

PROGRAMME IN BUILDING SURVEYING DEPARTMENT OF BUILT ENVIRONMENT STUDIES AND TECNOLOGY FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA PERAK BRANCH SERI ISKANDAR CAMPUS

# HANDLING THE PROCESS OF USER COMPLAINTS THROUGH FACILITIES MANAGEMENT SYSTEM (FMS) AT UITM KEDAH

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This practical training report is fulfilment of the practical training course.

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## CHAPTER ONE INTRODUCTION

## **1.1 Introduction**

Industry training is part of the compulsory courses that must be taken by all students of Universiti Teknologi MARA (UiTM), each student is required to undergo industry training for one semester before obtaining a degree certificate. This industry training is done for 4 months in a firm or organization that has been chosen by the students based on the scope of the learning course.

The students will be place at private companies or government agencies to practice them to real-life and working environment which is very different from the learning situation in college.

In this chapter, it is all about the general information of selected company for practical training that have been chosen based on the requirement that have been stated. This information including the profile and the general information about the company background.

The selected company is chosen based on requirement that have given by lecture and must be observed to all students. The company must have a scope of work related to students' course such as construction, maintenance and about safety at the site project. In this chapter, it is also explained the organization of company start from header until the staff. That can be some information all about this company.

## 1.2 Organisation Profile

Company profile of Universiti Teknologi MARA (UiTM)



| Company Name        | : Universiti Teknologi MARA (UiTM) |             |      |        |
|---------------------|------------------------------------|-------------|------|--------|
| Company Address     | : Universiti                       | Teknologi   | MARA | (UiTM) |
|                     | Cawangan                           |             |      |        |
|                     | Kedah, Kampus Sungai Petani,       |             |      |        |
|                     | 08400 Merb                         | ook, Kedah. |      |        |
| Office Phone Number | : 04-4562002                       | 2           |      |        |
| Fax                 | : 04-4562003                       |             |      |        |
| Email               | : gbpfkedah@uitm.edu.my            |             |      |        |
| Website             | : <u>http://ppii.uitm.edu.my</u>   |             |      |        |

#### **1.3 Organisation Background**

The Facilities Management Office was established in 1972, and it was known as the Office of Local Engineers at the time. The Office of Local Engineers changed its name to the Development and Maintenance Division in 1982. In 1994, the Development and Maintenance Division was renamed as the Development and Maintenance Office.

On 15th September 1995, the Development and Maintenance Office was separated under a separate head of administration. This is because the functions of the Development Office and the Maintenance Office are expanding. Both of these departments are placed directly under the Chancellery's Office. In August 1999, ITM was declared as Universiti Teknologi MARA and this development made the Maintenance Office play a wider role because the Maintenance Office is directly involved in the development, development, and progress of Universiti Teknologi MARA.

In order to strengthen the vision of Universiti Teknologi MARA as a global public education institution, the Maintenance Office was restructuring and rebranding of the Maintenance Office on 4 Januray 2006 and officially changed to the Facilities Management Office.

Universiti Teknologi MARA Facilities Management Office Kedah Branch Sungai Petani Campus is divided into several units consisting of Administration Unit, Event & Landscape Unit, Project & Contract Unit, Public Unit, Electrical Unit and Mechanical Unit.

The Facilities Management Division is a division that has been responsible for controlling, supervising and ensuring that all assets of UiTM Kedah Branch are always in a managed condition, good and safe to use or live and make Universiti Teknologi MARA as the most beautiful campus with complete infrastructure and conducive. UiTM Kedah Branch Facility Management Division led by a Senior Engineer and assisted by 4 Senior Assistant Engineers, a Senior Quantity Surveyor and 8 Assistant Engineers & an Assistant Landscape Architect (Mechanical, Electrical, Civil, Project, Event & Landscape), a draughtsman, an Electrical Machinery Caretaker, 3 Skilled Assistants, 4 Senior Skilled Assistants, 7 Public Servants, a Senior Public Servant, an Administrative Assistant and an Operations Assistant.

