

Housing Authority Safety Auditing System Ver 1.5.1

VO:

Here is the footage from “Site Safety Seminar for Capital Works New Works Contracts” organised by the Hong Kong Housing Authority” on 28 October 2015.

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His presentation topic is

“Review of Housing Authority Safety Auditing System (HASAS) Version 1.5”.

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As I mentioned earlier, our working committee,
if I remember correctly, had went through nine meetings.

It was a piece of hard work.

to review the Version 1.5.

The original intention was not to review every item.

We were hoping to come up with a simplified version of Surprise Safety Inspection Programme and Housing Authority Safety Auditing System.

For example, can we combine the two into one,
or do fewer inspections?

We decided that the two systems were different
and they could not be combined.

In addition, as the Pay for Safety Scheme is involved,
we cannot reduce the number of inspections.

We decided to see if it’s possible to streamline some of the requirements and reduce
the number of documents required.

Some of the documents were not originally designed for HASAS.

Some of them are required by HA’s Pay for Safety Scheme,
such as training records, toolbox talk records, morning meeting records.

They involve HA’s requirements
and cannot be taken out.

Let’s look at the finalised version, which is the current version.

We will go over a few items.

Slight changes have been made to Critical Pass.

The weighting has been changed.

We will look at the modified scoring table.

We have added general safety audit criteria.

We will also talk about major changes to the 14 elements.

We won't cover minor changes here.

The final version will be reviewed by the HA again,
before it is implemented officially.

There are a few items in Part B of Critical Pass,
including working at height, housekeeping, protection against falling objects,
lifting operations, tower crane and mobile crane.

These sub-elements are under Critical Pass in the HA's system.

What changes have been made?

In the original version, documentation, procedures and arrangements take up 3 points.
Implementation, physical condition and physical check take up 9 points.

After the review,
documentation is now worth 6 points instead of 3,
while the items that make up the 9 points remain unchanged.

After the review,
the score for Part A is the same.

There are 139 questions with a total score of 567.

It's the same as the original version.

In the revised version,
the number of questions under working at height is the same,
but the scores for the high risk sub-sections have been increased.

In the whole system,
the weighting of the elements under Critical Pass has been increased.

Similarly, the weighting of the questions in each sub-section has been evened out.

The number of questions remains the same.

In Version 1.5 and the advanced Version 1.5.1,
the number of questions in Part A and Part B are the same.

In terms of the score, Part B was worth 1455 points.

After revision, it carries 1569 points.

There's not much change.

General Audit Criteria will be specified in the handbook.

We don't encourage a lot of documents.

Enough is good.

The auditor is not required
to submit duplicate documents.

For example, if the safe plan has not been revised
and the auditor has already submitted it to us,
they only have to specify which audit version we should refer to.

For some documents, such as training records,
if the training certificates have been submitted before, they may not need to be
submitted again in the next audit,
unless the training record has been changed,
new supervisors have been added or management has taken new training courses.
If there are new documents, they can be collected and then submitted.

Risk Assessment.

Is it necessary to review the whole set of risk assessment record at every audit?

The answer is no.

If the generic risk assessments have not been changed,
they may not need to be reviewed at every audit.

Generally, it is specified in the safety plan how often they should be reviewed.

The review will be carried out according to your schedule.

As to specific risk assessments,
they should be reviewed according to the project progress.

They may be reviewed more frequently,
in line with the project progress.

They will be reviewed when it is necessary
and as arranged according to the schedule of the safety plan.

Now, specific questions, such as Safety Policy.

The first question asks what counts as high standard.

The audit criteria specify a few standards,
such as the implementation of new innovation programme,
Safe Working Cycle (SWC),
Work Safe Behaviour (WSB),
and Safety Climate Index Survey (SCI).

After discussion,
it is decided that SCI is not compulsory in this version.

We encourage you to do it.

It's highly recommended,
but it's not compulsory in this version.

If SWC and WSB have been implemented,
and there is an intention to implement new innovation programme –
if these 3 criteria are met,
then the requirement for high standard is fulfilled.

Another question asks if there are adequate resources to implement the safety policy?.

Some documents may not be necessary.

For example, whether there is detailed information on resources, how the funds are

allocated,
and how the resources are invested,
these may not be necessary.

