

Chapter 9

Section 2 - Procedures for Checking Compliance with Permit Conditions under Duties and Responsibilities of Audit Inspection Team

1. Introduction

- 1.1 A centralized audit inspection team (AIT) in Research and Development (R&D) Division of HyD is responsible for carrying out audit inspections of all excavation permit (XP) and emergency excavation permit (EXP) sites in a fair and open manner. The objective of the audit inspections is to monitor the performance of the permittees and nominated permittees (NPs) in compliance with permit conditions, which in turn to minimize inconvenience to the public by the excavation works; to prevent potential hazard to the public; and to ensure the best practical steps being taken by the permittees and/or NPs to stop any non-compliance with permit conditions and avoid recurrence of any like non-compliance.

2. Control of Permit Sites

- 2.1 The AIT should take up only the auditing role by means of visual inspection of permit sites. The overall responsibility of site supervision, management and control over the act and performance of NPs and contractors still lies with the permittees.

3. Monitoring of Permit Site Inspections

3.1 Audit inspection checklist

- 3.1.1 To facilitate effective and efficient audit inspections of permit sites, a “Permit Site Audit Inspection Checklist” (Appendix 9.2.1) is prepared to dovetail with the standard permit conditions.
- 3.1.2 In general, each checklist item is created corresponding to a requirement specified in a clause or sub-clause of the standard permit conditions. Some checklist items may have more than one sub-item. The site audit staff of AIT, who are generally the Works Supervisors (WSs), should follow “Guidelines for Marking of Defective Items in Audit Inspection Checklist” (Appendix 9.2.2) in carrying out audit inspections.
- 3.1.3 HyD Regional Offices may on top of the standard permit conditions impose additional conditions in particular circumstances. In this regard, the HyD Regional Office should send the following to AIT for audit inspections–
- (a) List of additional conditions;
 - (b) List of relevant check items; and
 - (c) Associated guidelines for marking the items.

3.2 Consistency and standard of audit inspections

- 3.2.1 The “Guidelines for Marking of Defective Items in Audit Inspection Checklist” are drawn up with a view to–
- (a) Establishing open, fair and objective audit inspections;
 - (b) Providing transparent requirements in the standard of audit inspections; and

- (c) Providing guidelines for AIT to maintain consistent standard in their audit inspections.

3.2.2 The engineers of AIT should have regular meetings with their site audit staff to discuss and align any inconsistent standard of marking the checklist items.

3.3 Audit inspection frequency

3.3.1 The present departmental target for overall audit inspection frequency of permit sites is at least once in every 10 active permit days on average. Active permit days are calendar days calculated from the date of permit commencement to the date of reporting completion.

3.3.2 In general, the AIT should strive to achieve the above departmental target for the overall audit inspection frequency for all permit sites on average, except for the following situations–

- (a) The audit inspection frequency may be increased for sites with poor performance records;
- (b) The audit inspection frequency may be reduced for sites with consistently good performance records;
- (c) The audit inspection frequency may be increased for sites with substantial impact or potentially substantial impact on the public and/or the traffic; and
- (d) The audit inspection frequency may be adjusted with due regard to the daily route planning and resources available.

3.4 Spot-checks by inspectorate staff

3.4.1 The inspectorate staff (IS) of AIT should carry out checks on a minimum of 5% of all active permit sites inspected by the site audit staff in order to maintain the consistent standard of the audit inspections. The IS should compare their spot-check results with the audit inspection results so as to identify any excessively over or under rating in the markings. If there is any irregularity discovered in the markings, the IS should enquire and clarify with the subject site audit staff.

3.5 Vetting of audit inspection results and monitoring of audit inspection frequency

3.5.1 The engineers of AIT should randomly select a minimum of 5% of the audit inspection results including the completed checklists and record photos uploaded to the Audit Inspection Management System (AIMS) by the site audit staff for their vetting. With reference to the “Guidelines for Marking of Defective Items in Audit Inspection Checklist”, the engineers may compare the audit inspection results amongst different site audit staff so as to identify any excessively over or under rating in the markings. If there is any irregularity discovered in the markings, the engineers should enquire and clarify with the subject site audit staff.