#### 1.4 Function and Roles of Facilities Management Division

- i. Managing the educational infrastructure, namely the teaching of dynamic learning and research to UiTM
- ii. Provide efficient and effective facilities
- iii. Support income generation for UiTM
- iv. To make UiTM a sustainable campus
- v. Using the latest technology/automation systems and adaptations

#### 1.5 Vision, Mission and Objective

#### Vision

To be a professional bumiputra facilities management organization in line with the vision of the University.

#### Mission

Improving facilities management as well as optimizing the professional use of assets through the best methods and technologies to provide conducive and dynamic educational, learning and research infrastructure to the University.

#### ✤ Objective

- i. Provide optimal comfort to staff and students.
- ii. Ensure maintenance is done from time to time in accordance with the needs of the campus.
- iii. There is no compromise in terms of safety and quality.

#### 1.6 Organisation Chart of Facility Management UiTM Kedah



Figure 1: Organizational Chart of Facilities Management Department, UiTM Kedah

Page | 6

# 1.7 Responsibilities each of unit in Facilities Management UiTM Kedah

| No. | Unit              | Responsibilities             |  |
|-----|-------------------|------------------------------|--|
| 1.  | Administration    | - Manage the general         |  |
|     |                   | administration of the office |  |
|     |                   | - Manage the purchase of     |  |
|     |                   | office equipment and         |  |
|     |                   | stationery                   |  |
|     |                   | - Manage, control department |  |
|     |                   | file records                 |  |
|     |                   | - Take care of staff welfare |  |
|     |                   | - Prepare duty attendance    |  |
|     |                   | report of division staff     |  |
| 2.  | Mechanical        | - Manage the maintenance of  |  |
|     |                   | mechanical equipment         |  |
|     |                   | - Manage new installation    |  |
|     |                   | works, replacement and       |  |
|     |                   | upgrading of mechanical      |  |
|     |                   | equipment such as air        |  |
|     |                   | conditioning systems,        |  |
|     |                   | sewage treatment plant       |  |
|     |                   | systems, tire prevention     |  |
|     |                   | systems, water suppry        |  |
|     |                   | systems                      |  |
|     |                   | - Assist in managing         |  |
|     |                   | - Assist III Indudging       |  |
|     |                   | development projects         |  |
|     |                   |                              |  |
| 3.  | Electrical &      | - Managing infrared and      |  |
|     | Telecommunication | internal electricity supply  |  |
|     |                   | systems                      |  |

|    |         | - Manage new work and            |  |  |
|----|---------|----------------------------------|--|--|
|    |         | electrical installations         |  |  |
|    |         | - Manage the maintenance of      |  |  |
|    |         | telecommunication systems        |  |  |
|    |         | - Manage new installations of    |  |  |
|    |         | telephone facilities             |  |  |
|    |         | - Ensure the PABX system         |  |  |
|    |         | operates in good condition       |  |  |
|    |         | - Prepare and manage the         |  |  |
|    |         | public address system for        |  |  |
|    |         | events/programs                  |  |  |
|    |         | - Helps in reducing electricity  |  |  |
|    |         | waste                            |  |  |
| 4. | Public  | - Provide maintenance            |  |  |
|    |         | services for buildings and       |  |  |
|    |         | public facilities                |  |  |
|    |         | - Building cleaning and          |  |  |
|    |         | washing services                 |  |  |
|    |         | - Area (landscape) cleaning      |  |  |
|    |         | service                          |  |  |
|    |         | - Pest control services          |  |  |
|    |         | - Logistic assistance services   |  |  |
|    |         | - Sanitact dressing unit service |  |  |
|    |         | - Domestic garbage collection    |  |  |
|    |         | and disposal services            |  |  |
| 5. | Project | - Ensure that all UiTM Kedah     |  |  |
|    |         | Branch assets are in a           |  |  |
|    |         | manageable condition             |  |  |
|    |         | - Provide advisory services in   |  |  |
|    |         | terms of technical planning      |  |  |
|    |         | and design                       |  |  |
|    |         | - Plan and implement projects    |  |  |
|    |         | - Upgrading physical facilities  |  |  |

