

# **Summary of Full Investigation Report Handling of a Complaint by Highways Department and Labour Department about Inadequate Safety Measures for Lifting Operations in a Government Infrastructure Project**

## **Foreword**

In response to a complaint lodged by a construction worker, the Highways Department (“HyD”) and the Labour Department (“LD”) conducted investigations to examine whether or not a construction site (“the Site”) of a government infrastructure project had implemented adequate safety measures for lifting operations. The complainant, dissatisfied that the two departments had failed to handle his complaints conscientiously, lodged a complaint with this Office.

2. Our investigation found that the two departments had vastly different views on the adequacy of safety measures at the same construction site. HyD considered the safety measures adopted by the contractor acceptable and in compliance with relevant legislation and contractual requirements. LD, on the contrary, considered that the contractor might have contravened occupational safety laws and demanded immediate rectification. Such divergence of judgements pointed to a grave lack of communication between the two departments regarding industrial safety issues, and HyD’s failure to take seriously the opinions and warnings of LD as an enforcement authority.

## **Duties of the Departments and Legislation on Lifting Operations Safety**

### ***LD***

3. LD enforces the *Occupational Safety and Health Ordinance* and the *Factories and Industrial Undertakings Ordinance* and its subsidiary legislation. Under the general duties provision (Section 6A) of the latter Ordinance, employers and their contractors have to provide as far as practicable safe systems of work for their workers in order to ensure the occupational safety and health of all the persons they employ.

4. So far as lifting operations are concerned, the *Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations* stipulate that an unobstructed passageway of not less than 600 millimetres wide must be maintained between any fixture (such as fences nearby) and any part of a lifting appliance liable to travel or slew. In case that is not practicable, the duty holder must ensure that all reasonable steps are taken to prevent persons from having access to that place when the lifting appliance is in use.

## *HyD*

5. HyD, as a works department, is responsible for overseeing the operations of the Site. It should keep track of the site safety performance of contractors in accordance with the Project Administration Handbook for Civil Engineering Works and the Construction Site Safety Manual. The contracts between HyD and its contractors stipulate that contractors must comply with existing statutory requirements about lifting operations and maintain safety installations and systems of work.

## **Sequence of Main Events**

### **2016**

6. On 6 December, the complainant telephoned 1823 to lodge a complaint about inadequate safety measures for lifting operations at the Site, alleging that the lifting zones there had not been fenced off and no safety officer was assigned on site. His complaint was referred to HyD.

7. On 7 December, HyD officers, together with its site staff and the contractor, conducted an inspection at the Site. They found that an unobstructed passageway was already there for the complainant's use. HyD confirmed that the safety measures at the Site that day were acceptable.

8. On 8 December, HyD asked its site engineer and the contractor to conduct an internal investigation.

9. On 13 December, HyD's site engineer submitted an investigation report, explaining that a signaller and a lifting supervisor had been deployed to assist and oversee respectively the lifting operation in question. Site workers were also present to guard against unauthorised entry into the lifting zone. Since the current legislation does not stipulate that lifting zones must be fenced off during lifting operations, the investigation report concluded that the contractor had strictly complied with the laws and the contractual requirements during the construction works.

10. On 20 December, the complainant lodged the same complaint with LD, which then conducted a surprise inspection at the Site that day. LD officers found three mobile cranes there but the lifting zones had not been fenced off and that there were no warning notices. Nor were the cranes and the workers properly separated. The contractor, therefore, might have contravened the law. Since no lifting operation was going on at the time, LD did not institute prosecution against the duty holder.

11. On 21 December, HyD informed the complainant of its investigation result, indicating that it did not find the safety measures at the Site inadequate.

12. On 22 December, LD apprised the complainant of its inspection results by telephone. It undertook to urge the contractor to adopt relevant safety measures and that it would continue to conduct follow-up inspections.

13. On 23 December, LD issued a Construction Site Inspection Report (“Inspection Report”) to the contractor, demanding immediate implementation of proper safety measures, including fencing off the lifting zones, posting warning notices, and proper separation of the cranes and workers. A copy of LD’s Inspection Report was sent to HyD in accordance with established procedures.

14. On 28 December, the complainant lodged a complaint with this Office against the two departments for failing to handle his complaints conscientiously.

## **2017**

15. On 26 January, LD officers conducted a follow-up inspection at the Site and found several mobile cranes there. However, the contractor still failed to adopt the said safety measures such as fencing off the lifting zones or posting warning notices.

16. On 27 January, in the light of its inspection results, LD issued an Improvement Notice to the contractor, pointing out that it had breached Section 6A of the *Factories and Industrial Undertakings Ordinance* and reiterating that safety measures as stated above must be taken. A copy of the Notice was also sent to HyD.

17. On 1 February, LD issued a second Inspection Report to the contractor with respect to its inspection results on 26 January, setting out details of the contravention found at the Site. A copy of this Report was sent to HyD.

18. On 7 February, LD conducted a follow-up inspection at the Site and did not find any lifting operations involving cranes going on.

19. On 1 March, LD conducted another follow-up inspection at the Site and found that the contractor had fenced off the lifting zones and posted warning notices.

## **HyD’s Response**

20. Neither the current legislation nor LD’s prevailing Code of Practice for Safe Use of Mobile Cranes (“the Code of Practice”) stipulate that lifting zones must be fenced off during lifting operations. Furthermore, LD did not indicate in the Inspection Report issued after its site inspection on 20 December 2016 (**paragraph 13 above**) that the contractor had contravened the law, but merely added a remark that “the lifting zone at the Site must be fenced off properly”. According to HyD, it was the first time since the commencement of this government infrastructure project in 2012 that LD had ever required HyD’s contractors to fence off lifting zones. Previously, LD had conducted many inspections at the sites of the project but never made such a requirement.

