

Schedule of the Regulation when conducting notifiable and regulatory works, and further implement dust control and suppression measures.

### Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

2.1.4 This Regulation comes into force on June 2015 and mandates that all Non-road Mobile Machinery (“NRMM”), unless they are exempted, shall meet the prescribed emission standards. All regulated machines sold or leased for use in Hong Kong that are approved or exempted must bear a proper label in a prescribed format issued by EPD.

### Asbestos Containing Materials (“ACMs”)

2.1.5 APCO regulates a series of activities involving ACMs. The owner of premises where ACMs are found or reasonably suspected of being shall engage a Registered Asbestos Consultant (“RAC”) to provide an Asbestos Investigation Report (“AIR”) before the building is demolished. In the case that any ACM is found, an Asbestos Management Plan (“AMP”) including an Operation and Maintenance Plan (“O&MP”) for ACM not requiring asbestos removal works; and an Asbestos Abatement Plan (“AAP”) for any asbestos abatement work or work which involves the use or handling of any ACM, shall be prepared, signed by the RAC and then submitted to EPD for approval. The owner shall notice EPD in writing no less than 28 days before date on which any asbestos abatement work is to be commenced in accordance with Section 73 of the APCO.

2.1.6 As stipulated in APCO, a Registered Asbestos Contractor shall be engaged in removal of ACMs in accordance with the approved AAP as the supervisor. Under Section 74(3) of the APCO, a RAC so appointed shall supervise the asbestos abatement work and notify the Authority of any modification of the content of the AMP or an AAP before implementing the modification. After the asbestos abatement work is done, the RAC shall prepare a summary report and submit to EPD for record and then demolition work can commence.

### Hong Kong Planning Standards and Guidelines (“HKPSG”)

2.1.7 Chapter 9 Environment in HKPSG also recommends buffer distances for roads as summarised in **Table 2-2**.

Table 2-2 HKPSG Recommended Buffer Distances for Roads

POLLUTION SOURCE	TYPE OF ROAD	BUFFER DISTANCE	PERMITTED USES
Road and Highways	Trunk Road and Primary Distributor	>20m	Active and passive recreational use
		3 – 20m	Passive recreational use
		<3m	Amenity areas
	District Distributor	>10m	Active and passive recreational use
		<10m	Passive recreational uses
	Local Distributor	>5m	Active and passive recreational use
		<5m	Passive recreational use
Under Flyovers	-	Passive recreational use	

Source: Table 3.1 of Chapter 9 Environment of HKPSG

mitigation measures, adverse air quality impact due to emission from construction plant is not expected.

- 2.3.6 As discussed in **paragraphs 5.2.16** and **5.2.29**, approx. 43.5 tonnes/day of construction waste (including 42.5 tonnes/day C&D materials and 1 tonne/day C&D waste) will be generated. Assuming the capacity of each dump truck is 15 tonnes, about 3 trips/day would be required to handle the generated waste. All loaded dump trucks shall be covered by impervious sheeting and the vehicle wheels shall be washed thoroughly before leaving the Site. Therefore, adverse air quality impact from dump trucks is not expected.
- 2.3.7 Regarding potential cumulative impact, desktop study and site visit has been conducted to ascertain the presence of any concurrent projects in the vicinity of the Site. Construction works are undergoing at Hopewell Centre II (i.e. ASR6). According to our site visit on 25 April 2024, major construction works for Hopewell Centre II were completed. As advised by the Applicant, the remaining works for Hopewell Centre II mainly include interior works, which is expected to be completed in 2024. In view of the works programme for the Proposed Development, no overlapping is anticipated with construction works of Hopewell Centre II. Hence, no adverse cumulative constructional air quality impact is expected.
- 2.3.8 Besides, according to TPB Portal, there is a planned residential development at 31-36 Sau Wa Fong, which may be the concurrent project in the vicinity of the Site. At the moment, there is no detail or solid timetable about this planned residential development. If the aforementioned project will be constructed concurrently with the Proposed Development, the Applicant of the Proposed Development will be responsible for the liaison with the responsible personnel of other projects to avoid adverse cumulative air quality impact. Moreover, mitigation measures including good site practice in accordance with the *Air Pollution Control (Construction Dust) Regulation* would be implemented for both the Proposed Development and the aforementioned project to further minimise dust and air pollutant generation. Hence, no adverse cumulative constructional air quality impact is expected.
- 2.3.9 A five-storey building at No. 18 Sau Wa Fong will be demolished as planned. Given the age of the building, ACM may be found inside the building. The owner of the premises should appoint a RAC to conduct an asbestos study including AIR, AMP and AAP before and throughout demolition process to conform to the APCO. The AIR and AAP, if any, will be submitted to EPD at appropriate time required. After that, the owner of the premises shall notify EPD the commencement of asbestos abatement works. Also, the owner of the premises should appoint a registered asbestos contractor to carry out the asbestos abatement works for the use or handling of any ACMs in the premises. If any sampling, measurement or analysis is required, the owner of the premises should appoint a Registered Asbestos Laboratory to carry out the the sampling, measurement or analysis in accordance with Section 76 of APCO.
- 2.3.10 In addition, to minimise the air emission during the demolition works, two layers of protective screen shall be placed over the scaffolds for the building. The area at which demolition work takes place shall be sprayed with water immediately prior to, during and immediately after the demolition activities so as to maintain the entire surface wet. With the implementation of recommend mitigation measures, no adverse air quality impact from the demolition works is anticipated.

