

Control of Environmental Nuisance from Construction Sites

Construction sites if not properly managed may become the source of serious environmental nuisance and related pollution affecting not only the workers on site but also adjoining occupants and the general public. Authorized persons and registered structural engineers are therefore strongly urged to take appropriate steps to minimize the impact of construction activities on the surrounding environment.

- 2. Appendix A is a checklist to assist in identifying possible nuisance and providing effective remedies. Further guidance if required, may be sought from the relevant Government departments listed.
3. A similar practice note has been issued to registered contractors.

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**Checklist and Practical Advice for the Control of
Environmental Nuisance from Construction Sites**

Common Environmental Nuisance	Practical Advice to Minimize/Prevent Nuisance (where appropriate)	Legislative Sanctions (where applicable)	Responsible Government Department(s) and Point of Contact
Noise			
(1) Excessive noise from use of powered mechanical equipment.	1. Planning - use quiet alternative construction method where possible (e.g. non-percussive piling vs percussive piling).	A permit is required for carrying out percussive piling operation. Use of powered mechanical equipment (between 7 p.m. and 7 a.m. on a weekday or all day on Sundays and Public Holidays) or the carrying out of prescribed construction work (per item (2) of column one) in designated areas (predominantly built-up areas) also requires a permit.	Environmental Protection Department (EPD) Pollution Complaints Hotlines at Local Control Offices
(2) Excessive noise from erection or dismantling of formwork or scaffolding, rubble disposal, steel bars handling and hammering works.	- use quiet powered mechanical equipment. 2. Adopt noise abatement measures - provide baffle/noise screens to noisy machines as necessary. - provide sound absorptive linings to the interior of engine compartments. 3. Improve operating / maintenance procedures. - locate noise source away from sensitive user. - operate machine only when necessary. - maintain machine properly (fasten loose panels, replace defective silencers). - reduce impact noise by careful handling. 4. Time scheduling minimize noise disturbance by careful scheduling of noisy activities to less sensitive hours. 5. Education - educate and encourage all workers and foremen to be more noise conscientious.	Carrying out the above work without valid construction noise permits or not adhering to permit conditions is actionable under the Noise Control Ordinance. Maximum fine is \$100,000 upon conviction, \$200,000 upon subsequent conviction.	

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Air			
(3) Black smoke/fume from construction equipment such as diesel hammer.	1. Planning - use properly maintained or less air-polluting equipment.	Emission of excessive smoke/dust from any plant in a construction site is actionable under the Air Pollution Control Ordinance. Maximum fine is \$500,000 and imprisonment for 12 months upon conviction.	EPD, Local Control Offices, Air Control Section
(4) Dust nuisance from demolition, operation of vehicles, material handling, conveyor system and concrete batching.	2. Material storage & conveying - cover dust generating material. - provide water sprays to dampen dust generating material during transportation/storage.	Carrying out the following construction work without notifying the Environmental Protection Department beforehand is actionable under the Air Pollution Control (Construction Dust) Regulation :	EPD, Local Control Offices, Air Control Section
(5) Dust, odour and smoke nuisance from open burning of refuse in construction site.	3. Main Haul Road - provide hard paving on main haul road. - spray main haul road with water. 4. Vehicles - cover material properly during transportation. - control vehicle speeds on site. - wash vehicle wheels before leaving site. 5. Fugitive dust from site - water site area frequently. - erect hoarding around site boundary. 6. Concrete batching - locate such activities away from sensitive user. - incorporate proper dust suppression measures.	- site formation; - reclamation; - demolition of a building; - tunnel work excluding any part beyond 100 metres from the exit to the open air; - construction of the foundation of a building; - construction of the superstructure of a building; - road construction work. Maximum fine is \$25,000 for the 1st conviction, and \$50,000 for 2nd and subsequent conviction. Without adopting appropriate dust reduction measures is actionable under the Air Pollution Control (Construction Dust) Regulation. Maximum fine is \$50,000 for 1st conviction and \$100,000 and 3-month imprisonment for 2nd and subsequent conviction. Emission of dust from any building under construction or demolition in such manner as to be a nuisance is actionable under the Public Health and Municipal Services Ordinance. Maximum penalty is \$10,000 (level 3) upon conviction with a daily fine of \$200.	Urban Services Department (USD) or Regional Services Department (RSD) as appropriate, District Office (Environmental Hygiene) concerned.
		In respect of demolition works failure to erect fans, catch platforms and dust screens as may be necessary to prevent any nuisance from dust or danger from debris or materials is actionable under the Building (Demolition Works) Regulations. Maximum fine is \$100,000 and imprisonment for 2 years upon conviction.	Buildings Department (BD). (Report to Area Building Surveyor).

