.
S-MU-01 (Versión 04)	Sampling of marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments for taxonomy tests of benthic macrofauna, granulometry and total organic matter.
<b>AQUATIC BIOLOGY</b>	
<b>Aquatic Organisms</b>	
A-EN-01 (Versión 02)	Quantitative analysis of phytoplankton
A-EN-02 (Versión 02)	Qualitative analysis of zooplankton
A-EN-03 (Versión 02)	Quantitative analysis of zooplankton
A-EN-04 (Versión 03)	Quantitative analysis of periphyton
B-EN-01 (Versión 02)	Identification and determination of ictiofauna
B-EN-02 (Versión 02)	Identification and determination of macrophytes



# SCOPE OF ACCREDITATION

NCh 411/2. Of96 Water quality - Sampling - Part 2: Guide on sampling techniques.	Sampling of ictiofauna
NCh 411/2. Of96 Water quality - Sampling - Part 2: Guide on sampling techniques.	Sampling of macrophytes
NCh 411/2. Of96 Water quality - Sampling - Part 2: Guide on sampling techniques	Sampling of phytoplankton
NCh 411/2. Of96 Water quality - Sampling - Part 2: Guide on sampling techniques.	Sampling of zooplankton
SUBPESCA, 2016. 2nd Edition Manual for the monitoring and identification of the benthic microalga <i>Didymosphenia geminate</i> .	Sampling of didymo
SUBPESCA, 2016. 2nd Edition Manual for the monitoring and identification of the benthic microalga <i>Didymosphenia geminate</i> .	Qualitative analysis of didymo
SUBPESCA, 2016. 2nd Edition Manual for the monitoring and identification of the benthic microalga <i>Didymosphenia geminate</i> .	Sampling of periphyton
SUBPESCA, 2016. 2nd Edition Manual for the monitoring and identification of the benthic microalga <i>Didymosphenia geminate</i> .	Qualitative analysis of periphyton
SUBPESCA, 2016. 2nd Edition Manual for the monitoring and identification of the benthic microalga <i>Didymosphenia geminate</i> .	Qualitative analysis of phytoplankton



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PROGRESO PASAJE 1 NO 1560, CHIGUAYANTE  
CONCEPCIÓN 4100000, CHILE

Inspection Agency AA-788  
Type A

has met the requirements of AC98, *IAS Accreditation Criteria for Inspection Agencies*, and has demonstrated compliance with ISO/IEC Standard 17020:2012, *Conformity assessment - Requirements for the operation of various types of bodies performing inspection*. This organization is accredited to provide the services specified in the scope of accreditation maintained on the IAS website ([www.iasonline.org](http://www.iasonline.org)).

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A handwritten signature in black ink, reading 'Raj Nathan', positioned above a horizontal line.

**Raj Nathan**  
President



## SCOPE OF ACCREDITATION

IAS Accreditation Number	AA-788
Company Name	Ecogestión Ambiental Ltda.
Address	Progreso Pasaje 1 N°1560 Chiguayante, Concepción, 4100000, Chile
Contact Name	Alex Aguilera G. – Gerente de Administración y Gestión
Telephone	+56 412492200 / 412492201
Effective Date of Scope	September 21, 2019
Type of Inspection Body	Type A
Accreditation Standard	ISO/IEC 17020:2012