3.5.2 R&D Division should produce monthly statistics on audit inspection frequency to ensure that the bi-monthly audit inspection frequency target is achieved. The Maintenance Working Group (MWG) will monitor and review the bi-monthly audit inspection statistics from R&D Division.

4. Audit Inspection Procedures

4.1 General

- 4.1.1 The AIT will carry out audit inspections of permit sites on a district basis. The site audit staff should have acquired reasonably good knowledge of characteristic sites within their districts before the actual audit inspections. This is important in planning their daily itinerary for audit inspections.
- 4.1.2 The site audit staff are required to be well conversant with the current version of the following documents–
- (a) Standard XP conditions, standard EXP conditions and any additional conditions;
 - (b) Code of Practice for the Lighting, Signing and Guarding of Road Works (CoP for LSG);
 - (c) Guide to Trench Excavations (Shoring Support and Drainage Measures);
 - (d) Guidance Notes RD/GN/024 on display board for motorists explaining the reason for idle road works;
 - (e) Guidance Notes RD/GN/014 on permanent trench reinstatement;
 - (f) Guidance Notes RD/GN/019 on publicity boards for motorists;
 - (g) Relevant HyD Standard Drawings on reinstatement of pavement, notice/publicity/display boards, vehicle crossings over trench opening, minimum depth requirement for underground services, etc.;
 - (h) Permit Site Audit Inspection Checklist;
 - (i) Guidelines for Marking of Defective Items in Audit Inspection Checklist;
 - (j) Relevant provisions in the General Specification for Civil Engineering Works on earthworks, carriageways, traffic signs, road markings, etc.; and
 - (k) Relevant guidelines and codes of practice issued by the Tree Management Office of Development Bureau and other relevant tree maintenance authorities on tree preservation, tree removal, etc.
- 4.1.3 If there is any doubt on the interpretation of the above documents, the site audit staff should consult their supervisors for advice.

4.2 Planning for audit inspections

- 4.2.1 For daily inspections by the site audit staff, the IS should do a proper planning with the aid of AIMS, which includes–
- (a) Compiling a daily list of active permit sites on a district basis from the Excavation Permit Management System (XPMS) with the following criteria–
 - i) Any permit sites with permit commencement date elapsed (including those just to commence on the day of audit inspection);
 - ii) Emergency excavation permit sites with emergency incident number registered in XPMS;
 - iii) Small Scale Works (SSW) permit sites with SSW job registered in XPMS;
 - iv) Any permit sites with completion notice not yet submitted or just submitted on or after the previous working day, or with completion notice rejected by the relevant HyD Regional Offices.

- (b) Selecting permit sites from the daily list of active permit sites with the following order of priority to draw up a daily inspection list–
 - i) Permit sites with poor performance records;
 - ii) Permit sites not inspected in the past 10 active permit days, with the following order of priority–
 - new permit sites (i.e. those without previous audit inspections) with advance notice (AN) submitted; and
 - existing permit sites and new permit sites without AN submitted; and
 - iii) Permit sites with consistently good performance records.
- (c) Planning routes for each site audit staff to minimize detouring.

4.3 During audit inspections

4.3.1 Upon arrival at a permit site, the site audit staff should record the permit number, location and names of the permittee and NP/contractor, if observable, on the checklist. He should check if the permit period has expired. The box of “Action required by ET (Enforcement Team)” in the checklist should be ticked for any of the following cases–

- (a) For normal excavation works (including Capital Works (CW)):
 - i) Permit period expired and no extension application received.
- (b) For emergency excavation works:
 - i) Permit period expired;
 - ii) Excavation registered as emergency incident but not of emergency nature;
 - iii) Initial period of emergency incident expired and no relevant permit application received; or
 - iv) Relevant permit period expired and no extension application received.
- (c) For SSW:
 - i) Permit period expired;
 - ii) Excavation registered as SSW job but not of SSW nature; or
 - iii) Time limit of SSW job expired.