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		Deposit of litter (including dirt, soil or dust) from vehicles onto street is actionable under the Public Cleansing & Prevention of Nuisances By-laws. Maximum fine is \$25,000 (level 4) and imprisonment for 6 months upon conviction.	USD or RSD as appropriate.
		Open burning of refuse in construction sites is banned under the Air Pollution Control (Open Burning) Regulation. Maximum fine is \$50,000 plus \$500 for every 15 minutes for which the offence continues for 1st conviction. For any subsequent conviction, maximum fine is \$50,000 and 3-month imprisonment, plus \$500 for every 15 minutes for which the offence continues.	EPD, Local Control Offices, Air Control Section
Water			
(6) Blockage of sewers / drains by silt/cement mortar/concrete.	<ol style="list-style-type: none"> 1. Planning <ul style="list-style-type: none"> - incorporate temporary drainage system with de-silting facility before connecting directly to the main drainage system. 	Discharge of muddy water etc. from a construction site is actionable under the Public Health and Municipal Services Ordinance. Maximum fine is \$5,000 upon conviction.	Drainage Services Department (DSD) relevant Operations and Maintenance Division (CE/HK & Islands, CE/Mainland South or CE/Mainland North as appropriate) or BD
(7) Discharge of waste water from sites, flooding etc.	<ul style="list-style-type: none"> - install sand trap, settling pit or grease trap as necessary. 		
(8) Accumulated waste water causing hygiene problems.	<ul style="list-style-type: none"> - install perimeter drainage channels or place sand bags along the low end of boundary. - install pH adjustment facilities or petrol interceptor as necessary. - cover open site area with gravel. - locate vehicle and plant servicing areas, vehicle wash bays and lubrication bays within roofed areas as far as possible. - provide vehicle washdown facilities on site. <ol style="list-style-type: none"> 2. Site maintenance <ul style="list-style-type: none"> - clear trapped debris and sediments frequently. - maintain sanitary condition at effluent disposal point. 	Construction site discharges are controlled under Water Pollution Control Ordinance (WPCO) and must comply with the terms and conditions of a valid WPCO licence. Discharge of any waste or polluting matter into Water Control Zone is an offence under the WPCO. Maximum penalty is \$200,000 and imprisonment of 6 months for the first offence.	EPD

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Health	<ul style="list-style-type: none"> - pump and properly drain away all stagnant water. - cover open stockpiles of construction materials and temporarily exposed slope by tarpaulin or similar fabric, especially during rainy season. 3. Water conservation <ul style="list-style-type: none"> - reuse water from de-silting facility for other purposes such as truck wheel washing. 		
(9) Mosquito breeding	<ul style="list-style-type: none"> (a) To pump and properly drain away all stagnant water. (b) To spray once weekly a thin layer of diesel oil on the water surface if it is not possible to pump or drain the stagnant water away. (c) To cover all water containers with close fitting lids. (d) To level all undulating ground surface. (e) To remove and properly dispose of all worn out rubber tires, empty cans and bottles and all other articles capable of retaining water from the site. 	<p>Any accumulation of water on any premises found to contain mosquito larvae or pupae is actionable under the Public Health and Municipal Services Ordinance. Maximum penalty is \$25,000 (level 4) upon conviction and a daily fine of \$450.</p>	<p>USD or RSD as appropriate.</p>
(10) Fly breeding	<ul style="list-style-type: none"> (a) To protect open food with fly-proof containers. (b) To store food remnants and refuse pending removal in properly covered containers. (c) To remove and properly dispose of food remnants and refuse daily. (d) To provide proper latrine accommodations and to properly dispose of human excrete daily. 	<p>Any accumulation of refuse which is a nuisance or injurious to health is actionable under the Public Health and Municipal Services Ordinance. Maximum penalty is \$10,000 (level 3) upon conviction and a daily fine of \$200.</p>	<p>USD or RSD as appropriate.</p>
(11) Rodent infestation	<ul style="list-style-type: none"> (a) To store both raw and cooked foods in properly covered containers. (b) To store food remnants and refuse pending removal in properly covered containers. (c) To remove and dispose of food remnants daily. (d) To seal up all holes in unpaved ground. (e) To clear and properly dispose of junk and building debris regularly. 	<p>Any premises in such a state as to be a nuisance or injurious to health is actionable under the Public Health and Municipal Services Ordinance. Maximum penalty is \$10,000 (level 3) upon conviction and a daily fine of \$200.</p>	<p>USD or RSD as appropriate.</p>

