

## **Information Paper for Legislative Council Panel on Housing**

### **Study by Independent Commission Against Corruption on The Construction Industry and its Recommendations**

#### **PURPOSE**

This paper informs Members the studies carried out by the Independent Commission Against Corruption (ICAC) on the construction industry and the recommendations made.

#### **BACKGROUND**

2. The numbers of pursuable corruption reports against works related government departments and public bodies, and the construction sector for the last four years are given in Annex A. The total number of reports received in 1998 is 307, which represents an increase of 19% compared with the figure for 1997. The total number of reports for the first 11 months of 1999 is 301.

3. A number of ICAC cases concerned sub-standard foundation works involving private developments as well as public housing blocks, and highlighted some common problems in the quality control of construction works. They have not only raised public safety issues but also caused concern over our construction system particularly the ability to produce quality flats. The key players involved in the system are the main contractors and sub-contractors who carry out the works, professional and site supervisory staff who monitor the quality of the works, the Housing Department which employs in-house staff, consultants and contractors to implement the public housing programme, and the Buildings Department which enforces the requirements under the Buildings Ordinance for private development works.

#### **ICAC STUDIES AND RECOMMENDATIONS**

4. In the past two years, we have completed a number of studies on different aspects of construction works projects in both the public and private sectors, focusing on corruption prone areas highlighted by recent corruption cases. The subjects of these studies include the procedures adopted by the Buildings Department to monitor construction works in private developments under the Buildings Ordinance, and those adopted by the Works Departments and the Housing Department for the administration and site supervision of government and public housing projects, including piling works. The employment of consultants in the implementation of these projects was also examined.

5. The more common problems identified from our cases and studies, and the major recommendations made to prevent corruption and malpractice are described in the following paragraphs.

### **Site Supervision**

6. A major problem identified is inadequate supervision of the construction sites resulting in poor quality, with completed works either not meeting the contractual specifications or the approved plans. In both public and private developments, some Employers tend to rely heavily on the contractors to construct the works to the required standards and specifications, and are reluctant to provide more than minimal resources to monitor the quality of works. As a result, the site staff employed often are inadequate, both in numbers and in experience, and are unable to detect fraudulent acts to cover up the sub-standard works. There is evidence that some site staff have developed an unhealthy relationship with contractors and sub-contractors and colluded with them to cover up sub-standard works in return for a bribe. There have also been cases of site staff who refused corrupt approaches facing threats to their personal safety.

7. We have recommended that :-

- (a) for private developments, Buildings Department should require full time supervision or at least supervision at critical stages of construction by staff of the Registered Structural Engineers to ensure that the works are constructed to the required standards. Buildings Department should also carry out spot checks on site to ensure that the works are properly supervised by the Registered Structural Engineers and Contractors;
- (b) for public housing projects, Housing Department should ensure that a sufficient number of site staff with appropriate training and experience should be deployed on both in-house and consultant managed projects to ensure quality construction, and require project professional officers to conduct frequent and regular site visits to monitor the quality of works; and
- (c) Works Departments and Housing Department should ensure that there are effective independent audits on a regular basis on all works projects.

### **Quality Control Tests**

8. Another problem identified is related to the testing of construction materials to verify the quality of the works constructed. These include tests on the strength of concrete and steel reinforcement used for the construction of building structures, and tests to ascertain the depth of piles and the quality of the concrete used to construct the piles. It is not unusual that these tests are carried out by a sub-contractor or laboratory appointed by the main contractor. We consider that there is

obvious conflict of interest in this arrangement as the main contractor is in a position to influence the sub-contractor to conceal any sub-standard works identified through these tests. We are also concerned with the identification and transportation of test specimens from the construction sites to testing laboratories. Inadequate security arrangements could result in test specimens being switched to hide non-compliant materials.

9. We have recommended to the Housing Department and the Works Departments that :-

- (a) quality control tests on construction materials should be carried out by independent testing agents employed directly by the Employer with the test results sent directly to the project Structural Engineer;
- (b) quality control tests carried out on site should be closely supervised; and
- (c) there should be adequate security procedures governing the sampling and testing of construction materials including sample identification and stock control to prevent possible tempering.

### **Consultant Projects**

10. Some public projects are managed by consultants who control the site staff and monitor the quality of the contractor's work on behalf of the Employer. However, consultants are not always required to commit to a quality control plan nor to regularly report back to the Employer the quality control measures undertaken to ensure that the quality of work on site is satisfactory. Some Employers, therefore, may not be in a position to ascertain whether the consultants have fully fulfilled their responsibility in this respect.

11. We have recommended to the Housing Department that consultants should be required to report regularly on the quality of works on site, any quality control problems encountered, and the control measures that they have taken to ensure that the quality of inspection carried out by the site staff is adequate and the quality of the contractor's work is satisfactory.

