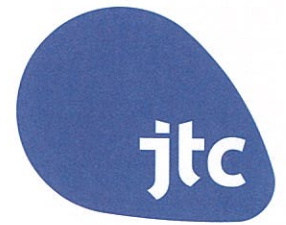


JTC(L)6519/868



Breaking New Ground

24 January 2017

The Director
Green Mark Department (New Development)
Building and Construction Authority
52 Jurong Gateway Road
#12-01
Singapore 608550

JTC Corporation

The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

JTC hotline 1800 568 7000
main line (65) 6560 0056
facsimile (65) 6565 5301
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Dear Sir/ Madam,

GREEN BUILDING OBLIGATIONS OF JTC CHEMICALS HUB @ TUAS SOUTH

JTC is committed to include the appended Green Building Obligations in the tenancy agreements for the Chemicals Hub.

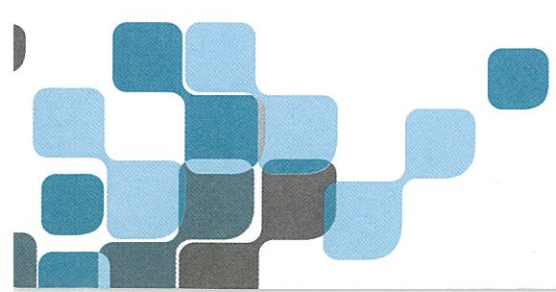
Yours faithfully,

Terence Ng

Deputy Director

JTC Corporation

Enclosed: JTC Chemicals Hub Green Building Obligations



1 Green Building Obligations

1.1 You must co-operate with us to ensure that the Green Mark Certification (i.e. *Green Mark Platinum* issued (or to be issued) by the Building and Construction Authority for the Building ("**Green Mark Certification**") is not affected or hindered in any way by your action or inaction. This includes ensuring that all of the following (collectively, the "**Green Building Obligations**") are complied with at your own cost and expense:

- (a) All water fittings used within the Premises shall be labeled 3-ticks under the mandatory Water Efficiency Labelling Scheme issued by the Public Utilities Board.
- (b) Only low volatile organic compounds ("VOC") paints certified under the Singapore Green Label Scheme ("SGLS") by the Singapore Environment Council, or an equivalent local certification body, are used within the Premises.
- (c) Only environmental friendly adhesives certified under the SGLS by the Singapore Environment Council, or an equivalent body, are used within the Premises.
- (d) Energy Efficiency

I. Air Distribution Systems (For Air Handling Units (AHUs) and Fan Coil Units (FCU))

- (d1) The design for air distribution systems efficiency (with reference to Fan System Input Power) shall have be above regulatory baseline efficiency requirements stated in SS553: 2009.
- (d2) The overall efficiency of the air distribution system (with reference to Fan System Input Power) for the Premises shall not exceed the following minimum efficiency requirements:
 - (d2.1) 0.35 W/CMH for air handling unit ("AHU") with fan motor greater or equal than 4kW (Variable Volume type);
 - (d2.2) 0.25 W/CMH for air handling units ("AHU") / Fan Coil Units (FCU) with fan motor greater or equal to 4kW (Constant Volume type)
 - (d2.3) 0.15 W/CMH for fan systems with nameplate motor less than 4 kW.

II. Air Distribution System (For Mechanical Ventilation)

(d3) The overall efficiency of the air distribution system (with reference to Fan System Input Power) for the Premises shall not exceed the following minimum efficiency requirements:

(d3.1) 0.25 W/CMH for fan motor greater or equal than 4kW (Constant Volume type);

(d3.2) 0.14 W/CMH for fan systems with nameplate motor less than 4 kW

III. Artificial Lighting

(d4) The design for the lighting system shall have an improvement of at least 40% above the regulatory lighting efficiency baseline requirements stated in SS530-2006.

(d5) As a result of the 40% improvement, the lighting power budget for the different occupied spaces shall not exceed the following:

Nos	Space Usage	Spaces as defined in URA planning submission (WP)	Lighting Power Density (W/m ²)
1	Office	Block 2: FCC/BMS room, management office	7
2	Light Industry	Block 2: Factory	7
3	Heavy Industry	Block 1: Factory	9
4	Storage/ Warehouse	Block 1: Warehouse	6
5	Canteen	Block 2: level 3- industrial canteen	10

(e) Daylighting Control

Day lighting control for perimeter lighting with on-off switches and/or dimmable ballast shall be adopted within all parts of the Premises.

(f) Energy Monitoring

(f1) Each unit within the Premises is provided with sub-meter that shall be linked to our Building Management System (BMS) for energy consumption monitoring, and that they are grouped to allow for tracking of energy based on the following:

(f1.1) Lighting consumption;

- (f1.2) ACMV consumption;
 - (f1.3) Receptacles consumption;
 - (f1.4) Chilled water thermal energy consumption.
- (g) All recyclable wastes within the Premises shall be segregated from non-recyclable wastes and disposed of in the designated bins provided in the Premises;
- (h) All non-recyclable waste must be disposed of in the prescribed manner as prescribed by us; and
- (i) Such other requirements, or good industry practices, as we may notify you from time to time.

A handwritten signature in black ink, located at the bottom right of the page.