Field and Range of Inspection	Regulations, Standards, Specifications and Inspection Procedures
Automatic measurement of wastewater flow -In situ measurements.	NCh 411/10-2005 Water Quality - Sampling - part 10: Sampling of waste water - Collection and handling of samples.
Manual measurement of wastewater flow -In situ measurements.	NCh 411/10-2005 Water Quality - Sampling - part 10: Sampling of waste water - Collection and handling of samples.
Measurement of temperature in line and in situ of wastewater -In situ measurements.	NCh 2313/2, Of 95, Supreme Decree No. 545 of 1995 of the Ministry of Public Works: Wastewater - Methods of analysis Part 2: Temperature Determination.
Measurement of dissolved oxygen in line and in situ of wastewater -In situ measurements.	NCh 411/10-2005 Water Quality - Sampling - part 10: Sampling of waste water - Collection and handling of samples.
Measurement of potential hydrogen determination in line and in situ of wastewater -In situ measurements.	NCh 2313/1, Of 95, Supreme Decree No. 545 of 1995 of the Ministry of Public Works: Wastewater - Methods of analysis Part 1: Potential Hydrogen Determination.
Manual sampling of spot samples in wastewater -Sampling.	NCh 411/10-2005 Water Quality - Sampling - part 10: Sampling of waste water - Collection and handling of samples.
Automatic collection of point samples of wastewater -Sampling.	NCh 411/ 10-2005 Water quality - Sampling - Part 10: Sampling of wastewater - Collection and handling of samples.
Manual sampling of composite samples in wastewater -Sampling.	NCh 411/ 10-2005 Water quality - Sampling - Part 10: Sampling of wastewater - Collection and handling of samples.
Measurements of free chlorine total in wastewaters -In situ measurements.	NCh 411/ 10-2005 Water quality - Sampling - Part 10: Sampling of wastewater - Collection and handling of samples.



# SCOPE OF ACCREDITATION

Field and Range of Inspection	Regulations, Standards, Specifications and Inspection Procedures
Measurements of free chlorine residual in wastewaters -In situ measurements.	NCh 411/ 10-2005 Water quality - Sampling - Part 10: Sampling of wastewater - Collection and handling of samples.
Sampling of ground waters -Sampling.	NCh 411/ 11-2005 Water quality - Sampling - Part 11: Guide for the sampling of groundwater.
Sampling of seawater and surface water for bioassays and other physicochemical and biological tests	Own Method S-MU-02 (Versión 01), based on Standard Methods for the Examination of Water and Wastewater 1060 B y 10200 B, 23rd Edition, 2017.
Measurements of conductivity in seawater and surface water -In situ measurements.	Exempt Resolution No. 3612 SUBPESCA, Numeral 29, modification Exempt Resolution No. 3002-2018
Measurements of temperature in seawater and surface water -In situ measurements.	Exempt Resolution No. 3612 SUBPESCA, Numeral 29, modification Exempt Resolution No. 3002-2018
Measurements of dissolved oxygen in seawater and surface water - In situ measurements.	Exempt Resolution No. 3612 SUBPESCA, Numeral 29, modification Exempt Resolution No. 3002-2018
Measurements of hydrogen potential in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments -In situ measurements.	Own Method S-ME-01 (Versión 04), based on Exempt Resolution No. 3612 SUBPESCA.
Measurements of reduction oxide potential in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial), and lacustrine sediments -In situ measurements.	Own Method S-ME-01 (Versión 04), based on Exempt Resolution No. 3612 SUBPESCA.
Measurements of temperature in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments -In situ measurements.	Own Method S-ME-01 (Versión 04), based on Exempt Resolution No. 3612 SUBPESCA.
Measurements of hydrogen potential in seawater and surface water - In situ measurements.	Standard Methods for the Examination of Water and Wastewater 4500-H B, 23rd Edition, 2017.
Measurements of temperature in seawater and surface water – In situ measurements	Standard Methods for the Examination of Water and Wastewater 4500-H B, 23rd Edition, 2017



# SCOPE OF ACCREDITATION

<b>Field and Range of Inspection</b>	<b>Regulations, Standards, Specifications and Inspection Procedures</b>
Measurements of free chlorine (total and residual) in drinking waters -In situ measurements.	NCH 409/1 2005 Drinking Water Quality.
Measurements of free chlorine (total and residual) in raw waters (surface water) -In situ measurements.	NCh 411- 10 Water quality - Sampling - Part 10: Sampling of wastewater.
Sediment sampling for bioassays and other physicochemical and biological tests in marine sediments (intertidal and subtidal), aquatic sediments (estuarine and fluvial) and lacustrine sediments -Sampling.	Own Method S-MU-01 (Versión 04), based on Exempt Resolution No.3612 SUBPESCA and clauses 25, 26 and 27 and Standard Methods for the examination of water and wastewater 1060 B, C 23rd,2017.
Soil sampling -Sampling.	NCh 3400/2:2016 Soil quality – Sampling - Part 2: Guidelines of sampling techniques. 2016. INN