Evidence can be obtained through
interviews with top management
or from meeting minutes.

As to safety organisation,
safety supervisors and representatives are required to
attend safety supervisor training.

In the case that some new safety representatives, such the representatives of
subcontractors,
are unable to obtain the safety supervisor qualification in time for an audit
if these new safety representatives,
are unable to meet the requirements in the previous audit, they can be given an
exemption.

They must meet the requirement at the next audit.

In other words, a grace period of three months is given to
the new safety representatives of subcontractors.

This question concerns competent persons.

Do they all need to have appointment letters?

They must if it's required by law.

If it's not, then the letters are not compulsory.

There should be a list of competent persons,
so that others know who are competent persons,
and they themselves also know they are competent persons.

This system will help the auditors perform the checks.

With regard to specific safety training,

These mention what counts as specific safety training.

The contract also specifies
what specific safety training refers to.

For example, the erection, alteration and dismantling of tower cranes, material hoists,
gondolas, etc.

count as specific safety training.

Similarly, working at height,

such as the erection, dismantling and alteration of bamboo and metal scaffolds also
count.

Then, electrical work, such as live electrical works,
lifting operations in particular,

powered machinery,
such as mobile elevating working platforms, abrasive wheels,
as well as compressed air tools,
all are counted as specific safety training.
In addition, the specific safety training defined as necessary
in the risk assessment,
will need to be given to
all workers through safety training.
So what counts as specific safety training has been fine-tuned and clarified.

I believe all of you have implemented this.
All managers are required to attend a 27-hour
Safety Training Course for Site Management Staff
provided by OSHC or the Construction Industry Council .
The course is made up of several modules, such as safety legislation,
safety management concepts, safety inspection, accident investigation,
risk assessment, Work Safe Behaviour, Safety Climate Index,
safe design and CDM.
The course is currently implemented by the HA.
For new workers,
the “P” and “N” Caring Programme applies.
The CIC has issued guidelines
incorporating the relevant criteria into the standard.
The “P” and “N” Caring Programme is explained in detail.
There is an assessment at the end of the programme.

This question mentions training record,
including a summary of the date, time, location, duration of training.
We have some guidance for the auditor.
During the audit,
you can select workers of 3 to 5 trades randomly
and check if their records are up-to-date
in order to verify this system.

With regard to inspection,
the safety inspection checklist for machinery
can be replaced by a logbook.
If a checklist is being used, that’s even better.

Not all the machines have checklists,

In this case, a logbook can be used.

The machinery should be inspected daily for its effectiveness.

“In safe working order” should be written down, and endorsed.

If there is no checklist,

a simple list of the checking items should be attached to the logbook, to indicate what needs to be checked.

Although there is no need to put a tick against every item, the check has to be performed according to the list.

Then “In safe working order” should be written down, and the logbook should be signed.

Some companies are using smartphones or mobile apps to do the safety inspection records.

This is acceptable,

but of course they need to show the auditor how the apps is used.

This question asks if there are arrangements

to check the effectiveness of the safety inspection.

If you can fulfil certain functions through an internal safety audit, that's acceptable,

but the coverage of the audit report should be adequate.

At present, some audit reports only include 8 to 10 elements.

That's not enough.

In some cases, no internal safety audit has been performed at the time of the first HASAS audit.

Then “N/A” can be selected for the relevant sections under risk assessment.

With regard to Risk Assessment,

I mentioned the review of records.

The auditor will randomly choose some high risk assessments as evidence,

which will be specified in the submission of audit report.

Although the auditor may not collect all risk assessment reports,

but they need to collect a master list and a risk assessment record summary, so that we know how many risk assessments have been carried out.

As I mentioned, generic risk assessment must be carried out every quarter.

Specific risk assessments should be carried out according to the project progress.

Some criteria have been added to personal protective equipment(PPE).

How to check whether the PPE is adequate?

It may not be necessary to keep a detailed inventory record.

The auditor may not need to see it,
but the minimum stock level,
such as the minimum number of safety helmets,
and the number of PPE sets,
should be reported to the auditor.

The auditor will review the actual situation and decide if the inventory level is reasonable.

As to accident investigation, the information has been updated.

The soon-to-be launched HAOIDSS will be incorporated.

The system will be used for accident trending analysis and finding out the common causes.

