



FIRE PROTECTION SERVICES

AZLINDA BINTI KHAMIS

94050546

DIPLOMA IN BUILDING

INSTITUT TEKNOLOGI MARA

FOTOSTAT TIDAK
DIBENARKAN

CONTENT

PAGE

A. INTRODUCTION

1. INTRODUCTION TO MENARA ESSO 1
2. INTRODUCTION TO FIRE PROTECTION 2
3. FIRE PROTECTION IN MENARA ESSO BUILDING 3 - 13
4. OPERATION OF FIRE PROTECTION SYSTEM 14 - 28

B. METHOD STATEMENT

1. OBJECTIVE 30
2. MATERIAL/EQUIPMENT SELECTION 31 - 32
3. PUMP 33 - 48
4. PIPING SYSTEM 49 - 53
5. CO2 SYSTEM 54 - 68

C. QUALITY ASSURANCE/CONTROL PLAN

1. PUMP Q.C OPERATION FLOW	70 - 75
1.1 QUALITY ASSURANCE FOR PUMP INSTALLATION	76
2. PIPING Q.C OPERATION FLOW	77 - 80
2.1 QUALITY ASSURANCE FOR PIPING INSTALLATION	81 - 82
3. FIRE ALARM SYSTEM Q.C OPERATION FLOW	83 - 85
3.1. QUALITY ASSURANCE FOR FIRE ALARM SYSTEM	86 - 88
4. PUMP QUALITY CONTROL CHECKLIST	89 - 91
4.1. PIPING QUALITY CONTROL CHECKLIST	92 - 94
4.2. FIRE ALARM SYSTEM QUALITY CONTROL CHECKLIST	95 - 96

D. DRAWING PLAN OF FIRE PROTECTION - 97 - 134

E. CONCLUSION - 135 - 136

OBJECTIVE

Prevention of personal injury or loss of life by fire should be the first objective of all fire protection. Life safety, where involved, is considered in all the of fire protection recommendations in this report. Automatic sprinkler protection is particularly important factor in safeguarding life from fire. NFPA records shows that the loss of life by fire in buildings equipped with automatic sprinkler has been almost negligible. Automatic fire detection systems provide an alarm automatically when fire occurs. Automatic sprinklers provide an alarm as well as apply water to the fire.

Then, there is a responsibility for us to make sure that the fire protection system in the building being installed correctly. The main contractor must make sure that the installation in the building for fire protection equipment is in correct order with quality checklist. This steps been taken for the benefit of the future so that we can prevent fire loses and deaths. Through method statement, we can know that the system really works or not by doing the quality assurance and control checklist. By doing that perhaps fire protection system in the building can works effectively for prevention of fire loses and deaths.

1. INTRODUCTION TO MENARA ESSO BUILDING

Menara Esso building is located at Jalan Pinang in the area of Kuala Lumpur City Centre. This 30 storey building comprises of 3 levels basement, 5 levels car parks and 25 levels of office area. The construction started on the 24th of June and was completed on November 1996, 3 months behind schedule. The main contractor that responsible in this construction is Perspec-Taisei Consortium which is a joint venture company. The cost of this project is about RM 106,897,657.33 as written in document. The consultant that involves in this project are Kumpulan Senireka Sdn. Bhd. (KSSB) as an architect, ARUP Jururunding as a civil and structural engineer, KTA Tenaga Sdn. Bhd. as a mechanical and electrical engineer and Perunding NFL as a quantity surveyor. While the client of this project is Kuala Lumpur City Centre. There is a certain new technology being used in this building for example building control and security system besides curtain walling. Now this building is fully completed and one of the mark of KLCC and Esso itself.