CECB Laboratory Services.....

At CECB Laboratory Services we are equipped to perform traditional laboratory testing for projects in different geographical areas across Sri Lanka. Our highly trained Engineers are more than capable of conducting a range of tests, whether it be soil testing, aggregate testing, concrete testing, cement testing, asphalt testing or testing of clay bricks. Now laboratories are located throughout the country to provide quality laboratory testing in Colombo, Badulla and Ampara.

Contact Us....

Main Laboratory - Colombo

CECB Laboratory Services
No.11, Jawatta Road,
Colombo 05, Sri Lanka.
Tel : +94 112 505 688
+94 112 081 324
+94 714 222 444
Fax : +94 112 598 215
E-mail : cecblab@gmail.com
lab@cecb.lk
Web : www.crdcecbsl.lk



Base Laboratory - Ampara

CECB Laboratory Services
South East
Sri Rathana Mawatha,
Ampara,Sri Lanka.
Tel : +94 632 222 434
Fax: +94 632 222 439
E-mail :cecblabse@gmail.com



Our Project Laboratories....

Badulla

CECB Laboratory Services
37/2A, Bandaranayake Mawatha,
Badulla, Sri Lanka.
Tel : +94 55 2222706
Fax : +94 55 2222706
E-mail : cecblab@gmail.com

"An Investment in Knowledge Pays the Best Interest."

Benjamin franklin

Chemical & Environmental Laboratory

Sri Lanka is one of the world's biodiversity hot spots. The need to preserve and protect the environment is therefore of utmost importance. In view of this CECB has taken the initiative as a government body to establish and implement the Chemical and Environmental Laboratory Services Unit to fulfill the verification needs of construction and industry related environmental issues in accordance to the regulations stipulated by the Central Environmental Authority. At present our main involvements include investigations in Kalu Ganga and Uma Oya Projects. We have also conducted a wide variety of EIA, IEE and Feasibility Studies both locally and internationally.

These Include:

- Joint Research and Consultancy Services for the Establishment of Alternative Road Construction Processes Using Coral-limestone Base Soil Materials at the Republic of Maldives
- EIA on ATGS Waste to Energy Project at Karadiyana Municipal Waste Dumping site
- IEE of the Proposed Badulla, Ella and Hali Ella Integrated Water Supply Scheme.
- Social and Environmental Assessment (SEA) for the Nyamwamba Small Hydropower Project, Uganda.
- Feasibility Study for 'Proposed Kurunegala-Habarana Railroad Project'
- EIA Studies for : Proposed MahagonaWewa Irrigation Project,Kolonna Water Supply Scheme(2012), Morana Reservoir Project in Badulla District (2012), KalugalOya Reservoir Project in Ampara District (2012).
- IEE studies carried out under the ADB funded Conflict Affected Region Emergency (CARE) Project.
- Construction Project of Ministry of Defence & Three Forces Head Quarters at Akuregoda

We at Chemical and Environmental Laboratory Services are well equipped and geared to cater for the environmental verification needs of the country in its current infrastructure development movement. We strive to excel in providing proper verification and assurance to support environmental compliance thereby ensuring a healthy environment for a better tomorrow.

Head Office

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CECB Laboratory Services

Chemical & Environmental Laboratory



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Chemical & Environmental Testing

About Us.....

CECB Laboratory, located in Jawatta, Colombo 05, is a major sub unit of CECB, an institution under the Ministry of Irrigation & Water Resources Management. The Chemical & Environmental Laboratory Services established under CECB Laboratory undertakes a range of sample testing for diverse projects, both local and foreign. Environmental chemists operate state-of-the-art analytical instrumentation, testing to government, regulatory, and industry standards. Our core values include:

Scientific Integrity
Workplace Diversity
Intellectual Honesty
Courtesy



Soil Chemical Tests



Sulphate Content W/A - BS1377:part-3 1990
Chloride Content W/A - BS1377:part-3 1990
Mass Loss on Ignition - BS1377:part-3 1990
Organic Matter Content - BS1377:part-3 1990
pH - BS1377:part-3 1990
Carbonate Content - BS1377:part-3 1990



