Project 48/2011 – Feasibility of utilizing sewage sludge incinerator ash for concrete blocks production

<table>
<tr><td>Project Number</td><td>48/2011</td></tr>
<tr><td>Project Title</td><td>Feasibility of utilizing sewage sludge incinerator ash for concrete blocks production</td></tr>
<tr><td>Principal Investigator (PI)</td><td>Prof. C.S. Poon, Department of Civil and Structural Engineering, The Hong Kong Polytechnic University</td></tr>
<tr><td>Project summary</td><td>The project aims to assess, through a comprehensive laboratory and pilot plant study, the feasibility of using sludge incineration ash derived from the future Sludge Treatment Facility in Hong Kong as alternative construction materials such as in concrete blocks.</td></tr>
<tr><td>Research Theme</td><td>Waste Recycling</td></tr>
<tr><td>Project Duration</td><td>36 months</td></tr>
<tr><td>Proposed Budget</td><td>The total budget is $994,000, comprising the following items:
<table>
<tr><th>Item</th><th>Amount requested ($)</th></tr>
<tr><td>Manpower
- 1 Research Assistant II
@ $14,330/month × 36 months
- 1 Research Assistant I
@ $17,760/month × 12 months</td><td>
515,880

213,120</td></tr>
<tr><td>Experimental Expenses
- Materials and consumable and miscellaneous expenses
- Charges of micro-structural analysis</td><td>150,000</td></tr>
<tr><td>Pilot plant production of blocks and laying</td><td>100,000</td></tr>
<tr><td>Conference attendance</td><td>15,000</td></tr>
<tr><td>Total</td><td>994,000</td></tr>
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<tr><td>Assessments/Remarks</td><td>See Appendix.

Members are invited to advise whether the application for ECF should be supported and if supported, the exact amount of fund to be granted.</td></tr>
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Secretariat, ECF Research Projects Vetting Subcommittee
September 2012