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(12) Accumulation of refuse	<p>(a) To store refuse pending removal in receptacles provided with close fitting covers.</p> <p>(b) To remove and properly dispose of refuse daily.</p>	Any accumulation of refuse which is a nuisance or injurious to health is actionable under the Public Health and Municipal Services Ordinance. Maximum penalty is \$10,000 (level 3) upon conviction and a daily fine of \$200.	USD or RSD as appropriate
(13) Connection of temporary toilet facilities to stormwater drains or water courses causing pollution	Connect to proper sewers or in unsewered area, connect to a septic tank and soakaway system or a sewage treatment plant for large flows. The same principle is applied to discharge from kitchens.	Discharge of any waste or polluting matter into stormwater drains or water courses is an offence under the Water Pollution Control Ordinance. Maximum penalty is a fine of \$200,000 and imprisonment for 6 months for the first offence.	DSD, EPD or BD
Associated with Drains (other than included elsewhere)			
(14) Blockage of public drains by entry of silty materials through old and/or abandoned sewer and drainage connections.	Seal up sewer and drainage connections before commencing demolition or foundation works.	In respect of demolition works failure to seal all sewer and drainage connections is actionable under the Building (Demolition Works) Regulations. Maximum fine is \$100,000 and imprisonment for 2 years upon conviction.	BD
		Entry of foreign matter into the public drainage system is actionable under the Public Health and Municipal Services Ordinance.	DSD
(15) Damage to drains and sewers by construction of foundations	Construction operations to be closely monitored to avoid possible damage to drains and sewers.		DSD or BD
(16) Blockage of access to public manholes within sites and/or drainage reserves by temporary structures	Temporary structures such as contractors' sheds to be properly sited.		DSD or BD
(17) Damage to public stormwater drains or foul sewers within or adjoining sites not promptly reported to DSD.	Construction operations to be closely monitored to avoid possible damage to drains and sewers		DSD or BD
(18) Surface water drainage from construction sites discharging through illicit connections into foul sewers, and contributing to exceptionally high flood flows at sewage treatment works.	This practice causes treatment and pollution problems and is unacceptable. Ensure surface water is directed to sand/silt removal facilities before discharging into natural drainage channels or to surface water drains.		DSD or BD

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Associated with roads/ footpaths			
(19) Dropping of materials on roads	(a) To properly secure and cover all loads on the vehicles before leaving the site.	Deposit of litter (including dirt, soil or dust) from vehicles onto street is actionable under Public Cleansing and Prevention of Nuisances By-laws. Maximum fine is \$25,000 (level 4) and imprisonment for 6 months upon conviction.	USD or RSD as appropriate, or Hong Kong Police Force (HKPF)
(20) Mud on roads	(a) To provide water bath for washing the wheels of vehicles before leaving the site. (b) To provide workers at the exit of the site to flush the body of each vehicle before leaving the site and to clear any mud that it carries onto the road.	Carrying of mud by vehicle onto street is actionable under Public Prevention of Nuisances By-laws. Maximum fine is \$25,000 and imprisonment for 6 months upon conviction.	USD or RSD as appropriate, or HKPF
(21) Excavation works in progress (utility trenches etc.)		May be actionable under Summary Offences Ordinance	Highways Department (HyD) or direct to Utility Company in the first instance if excavation made by them.
(a) Undue inconvenience to the public e.g. inadequate footpath width, obstruction due to stacked material or contractor's equipment	(a) To maintain minimum footpath width for the pedestrian demand. (b) To supervise the works regularly		TD
(b) Hazard to the public e.g. insufficient guarding and lighting, loose excavated material, pedestrians forced to walk on carriageway	(a) To provide in accordance with Code of Practice for the Lighting, Signing and Guarding of Road Works.		HyD
(c) Trench back-filled but not properly surfaced and no work was carried out			HyD
(22) The run-in for construction/ demolition vehicles presenting a hazard to pedestrians	(a) To separate pedestrian and construction vehicles. (b) Temporary resiting/removal of traffic signs should be agreed by TD.		BD in the first instance, or Transport Department (TD) TD
(23) Traffic signs in footpath damaged or obscured by hoardings	(a) To ensure that hoardings will not affect the existing signs. (b) To ensure that the general conditions for hoarding plans shall be observed.		HyD (if signs damaged) or TD (if signs obstructed) or BD

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(24) Footpath damaged and not temporarily re-surfaced			HyD or BD
(25) Footpath hazardous to pedestrians due to contractor's operations, past or present			HyD or BD
(26) Footpaths not cleared of litter and rubbish		May be actionable under Public Health and Municipal Services Ordinance or Summary Offences Ordinance according to circumstances.	USD/RSD or HyD according to circumstance.
(27) Dumping on the footpath e.g. debris, loose soil or rock building materials		May be actionable under Public Health and Municipal Services Ordinance or Summary Offences Ordinance according to circumstances.	USD/RSD or HyD according to circumstance.
(28) Vehicles parked on the footpath			HKPF
(29) Objects dropped from buildings	Provide fans, catch platforms and/or mesh screens	Actionable under the Summary Offences Ordinance. Maximum fine is \$50,000 and imprisonment for 1 year upon conviction.	HKPF
Associated with hoardings/covered walkways (Refer also to PNAP:75)			
(30) Fabric of the hoarding apparently unsound and damaged		Actionable under the Building (Planning) Regulations	BD
(31) Hoarding not of minimum width stipulated in permit			BD
(32) Passage for pedestrians within the hoarding obstructed		May be actionable under the Summary Offences Ordinance	HKPF or BD
(33) Hoarding presenting a hazard to pedestrians			BD