Aggregate Chemical Tests

Sulphate Content W/A - BS 812:part-118
Chloride Content W/A - BS 812:part-117
Soundness of Aggregate - BS 812:part-121 / ASTM C 88
Potential Alkali - Silica Reactivity of Aggregate - ASTM C 829
Organic Impurities in Fine Aggregate - ASTM C 40
Insoluble Residue in Carbonate Aggregate - ASTM D 3042
Acid Soluble Material in Fine Aggregate - BS 812:part-118
Light Weight Particles in Aggregate - ASTM C 123





Water Quality



Sulfate Ion Content - ASTM D 516, APHA-4500-E
Chloride Content - ASTM D 512-04
pH - ASTM D 1293
Carbonate Content - USGS Method
Bicarbonate Content - USGS Method
Acidity or Alkalinity - ASTM D 1076,APHA 2310
Total Dissolved Solids - APHA-2540-C
Electrical Conductivity - APHA-2510-B
Chemical Oxygen Demand - USPA 410.1, APHA-5220-B



Biochemical Oxygen Demand - APHA-2510-B
Total Hardness - APHA-2340-C USEPA 130.2
Total Oil & Grease - USEPA 413.1
Total Phosphate - ASTM 4500-P
Nitrate & Nitrite - ASTM 4500-NO_3 B
Color - APHA 2120 C



Air Quality

Particulate Matter PM10 - ASTM D 4096-91 (2009)
Particulate Matter PM2.5 - ASTM D 4096-91 (2009)
Ozone Content - ASTM D 5156-02 (2008)
Carbon Monoxide Content - ASTM D 3162-12 (2012)
Sulfur Dioxide Content (SO_x) - ASTM D 2914-01 (2007)
Nitrogen Dioxide Content (NO_x) - ASTM D 1607-91 (2011)
ASTM D 3608-95 (2011)



Including.....
Atmospheric Temperature,
Atmospheric Pressure, Humidity, Wind Speed,
Wind Direction

Noise & Vibration

Noise Measuring Method - ISO 1996(part1,part2) & BS 4142:1997
Vibration Measuring Method - ISO 4866:1990







Cement



Loss on Ignition - SLS 107 :part2 :2008
Insoluble Residue - SLS 107 :part2 :2008
Silicon Dioxide Content (SiO_2) - SLS 107 :part2 :2008
Aluminum Oxide Content (Al_2O_3) - SLS 107 : part2 : 2008
Iron Oxide Content(Fe_2O_3) - SLS 107 :part2 :2008
Calcium Oxide Content(CaO) - SLS 107 :part2 :2008
Magnesium Oxide Content(MgO) - SLS 107 :part2 :2008
Chloride Content (Cl^-) - SLS 107 :part2 :2008
Sulphate Content (SO_4^{2-}) - SLS 107 :part2 :2008



Concrete



Sulphate Content - BS 1881:Part 124:1988
Silicon Dioxide Content (SiO_2) - BS 1881:Part 124:1988
Calcium Oxide Content (CaO) - BS 1881:Part 124:1988
Magnesium Oxide Content (MgO) - BS 1881:Part 124:1988
pH - BS 1881:Part 124:1988

Flyash



Moisture Content - BS 3892-Part 1,BS EN 196-2:1995
Loss on Ignition - BS 3892-Part 1,BS EN 196-2:1995
Insoluble Residue - BS 3892-Part 1,BS EN 196-2:1995
Silicon Dioxide Content - BS 3892-Part 1,BS EN 196-2:1995
Aluminum Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Iron Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Calcium Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Magnesium Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Sulphur Trioxide - BS 3892-Part 1,BS EN 196-2:1995
Sodium Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Potassium Oxide Content - BS 3892-Part 1,BS EN 196-2:1995
Available Alkali - BS 3892-Part 1,BS EN 196-2:1995