|    |       | - Review and manage            |  |  |
|----|-------|--------------------------------|--|--|
|    |       | documentation                  |  |  |
| 6. | Event | - Event/program equipment      |  |  |
|    |       | preparation services           |  |  |
|    |       | - Space / equipment            |  |  |
|    |       | reservation service for        |  |  |
|    |       | programs and events            |  |  |
|    |       | - Manage the preparation of    |  |  |
|    |       | venues and equipment for       |  |  |
|    |       | official campus, faculty and   |  |  |
|    |       | student functions              |  |  |
|    |       | - Provide advisory services to |  |  |
|    |       | other divisions and students   |  |  |
|    |       | regarding the preparation for  |  |  |
|    |       | the work of the event          |  |  |

Table 1: The Responsibilities each of units in Facilities Management UiTMKedah

#### 1.8 Location Plan of UiTM Kedah

This facilities management office was located in UiTM Kedah Branch Sungai Petani Campus, Malaysia. This building near to main gate of UiTM Kedah which is located in front of vehicle depot and administration building.



1.8.1 Key Plan of UiTM Kedah

Figure 2: Key Plan of UiTM Kedah

## 1.8.2 Location Plan of UiTM Kedah



Figure 3: Location Plan of UiTM Kedah



#### 1.8.3 Site Plan of UiTM Kedah

Figure 4: Site Plan of UiTM Kedah

## CHAPTER TWO LITERATURE REVIEW

### 2.1 Introduction

This chapter continues from chapter 1. In this chapter, it explains of some information, keywords that related to the topic. Literature reviews are written on the basis of reading from previous studies which can be retrieved using resources from books, other journals and the internet. The citation must be stated to show where the sources come from. A literature review was one of an important part because it can be used as a guideline to achieve the objectives of this report. All points and keywords that will be used in this report will be explained in this chapter.

#### 2.2 Definition of user complaints

Users are the most important parties to be given attention in providing facilities management services for a premise or building. Gove (1981) defined complaints as expressions of dissatisfaction, dissatisfaction, protest, resentment, or regret in Webster's Third New International Dictionary. Generally, most literature discusses complaining as the behavioural outcome of a perceived discrepancy between an individual's expectation and the actual product performance (Bearden and Teel, 1983; Day et al., 1981).

#### 2.3 Definition of Complaints

#### 2.3.1 Complaints Handling

Complaints are dissatisfaction expressed by customers/consumers to the service provider when the service fails. When consumers experience service performance below their expectations and the dissatisfaction that accompanies them, they will complain. Therefore, unsatisfied customers are more likely to complain than satisfied customers (Keiningham et al., 2015; Sigh & Roberts, 1996). Complaint handling involves the behavior and activities of suppliers, as well as their ability to avoid potential complaints, solve obvious problems before they are created, and openly discuss solutions when problems arise (Sohail, 2012). Complaints are an integral part of interpersonal relationships and any service activities, because errors are an inevitable feature in interpersonal communication and service delivery (Boshoff, 2007), but the company believes that any type of consumer complaints are indispensable for poor performance Indicators of the same (Taleghani et al., 2011). Therefore, complaints can be used as feedback and help companies realize the problem (Crie & Ladwein, 2002). Dissatisfied consumers

who complain have a higher willingness to buy back than consumers who do not (Johnston, 2001, Lau & Ng, 2001). Therefore, the company not only formulated measures to prevent service failures that may trigger complaints; they also designed methods to deal with consumer complaints caused by service failures.

Complaint handling is a planned and controlled way to receive, record, process, respond to and report complaints and use them to improve services and decision-making (Ombudsman, undated). It includes the reception, investigation, resolution and prevention of customer complaints, and customer recovery (Taleghani et al, 2011). Consumers have various means to express their dissatisfactions (Singh, 2000), and several typologies have been proposed to differentiate complainers from non-complainers (Crie & Ladwein, 2002).