### **Contract Award**

12. We have reviewed the procedures adopted by government departments for the letting of works projects. We are satisfied that the procedures are generally open and fair. We are aware that the Housing Department is developing new procedures for the letting of tenders that would take into account the past performance of tenderers. We are working closely with the Department to ensure that these new procedures conform to corruption-resistant best practices.

13. We accept that sub-contracting of works is a long existing practice in the construction industry which enables the contractor to carry out the works in an efficient and cost-effective manner. We however consider that the brokerage type of

sub-contracting is undesirable because the additional layers would reduce profit margins and increase the incentive and potential for malpractice. We believe that the solution to this problem is to impose appropriate controls on non-productive sub-contracting and enhance the level of supervision of works on site to ensure that they are up to the required standard. Unprofitable sub-contracting would be discouraged if sub-contractors know that they cannot cut corners to save cost.

### **Integrity Issues**

14. From the corruption risk point of view, site staff are in a vulnerable position because they have the front-line responsibility of maintaining quality control of the contractor's work. There is evidence that some site staff gamble and over-socialize with contractors and sub-contractors whose work they supervise, receive lavish, frequent and inappropriate entertainment from them, or take up part-time work for them. These relationships put the site staff in a position of obligation to the contractors and undermine their effectiveness in controlling the quality of contractors' work.

15. We have recommended to the Housing Department and the Works Departments that site supervisory staff should be regularly reminded of the need for appropriate behaviour in their daily contact with contractors. While site staff who are civil servants are guided by civil service instructions in matters such as conflict of interest, we consider that consultants and contractors on the Departments' approved lists should be required to promulgate a code of conduct for their staff.

### **RAISING CORRUPTION PREVENTION AWARENESS**

16. In addition to reviewing government's procedures for the administration of public construction projects, we have also made efforts to promote corruption prevention awareness in the construction industry including :-

- (a) we have conducted many training seminars for site staff involved in the supervision of contractors' work. The objective of these seminars is to brief these staff the relevant provisions of the Prevention of Bribery Ordinance and to increase their awareness of the corruption problems in the industry;
- (b) we have organised a number of joint seminars with trade associations and professional institutes including the Hong Kong Construction Association, The Hong Kong Institution of Engineers and the Hong Kong Institute of Surveyors to raise corruption prevention awareness among members of these bodies;
- (c) we have contacted over 1,000 firms in the construction industry, including both consultant and contractor firms, to offer them our free advisory services on corruption prevention;
- (d) we have issued a number of "best practice" packages to help consultant and contractor firms put in place internal controls and safeguards against corruption and malpractice;
- (e) we have organised a seminar for the construction industry entitled "Construction 2000" to be held on 7 December 1999. The seminar

aims to secure the commitment of the key players concerned to promote best practices and enhance professional ethics within the industry; and

- (f) we have conducted talks for course members of the Construction Industry Training Authority and final year students of tertiary institutes. We have also provided input to the construction related departments of the tertiary institutes in their preparation of teaching materials on professional ethics.

## **IMPLEMENTATION OF RECOMMENDATIONS**

17. Most of the ICAC recommendations have been accepted in principle by the relevant government departments. Some of them have already been implemented and others are being actively considered for implementation.

18. The Buildings Department has already implemented some of the short to medium term recommendations such as instructing its officers to bring their own measurement tapes on site to check the contractor's works, giving guidance to Authorized Persons and Registered Contractors on corruption prevention awareness and designating site investigation as specialized works and maintaining a sub-register for site investigation contractors. The Department is consulting the construction industry on the implementation of other medium to long term recommendations.

19. The Housing Department has already implemented the recommendations on independent auditing of works, and is actively implementing recommendations on the control of piling works and on quality control testing of construction materials. These recommendations include effective identification of test samples, enhancing site supervision on piling works, employment of an independent laboratory to carry out loading tests on piles and an improved system for verifying the location of piles.

20. We will continue to liaise closely with these departments to ensure that the accepted recommendations are effectively implemented. We will also ensure that corruption prevention measures are built in when new policies and procedures are formulated by these Departments.

21. While the ICAC has a key interest in preventing corruption in construction projects, the effort to enhance construction quality must come from the construction industry and the parties involved. We are represented at the Construction Advisory Board chaired by the Secretary for Works and its Quality Construction Committee to give advice on the formulation of new policies and initiatives in enhancing construction quality. We will also have an input to HD's on-going review on the construction process to ensure anti-corruption measures are featured in the review.

December 1999

**Pursuable Corruption Reports Against  
Works Related Government Departments, Public Bodies and Private Sector**

**January 1996 - November 1999**

	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999 (Jan - Nov)</b>
Housing Department*	84	105	110	101
Works Department*	39	33	46	54
Public Bodies with major Works Projects *#	7	17	14	38
Private Sector	93	101	137	108
<b>Overall total</b>	<b>223</b>	<b>256</b>	<b>307</b>	<b>301</b>

\* Including non-construction related complaints e.g. staff administration

# i.e. The Airport Authority, Hong Kong Housing Society, Mass Transit Railway Corporation and Kowloon-Canton Railway Corporation