For discussion on 19 December 2016

LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

Actions to combat illegal land filling and fly-tipping of construction and demolition waste

Purpose

This paper serves to brief Members on the actions being taken by the Government in tackling illegal land filling¹ and fly-tipping² of construction and demolition (C&D) waste.

Background

2. In general, C&D materials of different nature are abandoned from our daily construction works, most of which are reusable inert materials such as rock, rubble, boulder, earth, soil, sand, concrete, asphalt, brick, tile, masonry and used bentonite. These inert materials can be gainfully reused such as land formation, ground levelling and other construction works. However, there are incidents of illegal dumping of C&D waste in public places and in rural areas, leading to public concerns and complaints. Apart from causing environmental nuisance and hygiene issues, some are also concerned that the illegal land filling activities could result in slope safety concerns or blockage of streams and watercourses. While disposal of C&D waste is subject to a statutory charge under the Construction Waste Disposal Charging Scheme, some free-riders may seek to evade the charge through illegal land filling or fly-tipping. Meanwhile, there have been some concerns that the increase in the construction waste disposal charges in April

Land filling refers to depositing or placement of C&D waste as fill material on land, which results in an elevation of ground level. Land filling activities are usually carried out for purposes of filling up ponds, levelling off uneven ground surfaces, forming sites for development, stockpiling in the form of a fill bank, or depositing of C&D waste onto land as dumping ground.

Fly-tipping refers to illegal depositing of C&D waste, which is often associated with haphazard and casual dumping from vehicles. Fly-tipped C&D waste is usually scattered, left in heaps, and in small quantities. Most of these illegal dumping activities take place in urban built-up areas at locations with good vehicular access, such as at kerb sides or side roads branched off from main roads.

2017³ may aggravate the problem of illegal land filling and fly-tipping.

3. Tackling the illegal land filling and fly-tipping activities has been challenging, since these activities are mostly conducted at inconspicuous locations, at odd hours and as a transient act. Nevertheless, relevant Government departments have been attaching great importance to taking enforcement actions against these illegal activities.

The Existing Statutory Control

4. The objective of the Government is to properly control activities in connection with depositing of C&D waste. Land filling and fly-tipping activities are regulated by existing environmental, town planning, land management, buildings, drainage, public safety, public health or country park legislation administered by different Government departments. Relevant Government departments have been taking actions under their respective jurisdiction and legislation as listed in **Annex I** to tackle the illegal land filling and fly-tipping problem. A brief description of the major legislation is given in the following paragraphs.

Waste Disposal Ordinance (Cap.354)

5. The Waste Disposal Ordinance (Cap.354) (WDO) prohibits illegal land filling and fly-tipping activities if the waste is deposited on Government land, or on private land without the consent of the land owners. To enhance the control on depositing or dumping of C&D waste on private land, the Environmental Protection Department (EPD) has implemented a prior notification mechanism under the Waste Disposal (Amendment) Ordinance 2013 since 4 August 2014.⁴ It requires a person to obtain the written permission of the relevant landowners given in a specified form and acknowledged by EPD prior to the intended date of the deposition of C&D waste on private land. The prior notification mechanism enables EPD to alert other relevant Government departments in advance of possible deposition of C&D waste on private land. Hence the departments can take follow-up actions under their respective purview to ensure that the proposed deposition will comply with the relevant legislative requirements. EPD can

The Waste Disposal (Amendment) Ordinance 2013 was enacted by the Legislative Council on 18 December 2013.

The fee adjustment will be implemented vide the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2016 under which (i) the public fill charge will increase from \$27 per tonne to \$71 per tonne, (ii) the sorting charge will increase from \$100 per tonne to \$175 per tonne and (iii) the landfill charge will increase from \$125 per tonne to \$200 per tonne.

also take follow-up actions as may be appropriate in accordance with requirements of the Air Pollution Control Ordinance, Water Pollution Control Ordinance, Noise Control Ordinance and Environmental Impact Assessment Ordinance. Since the implementation of Waste Disposal (Amendment) Ordinance 2013 on 4 August 2014, EPD had received a total of 74 notifications as at end October 2016.