There are established standards and guidelines for complaint handling in the organization, which can be used as a starting point for evaluating good practices in complaint handling plans (Ang & Buttle, 2006). BSI (2004) recommends that these standards and guidelines for effective complaint handling include visibility, accessibility, responsiveness, objectivity, no charge for complaint handling, confidentiality, customer-centric approach, and accountability (within the organization) And continuous improvement. According to the Ombudsman's recommendations, these standards and guidelines are commitment, communication, visibility and access, responsiveness and fairness, resources, personnel and training, evaluation and investigation, remedial measures, business improvement, internal and external review systems; while George et al (2007)

identify highly visible procedures, easy and free access, effective company protocols, fairness and organisational ownership and commitment as standards and guidelines for effective complaint handling.

#### 2.4 User Satisfaction

User satisfaction with facility changes depends not only on the effectiveness of the decision, but also on the communication and management expected by users during the implementation process. User satisfaction level is seen as a viable tool for evaluating the performance of facilities and FM services (Oladokun, 2018). According to Maizan and Dayang (2005), stated that user satisfaction is one of the goals to be achieved in the management of quality facilities.

Facilities quality refers to the extent to which a particular type of facility is available that can meet the needs and provide satisfaction to the user. Oladokun (2018), "the factors that make up satisfaction may vary from a category of user to another, even from an individual to another". An organization must know customer satisfaction. The word "satisfaction" is at the core of many definitions, and it has multiple meanings in the context of marketing (Fecikova, 2004) (as cited by Lepkova (2013):

- satisfaction is merely the result of "things not going wrong".
- satisfying the needs and desires of the consumer.
- satisfaction-as-pleasure.
- satisfaction-as-delight.
- customer evaluations of the quality of goods and services.

Nakhleh (2012) stated that customer satisfaction has been thought of as a key performance indicator for evaluating the quality of relationships between service providers and customers.

#### 2.5 Key Performance Indicator (KPI)

KPI can be defined as a tool to monitor the degree of achievement of the performance level defined in the key performance area (Verzola.et.al., 2009). According to STN (2007), key performance indicators are defined as indicators that display a relevant information about the performance of service facility management and supply. The overall performance of a company is composed of the performance each of its parts, which is very important for the correct allocation of selected indicators to specific processes, which is called KPI disaggregating. Goodpasture (2003) added that KPIs are tools for systematic measurement and have established key success factors in the management literature. In order to determine performance, appropriate KPIs need to be determined (Cox et al., 2003; Enos, 2000; Verweire and Berghe, 2004). The purpose of KPIs is to achieve quantifiable measurement to reflect the organization's key success factors (Bose, 2006; Chan and Chan, 2004; Beatham et al., 2005).

As stated in LAI (2011), facility management is evaluated from five aspects through questionnaire surveys: safety, cleaning, repair and maintenance, landscape and leisure, and overall management. The focus group participants are required to provide sample questionnaires used by their companies for soliciting responses satisfaction of residents with FM services.

#### 2.6 Facilities Management System (FMS)

A facility management system (FMS) is an overarching system of a smart building that brings together some of the operational management functions of the facility and the building technology systems (James, 2010). An FMS focuses on the business processes of facility management. It is a tool that assists in managing service orders, inventory, procurement and assets.



Figure 5: Facilities Management System (FMS)

#### 2.6.1 Facilities Management System (FMS) used at UiTM

Facilities Management System (FMS) is an information system facility management developed using off-theshelf software i.e. Archibus / FM for support management and facility maintenance at UiTM. The implementation of FMS in this university will place UiTM in its own class in managing university facilities as a whole with 8 support systems that have been developed internally, namely e-Complaint system, e-Bangunan system, e-Kontrak system, e-Works system, e-Majlis system, e-Projek system and e-Ruang system.

- i. e-Complaint system (2006)
  - This system allows all UiTM citizen includes outsiders (contractors etc) make a complaint of damage facilities through online.

#### ii. e-Contract system (2010)

 Contracts & Control Division Cost is the main user of the system. The main purpose of system development is to store information contractors and facility contracts in addition to making contractor performance appraisals.

#### iii. e-Building system (2011)

 This system is held for the purpose to store UiTM building information and assist the auditing building process.

#### iv. e-Works system (2014)

- The three (3) functions of this system are maintenance repair, officer registration and

recording monthly reports that related to complaints.

