

## ABSTRAK

El Grace P. R. Manihuruk (00000026382)

### **PENGARUH SISTEM MANAJEMEN KESELAMATAN KONSTRUKSI TERHADAP PENGENDALIAN KECELAKAAN KERJA PADA PROYEK KONSTRUKSI JALAN TOL (STUDI KASUS PROYEK JALAN TOL BEKASI-CAWANG-KAMPUNG MELAYU SEKSI 2A-UJUNG)**

Skripsi, Fakultas Sains dan Teknologi (2021)

(xv + 76 halaman; 7 gambar; 19 tabel; 6 lampiran)

Sistem Manajemen Keselamatan Konstruksi (SMKK) merupakan hal yang wajib dilakukan pada setiap proyek konstruksi sebagai sistem perlindungan bagi para pekerja agar terhindar dari kecelakaan kerja. Oleh karena itu, perlunya pengendalian terhadap kecelakaan kerja mengingat sektor konstruksi merupakan salah satu penyumbang angka kecelakaan terbesar. Dengan adanya SMKK diharapkan dapat mengendalikan kecelakaan kerja sehingga meningkatkan kinerja dan produktivitas proyek. Penelitian ini dilakukan pada proyek Jalan Tol Becakayu Seksi 2A-Ujung untuk mengetahui bagaimana pengaruh sistem manajemen keselamatan konstruksi terhadap pengendalian kecelakaan kerja, mengetahui variabel yang paling dominan, dan mengetahui rincian kegiatan pada SMKK. Item-item kuesioner disusun berdasarkan Peraturan Menteri PUPR Nomor 21 tahun 2019 tentang Pedoman Sistem Manajemen Keselamatan Konstruksi. Metode penelitian yang digunakan dengan menyebarkan kuesioner kepada 45 responden yaitu *project manager*, petugas QHSE, *engineering*, *quantity surveyor*, pelaksana lapangan, dan *logistic & equipment*. Kemudian, pengolahan data dengan menggunakan *Statistical Product and Service Solutions* (SPSS). Data hasil kuesioner diolah dengan menguji instrumen, uji asumsi klasik, uji hipotesis, dan analisis linier berganda. Ada 9 faktor yang dalam SMKK yaitu Rencana Keselamatan Konstruksi (X1), Sosialisasi, Promosi dan Pelatihan (X2), Alat Pelindung Kerja dan Alat Pelindung Diri (X3), Asuransi dan Perizinan (X4), Personil K3 (X5), Fasilitas, Sarana, Prasarana dan Alat Kesehatan (X6), Rambu-Rambu (X7), Konsultasi Ahli Keselamatan Konstruksi (X8), dan Lain-lain terkait Pengendalian Risiko Keselamatan Konstruksi (X9). Dari hasil penelitian, didapatkan bahwa Rencana Keselamatan Konstruksi, APD dan APK, serta Rambu-rambu merupakan faktor yang berpengaruh secara signifikan dengan Rencana Keselamatan Kerja menjadi variabel dominan. Selanjutnya, didapatkan hubungan SMKK terhadap pengendalian kecelakaan kerja sebesar 82.5% dengan persamaan regresi  $Y = 8,215 + 3.305 X1 - 0.073 X2 + 0.357 X3 + 0.903 X4 + 0.016 X5 - 0.457 X6 + 0.763 X7 - 0.530 X8 - 0.195 X9$ .

Kata Kunci : SMKK, Kecelakaan Kerja, SPSS, Jalan Tol

Referensi : 24 (2006-2020)

## ABSTRACT

El Grace P. R. Manihuruk (00000026382)

### **EFFECT OF THE CONSTRUCTION SAFETY MANAGEMENT SYSTEM TO ACCIDENT CONTROL ON TOLL ROAD CONSTRUCTION PROJECT (CASE STUDY ON BEKASI-CAWANG-KAMPUNG MELAYU SEKSI 2A-UJUNG TOLL ROAD CONSTRUCTION PROJECT)**

Thesis, Faculty of Science and Technology (2021)

(xv + 76 pages; 7 figures; 19 tables; 6 appendices)

The Construction Safety Management System (SMKK) is a mandatory for any construction project as a protection system for workers to avoid work accidents. Therefore, it is necessary to control work accidents considering that the construction sector is one of the largest contributors to the number of accidents. With the existence of SMKK is expected to be able to control work accidents so as to increase project performance and productivity. This research was conducted on Becakayu Section 2A-Ujung Toll Road construction project to determine how the effect of construction safety management system on work accident control, determine the most dominant variabel in SMKK, and also to know the details of activities in SMKK. The questionnaire items were prepared based on the Minister of Public Works and Housing Regulation Number 21 of 2019 concerning Guidelines for the Construction Safety Management System. The research method was conducted by distributing questionnaires to 45 respondents, namely project managers, QHSE officers, engineering, quantity surveyors, field implementers, and logistics & equipment. Then, proceed with data processing using Statistical Product and Service Solutions (SPSS). The data from the questionnaire were processed by testing the instrument, classical assumption test, hypothesis testing, and multiple linear analysis. There are 9 factors in SMKK, such as Construction Safety Plan (X1), Socialization, Promotion and Training (X2), Work Protective Equipment and Personal Protective Equipment (X3), Insurance and Licensing (X4), K3 Personnel (X5), Facilities, Infrastructure and Medical Devices (X6), Signs (X7), Construction Safety Expert Consultation (X8), and others related to Construction Safety Risk Control (X9). From the research results, it was found that the Construction Safety Plan, APD and APK, and signs were the factors that had a significant effect on the Work Safety Plan being the dominant variable. Furthermore, the correlation between SMKK and occupational accident control was 82.5% with the regression equation  $Y = 8,215 + 3,305 X1 - 0.073 X2 + 0.357 X3 + 0.903 X4 + 0.016 X5 - 0.457 X6 + 0.763 X7 - 0.530 X8 - 0.195 X9$ .

Kata Kunci : SMKK, Work Accidents, SPSS, Toll Road

Referensi : 24 (2006-2020)