2.3.11 In general, EPD publishes the *Code of Practice on Asbestos Control and Practice Note* (“ProPECC PN 2/97”), which stipulates the following precautionary measures that should be taken during the removal of ACMs:

- Adoption of protection, such as a full containment, mini containment, or segregation of work area.
- Provision of decontamination facilities for cleaning of workers, equipment and bagged waste before leaving the work area.
- Adoption of engineering control techniques to prevent fibre release from work area, such as use of negative pressure equipment with High Efficiency Particulate Air (“HEPA”) filters to control air flow between work area and the outside environment.
- Watering of ACMs before and during disturbance, minimising the breakage and dropping of ACMs, and packing of debris and waste immediately after it is produced.
- Provision of HEPA-filtered vacuum cleaner and wet wiping for cleaning the work area.
- Provision of sealants for coating any surfaces previously in contact with or contaminated by asbestos.
- Proper bagging, safe storage and disposal of asbestos and asbestos-contaminated wastes.
- Pre-treatment of all effluent from work area before discharge.
- Air monitoring strategy to check for leakage and clearance of the work area after the asbestos work.

2.3.12 By making out an asbestos abatement plan and taking recommended precautionary measures, it’s not expected to be adverse impact related to the removal of ACMs. Further details on disposal of asbestos waste is discussed in **Section 5** of this EA Report.

## 2.4 Air Quality Impact during Operation Phase

### Chimney Emission

2.4.1 A site visit was conducted on 25 April 2024 to identify air pollution sources in the vicinity of the Site. No chimney was found within 200m from the Site during the site visit. The buffer distance between industrial chimneys and air sensitive uses of the Proposed Development recommended in Table 3.1 of Chapter 9 in HKPSG is fulfilled in this case. Therefore, no adverse air quality impact from chimney emission is expected.

### Vehicular Emission from Open Road

2.4.2 Queen’s Road East, Kennedy Road and St. Francis Street are three major roads in vicinity of the Site as shown in **Figure 2-3**. With reference to the *Annual Traffic Census 2022* published by the Transport Department (“TD”), both Queen’s Road East and Kennedy Road are classified as District Distributors (“DD”). Table 3.1, Chapter 9 of HKPSG recommends a minimum buffer distance of 10m between DD and air sensitive uses, which has been adopted for Queen’s Road East and Kennedy Road.