- v. e-Majlis system (2014)
  - This system aims to manage event application that cover a location and equipment bookings, instructions officers on duty until the event completed. It was developed with a purpose facilitate UiTM residents to apply for location reservations as well as equipment under the operation of the Infrastructure Development Department online.

Below are the example of manual access to the UiTM Facilities Management System (FMS) for checking user complaints towards facilities that available at UiTM Kedah.

i. Open the chrome tab and insert the url to enter the UiTM FMS system <u>www.fms.uitm.edu.my</u>



Figure 6: UiTM FMS portal

ii. Insert staff number and password at the"administration" label to log in onto FMS system.



Figure 7: UiTM FMS portal

iii. After logging in and this was the Homepage for FMS system.



#### Figure 8: Homepage of UiTM FMS system

iv. Click the eWorks icon for checking a complaint from user by insert the categories that want to check on as below. Generally, this system or complaints from user must be check/log in by the facilities staff every day to ensure that the complaints are responded to for work instruction to be issued.



Figure 9: eWorks section at FMS system

#### 2.7 Chart Process of Complaints Procedure

This procedure is provided to provide guidance and information on customer complaint management procedures to ensure the management of complaints and feedback from UiTM users is handled efficiently, orderly and effectively.



Figure 10: User Complaints Handling Procedure at UiTM Kedah Source: BPF, UiTM Kedah Page | 23

# 2.7.1 Analysis of Complaints for Toilet Equipment & Plumbing Elements

| Laporan jumlah aduan berdasarkan elemen ,masalah,lokasi kerosakan |                                   |  |  |
|---|-----------------------------------|--|--|
| Negeri* :   | Kedah                             |  |  |
| Kampus* :   | Kampus Merbok                     |  |  |
| Pilih :   | Julat Tarikh 🗸                    |  |  |
| Tarikh Dari :   | 01/11/2021 E Sehingga 31/12/2021  |  |  |
| Seksyen   |                                   |  |  |
| Elemen kerosakan  | D2010 Peralatan Tandas & Plumbing |  |  |
| Masalah   |                                   |  |  |
| Bangunan  |                                   |  |  |
| Blok  |                                   |  |  |
|   |                                   |  |  |

| No. | Damage Details                                       | No. Damage |
|-----|--|------------|
| 1   | D2010011 – BROKEN WASH BASIN                         | 1          |
| 2   | D2010037 – NO SITTING TOILET BOWL COVER              | 1          |
| 3   | D2010008 - FLUSHING HANDLE NOT<br>FUNCTIONING/BROKEN | 7          |
| 4   | D2010010 - TOILET BOWL BROKEN / DAMAGED              | 2          |
| 5   | D2010020 - TOILET PIPES LEAKING                      | 1          |
| 6   | D2020099 – OTHERS DAMAGE TO PLUMBING EQUIPMENT       | 40         |
| 7   | D2010002 - LOOSE FAUCET                              | 1          |
| 8   | D2010021 - NO WATER SUPPLY IN THE TOILET             | 1          |
| 9   | D2010007 - BOTTLE TRAP BROKEN /LEAKING               | 1          |
| 10  | D2020003 - TOILET TANK LEAKS/OVERFLOW                | 3          |
| 11  | D2010016 – BROKEN TOILET WATER CISTERN               | 1          |
| 12  | D2010036 – BROKEN SHOWER HEAD                        | 3          |
| 13  | D2010006 – CLOGGED FLOOR TRAP                        | 15         |
| 14  | D2010003 – LEAKS FAUCET                              | 4          |
| 15  | D2020001 - CLOGGED/BLOCKED TOILET DRAINAGE<br>SYSTEM | 6          |
| 16  | D2010012 - TOILET MIRROR BROKEN/DAMAGE               | 1          |
| 17  | D2010033 – BROKEN FLUSH VALVE                        | 8          |
|     | Overall Total  | 96         |

Table 2: Overall total of complaints towards Toilet Equipment & Plumbing elements for November and December 2021 (Source: FMS UiTM Kedah)