4.3.2 Points to note during audit inspections–

- (a) Record any active permit site exceeding the horizontal extent/depth permitted under the permit.
- (b) Record any active permit site without AN submitted.
- (c) Record any permit site with AN submitted but has no sign of any site activities.
- (d) Pay particular attention to items related to road safety. Check any non-conformance with the CoP for LSG. Check any non-conformance with the agreed temporary traffic management plans, if any.
- (e) Check items related to site cleanliness and unattended site.
- (f) Check any non-conformance with all relevant HyD Standard Drawings, specifications and/or any approved alternatives.
- (g) Take photographic records, in particular for NC items observed on site during audit inspections. Fill out relevant checklist items for record purpose even no NC item may be observable.
- (h) During the journey to the next permit site, keep a watchful eye on, if observable, any excavation without valid permit, any emergency work/SSW/CW sites that are not registered in XPMS, and any abuse of EXP or block SSW XP. Record details of such sites for follow-up action.

4.3.3 Points to note for personal safety during audit inspections–

- (a) In accordance with the CoP for LSG, all persons working on or near carriageway of any road must wear high visibility jackets incorporating reflective stripes or patches. Wear safety helmet, reflective apparels and appropriate attires in compliance with relevant statutory provisions for site safety at all times during audit inspections.
- (b) If a vehicle is provided for audit inspections, the vehicle should be parked at a place without causing nuisance or danger to other road-users. The warning lights on top of the transport vehicle, if available, should be lighted up at all times during audit inspections.
- (c) In the face of intimidation, disturbance, assault or potential violence, the site audit staff should immediately contact the police.

4.4 Post-audit inspections

- 4.4.1 After audit inspections, the site audit staff should upload all marked-up checklists and photographic records taken on site to AIMS by the day of inspection.
- 4.4.2 The IS should review all the uploaded audit inspection results and, if necessary, correct the markings after studying the record photographs. The audit inspection results shown in AIMS will be treated as final by 1:00 p.m. on the working day following the day of the audit inspections; except for audit inspections carried out preceding Saturday, the results of which as shown in AIMS will be treated as final by 1:00 p.m. on the first working day in the following week.
- 4.4.3 For those permit sites with any NC items, the relevant engineer of AIT should, making use of AIMS, send email notifications on the audit inspections to the email addresses of the relevant parties of the permits, which have been registered in XPMS. The email notifications may be sent before the status of the audit inspections are confirmed final in AIMS. However, there may be situations that such notifications could not be received by the relevant parties (e.g. the relevant parties did not properly register/update their contact details in XPMS, etc.). It should not be a ground for the denial of responsibilities based on such situations. The permittees/NPs should ensure that their contact details are kept up to date in XPMS, and should check the audit inspection results in XPMS daily for follow-up actions. After all, the permittees/NPs are responsible for their own supervision, management and control to prevent contravention of the permit conditions, and any adverse consequences such as the sanctioning measure in paragraph 8 and enforcement action in Chapter 10.

5. Appeals against Audit Inspection Results

- 5.1 A permittee or a NP who is aggrieved by the audit inspection result may make an appeal to AIT within 9 working days from the date of audit inspection result finalized and shown in AIMS. Unless justification is provided, appeals made beyond the time limit will not be processed.
- 5.2 To improve efficiency and save papers, a permittee or a NP, who is an XPMS account holder, should make appeals on-line through AIMS. Unless justification (e.g. AIMS is inaccessible during system maintenance while earlier application is impractical) is provided, appeals made in hard copies by XPMS account holders will not be processed. However, in event appeals made in hard copies are allowed, the procedure as stated in paragraphs 5.3 and 5.4 below should be followed.

