CORNERSTONE
INTERNATIONAL
BEYOND LIMITS

Carbon Capture Bubble Filter

Market Gap

Carbon Capture

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01 Unable to meet high demand for net zero emissions

02 CO_2 emission increase from 32.2 to 33.3 gT - 2019

03 Low achievability of high-capacity plants seizing multi MTPA of CO_2

04 All focus on CO_2 , and not on other pollutant carbons

05 Few carbon credit accumulation companies exist

Carbon Capture

The Problem

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- Current technologies are large and expensive
- High level of Carbon and Methane emissions
- Significant capital cost to set-up large scale CCS systems
- Substantial annual operational expenses to run systems at optimum levels.
- New government regulations on achieving net zero compliances
- Concentration on capturing emissions only from large industrial plants
- Other forms of particulated carbons are still emitted to the atmosphere.
- Existing technologies capture only 1 form of carbon, either only CO_2 or CH_4
- CO_2 stored in huge reservoirs deep under the earth or ocean.

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Market Need:

For carbon capture bubble filter

Need for a cost-effective and easily customizable all-in-one device which helps in carbon capture and sequestration thereby reducing carbon emissions

Required in

- Automobiles
- Large industrial complexes / factories
- Sewage Treatment Plants
- Hotels & Restaurants
- Households & Apartments
- Oil Refineries & Oil Sands
- Cattle Sheds
- Medical grade equipment manufacturers

Carbon Capture

The Solution

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Technology to Achieve 'Net Zero'

cost-effective technology to capture all forms of particulated carbon from nanotonne to gigaton scale

Modular system

Modularized and containerized solutions to easily scale your carbon capture system

Engineering services

Engineering services to help in stages of exploration, design and engineering process

Technology license

- Custom design for your unique site that makes the most of our inbuilt processes.

High-performance solvents

- Proprietary solvent formulation provides better carbon capture results and is efficient

Warranty

- 5 years' product warranty. No moving parts

Customized Design

Carbon Capture for Cattle Milking Shed

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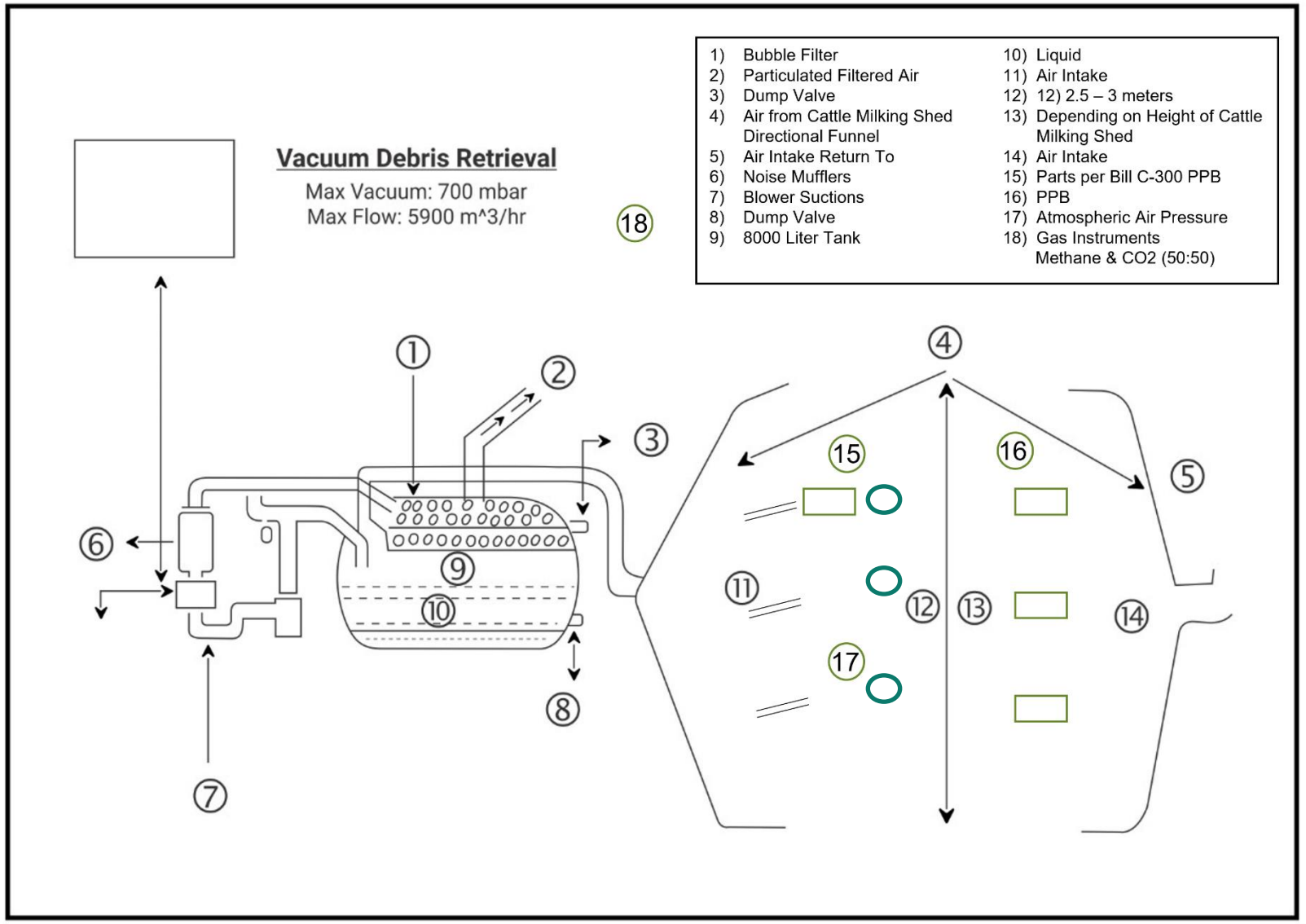