Refer to the Chart 1, it shown analysis of complaints based on toilet equipment and plumbing elements were collected from Facilities Management System (FMS) which recorded from November and December 2021. By referring to the chart, it clearly shows that the highest complaints are recorded is "Others damage to plumbing equipment" (40 complaints) while middle highest was "clogged floor trap" which is 15 out of 96 complaints were recorded. Through complaints made by UiTM users consisting of students and staff, a serious case that needs to be taken into account is the clogged floor trap. In the meantime, facility staff have taken action by resolving this issue by upgrading the clogged bathroom drainage system to prevent clogged and recurring complaints. This upgrading works will be discussed in detail in Chapter 3.

#### 2.8 Service Level Agreement (SLA)

A service level agreement (SLA) is defined as a contract between a service provider and a user. According to Hiles (2000), SLA is defined as an agreement between support services and users, which quantifies the minimum service acceptable to users. The New Zealand Attorney General's Office (2004) outlined the International Infrastructure Management Manual "Creating Customer Value", which defines service levels as service parameters or requirements for specific activities or service areas that can measure service performance. Such service levels may involve dimensions such as quantity, reliability, responsiveness, environmental quality, acceptability, and cost. For Facilities Management UiTM Kedah, it also has metrics that determine their level of service that should aim to:

- Ensure that damage complaints from customers are responded to within 1 hour from the time of receipt of the complaint
- ii. Ensure that the power supply interruption is restored within1 hours from the time of receipt of the complaint
- Ensure that applications for renovations and upgrades are implemented within 6 months after the after the rector's approval is obtained.
- iv. Ensure physical facilities and infrastructure are safe and conducive to campus residents and visitors.

#### 2.9 Summary

User complaints are considered as a vital and significant information that can be used to achieve users' satisfaction. As a results, establishing a complaint handling system is essential towards addressing user dissatisfaction and preventing similar problems from reoccurring. However, what constitutes satisfaction may vary from user category to individual, even from individual to individual. This chapter reviews the literature review about user complaints, complaints handling, user satisfaction, key performance indicator (KPI), Facilities Management System (FMS) and Service Level Agreement (SLA).

## CHAPTER THREE CASE STUDY

3.1 Project Background



Figure 11: Malinja College, UiTM Kedah

This upgrading clogged bathroom project was located at Malinja College (Block A), UiTM Kedah which is a men's dormitory, and this project will be done at ground floor bathroom. There are about 3 workers that provided by the contractor who are in charge of this project. The total cost of this upgrading project is about less than RM 2000.00 and this project is completed about in 2 days only.

This upgrading project is undertaken to prevent the bathroom drainage system from being clogged again. According to the information acquired, the facility staff often receive similar complaints from colleges staff or students about clogged bathroom through the FMS system. When repeatedly trying to solve this clogged bathroom problems, the same thing occurs and remains unresolved. From that, the facilities staff has suggested that this clogged bathroom be upgraded so that the problem does not reoccur.

Before upgrading works begin, one of the facility staff who are in charge for this project responsible to find a contractor and bring them to the site to see and measure the length of the bathroom that need to be upgraded. After measurement have been taken, the contractor will buy all the necessary materials such as UPVC pipe, clay drains half round, cement and then the construction will begin.

#### 3.2 LOCATION PLAN

#### 3.2.1 Location Plan





This project located in UiTM Kedah Branch, and it is just 3 minutes away from facilities management office.





Figure 13:Site location of Malinja A College, UiTM Kedah

This project is located at ground floor bathroom of Malinja College Block A and it is small scale of project which is upgrading this clogged bathroom drainage system.

#### 3.3 List of Equipment used at site

There is a few equipment and tools that used by the workers in order to complete the upgrading work. This all equipment and tools are important to ensure all works can be done properly and to reduce the times.