Town Planning Ordinance (Cap.131)

- 6. The Town Planning (Amendment) Ordinance (1991) provides the Planning Authority (PA) with enforcement power against unauthorized developments within the development permission areas (DPAs) in the rural New Territories. Within the DPAs, developments are unauthorized unless they are in existence before the gazettal of the DPA plans, permitted under the relevant DPA Plans and subsequent replacement Outline Zoning Plans (OZP), or covered by valid planning permission granted by the Town Planning Board (TPB). Prior planning permission from the TPB is required for land filling mainly in conservation related zones such as "Sites of Special Scientific Interest", "Conservation Area", "Coastal Protection Area" as well as "Green Belt" ("GB") and "Agriculture" zones⁵ within the DPAs. The PA can take enforcement actions against unauthorized land filling activities falling under these zonings within the DPAs in the rural New Territories if no planning permission has been obtained.
- 7. For unauthorized land filling activities in DPAs, the PA takes enforcement actions by issuance of Enforcement Notice (EN) or Stop Notice (SN) requiring the concerned parties to discontinue the unauthorized development by a specified date. Where an EN or SN has been served in relation to an unauthorized development, the PA may serve a Reinstatement Notice (RN) which requires the notice recipient concerned to reinstate the land by a specified date to the condition before the gazettal of the DPA plans or Interim DPA plans (if any) or to such other condition, more favorable to the notice recipient, as the PA considers satisfactory. If the EN, SN or RN is not complied with by the date specified, the PA may consider taking prosecution action when there is sufficient evidence to do so.

⁵ Land filling in "Agricultural" zone requires planning permission from the TPB unless the laying of soil does not exceed 1.2m in thickness and is for cultivation; the activities are for construction of an agricultural structure with prior written approval issued by Lands Department; or the activities are for public works coordinated or implemented by Government, and maintenance, repair or rebuilding works.

Land (Miscellaneous Provisions) Ordinance (Cap.28)

8. The Lands Department (LandsD) is responsible for clearance of C&D waste illegally dumped on unallocated Government land excluding Government land under the control of other Government departments where formal land allocation is not required. Placing of C&D waste on unleased land may be treated as unlawful occupation of unleased land. District Lands Office (DLO) of LandsD will, in accordance with the Land (Miscellaneous Provisions) Ordinance (Cap.28), post a notice requiring the occupier to cease occupation before a specified date. After expiry of the notice, DLO would arrange a contractor for removal action and where appropriate, initiate prosecution if the offender can be identified with sufficient and reliable evidences collected.

Land Lease in the New Territories

9. Most of the private agricultural lands in the New Territories are held under the Block Government Lease (BGL). According to the judgment made by the Appeal Court in 1983 for the "Melhado" case, there was no restriction on the land use of the private agricultural land held under the BGL. Hence, land filling activities on private agricultural land held under BGL is not regarded as a breach of lease and accordingly LandsD does not have any locus to take lease enforcement action. Nevertheless, the lot owners concerned are still responsible for complying with all the relevant laws of Hong Kong.

Buildings Ordinance (Cap.123)

- 10. If land filling activities on private land are not undertaken for the purpose of or are not associated with the planning, design and construction of buildings or building works, they do not come under the control of the Buildings Ordinance (Cap.123) (BO). However, should land filling activities result in unstable slopes on private land likely to cause a risk of injury to any persons or damage to any property, the Buildings Department (BD) may serve an order under the BO, requiring the responsible land owner to carry out works as specified in the order, appoint registered building professionals to investigate the slope and submit remedial works proposal for approval, and carry out the approved remedial works to ensure public safety.
- 11. If the landowners fail to comply with the orders, the BD may arrange carrying out of the works and recover the full cost of the works together with a supervision charge and a surcharge of not exceeding 20% from the landowners. If the landowners fail to comply with the order

without reasonable excuse, the BD will consider instigating prosecution against them.

Country Parks Ordinance (Cap.208)

12. Under the Country Parks and Special Areas Regulations (Cap.208A), the Agriculture, Fisheries and Conservation Department (AFCD) can take enforcement action against illegal dumping on Government land within country parks and special areas.

Other Complementary Measures

13. Apart from the aforesaid enforcement actions under respective legislation, other complementary measures, such as erection of bollards, fencing and suitable railings to restrict access to the black spots, as well as stepped-up enforcement at reported black spots such as targeted ambush operations have been deployed by Government departments as appropriate.

Enhanced Measures

14. The Government has been exploring new enhanced measures to strengthen the monitoring of overall situation on illegal land filling and fly-tipping. Some of the enhanced measures being implemented or explored are described below.

<u>Inter-departmental Coordination Mechanism on Control of Depositing of C&D Waste on Government Land and Private Land</u>

15. EPD has coordinated an interdepartmental meeting with nine concerned Government departments, including AFCD, BD, Civil Engineering and Development Department (CEDD), Drainage Services Department (DSD), Food and Environmental Hygiene Department (FEHD), Highways Department (HyD), Home Affairs Department (HAD), LandsD and PlanD, to exchange intelligence and gather information regarding illegal land filling and fly-tipping cases. EPD and various departments also conduct an annual review of actions taken against illegal dumping of C&D waste and uploaded a list of land filling and fly-tipping black spots onto EPD's website (www.epd.gov.hk) to facilitate monitoring of these black spots by members of the public. The inter-departmental coordination mechanism serves as an effective tool to facilitate information sharing amongst departments on the suspected illegal dumping cases and enable them to exercise their functions under their respective purview and conduct joint inspection as necessary.

