**e Transcription: English subtitles**

Here is the footage from "Site Safety Seminar for Capital Works New Works Contracts" organised by the Hong Kong Housing Authority on 30 April 2015.

The speaker is Mr. Henry CHEUNG, Senior Consultant of OSHC

His presentation topic is "Latest Progress of Developing the Housing Authority Occupational Injury & Disease Surveillance System"

Mr. Henry CHEUNG:

This is the Housing Authority Occupational Injury & Disease Surveillance System (HAOIDSS)

developed by the Occupational Safety and Health Council (OSHC) for the Housing Department

The English name is very long, as is Chinese name,

Housing Authority Occupational Injury & Disease Surveillance System even the abbreviation HAOIDSS is a little hard to pronounce, something like this.

In fact, we have introduced this system in the same occasion or other events, as Mr. Lau has mentioned.

We would like to report the latest progress. First of all, let's recall everyone's memory what is this system, and what is it for.

In fact, it has several purposes. First, to record.

To have a systematic record on the accidents, near misses or occupational diseases on the site.

Second, to specify the forms to be filled out by the contractors, some administrative forms to be filled out.

It mainly refers to Form787 This form

is just an assistance, it can't complete the legal forms,

such as Form2, Form2A, Form2B and DO forms, etc, [omit this subtitles and the related video track]

just some little help.

The third purpose is to provide users with a warning.

It provides a warning function for carrying out improvement measures when the accident number increased.

The fourth is to allow the Housing Department and other users to prepare statistics, reports and charts


for supervision.

Those are the main functions. There are three sections,

three modules or three operations. Each operation has two phases,
which performed the functions just mentioned.
And each phase or module requires password login.
For example, the first module is about the registration of the site, to set up the file for the site.
That registration section would be done by the OSHC.
When Housing Department provides the data, we will open a file. After that, the accidents can be reported
Accident reporting should be for real accidents,
near misses, or occupational disease, which had really happened and reported by the contractor.
And the second section is to perform monitoring and conduct statistical analysis
As we have just mentioned,
If the number reaches a certain high level, the alarm will be triggered The alarm will be sent via email
to remind everyone that the criterion had been reached, in short, it's not good, the criterion had been reached.
And some statistical analysis will be conducted.
The third section is to conduct the accident analysis.
Our initial idea was purely for your reference, Which is not compulsory
We just provide a tool for everyone to use.
You can input the information from the accident investigation and make an analysis.
I can show you.
First, there are five groups of users.
The highest level, of course, is the Housing Department, Housing Department,
including the group of Mr. Lau and Mr. Sing the safety unit.
They can receive the alert emails,
develop reports and make statistical analysis, etc. The highest layer could access most functions.
And the OSHC is at the second level. We are managers of the system,
including the establishment of file and open account, and we can also receive emails, or develop some reports.
The third level is the contract manager, namely, colleagues of the Housing

Department.
Usually, the colleague of the Housing Department shall also be responsible for the Form 787,

as he needs to sign on the Form 787, so he will also be involved,

and will receive some emails, and read some reports.

Next is the site staff of the Housing Department, who are responsible to fill out the Form 787.

We all fill out a lot of forms.

After the Form 787 is completed, it will be sent to the site staff.

He will see whether there is anything missing, and whether properly,

and then submit to the contract manager. Of course, he plays one of the roles.

Finally, the most basic

front-line staff of the contractor. If they need to report,

they can enter through this system This is a preliminary model,

which may be further improved. Login interface will be added later. For example, after the user logs in,

For the users of the Housing Department just mentioned, there will be a panel function,

with several major buttons. As you can see,

for example, this is for contract review, this is for the submission of Form 787 or the review of Form 787.

This is for reviewing the report. This is for accident analysis.

It has the most functions,

and has access to many conditions. For example, even for contractors,

the layout of the interface is actually similar, just few buttons less.

it

is

filled

out

The contractor, or the contract manager of the Housing mentioned,

can see the situation of all the sites under his authority on the accident cases only.

The number in Form 787 refers to accident only. So they can see the number of accidents.

Department

just


And there is an indicator, which is set by the contractor.

For example, our company has set the accident rate,

or the accident indicator in this site shall not be higher than this level. A line will show up,

which is set by the user himself. If it's an accident only,

the Housing Department also has an indicator.

We will see whether the actual figures are very close to the indicator. This is, in fact, the concept of the quality control table,

namely, the quality control concept applied in the production industry and manufacturing business.

If it is very close to the indicator, we shall be alerted.

Of course, if the indicator is reached, alert email will be sent out to the contractors, and colleagues at the site will be advised as well.

In addition, that table actually shows the number of Form 787,

how many Form 787 have been approved by the contract manager and submitted to the headquarters.

Some forms 787 are in processing.

The most left-hand side has been confirmed with the confirmed accident cases.

For the accident cases, the current practice of the Housing Department is to refer to the verified cases

by the Labor Department after SIS authentication.