2.4.3 St. Francis Street is not listed in the *Annual Traffic Census 2022*. It is a cul-de-sac leading from St. Francis’ Canossian School to Queen’s East Road, which may be classified as Local

## Construction Phase

- 4.2.2 Muddy runoff from the Site may be generated during the construction phase, including filling activities, especially during the rainy season.
- 4.2.3 Wash water from vehicles and equipment; silt from any on-site stockpiles of soil, cement and grouting materials; and spillage of fuels, oil and lubricants from construction vehicles and plant are all potential sources of water quality impacts. Without proper mitigation measures in force, these sources could lead to increased amounts of suspended solids, grease and oil, pH, Biochemical Oxygen Demand (“BOD”), etc. in the drainage system.
- 4.2.4 Sewage generated by construction workers may also cause water quality impacts.
- 4.2.5 Most of the WSRs identified within the 500m study area are located at an elevation higher than that of the Indicative Development Scheme. Moreover, no construction works will be carried out on the streams near the Site. Therefore, the identified WSRs would not be affected by the Project. With implementation of the recommended mitigation measures and good practices listed in **Section 4.3**, adverse water quality impacts from the Indicative Development Scheme on the WSRs are not anticipated.

## Operation Phase

- 4.2.6 Majority of the sewage/wastewater generated during operation phase would be sewage and grey water from toilets, showers, sinks and kitchens from the residential and commercial use of the Indicative Development Scheme. Sewage and wastewater generated from the Indicative Development Scheme will be discharged into the public sewer. A separate Sewerage Impact Assessment (“SIA”) prepared by the Project Sewerage Consultant concludes that there will be no adverse sewerage impact on the municipal sewerage system arising from the Indicative Development Scheme. Hence, no adverse water quality impact resulting from the operation of the Indicative Development Scheme is anticipated.
- 4.2.7 Runoff during rainstorms could wash sources of non-point/diffuse source pollution, including dust, tyre, scraps oil etc. into nearby watercourses. In order to minimise this pollution loading, silt/sand traps should be provided for the drainage systems and should be regularly cleaned and maintained.
- 4.2.8 As mentioned in **paragraph 4.2.5**, most of the identified WSRs are located at a higher elevation than the Indicative Development Scheme. With implementation of the recommended mitigation measures and good site practices as listed in **Section 4.3**, adverse water quality impacts on the WSRs from the operation of the Indicative Development Scheme are not anticipated.
- 4.2.9 With the provision of the aforementioned mitigation measures, no adverse water quality impacts during operation phase are anticipated.

## 4.4 Conclusion

- 4.4.1 During construction phase, portable toilets will be supplied for construction workers. With the implementation of the mitigation measures and good site practices mentioned in **paragraph 4.3.2**, adverse water quality impacts from in construction phase are not anticipated.
- 4.4.2 The Contractor shall apply for a Discharge Licence under the WPCO. All site discharges shall be treated in accordance with the terms and conditions of the Discharge Licence. Also, when handling the discharge from the Site, guidelines in ProPECC PN 2/23 should be also followed to minimize the water quality impact arising from the construction activities.
- 4.4.3 During operation phase, sewage and wastewater generated from toilets, showers and kitchens will be collected and discharged into the public sewerage system. The separate SIA Report prepared by the Project Sewerage Consultant has concluded that there will be no adverse sewerage impact on the municipal sewerage system arising from the Site.
- 4.4.4 Moreover, with the provision and maintenance of silt/sand traps in the drainage system, no adverse water quality due to runoff is expected.
- 4.4.5 Therefore, no adverse water quality impact is anticipated during construction and operation phases of the Indicative Development Scheme.

5.2.36 Given the above, with the implementation of mitigation measures mentioned above and listed in **Section 5.3**, no adverse waste impact from the handling, transportation or disposal of general refuse from workforce during construction of the Indicative Development Scheme is anticipated.

### Chemical Waste

5.2.37 The existing building at No. 18 Sau Wa Fong was built in 1960s. ACM will likely be present in this building. The details of handling the ACM in accordance with APCO have been discussed in Paragraphs **2.3.9** to **2.3.12**. After the demolition works, the asbestos waste labelling, handling and packaging depends on the type of ACMs. The EPD’s *Code of Practice on the Handling, Transportation and Disposal of Asbestos Waste* shall be followed for handling, collection and transportation and disposal of asbestos waste. The quantity of the asbestos to be generated depends on the investigation and asbestos abatement plan carried out by RAC.

5.2.38 Other than asbestos, other chemical waste produced during construction of the Indicative Development Scheme include waste batteries, lubricating oil, waste paints and waste lamp may be generated. However, given the small scale of the works, only a limited amount which is expected to be less than 1 tonne of these chemical wastes may be generated.