In terms of emergency preparedness,

some criteria have been added,

listing the emergency situations under which drills are required.

The specifications are listed in the contract.

Emergency programmes are required for the following five situations:

an accident which results in death or serious injury;

a fire breaking out;

and any other accident which creates a dangerous situation.

These situations need to be considered under emergency preparedness.

With regard to safety promotion,

Work Safe Behaviour (WSB) needs to be implemented.

Some criteria have been added.

Safety officers who have completed the Train-the-Trainer course

can illustrate the responsibility of an observer

and how to implement WSB

in internal training.

More criteria have been added for WSB

for high risk site activities.

Data should be provided

for every audit, every quarter.

One high risk site activity can be observed each time.

For example, the auditor may observe working at height this time,

and lifting operations next time.

No more than 15 items should be observed each time.

It is hoped that dangerous behaviour can be observed to see if there are abnormalities on the workers' part.

Safety Climate Index Survey (SCI) is not compulsory.

If it has not been implemented, you can fill in "N/A".

But we highly recommend contractors to do it.

It's a good way or tool

to review the company's safety culture –

what do the workers think of the company's safety culture?

Criteria have been added for the new safety innovation programme.

If no safety innovation programme is in place at a particular audit,

"N/A" can be filled in for that audit.

The safety innovation programme is divided into three items.

BIM can be used.

RFID and other safe innovation methods

can also be used.

The safety innovation should demonstrate

how it can minimise and mitigate accidents.

The Health Assurance Programme mentions pre-employment medical examination.

This is required by the law and must be implemented.

For those working with carcinogenic substances, or asbestos

and in special environments, such as in compressed air,

they should undergo pre-employment medical examination as required by the law.

If the project does not involve these procedures,

"N/A" can be put down for this question.

Risk assessment with regard to manual handling operation should be done by a competent person.

The Registered Safety Officer (RSO) is now considered to be a competent person.

What if it is not done by the RSO?

How can other persons handle the risk assessment?

The person must have completed the safety training on manual handling for competent persons,

and be appointed by the employer,
in order to carry out the risk assessment.
Of course, the auditor will assess whether the quality of manual handling can pass the requirements or not.
They may fill in the reports half-heartedly.
The auditor will make a decision regarding the quality of the reports.
It's the same for noise assessment.
The auditor will assess whether the quality of the noise assessment report is up to standard.
Another question asks if there is a system to reduce the workers' exposure to the noise after the noise assessment, by planning work, changing machines, etc.
Some criteria have been added for relevant measures that can be laid down.
This question asks whether suitable personal protective equipments, such as ear protectors, are provided to workers who are exposed to noise.
We have revised the criteria to make things clearer.

With regard to subcontractors,
is there any arrangement to ensure that the tools and equipment taken into the site by the subcontractors and suppliers comply with the relevant statutory requirements?
When they enter the site, they are required to submit certain documents to prove and show the contractor what tools or equipment they are taking into the site.
The guideline specifies what equipment is mandatory, such as the tools and substances stipulated under the law and contract, including oxy-acetylene cylinders, lifting appliances, cartridge-operated fixing tools, chemicals, portable electric tools and 110V power tools.
The information should be submitted to the contractor.
For equipment other than the abovementioned tools and materials, the contractor can check whether the tools brought to the site by the subcontractors are appropriate through routine safety inspection and daily monitoring.
We made a slight amendment to the sub-section 14.4.6.
For the sake of consistency, the name "builder's lift" is used instead of passenger hoist.
A few criteria have been added to Fire Risks.

Only registered safety officers and representatives from registered fire service installation contractors can conduct training in the use of fire extinguishers for workers.

With regard to confined space, one of the criteria requires Work Safe Behaviour observation.

In the case that this procedure is chosen for Work Safe Behaviour observation and the procedure does not span a period of four weeks, it can be finished in a few days or one week, depending on implementation situation.

We believe it can be finished.

With regard to working at height, we have avoided duplication of questions.

This question applies to edges, working platforms and mobile tower scaffolding, etc. Floor edges and stairways are covered by the question in 14.1.3.9, so this question does not look into that.

We added some guidance.

If for some reason the guard-rails and toe-boards need to be temporary temporarily removed, they must be replaced as soon as the relevant work is completed.