- 5.3 A permittee, who is not an XPMS account holder, should make appeals by using the Standard Appeal Application Form in Appendix 9.2.4, in writing or by facsimile to CHE/R&D, HyD. Unless justification is provided, appeals made beyond the time limit as stated in paragraph 5.1 above will not be processed. CHE/R&D, HyD should notify the permittee concerned, using the Standard Appeal Reply Form in Appendix 9.2.5, in writing or by facsimile, of the result of his review within 7 working days from the date of receipt of the appeal. In addition, the result of the review will be shown in AIMS.
- 5.4 A NP, who is not an XPMS account holder, is allowed to make appeals against any NCs in the audit inspection results to be complied with by him. The requirement for the use of the Standard Appeal Application Form in Appendix 9.2.4 and the time limit for appeal are the same as those stated in paragraph 5.3 above. In order to ensure the permittee would undertake his management duty, the NP should submit appeals via the permittee. The NP should complete the box exclusive for appeal application submitted directly by the NP via the permittee in the Standard Appeal Application Form to state that he has discussed with the permittee about the appeal cases and indicate whether or not they could reach a consensus, and copy the appeals to the permittee. HyD will consider appeals submitted by the NP though the permittee may have reservations about the NP's view point on the appeal cases. However, if the NP fails to indicate that he has discussed the appeal cases with the permittee, HyD will not process the appeals and will return the appeals to the permittee.
- 5.5 The checklist items and reasons related to the appeals should be collected for analysis to monitor and improve the audit inspection process as the analysis may identify–
- (a) Requirement, condition or standard not clearly specified;
 - (b) Unclear guideline on marking a checklist item;
 - (c) Inconsistent standard of marking a checklist item;
 - (d) Subjective inspection; and
 - (e) Abuse of the appeal mechanism.

6. Actions against Non-compliances with Permit Conditions

- 6.1 The engineers of AIT should immediately refer the following cases to the Enforcement Team (ET) for further action–
- (a) Excavation without valid excavation permit (XP/EXP/block SSW XP/CWXP);
 - (b) Excavation with excavation permit period expired and no extension application received;
 - (c) Emergency incident with initial period expired and no relevant excavation permit application received;
 - (d) Excavation registered as emergency incident but not of emergency nature;
 - (e) SSW job with the time limit expired; and
 - (f) Excavation registered as SSW job but not of SSW nature.
- 6.2 In addition to the cases listed in paragraph 6.1 above, the engineers of AIT should, making use of AIMS, issue advisory letters to the relevant parties of the excavation permit, using the contact details which have been registered in XPMS during permit application, and/or referral memos to the ET, as to observation of more serious contravention and/or repetitive contravention of the permit conditions. However, there may be situations that the advisory letters could not be received by the relevant parties (e.g. the relevant parties did not properly register/update their contact details in XPMS, etc.). It should not be a ground for denial of responsibilities based on such situations.

The permittees/NPs should ensure that their contact details are kept up to date in XPMS, and should check the audit inspections of the permits in XPMS daily for follow-up action. After all, the permittees/NPs are responsible for their own supervision, management and control to prevent contravention of the permit conditions, and any adverse consequences such as the sanctioning measure in paragraph 8 and enforcement action in Chapter 10.

- 6.3 If the performance % of any group ¹ for the permit sites of a permittee in any month is less than 70% or the overall performance % for the permit sites of a permittee in any month is less than 80%, the permittee is required to submit site progress photos for all his active permit sites in the subsequent month in accordance with the current version of the “Guideline on submission of site progress photographs by utility undertakings”. The above mentioned performance % is just a benchmark to trigger the monitoring measure and its achievement is not reckoned as a criterion for acceptance of the permittee’s performance. The permittees should strive to achieve performance % as high as possible. MWG will review the monthly performance % of groups or overall performance % of permit sites triggering submission of site progress photos as and when required.