For the occupational accident recognized by the Labour Department, we will then review and verify.

so only the SIS confirmed accidents would be shown. You can see at the overview list, for example, the site under your supervision, how the situation,

how many forms 787 are ongoing,

and how many forms 787 have been confirmed, and similar situation.

Then the electronic version of the Form 787. According to the comments of colleagues of the HD,

it is preferable to simulate the format of the current Form 787, so everyone will be familiar with.

Therefore, the format is very similar to the present one, just like the layout of printed paper.

But we add some parts with the help of computer.

For example, when you enter the date, calendar will pop up, so that it will be easy to see and select.

Form 787 will adopt the current input mode.

We will add some more data later,

some very important data shall be added. For example, contract type,

as we are now, for example, conducting safety audits or Surprise Safety Inspection ,

which shall not be accessible to all the sites of the Housing Authority. There are different types.

For example, building, foundations, demolition and pre-construction works. Therefore, we will add the contract type in the Form 787, which is not available at present.

Another field that not available at the current Form 787 Occupational disease,

The data in Form2A.

You have to submit the content of Form2A, which, in fact, is very rare.

Do you know what this Form2A is about?

Death or inability to work due to occupational disease. I think we have very little opportunity to fill in this form.

In case of death or loss of the ability to work due to occupational disease,

Form2A shall be filled in,

which is also included in our system. [09:51 – 09:54 delete the subtitle and the related video of this part]

If you really need to enter information for this situation into the system, Here is the form for you to fill in.

The third data is also very important,

which is temporarily unavailable in Form 787, that is , the Severity, injury severity, the severity of the injury.

In the Form 787 now, we fill in at that moment,

how many workers were there and the workday lost.

But after filling out the form, we still have no idea the total loss in the number of working days.

So if we do an analysis or statistics, no matter you are contractors

or staff of the HD,

we all want to know how many injury days the accident has caused. We will add this seriousness,

using the number of days as the unit of measurement. With this additional data,

This important but temporarily not yet available data, Would facilitate the follow up works

Firstly, we can do statistics

such as summaries, analysis and calculations, especially the calculation of the

accident rate. There are more texts which report on the situation. It is just an example.

Some are in the form of charts and tables. For example, the first one is an accident rate, for example, the Housing Authority contract,

new construction contract or renovation, maintenance,

comparison between the construction industry and Development Bureau, This is particularly helpful to colleagues in the Housing Department.

You can review for a few years say 3 years, 5 years or 10 years, and make the comparison.

Another tool is the Line Graph.

For example, the fatal accident rate, Calculated per one thousand of workers,

new construction sites, maintenance contracts, and also for the construction industry.

You can also select different years.

For example, there may be histograms, and some statistical tables.

Accident rate is calculated per one thousand of workers, active sites of the Housing Authority,

and you can review by contract, and also review all the contracts, or only the building construction, foundation works and so on.

There are also some statistical analyses. For example, the types of injury.

For example, we refer to the 23 categories defined by the Labour Department. What is the seriousness of the injury among these 23 types of accidents occurred at the sites of the Housing Authority?

Whether there is relationship with the sick leave days? We can do statistical analysis. All these can be done.

We select several categories,

type of accident, location of accident, and the part of the injury, then we can make such an analysis.

Here are some examples of graphs.

And this is the histogram just mentioned.

For example, the comparison of the accidents occurred at the construction sites of the Housing Authority,

the Development Bureau and the construction industry. [13:23- 13:28 omit        the


subtitle 'the Development Bureau and' and the audio '工務局嘅地盆'

13:13 – 15:18 Also, mask the bar chart on the top left hand corner of the slide as the data of fatalities are not correct and masking the data so as to avoid misunderstanding]

This is the linear graph of fatality rate at different periods. For example, this is a construction site,

and I am the contractor for that site.

I'd like to see the accident rate at that site. I can see a lot of lines,

The maximum lines can be shown As you can see,

the bottom line is an alarm line, the alarm threshold, which is set by the site itself.

This is an alarm line.

You can set

the first alarm line of your own.

After all, it doesn't matter whether you follow the requirement of the Housing Department

by percentage or at your own rate. The other is the green line below, which is the indicator of the site.

I don't use that indicator,

as we have to achieve the target indicator, and there is no need to draw a boundary line. Accident boundary line.

The middle yellow line refers to all the contractors.

A construction company

can have its own company boundary line. If you have, you can fill it.

If not,

it will probably be the same line.

Then the boundary line of the Housing Department. The blue line is actually the accident rate.

There may be a few of them, we call them the control level.

Different circumstances will have different alarm, reminding that we are very close to threshold, please be aware;

or we have reached or crossed the line, we have to take the other steps.

You may have to report to the headquarters presentation

on the measures for improvement.

soon      or      make      detailed


These are some tables.

We have just mentioned that some reports are in the form of tables. For example,

this is for the past 10 years.

