

**Technical Visit to Lafarge Concrete Plant, Petaling Jaya**

by Ms. Wong Ai Ming

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The Civil and Structural Engineering Technical Division (CSETD) organized a technical visit to Lafarge Concrete Plant, located at Jalan Kilang, Petaling Jaya, on 20th May 2017. The visit has attracted 16 participants including a number of non IEM members, industry practitioners, academicians and Consultants.

Registration at Lafarge Concrete Plant started at 9.30am. The visit started at 10.00am, with a welcoming address by the General Manager of Lafarge Concrete, Mr Lim Chin Wooi. The classroom briefing started by the Plant Manager, Mr Chan, giving a safety briefing before he gave a presentation on the plant. Firstly he showed the Plant Layout of raw materials stockpile storage area, the batching plant, control room, QC lab and heavy vehicles movement area. The ready-mixed plant is certified to MS ISO 9001:2000. The rated production capacity is 200m³/hr.

Some of the health and safety features adopted are as follows;

1. Interlocking key system for cement pumping. This is to make sure the right cement is pumped to the right silo, ie the tanker driver needs to unlock the silo intake pipes, by first retrieving the key from the batching room. The batcher turn the intended key to "on" position in order to release the key for the driver to unlock the corresponding cement intake pipe.
2. The reduction of dust emission from cement silos by installing Silo Venting Filter and Pressure Relief Valve on the top of the silo.
3. Installation of Water Management System to process water generated from batching plant to flow into the recycling ponds for filtration which is later reused for production.
4. Residual material disposal by letting the inert material left to dry, then transported to quarry site to be used for soil stabilization. 5. Spillage prevention of admixtures and diesel by construction of Bund Wall. On the safety features of a mixer truck, the safety features include beacon lights, seat belts for both driver and passenger, emergency kit and fire extinguisher. In order to mitigate concrete spillage on the road, steps taken include all loads cannot exceed 85% of a drum capacity, installation of spillage bucket and installation of Global Positioning System (GPS). The pending implementation of CIS 21 by CIDB in ready-mix plants is also briefly discussed.

For the plant tour, the visitors were divided into 2 groups. It is mandatory that each visitor wears the four personal protective equipment, ie safety helmet, safety goggles, safety vest and safety shoes.

The tour route includes:-

1. A visit to the Control Room, where the monitors can show real time batching;
2. The QC area with the equipment for testing of sand and aggregates, the trial mix area and the cube strength testing area.
3. Cement pumping area to view the interlocking key system.
4. The stockpile storage area.
5. A platform to view the wet mix pan mixer before the concrete is batched into the tankers below the platform.

After the plant tour, there was a Q&A session where the participants could further clarify any questions. In closing, the Chairman of CSETD, Dr Ng Soon Ching presented a momento of appreciation to the General Manager of Lafarge Concrete Plant, Mr Lim Chin Wooi.

Before we dismissed, a buffet lunch was served to the participants. It was a good visit and the participants enjoyed the hospitality from Lafarge.