



1-Day Experiential Workshop

Material Recycling for Sustainable Construction

Introduction

Under the Sustainable Singapore Blueprint which was launched in April 2009, the government seeks to optimise the use of natural resources and reduce dependence on natural building materials to build resilience in the supply of construction materials. BCA advocates Sustainable Construction, through the adoption of resource-efficient building designs and the use of recycled waste materials, as an important component of sustainable development.

Enhancement to the material recycling supply chain has been made by introducing the SS EN 12620 to enable the use of recycled aggregates to replace natural aggregates, the Concrete Usage Index (CUI) to benchmark and encourage more efficient concrete usage and an accreditation scheme for concrete suppliers to provide concrete using recycled aggregates.

On the demand side, BCA will soon require projects targeting at Green Mark Gold^{Plus} and Platinum to be designed for resource-efficiency and to achieve a minimum score for Sustainable Construction under its assessment criteria (to be unveiled in 2nd half of 2010). Developers would have another good reason to consider the use of recycled materials.

Objective

This 1-day experiential workshop complements our 2-day theory workshop and is designed as a tour of facilities that support the material recycling supply chain, and of buildings that have been built with recycled materials. Engineers, architects and builders can derive value and knowledge from the workshop by familiarising themselves with the production and quality management of sustainable materials, so that they will be better informed when choosing to adopt recycled materials for construction.

Workshop Outline

THE SUPPLY CHAIN

- **RCA Recycling Plant**
 - Proper Quality Control
 - Procedures to ensure the aggregates produced meet new SS EN 12620 standard
- **Copper Slag Plant**
 - Proper Quality Control
 - Procedures to ensure the copper slag meet requirements for concrete application

THE BUILT PRODUCTS

- **Eco-Green Building**
 - Applications of RCA concrete
 - Proper design and technical consideration in building project implementation
 - Demonstration of RCA concrete comparability to conventional concrete
 - Long-term monitoring of RCA concrete performance especially in application over and above code limits
- **Tour of Eco-Green Park**
 - Concept of one-stop centre for recycled materials
 - Special features of each facility in the Park eg. RMC plant as reclaimer and for production of eco-concrete

Details

Date: 1 September 2010

Time: 9am to 5pm
(Registration starts at 8.30am)

Venue: Site visits including
Samwoh Corp's Eco-green Park
(Itinerary to be confirmed; assemble and disperse at BCA Academy)

Fee: S\$149.80* (with 50% subsidy)
S\$299.60 (without subsidy)
Inclusive of GST

Complimentary lunch is provided.

Participants who are interested in this workshop should also consider the complementary 2-day theory workshop to be conducted on 17-18 August 2010.

- * The following terms and conditions apply:
- Only Singaporeans and Permanent Residents are eligible
 - Must be supported by Employer
 - Achieve at least 75% course attendance

Accreditation

PEB - *Pending*
BOA-SIA - *Pending*

BCA ACADEMY
200 Braddell Road Singapore 579700
Tel: 6248 9999 Fax: 6258 0558
www.bcaa.edu.sg

The following professionals have been invited to conduct the various sessions:

• FACILITATOR

Mr Low Giau Leong has worked in various research projects, including purpose-made cements and concrete, waste water reclamation and wood waste recycling, for the past 11 years. He was involved in the research effort for the Samwoh Eco-green building and in secretariat work for the BCA-WMRAS Recycling WorkGroup. He is co-owner of a patented concrete reclaimer for use in ready mix concrete batching and has presented papers at conferences and published technical papers.

• LECTURE AT ECO-GREEN PARK

Dr Ho Nyok Yong is the Technical Director of Samwoh Corporation, a leading integrated construction and sustainable recycling company. He holds a PhD in Civil Engineering and is a registered professional engineer and is active in R&D for waste material utilization and sustainable construction. He has authored over 50 technical papers on these fields and speaks regularly at conferences and seminars. He was an ex-president of SCI and is currently the 1st Vice President of SCAL. He has also received a number of awards for his contribution.

Event Code: 77032

REGISTRATION FORM - Material Recycling for Sustainable Construction

Date: 1 September 2010
Time: 9.00am to 5.00pm
Venue: Site visits including Samwoh Corp's Eco-green Park

Fee (Inclusive of GST): S\$149.80* (Applicable to Singaporean & Permanent Residents)
S\$299.60
(Complimentary lunch is provided)

* I am aware that the fee subsidy is conditional on 75% attendance.

Name: NRIC / PP No / Work Permit No:

Nationality: Date of Birth : (dd/mm/yyyy) Gender : * Male / Female

Tel /HP no.: Fax no.: Email address:

Mailing Address:

Yes, I would like to receive course - seminar updates via email _____ PEB BOA-SIA (Please ✓ tick where appropriate)

CONTACT PERSON PARTICULARS

Company Name: Company UEN No.:

Mailing Address:

Name: Dr/Mr/Mrs/Ms: Email:

Designation: Hp no.:

Telephone No.: Fax no.:

PAYMENT

Enclosed is a cheque no. _____ (Cheque should be crossed, marked "account payee only" and payable to 'BCA Academy') for S\$ _____

OR Deduct from GIRO acc. No _____

(should be the same bank account number as indicated in the Direct Debit Authorisation form submitted to BCA)

Company Stamp
(For company application)

.....
Name/Signature (*Company / individual applicant)

Reservation may be made by fax, e-mail, post or by hand. To confirm the reservation, payment will have to be made before the seminar date via cheque, VISA or Nets/cash. No invoice will be issued. Walk-in applicants will only be admitted on the basis of seat availability and full payment. Please inform us in writing of any change in your registration, which is subject to administrative charges as shown below:

- Request for Replacement and/or Withdrawal
- Request for replacement in writing, must reach BCA Academy before the commencement date of the seminar: No administrative charge
- Request for withdrawal in writing, that reaches BCA Academy at least 2 weeks before the seminar date: 90% refund of seminar fee.
- Request for withdrawal in writing, that reaches BCA Academy less than 2 weeks but more than 3 working days before the seminar date: 75% refund of seminar fee.
- Request for withdrawal in writing, that reaches BCA Academy 3 working days or less before the seminar date: No refund of seminar fee.

BCA Academy reserves the right to amend the seminar details or cancel the seminar and fully refund the participants should unforeseen circumstances warrant it.

ENQUIRIES:

For enquiries, please call
6248-9999 / 6248-9843
or email us at bca_academy@bca.gov.sg

For details of other seminars and courses, please visit
our website @ www.bcaa.edu.sg

REGISTRATION:

Seats are limited, registration is on a first-come, first served basis.
Training places will be confirmed upon the payment of the seminar fees before the commencement date.
Please fax the application form to: 6258-0558
Cheques with original application form should mailed to BCA Academy, 200 Braddell Road, Singapore 579700