21. HyD also stated that it was not until September 2017 when the Code of Practice was updated that LD added the requirement to fence off all lifting zones at construction sites as far as practicable. The updated Code of Practice also indicated that other effective measures should be taken to prevent unauthorised entry if fencing off lifting zones was not feasible due to space constraints. HyD opined that such requirement in the updated Code of Practice, in other words, reflected that fencing off lifting zones was, while the preferred option, not the only acceptable measure under the law because the actual circumstances on site and feasibility must also be taken into account.

22. In this case, the contractor had already drawn up safety rules of lifting operations, and deployed signallers and lifting supervisors to provide assistance to guard against unauthorised entry into lifting zones. Such measures were deemed as effective as the passive measure of setting up fences to prevent workers from getting near lifting zones and were in line with current legal requirements.

### **LD's Response**

23. LD enforces the laws on occupational safety of employees. In recent years, LD has issued various guidelines and publicity pamphlets on the safe use of mobile cranes, stating clearly that lifting zones must be demarcated and fenced off, with clear notices posted on site. Upon receipt of this complaint, LD's Occupational Safety Officers ("OSOs") conducted inspections at the Site to check the work procedures and system for lifting operations, the use of cranes, the environment of lifting zones and the loads to be lifted, and confirmed that there was sufficient space at the Site for fencing off lifting zones.

24. In addition to an Inspection Report, LD issued also an Improvement Notice to the contractor, clearly demanding the latter to fence off lifting zones, post warning notices, and separate the cranes and the workers. In its two follow-up inspections, LD confirmed that the contractor had complied with those requirements. Based on the follow-up inspection on 1 March 2017, without any significant changes to the environment of lifting zones, the contractor was able to comply with LD's requirements and fenced off the lifting zones, showing that fencing off the zones was indeed practicable.

25. LD explained that space constraint precluding the setting up of fences for lifting zones as noted in the updated Code of Practice (**paragraph 21 above**) mainly applies to temporary lifting operations on roadside where fencing off a large area of road surface is unfeasible. Fencing off lifting zones is generally feasible at construction sites. Moreover, fencing off lifting zones by setting up fences or barriers (like adding a protective guard to the dangerous part of a machine or setting up fences at the work platforms of scaffolding) is an engineering control for prevention of danger, while administrative controls such as posting of warning notices are safety measures aiming to prevent workers from entering lifting zones accidentally. Engineering controls, which do not involve human factors, are much more effective and reliable than administrative controls. Hence, unless fencing off lifting zones (which is an

engineering control) is not practicable, the contractor should not consider taking other safety measures. In LD's views, to ask signallers or lifting supervisors, who have their own specific duties, to also keep watch on work in the lifting zones would increase the risk of human errors and create potential hazards. It was, therefore, unacceptable.

## **Our Comments**

26. LD stated clearly in its various publicity pamphlets and the Inspection Reports issued to the Site that lifting zones must be fenced off. HyD, however, considered the contractor's safety measures acceptable simply because LD had not specified in its first Inspection Report that the Site had contravened the law. HyD apparently failed to take heed of the advice given by LD as the enforcement department.

27. HyD contended that the current legislation does not explicitly require lifting zones to be fenced off. However, as LD has explained, the fencing requirements could only be waived in exceptional circumstances, such as lifting operations on roadside. It is perplexing that HyD, being the overseer of all large-scale road works in Hong Kong and hence having frequent contacts with LD regarding construction site safety, could still fail to fully understand the safety requirements on lifting operations.

28. Since both HyD's site staff and the contractor had participated in the safety inspections conducted by the OSOs, they should have adequately understood the safety concerns raised by LD. There should also be sufficient time and opportunities for them to clarify LD's requirements. Moreover, they could make enquiries under the existing liaison mechanism, such as inviting LD to attend Site Safety and Environmental Management Committee meetings. Despite ample means of communication, however, HyD still failed to fully appreciate the comments in LD's Inspection Reports. This shows a serious lack of communication between the two departments. HyD obviously had made no attempt to clarify the matter with LD. Yet, had the OSOs stated clearly during inspection their concerns about the safety problems at the Site, HyD would also not have been so unclear about whether the work procedures at the Site had contravened the law.

29. According to the information about accident investigation cases provided by LD and its records of warnings issued to construction sites, LD has all along actively required construction sites to fence off lifting zones and instituted prosecution against offenders. In particular, we noted that prior to this case, LD had already issued two warnings against construction sites of the same government infrastructure project, requiring them to fence off their lifting zones. This shows that HyD's argument that it was not until December 2016 that LD required any contractor of this infrastructure project to fence off lifting zones for the first time (**paragraph 20 above**) is untenable.

30. In the course of following up this case, LD inspected the Site immediately upon receipt of the complaint and issued written warnings to the contractor when safety problems in the lifting operations were found. LD also copied the warning documents

to HyD according to established procedures. Furthermore, as there were still some misunderstanding about the requirements on fencing off lifting zones, after our intervention LD revised the Code of Practice (**paragraph 21 above**) to prevent further misunderstanding.

## **Our Conclusion**

31. In the light of the above, The Ombudsman considers the complaint against HyD **substantiated**, and the complaint against LD **unsubstantiated**, but there are **other inadequacies found**.

32. **We recommend that:** (1) HyD and LD review the current mechanism for monitoring construction site safety, examine why the two departments had such vastly different understanding of the Inspection Reports issued after the site inspections, and explore how to improve their existing communication mechanism to avoid recurrence of similar incidents; and (2) HyD steps up training for its management and site staff on the law on safety of lifting operations, such as inviting LD to speak at seminars or talks and explain the relevant legislation.

**Office of The Ombudsman**  
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