

**For information
on 20 June 2011**

**Legislative Council
Panel on Development**

**Concerns on Maintenance of Aging Buildings arising from the
Recent Canopy Collapse Incident in Tuen Mun**

INTRODUCTION

This paper briefs Members on the recent canopy collapse incident in Tuen Mun on 9 June 2011 and the Buildings Department's follow-up actions.

BACKGROUND AND INVESTIGATION

Background information

2. On 9 June 2011 at about 6pm, a section of a reinforced concrete cantilevered slab canopy of about 40 metres in length at the first floor level of the building at 3 Kin Kwan Street, Tuen Mun (the building) collapsed. A man was seriously injured and several motor vehicles damaged in the incident.

3. The building is 13-storey high. Its occupation permit was issued on 2 November 1979. According to the approved plans, there are car parks and three factory units on the ground floor of the building and five to eight factory units on each floor from the first floor to the twelfth floor.

4. Staff of the Buildings Department (BD) arrived on site in about an hour after the collapse of the canopy. Upon completion of the search and rescue operation by the Fire Services Department, staff of the BD began assessing the conditions of the building and the portions of the canopy that remained after the collapse. A contractor engaged by the

BD removed the loose parts of the damaged canopy and put up temporary shoring to support the remaining parts of the canopy. The condition of the building was found to be generally acceptable.

5. The emergency works to remove the damaged parts of the canopy and support the remaining parts were substantially completed on 13 June 2011.

Investigation of Tuen Mun Canopy Collapse Incident

6. The investigation into the cause of collapse of the canopy has commenced in parallel with the carrying out of the emergency works. The BD has been conducting investigation in three directions: first, to study the record of maintenance, and addition and alteration works in respect of the building concerned; second, to examine the evidence gathered at the scene and analyse specimens collected; and third, to obtain information from eyewitnesses. An initial investigation report is expected to be completed in about a month's time.

Brief History of BD's Enforcement Action on the Building

7. The ensuing paragraphs describe the enforcement actions on the building taken by the BD in recent years with particular focus on the canopy in question.

8. In April 1997, the BD issued an investigation order under section 26A of the Buildings Ordinance (Cap. 123) (BO) to the Incorporated Owners (IO) of the building requiring investigation of the stability of the canopy of the building. The Department also issued a drainage repair order under section 28 of the BO requiring investigation of drains and sewers of the building. An authorised person (AP) appointed by the IO carried out structural investigation which showed that the factor of safety of the canopy was adequate. A proposal for repair of both the canopy and drainage and sewer works was submitted by the AP and was accepted by the BD in March 1998. The relevant compliance letter was subsequently registered in the Land Registry.

9. The remedial works for the canopy and drainage and sewer works were completed under the supervision of the AP. The AP's certification on completion of the works was acknowledged by the BD in April 1999. According to the established practice of the BD, such kind of acknowledgement letters issued by the Department in respect of the certificate of completion of works does not need to be registered in the Land Registry.

10. The building was one of the target buildings selected in the large scale operation (launched by the BD as part of the ten-year enforcement programme that ended on 31 March 2011) to clear in one go all unauthorised buildings works (UBWs) projecting from the external walls. There is one outstanding removal order in respect of an unauthorised structure on the flat roof of the first floor of the building. The order was issued to the owner of the concerned factory unit in January 2007. The owner was prosecuted and convicted twice for non-compliance of the removal order in May 2009 and June 2011 respectively. This unauthorised structure, which has no connection with the canopy, has yet to be removed. The BD will continue to take follow-up actions on the case.

11. As a result of the patrol inspection by the BD's consultant in April 2007, some patching-up repair to the underside of the canopy was completed by the owner in October 2007.

12. In January 2010, the Joint Office (JO) for water seepage formed by the Food and Environmental Hygiene Department and the BD received complaint from a party of one of the ground floor units of the building about water seepage within his unit. Investigation was carried out by the JO but the source of seepage could not be identified. Further investigation is being undertaken by the JO.

FOLLOW-UP ACTIONS

Inspection of Buildings with Cantilevered Slab Canopies

13. On the second day of the canopy collapse incident (i.e.

10 June 2011), the BD announced that it would launch a special operation to inspect about 4,000 buildings in the territory with cantilevered slab canopies similar to that of the building. The inspection is being carried out by the professional and technical staff of the BD. The purpose of the inspection is to visually assess the state of repair and maintenance of these canopies and determine whether any follow-up actions are necessary. The canopies are grouped into three categories according to their state of repair and corresponding follow-up actions would be taken. The three categories are as follows:

Category I Canopies requiring emergency works, e.g. temporary shoring works or urgent removal of spalled concrete.

Category II Canopies requiring statutory actions such as issue of investigation, repair and/or removal orders.

Category III Canopies with no apparent defect but advisory letters will be issued to the owners reminding them of the importance of periodic maintenance of the canopies.

14. The inspection will focus on the defects identified in the canopies which may have an adverse effect on the structural stability. The inspection is expected to complete by the end of July this year.

ADVICE SOUGHT

15. Members are invited to note the information in relation to the canopy collapse incident in Tuen Mun and the follow-up actions being taken by the BD.

**Development Bureau
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