Carbon Capture

The Design

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This design was used in 1985 by Barry Brothers Specialized Services. This technology was used to clean a Beef Sewer Pit which was also a pumping station that carried the debris to the Werribee Treatment Plant. The unit was used mainly to protect the people working in the plant from exposure to methane gas.

It will have dual supply power supply, one via solar panel and the other via conventional electricity supply input. Hence with this hybrid model, the electricity power consumption is quite low.

The noise from the blower from where the particulated air comes out also has a muffler attached to it, hence the noise level is kept below 80 dB.

A specially formulated liquefied chemical combination is used in the bubble filter. This is a very economical and natural method of capturing carbon and methane gas. However, due to our strict patent regulations and privacy act, the formulation is a trade secret and kept confidential. However, the SGS, Australia, reports certifies the high performance extraction ability of the formulation.

The residue collected in the bubble filter contains CO_2 and methane gas while the

The tank will contain natural salts. Both the residue and the natural salts collected can be used as fertilizers.

SGS Test Reports

HOLDING TIME SUMMARY

rent regulations and are highly dependent on sample container preservation as sp
-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) G
es are derived from "AS/NZS 5667.1 : 1998 Water Quality – sampling part
m 2005.

es listed are calculated from the date sampled, although holding times may be
hat samples may be held before extraction or analysis and still be considered valid.

when within suggested criteria or Red with an appended dagger symbol (†) when outside

QC Ref	Sampled	Received	Extraction Due	Exte
LB048615	04 Feb 2022	04 Feb 2022	11 Feb 2022	08 Fe
LB048615	04 Feb 2022	04 Feb 2022	11 Feb 2022	08 Fe
LB048615	04 Feb 2022	04 Feb 2022	11 Feb 2022	08 Fe

SURROGATES

lower limit criteria established in the SGS QA/QC plan (Ref: MP-(
)C are to be within 70-130% where control charts have not been
as an acceptance criterion. Water sample surrogate spike reco
an acceptance criterion.

criteria or Red with an appended reason identifer when outside su

METHOD BLANKS

f reporting (LOR), for the chosen method and its associated instrumer

or Red with an appended dagger symbol (†) when outside suggested criteria.

arameter
tal Carbon

DUPLICATES

rence (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 /

owable Difference (MAD) criteria and can be graphically represented by
rmula: MAD = 100 x SDL / Mean + LR

a number larger than 200 it is displayed as 200.

criteria or Red with an appended reason identifer when outside suggest

nded data for the original and replicate result. Manual calculation of the RPD from t

Parameter	Units
Total Carbon	mg/L

STATEMENT OF QA/QC PERFORMANCE

LABORATORY DETAILS

Manager	Adam Atkinson
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 316
Telephone	+61395743200
Facsimile	+61395743399
Email	Au.SampleReceipt.Melt
SGS Reference	ME325005 R0
Date Received	04 Feb 2022
Date Reported	09 Feb 2022

TY LTD
OURT
NY VIC 3175

128
ied)
outlook.com

mples

or each environmental matrix was compared to SGS' stated Data Quality Objecti
were made and are reported below.

g was taken from the Chain of Custody document.
t be read in conjunction with the referenced Analytical Report.
ytical Report must not be reproduced except in full.

were met (within the SGS Melbourne EH&S laboratory).