The question covers the requirements for ladders, based on the requirements in the HA's circular.

The standard requirement stipulates that ladders can only be used as access. Work cannot be performed on them.

For working at height between 900mm and 2m, working platforms or step platforms can be used.

For work not more than 900mm, step platforms and platform ladders can be used.

With regard to lifting operations, we hope risk assessment can focus on a few aspects, including tower cranes and mobile cranes.

High risk lifting operations can be covered by the risk assessment.

We have added more criteria for temporary works.

The HA uses the form DEI—F26, which must be filled in before covering up to certify that all falsework is safe for use.

With regard to electrical supply system, the WR1 should be applied as required by the EMSD.

The WRI WR1 is also required for temporary installations.

The wiring system must be certified safe before the circuit is connected.

With regard to generators, EMSD has provided guidelines for copper rod electrodes and earthing systems.

They must be laid at a minimum depth of 600mm below the ground surface.

Should be checked periodically by a Registered Electrical Worker, who is obliged to record the results for the auditor to review.

With regard to maintenance, records are required for some machines. Sometimes logbooks are used.

In the case that the machine is rented, such as elevating working platform and material hoist, there may not be a logbook covering the time from production to the present.

Then there should at least be a logbook with detail maintenance record for the period of use on site.

Some criteria have been added for excavators to meet the requirements of COP.

A maintenance logbook should be kept, with records of routine inspection and maintenance records.

With regard to Prior-to-Work (Before Use) and After Use Inspection, important machinery, such as tower cranes, mobile cranes, gondolas, elevating working platforms, material hoists and excavators should each have a logbook even if a prior-to-work inspection checklist is not available.

Every day before use, the equipment must be checked. Records must be kept and endorsed with an signature.

As I mentioned, a list of checking items should be attached to the logbook, so that the person performing the inspection knows what they need to look at.

This is an example of mobile crane pre-use checklist for your reference.

One company uses graphics to illustrate what items need to be checked every day before work.

The inspection is recorded and verified with an signature.

You can use similar formats.

Besides these machines,

what should we do with other kinds of machinery?

There are also pre-use check items.

For sample, records for compressed air tools, woodworking machinery, abrasive wheels and hand-held power tools

can be kept in a logbook if a checklist is not available.

Not every piece of machinery needs a logbook.

The logbooks serve as the subcontractor's records:

how many machines are in use on a particular day,
and if the workers have checked each one of them.

If no problem is found, they don't need to make a record.

If there are problems, they should be reported to the subcontractor-in-charge.

The machine with problems should be recorded.

In other words, report if there are problems.

If there is no problem, you can assume it's in safe working order.

Besides, daily inspection records

can be made using Form 3A.

Some of the items may not be on Form 3A.

In that case, you can add them under "Others".

There is only one field on Form 3A where you can fill in information.

What are you going to inspect?

You need to attach a list of checking items.

For example, if you are checking the working machine, what are you looking at?

You need to attach a list of checking items.

The inspector should be very clear about the checking items,
and he should be able to carry the list with him.

Or he can save it in his smartphone.

He should know what items he need to check.

In terms of site traffic,

the HA has issued DCMBI requirements recently.

Mechanically operated horizontal gates, with safety alarm devices, must be added
at vehicular ingress/egress points.

When the gate is in operation,

the alarm will alert workers and pedestrians

and inform everyone that the gate is in operation.

There should be emergency stop push buttons.

For more details, you may refer to the requirements of DCMBI.

Changes to the NSC checklist are minimal.

Only a few criteria have been added.

For example, the EN131 standard has been added to the ladder.

As to working platforms, if the auditor sees one nearby,

they will ask the NSC whether they are using it.

If they are not,

or if there is proof that the platform belongs to the contractor,

the abnormality has been reported

and it won't be used,

then "N/A" can be filled in for this question.

They are obliged to explain whether they are using the platform.

There is nothing to note in particular in the other sections.

One more thing:

In terms of noise assessment,

if noisy machinery is used,

then noise assessment is required during site inspection.

If no noisy tools are in use and there is no noisy operations on site,

or there is no plan to use noisy tools,

"N/A" can be filled in for these questions.

Only minimal changes have been made to NSC.

Just a few criteria have been added.

Thank you.