These figures may not be true. We just make a demonstration.

The top first is the fatal number in the construction industry, the fatality rate. This is a new sites of the Housing Authority

The bottom one is a maintenance site of the Housing Authority. Here forms a table.

In addition,

if we accumulate the data, it will become very helpful.

In the aspect of table, we have made 24 tables for now, with a lot of valuable information.

If you want to acquire it,

you can export from this system in the form of spreadsheets. After you get the information,

you can continue to do research, or make report.

It's flexible, like others.

In addition to the 24 reports, the 25 th has included everything. As long as you input the time and data,

you can see any kind of data. And you can acquire the data,

then take the data to make graphs or report as you wish.

Then the last module

is about the accident investigation.

In fact, this is purely an auxiliary function,

which is a tool to help conducting accident investigation. Although we can read the Form 787,

most of the time, it includes accident reporting, but most times it doesn't.

This is another consideration.

You can use this as a form for report. For consideration, not mandatory

This module has three sections to fill in. The first is the basic data,

that is, when it occurred, where it occurred, and what machinery was involved. If you have filled out the Form 787,

when you fill in the form, the data will be displayed, and you do not have to fill it again.

You just check if it's correct, if correct, enter it.


The second section is to answer some questions, which involves 20 factors,

the factors leading to accidents, the causes of accidents.

We refer to a model,

known as the Human Factors Analysis Classification System. This is the founder of the cheese model.

When he got to the United States, he developed with NASA a set of accident investigation model.

We adopt a modified version,

which is developed by the OSHC and the Hong Kong Polytechnic University in a research.

We call it Modified HFACS Model. There are 20 factors involved.

These factors are divided into four levels by different colours according to their relevance to the accident.

Red colour means it is directly related to the accident.

For example, is the accident caused by the worker's lack of sleep? If the investigator thinks yes, or the data of the worker shows yes, it will be red.

That factor will be red

If it is a little problem, that is, abnormal factor, but not directly related to the accident,

it shall be yellow. The third is,

if the factor has no problem,

as I have just mentioned, no problem in people's mental state, or function

then it is green.

And the fourth is not applicable,

there is no such thing in that situation.

That is, if the worker is working alone, and no one else is involved, that factor shall be blue.

The modified model I have just mentioned is divided into such four levels.

The most basic level is what we often hear "Unsafe Acts" that is, some unsafe hebaviours.

Above are some Pre-conditions,

the conditions leading to the occurrence of these "Unsafe Acts", especially the environmental factor.

Then the second level is "Supervision",

which are surveillance, supervision and direct superiors. And the top level is the Management,

responsible for the allocation of resources, etc.

the body

So we divide it into four levels.

Do you remember what we have just said? How many factors?

20, which are distributed in four levels respectively. If it is directly related, it will be red.

For example, there are three red factors here. There are three red factors here. There are three red factors at the bottom. There are also three red factors here as well. You may still remember the cheese model, Swiss cheese model,

that is, the cheese is through,

and there may be situation when all four levels are red. If there is a hazard, it will pass through the fourth level. How useful, practical and effective it is,

depends on how you input.

Because this system cannot analyse whether the data you input is sufficient or not, or true or not, it cannot distinguish between the true or false. It is not a lie detector,

but just a tool for you to fill in data.

I have reviewed the forms 787 in recent years. We all know that some factors will never be input.

For example, inadequate supervision, I have never seen it in the input.

So whether the filling of Form 787 is subject to time restrictions, or other considerations,

some columns in the Form 787 would never be filled. And we try to provide you with a tool,

if you really want to work well, or find out the causes of accidents, you can consider using this tool.

At the moment it is not designed for mandatory. You can use it as you wish.

The third section is the risk control action plan. This involves improvement action.

First, those risk control measures no matter long or short terms,

do we have a plan to make improvement? Maybe on the hardware, maybe on the software, if we do, we'd better write it down,

who to do it and when to do it. I recently saw an accident.

After the accident, risk assessment review or adjustment is conducted immediately, which is very good.


But they didn't do the method statement,

This can be filled in a risk control measure form. In fact, it shall be done.

First, do the risk assessment review, then the method statement review.

While Form 787 is mostly for the morning briefings.

It will certainly be mentioned and the injured workers will certainly do it. Most of these are available, and there is no problem.

You can write how and when to do it and when to finish at the risk control measure form.

Another example is the control measure. This is a reviewing file.

The control measure means that there are some changes in the hardware. This is the update of the file.

For example, whether there are some related accidents, whether we have paid attention.

This is not the first case, such as foot injury.

There is one now.

Look at the previous several cases.

Such accidents are worth further in-depth review.

In fact, these are all just tools to help and remind you

that we should see the big picture or what is missing.

It is not necessary a replacement to the existing accident investigation that you are doing,
but can be a complement, or a reference.
Well, that's my sharing today. Thank you