7. Referring Public Complaints regarding XPs

- 7.1 HyD Regional Offices and other HyD Offices should refer all public complaints regarding XPs directly to ET for enforcement action in Chapter 10, and copy to AIT for reference.

8. Demerit Point System and Sanctioning Measure

8.1 Demerit Point System

- 8.1.1 The Demerit Point System has been developed to record the performance of works promoters and contractors in a quantified manner, and shall be universally and impartially applied to all permittees and NPs, including both Government departments and utility undertakings, to ensure its fairness.
- 8.1.2 A NC revealed from audit inspection will attract a demerit point, amplified with appropriate multiplying factors assigned in accordance with pre-determined risk weightings, which are related to the following three aspects –
- (a) Severity of NC item;
 - (b) Repeating of NC item; and
 - (c) Timely rectification of immediately rectifiable NC item.
- 8.1.3 Severity of NC item – All NC items in the Permit Site Audit Inspection Checklist have been classified into “Severe”, “Major” or “Minor” in respect of its severity. Appropriate demerit point according to the respective risk weighting shall be imposed to each NC item.
- 8.1.4 Repeating of NC item – To deter permittees/NPs from committing repeated NC within a comparatively short period at the same permit site, multiplying factors shall be imposed to repeated NC item.

¹ Performance % of groups is calculated in accordance with the performance appraisal in Appendix 9.2.3.

- 8.1.5 Timely rectification of immediately rectifiable NC item – To encourage permittees/NPs to take prompt action on rectifying immediately rectifiable NC item, demerit point of NC item incurred will be reduced by a merit multiplying factor provided that (1) the immediately rectifiable NC item has been rectified and reported in AIMS within 48 hours, and (2) the rectification work is reasonably satisfactory to HyD.
- 8.1.6 In addition, demerit points will be assigned to the permittee who fails to comply with the relevant permit condition due to delayed rectification of rejected permanent reinstatement, failure to submit certified as-built records, overdue submission of test certificates/reports, delayed rectification of shallow depth service, delayed rectification of damaged/deteriorated manhole and drawpit covers, and abuse of emergency excavation permit respectively. Demerit point will be generated weekly on Saturdays.
- 8.1.7 Pre-determined multiplying factors are shown in Appendix 9.2.6.

8.2 Demerit Point Level

- 8.2.1 Demerit Point Level (DPL) is evaluated to reflect the performance of a Permittee-Division-Contractor combination in a quantified manner. DPL is calculated by the following formulas –

$$\text{DPL 1} = \frac{\Sigma \left\{ \begin{array}{l} \text{Rolling 3-month cumulative demerit point of the responsible} \\ \text{party combination revealed from audit inspections} \end{array} \right\}}{\text{Total number of audit inspections carried out for permit sites of that responsible party combination within the 3-month period}}$$

$$\text{DPL 2A} = \frac{\Sigma \left\{ \begin{array}{l} \text{Rolling 7-month cumulative demerit point of the responsible} \\ \text{party combination contravened the relevant permit condition} \\ \text{for delayed rectification of rejected permanent reinstatement} \\ \times \text{corresponding Risk Weighting} \end{array} \right\}}{\text{Total number of permits with rejected permanent reinstatement assessed on the permits of that responsible party combination within the 7-month period}}$$

$$\text{DPL 2AA} = \Sigma \left\{ \begin{array}{l} \text{Cumulative demerit point of the responsible permittee,} \\ \text{irrespective of any different Division/Contractor involved,} \\ \text{for rejected permanent reinstatement remaining outstanding} \\ \text{for prolonged period and not yet satisfactorily rectified} \\ \times \text{corresponding Risk Weighting} \end{array} \right\}$$

$$\text{DPL 2B} = \frac{\Sigma \left\{ \begin{array}{l} \text{Rolling 3-month cumulative demerit point of the responsible} \\ \text{party combination contravened the relevant permit condition} \\ \text{due to overdue submission of certified as-built records} \\ \times \text{corresponding Risk Weighting} \end{array} \right\}}{\text{Total number of permits requiring submission of certified as-built records assessed on the permits of that responsible party combination within the 3-month period}}$$