5.2.39 The Contractor shall register as a Chemical Waste Producer under the WDO. All chemical waste shall be stored at a properly designed chemical waste storage area located within the construction site in accordance with EPD’s *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*. A licensed collector shall be employed to handle and dispose of all chemical wastes, e.g. at the Chemical Waste Treatment Centre (“CWTC”) at Tsing Yi, or other facility approved by EPD.

5.2.40 Given the above, with the implementation of mitigation measures mentioned above and listed in **Section 5.3**, no adverse waste impact from the handling, transportation or disposal of general refuse from workforce during construction of the Indicative Development Scheme is anticipated.

### Summary

5.2.41 The type of waste and their estimated quantities generated during the construction phase are summarised in **Table 5-3**.

**Table 5-3 Estimation of Wastes to be Generated During Construction Phase**

WASTE TYPE	ESTIMATED QUANTITY (TONNES)	SOURCES OF WASTE	TREATMENT
<b>INERT C&amp;D MATERIAL</b>			
Demolition waste	137	Demolition	On-site reuse/recycle Off-site reuse/recycle Sent to public fill reception facilities
Paving	1,206	Removal of paving	
Excavated material	11,307	Excavation	
Building Waste	11,959	Superstructure Construction	
<b>NON-INERT C&amp;D MATERIAL</b>			
Topsoil	251	Site clearance and formation	On-site sorting for reuse/recycle

WASTE TYPE	ESTIMATED QUANTITY (TONNES)	SOURCES OF WASTE	TREATMENT
Building Waste	361	Superstructure Construction	Disposal of at landfill
<b>ASBESTOS WASTE</b>			
Asbestos Waste	Depends on the findings of the AIR	Asbestos abatement work	Supervision of asbestos waste handling, packaging and disposal by RAC Disposal by licensed asbestos waste collector
<b>OTHERS</b>			
General Refuse	27	Construction staff	On-site sorting for reuse/recycle Disposal of at landfill
Chemical Waste	<1	Waste batteries, lubricating oil and waste paints, etc.	All to be collected by the licensed chemical waste collector and treated in the CWTC.

## Operation Phase

- 5.2.42 During operation phase, municipal solid waste will be the major type of waste being generated, this includes domestic waste from residents and commercial waste from commercial outlets. According to Waste Statistics for 2022, the most recent domestic waste disposal rate and commercial waste disposal rate are 0.93 kg/person/day and 0.59 kg/person/day respectively.
- 5.2.43 According to the Applicant, the number of units in the Indicative Development Scheme is 312. With reference to the 2021 Population By-census for Tertiary Planning Unit 131, the average domestic household size is assumed to be 2.1 persons/unit, which means that the total residential population of the Indicative Development Scheme will be approx. 655 persons. As a result, the total domestic waste to be generated every year is estimated to be approx. 222,340 kg or 222 tonnes (i.e. 655 persons x 0.93 kg/person/day x 365 days/year).
- 5.2.44 The total non-domestic GFA in the Indicative Development Scheme is about 1,064.6m<sup>2</sup>. With reference to Table 2 in Chapter 5 of HKPSG, the density of workers in business use is 20m<sup>2</sup> to 25m<sup>2</sup>/worker. Assuming a worker density of 20m<sup>2</sup>/worker, the number of workers is estimated to be 54. As a result, the total commercial waste generated every year is estimated to be 11,629 kg, or 11.6 tonnes (i.e. 54 workers x 0.59 kg/person/day x 365 days/year).
- 5.2.45 With reference to Plate 3.2 of Waste Statistics for 2022, the recovery rate of domestic waste and commercial waste is 20% and 45% respectively. Therefore, it is estimated that 20% of domestic waste (i.e. 44.4 tonnes/year) and 45% of commercial waste (i.e. 5.2 tonne/year) could be reused and recycled.
- 5.2.46 The remaining municipal solid waste of 184 tonnes/year (i.e. 177.6 tonnes/year domestic waste plus 6.4 tonnes/year commercial waste) would be disposed of at a landfill managed by EPD.