In the past three years (2013-2015), the Government handled about 6 000 to 8 000 public complaints against illegal dumping of C&D waste. Statistics of illegal land filling on private land and fly-tipping on Government land between 2013 and mid-2016 are at **Annexes II** and **III**, respectively. Overall, the quantity of C&D waste fly-tipped and cleared by the Government accounts for less than 0.05% of the total quantity of C&D materials/waste disposed of properly at the designated Government reception facilities in the last three years from 2013 to 2015.

Installation of Surveillance Camera System at Black Spots

- 17. Since fly-tipping activities are mostly conducted at inconspicuous locations and odd hours, the EPD had used closed-circuit television (CCTV) system at fly-tipping black spots in Siu Lang Shui Road in Tuen Mun since 2009 and subsequently in Wan Po Road in Tseung Kwan O in 2013 to monitor and collect evidence on illegal dumping activities near landfill sites. Though the setting up of CCTVs showed some deterrence effect against fly-tipping activities, CCTVs were costly. It was also difficult to find suitable locations for their installation.
- 18. To explore new approaches to enhance detection of illegal dumping of C&D waste, EPD launched a trial scheme of setting up surveillance cameras at 12 selected black spots under the Keep Clean 2015 Campaign during late August 2015 to February 2016. The trial scheme tested the use of compact web cameras available in recent years at different environmental settings (such as lighting conditions, shooting angles and distance) in order to identify cost-effective and more flexible arrangements for detecting illegal dumping activities.
- 19. The trial successfully identified 170 cases involving illegal dumping of C&D waste by vehicles. Not all images recorded were sufficiently clear to enable follow up investigation, especially for night operation with dim or no street lighting. Around 50% of the incidents recorded images of vehicle registration marks clear enough to enable further investigation. EPD has issued summonses for 35 cases and Fixed Penalty Notices for 11 cases.
- 20. EPD is now conducting an overall review of the trial scheme. Based on experience gained and issues identified, we aim to improve the design and operation of the surveillance camera system so as to take advantage of it as one of the tools to detect and prevent the illegal dumping of C&D waste. Though the review is still on-going, our preliminary observation is that surveillance cameras had helped enhance the enforcement

effectiveness against fly-tipping by vehicles as well as stepped up the deterrence effect at the black spots but might not be as effective in controlling illegal fly-tipping activities by hand or by cart. Relevant Government departments will continue to deploy other means to address illegal fly-tipping activities by hand/cart.

<u>Mandatory Use of Global Positioning System (GPS) at C&D Waste</u> Collection Vehicles

Apart from using technologies like surveillance camera system to tackle illegal dumping activities, EPD is examining the possibility of adopting GPS to prevent fly-tipping of C&D waste more effectively. Through pilot trials, it has been affirmed that the GPS technology is technically mature and there are affordable applications in the market. Mandatory use of GPS at C&D waste collection vehicles may help track and log the activities of the vehicles, which may in turn deter fly-tipping of C&D waste and facilitate monitoring/investigation. Having regard to experience gained from the trials, EPD is drawing up the operational details of the regulatory regime, and will consult the trade further.

Adoption of Trip Ticket System (TTS)

22. At present, the Government has implemented TTS in public works projects, which is a recording system that helps track the movement of C&D waste generated, and hence prevent illegal dumping. EPD is working with some public organizations which undertake major works projects to promote the adoption of TTS in these projects.

Advice sought

23. The Panel is invited to note the actions taken by Government departments in tackling the illegal land filling and fly-tipping problems of C&D waste.

Environmental Protection Department December 2016

Statutory Control over Illegal Land filling and Fly-tipping Activities

Illegal land filling and fly-tipping activities are regulated by various environmental, land management, planning, drainage, public health or country park legislations which are enforced by a number of Government departments.

1. Environmental Protection Department (EPD):	Waste Disposal and Pollution Control										
2. Environmental Florection Department (EFD)	Trasec Disposar and I diminon Connor										
Waste Disposal Ordinance (Cap. 354) (WDO)	Enforce against illegal land filling and fly-tipping activities for waste deposition Government land, or on private land without the consent of the land owners lawful occupiers.										
Air Pollution Control Ordinance (Cap. 311), the Noise Control Ordinance (Cap. 400) and the Water Pollution Control Ordinance (Cap. 358)	Control dust emission, noise and wastewater discharges arising from illegal land filling activities.										
2. Lands Department (LandsD): Land manageme	nt										
Land (Miscellaneous Provisions) Ordinance (Cap.	To remove C&D waste illegally dumped on unallocated Government land										
28)	excluding Government land under the control of other Government departments										
	where formal land allocation is not required as unlawful occupation.										
3. Planning Department (PlanD): Planning contr	ol										
Town Planning Ordinance (Cap. 131) (TPO)	Enforce against unauthorized land filling activities falling within the Development										
	Permission Areas (DPAs) in the rural area when provisions of statutory plans are										
	not complied with. (Planning permission from the Town Planning Board is required										
	for land filling mainly in conservation-related zones, "Green Belt" and										
	"Agriculture" zones within DPAs.)										