3 water	Type of documentation received
Ambient	Turnaround time requested

pt

BORATORY CONTROL SAMPLES

uated against an expected result, typically the concentration of
The criteria applied to the percentage recovery is established in
g page of this report.

or Red with an appended dagger symbol (†) when outside suggested crite

Units

MATRIX SPIKES

e percentage recovery of an expected result, typically the concentration of
's result is subtracted from the sub-sample result before determining the
SS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer

gested criteria or Red with an appended reason identifer when outside su

Parameter	Units	L
otal Carbon	mg/L	

MATRIX SPIKE DUPLICATES

rcent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult |

matrix spike. The Duplicate result is the analyte concentration of the matrix spike dup

Allowable Difference (MAD) criteria and can be graphically represented by
formula: MAD = 100 x SDL / Mean + LR

to a number larger than 200 it is displayed as 200.

ria or Red with an appended reason identifer when outside suggested criteria. Refer

arameter	Units	LC
tal Carbon	mg/L	1

SGS Test Reports

ANALYTICAL REPORT

LABORATORY DETAILS

Manager Adam Atkins
Laboratory SGS Melbou
Address 10/585 Black
Notting Hill V
Telephone +6139574321
Facsimile +6139574331
Email Au.SampleRe
SGS Reference ME325005.
Date Received 04 Feb 2022
Date Reported 09 Feb 2022

ISO:17025 standards, results of analysis in this report fall outside

ed due to high target analyte concentration.

nent, Health and Bldg 10, 585 Blackburn Rd Notting Hill VIC Au

ANALYTICAL REPORT

	Sample Number	ME325005.001
	Sample Matrix	Water
	Sample Date	4/2/22 13:00
	Sample Name	Bottle #1
Units	LOR	

A-1117.WW.01 Tested: 8/2/2022

mg/L	1	3800

QC SUMMARY

of analyte recovered from the sample compared the the amoun
st their original counterpart samples according to the formula : t
re the DUP RPD is 'NA' , the results are less than the LOR and

W.01

QC Reference	Units	LOR	ME
LB048015	mg/L	1	<1.

METHOD SUMMARY

OLOGY SUMMARY

d is used for the analysis of Total Organic Carbon (TOC) and Dissc
e combustion.
Sulphuric acid preserved samples are injected as received into TOC
(TOC-L CSH) analyser and detected by Non-Dispersive InfraRed (N
Sulphuric acid preserved samples are filtered through 0.45 µm filter
nd detected by NDIR analyser.

FOOTNOTES

LOR	Limit of Reporting
↑↓	Raised or Lowered Limit o
QFH	QC result is above the upp
QFL	QC result is below the low
-	The sample was not analy
NVL	Not Validated

eeded.

by SGS, the samples have been analysed as received.

xample, Total PAHs, Total OC Pesticides) the total wi
<LOR being assumed to be zero. The summed (To
For example, where 16 individual analytes are being s
2 analytes are being summed, the "Total" LOR will be the s

l is rounded after adding up the raw values.

sign after the analytical result and is expressed as
approximately 95%, unless stated otherwise in the comment

methods with codes starting with ARS-SOP, radionu
volume or per wipe as stated on the report. Becque

st methods with codes starting with ARS-SOP, less t
ment system used. The respective detection limits h

review according to the SGS QAQC plan and may b
-and-safety.

nder its General Conditions of Service accessible
ation and jurisdiction issues defined therein.

ormation contained hereon reflects the Company's finc
The Company's sole responsibility is to its Client
ent is unlawful and offenders may be prosecuted to the fulles

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Thank You

Email: info@cornerstonegroup.co.in

Location : Bangalore, India