$$\text{DPL 2C} = \frac{\Sigma \left\{ \begin{array}{l} \text{Rolling 3-month cumulative demerit point of the responsible} \\ \text{party combination contravened the relevant permit condition} \\ \text{due to overdue submission of test certificates/reports} \\ \times \text{corresponding Risk Weighting} \end{array} \right\}}{\text{Total number of permits requiring submission of test certificates/reports} \\ \text{assessed on the permits of that responsible party combination within the} \\ \text{3-month period}}$$

$$\text{DPL 2D} = \Sigma \left\{ \begin{array}{l} \text{Cumulative demerit point of the responsible party} \\ \text{combination contravened the minimum depth requirements} \end{array} \right\}$$

$$\text{DPL 2E} = \Sigma \left\{ \begin{array}{l} \text{Cumulative demerit point of the responsible permittee,} \\ \text{irrespective of any different Division/contractor involved, for} \\ \text{confirmed case of delayed rectifications of} \\ \text{damaged/deteriorated manhole or drawpit covers} \end{array} \right\}$$

$$\text{DPL 2F} = \Sigma \left\{ \begin{array}{l} \text{Rolling 3-month cumulative demerit point of the responsible} \\ \text{party combination for confirmed case of abuse of emergency} \\ \text{excavation permit revealed from audit inspections} \end{array} \right\}$$

$$\text{DPL 2G} = \Sigma \left\{ \begin{array}{l} \text{Cumulative demerit point of the responsible party} \\ \text{combination for confirmed case of delayed removal of} \\ \text{temporary structure/equipment or installation} \end{array} \right\}$$

8.2.2 The definition of DPL 2A, DPL 2AA, DPL 2D, DPL 2E and DPL 2G, are described in detail in Appendix 9.2.7.

8.2.3 The overall DPL of the responsible party combination is the summation of DPL 1, DPL 2A, DPL 2AA, DPL 2B, DPL 2C, DPL 2D, DPL 2E, DPL 2F and DPL 2G. A worked example is attached in Appendix 9.2.8 for reference.

8.2.4 DPL will be generated weekly on Saturday. Permittees and contractors can view their own DPL in XPMS.

8.3 Sanctioning Measure

8.3.1 The main objectives of the sanctioning measure are to–

- (a) Enhance alertness of permittees to supervise their contractors;
- (b) Oblige and assist permittees/NPs to manage excavation works; and
- (c) Deter permittees/NPs from committing NCs against permit conditions.

8.3.2 The conditions where sanctioning measure will be imposed are set out in the table below:

	Conditions where sanctioning measure will be imposed	Sanctioning period
(a)	Overall DPL at or above 4.0	At least three months and until the overall DPL drops below 4.0.
(b)	Long outstanding rectifications of: (i) rejected permanent reinstatements with prolonged period over 2 years (ii) shallow depth services with prolonged period over 15 months after the initial rectification period (iii) rejected removal of temporary structure/ equipment/ installation with prolonged period over 2 years	At least three months and until there is: (i) no rejected permanent reinstatement with prolonged period over 2 years (ii) no shallow depth service with prolonged period over 15 months after the initial rectification period, to the satisfaction of the relevant HyD Regional Office (iii) no rejected removal of temporary structure/equipment/installation with prolonged period over 2 years

8.3.3 When a party combination is being sanctioned, the relevant contractor will not be approved as a NP in any new application for nomination of NP. The previously approved nominations will remain not affected.

8.3.4 For application for nomination of NP submitted during the sanctioning period but still being processed after the sanctioning measure revoked (i.e. the conditions as stated in 8.3.2), the permittee may cancel the application and re-submit one for automatic approval, since the relevant contractor should have been re-introduced in the pre-approval NP list under the relevant division of the relevant permittee.