Form EMSD EE CT4

Fresh Water Cooling Towers Scheme
Cooling Tower Installation Details

Date:_____

1. General Details		
1.1	EMSD Cooling Tower Registration No.:	PS -
1.2	Building name:	
1.3	Building address:	
1.4	Number of cooling towers to be installed:	
1.5	Owner's cooling tower ref. no.:	

2. Cooling Tower Design Details
(If the cooling towers installed / to be installed have different details, please provide the information by duplicating this paragraph)

2.1	Make		2.2	Model	
2.3	Physical dimensions (mm)		2.4	Operating weight (kg)	
2.5	Cooling Tower Type:	Direct-contact type / Indirect-contact type / evaporative condenser*			
2.6	Draft type:	Induced-draft/ Forced-draft*	2.7	Air flow type	Counter flow/ Cross flow *
2.8	Fan input power	kW	2.9	Sound Power level of fan	dB(A)
2.10	Cooling water circulation rate	L/s	2.11	Air flow rate	L/s
2.12	Average bleed-off water rate	L/s	2.13	Average make-up water rate	L/s
2.14	Average drift rate	L/s	2.15	Average evaporation rate	L/s
2.16	Fan type	Centrifugal fans / Propeller or axial *	2.17	Water flow per unit tower fan motor nameplate power	L/s/kW
2.18	Adoption of Intelligent Control System *(refer to Clause 2.3.11 of COP(FWCT) Part 1 2023 edition)*				(Yes/No)*

3. Cooling Tower Installed Location

3.1	Installation location:	*Roof / Podium / Indoor / Other (please specify) _____			
3.2	Shortest separation distances			Horizontal separation	Vertical separation
	(a) Any critical air intake / exhaust# or operable window near cooling tower(s):	Yes / No*	Outdoor air intake	_____ m	_____ m
			Exhaust air outlet	_____ m	_____ m
			Operable window	_____ m	_____ m
	(b) Any public accessible area next to cooling tower(s) exhaust:	Yes / No*	Public accessible area	_____ m	_____ m

Remarks:
 # Critical outdoor air intake refers to fresh air intakes of the building air conditioning systems (e.g. primary air unit, air handling unit, lift vent) or any intake that draws fresh air into the occupied area or vent pipe of water tanks. Critical exhaust air outlet refers to kitchen exhaust, toilet exhaust, car park exhaust, food processing exhaust, laboratory exhaust, outlet of drainage vent pipe, generator flue discharge, or any exhaust that can contaminate the cooling water or pollute the cooling air. (Details refer to CoP(FWCT) Part 1 Section 4)

4. Reuse of bleed-off water for flushing purpose #		
4.1	Estimated peak daily bleed-off volume: (Daily operation hour) ^	m^3 (hours)
4.2	Estimated peak daily demand for flushing ^	m^3
4.3	Break tank retention volume/ Reserved volume in existing flushing tank # ^	m^3
4.4	Bleed-off water to be directly discharged to public sewerage? *(If yes, please update the application progress of discharge licence with supporting documents.)*	Yes / No *
Remarks: *# It is a mandatory requirement to reuse the bleed-off water for flushing purposes. If the bleed-off water is not reused for flushing purpose or there is other discharge arrangement other than reusing for flushing, please specify the discharge arrangement and state the reason(s) in a separate sheet. ^ Please provide calculations.*		

5. Water Treatment					
5.1	Chemical Treatment	Type 1	Type 2	Type 3	
	Chemical / Trade name:				
	Dosing method	Automatic / Manual *	Automatic / Manual *	Automatic / Manual *	
5.2	Physical Treatment	Type 1	Type 2	Type 3	
	Treatment method				
	Equipment model				
5.3	Adoption of Integrated Control and Monitoring System (*refer to Clause 5.3 of COP(FWCT) Part 3 2023 edition)*				(Yes/No)*

6. Information to be submitted with this application form (Please put a "✓" in appropriate box.)	
6.1	□ Site plan of the premises / building(s) showing the following information: □ nearest noise sensitive receiver(s) □ location of the cooling tower installation □ cooling tower separation distance from the nearest adjacent building
6.2	□ Drawing(s), including plan(s) and section(s), to legibly show the following information: □ cooling tower installation(s) □ critical operable window, outdoor air intake and exhaust air outlet and their separation distances from cooling tower(s)
6.3	□ Piping schematic diagram# to legibly show the following information: □ Water treatment arrangement □ Arrangement for the re-use of bleed-off water □ Cooling water sampling point(s) □ Bleed-off water sampling point *# Please refer to Appendix 1A of CoP(FWCT) Part 1 for typical schematic diagram.*
6.4	□ Technical information of cooling tower(s) and drift test report
6.5	□ Programmes of routine chemical treatment, inspection of cooling tower(s) and cleaning, desludging and disinfection of cooling tower(s)
6.6	□ Other supporting documents □ Material Safety Datasheet of proposed chemical □ Technical information of proposed physical water treatment (if applicable) □ Plume abatement report endorsed by the owners of cooling towers (if applicable) □ Risk management plan (if applicable) □ Supporting documents for the application of direct discharge licence from EPD (if applicable)

Prevention of Bribery

Any attempt to offer advantage (as defined in the Prevention of Bribery Ordinance ("POBO") (Chapter 201 of the Laws of Hong Kong)) to any Government officer with a view to influencing the outcome of this application constitutes an offence under the POBO and renders the application invalid. The case will be reported to the Independent Commission against Corruption. You should report to the ICAC (Telephone No.: 2526-6366) if any government officers or their agents solicits an advantage from you in relation to this application.