Table 3: List of Equipment used at site

| No. | Description   | Photo                   |
|-----|---|-------------------------|
| 1.  | <ul> <li>For the first process, the workers mark places to be hacked and drilled. Then, the worker used a demolition hammer to drill a hole at every wall partition for new drainage along 5410 mm in the interior of the bathroom. This work only take half day to be done for interior work.</li> </ul> | Figure 18: Hacked floor |
| 2.  | <ul> <li>Next, after the drilling work is<br/>done on the inside of the<br/>bathroom for the new<br/>drainage, then the drilling<br/>work on the outside is done to<br/>connect the new drainage<br/>directly to the manhole.</li> </ul>  | <image/> <image/>       |

## 3.4 The process of upgrading clogged drainage system

## For next step, after the process of hacked and drilled the floor to make a trench about 6" depth on interior of the bathroom, then clay drains half round 4" is installed along the perimeter and it should followed the required gradient for a slope to allows water to run off. Before that, the workers will make sure all the debris from hacking works are cleared before putting the clay drain. The contractors choose a clay drains half round with dimension 4" depth and 22" length for interior drainage. On the outside part they are using UPVC pipe 4" to connect from the inside drainage directly the to manhole.

3.



Figure 20: Install the half round clay drains





Figure 21: Install UPVC pipe



Table 4: The process of upgrading clogged drainage bathroomworks

#### 3.5 Summary

In this chapter, it shows the process of upgrading clogged drainage bathroom works at one of bathroom Malinja College Block A. This upgrading work is important to ensure that the clogged bathroom is solved and no issue regarding on this in future. There are 3 workers that involved for this upgrading works since it is just small-scale upgrading works and it just took about 2 days only to completed. Besides, during observation the workers also did not followed PPE procedure while they were doing upgrading work which could cause any injuries during at site.

## CHAPTER FOUR ISSUE AND PROBLEMS

### **4.1 Introduction**

Whether it is a large project or a small project, every construction project often facing and having an issues that usually related to the workmanship, material, machinery and etc. Every issue needs to be controlled to avoid any issues that could impact schedule or cost projects. Because it can have a big impact on the quality of the work and the profits of the company.

Most issues slightly affect the construction project but with the commitment of every site supervisor and other staff that involved, all of the issues can be solved and encountered.

#### 4.2 Issue and Problems

Through the experience and observations during the internship, there are several problems and issues that were identified. If the project management team is not well managed, these issues will affect the project.

#### 4.2.1 Noise Problems

Noise Pollution is the high intensity of sound that is unnecessary and will cause harmful or danger towards human or nearby. Noisy activities on construction sites include the use of jackhammers, dump trucks, cement mixers, cement cutters, electric saws, tamping machines and welding machines, as well as noise generated from hand tools such as sledgehammers and drills.

Based on experience seen at Malinja College Block A which is the site area located for upgrading work at ground floor bathroom, the work of drilling and hacked the floor and wall to make a hole for new drainage system inside of the bathroom which using a hammer drill has produced a noisy and loud noise that cause disturbed towards students on that block as the block was already inhabited by the students. This causes disruption to students to study or having an online class.



Figure 23: Drilling works

#### 4.2.2 Shortage of PPE for workers



Figure 24: Drilling work at manhole

PPE is equipment that will protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. Ensuring that all personnel is not just wearing their PPE but wearing it correctly is one of the duties a site manager or employer must take on, otherwise, a variety of risks are being taken.

Through the observation at site area, it can be seen that one of the workers not wearing a safety footwear at site which might occur any unexpected accident during upgrading works. Thus, they also lack awareness on the important of PPE and guidelines that need to be followed at construction site which can be seen they are not wearing earing protection during drilling works that might causes hearing injury in long term.

#### 4.2.3 Construction waste left on site



Figure 25: Construction waste

Construction waste is any kind of debris from the construction process. Construction activities can generate large amounts of waste materials that then need to be disposed of. Unsystematic construction waste management can cause problems to the environment, health and safety of construction workers. This is because the system is not implemented by the contractor for certain reasons.

During observation at the site, it can be seen there are still have a construction waste located outside the upgraded bathroom left behind which the upgraded work was completed at that time. This problem can cause any accident to the students or hostel cleaner since the upgrading works was at male dormitory.

## CHAPTER FIVE RECOMMENDATION AND CONCLUSION

#### 5.1 Recommendation

Based on issues identified and observed at the site throughout the internship period, there are several recommendation and suggestion that suitable to be applied in order to help reduce the problems.