4. Food and Environmental Hygiene Department (FEHD): Environmental Hygiene										
Public Health and Municipal Services Ordinance (Cap.132) (PHMSO)	Enforce against the responsible person if filling or dumping of C&D waste on a particular piece of private land gives rise to sanitary nuisance. Also against deposition that leads to an accumulation of water resulting in breeding of mosquitoes.									
Public Cleansing and Prevention of Nuisances Regulation (Cap.132BK).	Against the registered owner or hirer of the specified vehicle for littering offences.									
5. Buildings Department: Slope Safety										
Buildings Ordinance (Cap. 123)	Enforce against dangerous slope on private land arising from land filling activities.									
6. Agriculture, Fisheries and Conservation Depart	tment (AFCD): Country Park management									
Country Parks and Special Areas Regulations (Cap. Enforce against illegal dumping on Government land within country parks and special areas. 7. Drainage Services Department (DSD): Flood control										
Land Drainage Ordinance, (Cap.446)	Gain access onto private land to remove illegal structure that causes stormwater drainage obstructions to designated watercourses so as to control flooding.									

Note: Fixed Penalty (Public Cleanliness and Obstruction) Ordinance (Cap. 570) is also being applied by Government departments (Hong Kong Police Force, Housing Department, Leisure and Cultural Services Department, Marine Department, AFCD, EPD and FEHD) to tackle certain public cleanliness offences including littering and minor waste deposition.

Annex II

Private Land Filling Figures (involving C&D waste)

			2013					2014			2015						2016 (As at June)					
	EPD	LandsD	PlanD	Other Departments#	Sub-total	EPD	LandsD	PlanD	Other Departments#	Sub-total	EPD	LandsD	PlanD	Other Departments#	Sub-total	EPD	LandsD	PlanD	Other Departments#	Sub-total		
Complaints																						
Public complaints received	121	58	219	3	401	170	100	185	9	464	203	72	171	10	456	119	64	118	38	339		
Actions taken		·	1	•			•	•				•	•	1		•						
Warning letter issued	0	5	270	0	275	0	2	400	0	402	4	1	293	0	298	3	7	181	0	191		
Enforcement/ stop notice issued	n/a	0	366	0	366	n/a	0	512	0	512	n/a	0	311	0	311	n/a	0	234	6	240		
Re-instatement/ compliance notice issued	n/a	0	264	0	264	n/a	0	174	0	174	n/a	0	350	0	350	n/a	0	124	0	124		
Prosecution																						
No. of prosecutions (by summonses)	1	0	26	0	27	1	0	4	0	5	8	0	20	0	28	1	0	10	0	11		

^{*} Other Departments include BD, CEDD, DSD, FEHD and HAD.

Annex III

Fly-tipping Figures (involving C&D waste on Government Land)

	2013						2014							2015							2016 (As at June)					
	EPD	LandsD	HyD	FEHD	Other Departments#	Sub-total	EPD	LandsD	HyD	FEHD	Other Departments#	Sub-total	EPD	LandsD	HyD	FEHD	Other Departments#	Sub-total	EPD	LandsD	HyD	FEHD	Other Departments#	Sub-total		
Complaints																										
Public complaints received	1861	1940	3506	996	32	8335	1525	2296	2890	835	19	7565	1638	1734	2427	687	13	6499	765	859	1526	371	8	3529		
Actions taken																										
Warning letters issued	76	1	0	0	0	77	32	1	0	0	0	33	15	5	0	0	0	20	2	0	0	0	0	2		
Cases with barriers erected	n/a	3	0	1	0	4	n/a	11	0	0	0	11	n/a	11	0	2	1	14	n/a	0	0	0	0	0		
Cases with warning signs erected	n/a	24	0	22	6	52	n/a	29	0	27	0	56	n/a	20	0	54	2	76	n/a	0	0	2	1	3		
Prosecution																										
No. of prosecutions (by summonses)	39	0	0	1	0	40	43	0	0	15	0	58	52	0	0	19	0	71	56	0	0	4	0	60		
Fixed penalty tickets issued*	46	0	0	1	0	47	18	0	0	17	0	35	18	0	0	14	0	32	23	0	0	13	0	36		

^{*} For cases involving unlawful deposition of small quantity of construction wastes, EPD and FEHD enforcement officers will issue Fixed Penalty Notices (\$1500) to offenders.

[#] Other Departments include AFCD, BD, CEDD, DSD & HAD