#### 5.1.1 Do upgrading work during semester break

Small or large scale project of upgrading works it may create a noisy to surrounding. This noise sound which may come from drilling works has caused disturbance towards human or nearby. So, since the college was inhabited by students it causes disruption to them to study and will make it difficult for students to use the bathroom.

Therefore, it is suggested to the staff who are responsible to hire a contractor to do this upgrading work to plan properly in the future as it involves the works of in the residential college area which may cause disruption to the students. They can plan by doing an upgrading works at college during semester break in the future as it will not disturb any parties.

#### 5.1.2 Provide a PPE for workers

There are so many potential hazards at a construction site, and personal protective equipment (PPE) is one of the workers' primary lines of defence. Employers have a duty to provide PPE for their workers at site, and their workers also have responsibilities to wear and use PPE in terms of to prevent any hazard occurred. It's important that workers to use PPE that is properly fitted. Each piece should stay on securely without causing discomfort or limited mobility, clothing and other items should not be loose, as this creates dangers for tripping, getting caught in moving parts.

So, it is suggested for employer to provide some PPE for their workers whether it is small scale project or large-scale project. From the issues above, the workers should wear foot protection i.e. work boots is to protect against crushed toes due to heavy or falling equipment or materials. Other than that, hearing protection is very important since they are using a demolition hammer to hack the floor because this equipment create noise levels that can damage workers' hearing - particularly with prolonged exposure.

#### 5.1.3 Monitor the site before making a last payment

Construction waste that comes from drilling and hacking work may contain hazardous substances that can affect humans and the environment. It should be properly managed by the contractors after the upgrading work is done. As mentioned from the issue above, it seen there are still has construction waste at outside of the upgrading bathroom.

In future, to ensure that construction waste properly managed and disposed of by the contractors, it is suggested to the facility staff who are in charge for this project should monitor and go to site by time to time before making a last payment to the contractors. So that, the contractors can be alert on work done and could be managed properly.

#### **5.2 Conclusion**

In the end, there were so much that have been learned from all aspects of the career field, especially how to communicate and work with clients, workers and subcontractors. As a student, industrial training it helps to adapt to the work culture and get involved in an activity or organization. This helps to gain more knowledge about facility management.

Furthermore, the implementation of FMS in this university will make UiTM unique and has it own class in managing university facilities as a whole with 8 support systems that have been developed internally, namely e-Complaint system, e-Bangunan system, e-Kontrak system, e-Works system, e-Majlis system, e-Projek system and e-Ruang system. This system have makes it easier for staff to manage complaints from users regarding on the facilities at UiTM.

Other than that, for the upgrading clogged bathroom project, it also has a several issue that can be seen at site such as noise problem, construction waste left on site and shortage of PPE for workers. Each of these issues should be solved to ensure there are no problems in the future. Because it can affect the company performance and trusted issues between clients and contractor. Besides, the facility staff that in charge for this project play as a main role in order to manage or monitor the issues at the construction site.

#### REFERENCES

- Gruber, T., Szmigin, I., & Voss, R. (2009). Handling customer complaints effectively: A comparison of the value maps of female and male complainants. *Managing Service Quality: An International Journal*, 19(6), 636–656. https://doi.org/10.1108/09604520911005044
- LAI, J. H. K., YIK, F. W. H. (2011). An analytical method to evaluate facility management services for residential buildings. *Building and Environment 46 (2011)* p. 165-175.
- Lepkova, N., & Žūkaitė-Jefimovienė, G. (2013). Study on Customer Satisfaction with Facilities Management Services in Lithuania. *Slovak Journal* of *Civil Engineering*, *20*(4), 1–16. https://doi.org/10.2478/v10189-012-0017-4
- Oladokun, S. O., & Ajayi, C. A. (2018). Assessing users' perception of Facilities Management services in a Public University: A case study approach. 2(2), 62–73.
- STN EN 15 221-1: (2007). Facility Management. Part 1: Terms and definitions. Slovak Standards Institute.