

## IMPLEMENTATION OF WORK IN PROGRESS ADJUSTMENT FORM AT PT PLN NUSANTARA POWER

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### ABSTRACT

*Work In Progress Form is a tool that is used to assess the occupational safety and health program of contractors. However, the Work in Progress Form currently used is made using only best practices. which can increase the risk of work accidents because it does not follow SMK3. Therefore, adjustments need to be made to the current Work in Progress Form.*

*After adjustments were made, the Work In Progress Form which was initially only following 18 of 64 criteria of SMK3 based on PP No. 50 of 2012 at the Initial Level, then after being adjusted, it now follows 38 of 64 SMK3 at initial Level. The implementation of SMK3 at Initial Level was chosen because it's in the project phase.*

*Back then, contractors always got 100% score. When an assessment was carried out using the adjusted Work In Progress Form, for the contractor PLN NPC received score of 90.53% in April 2024 then increased to 95.52% in May 2024. Meanwhile, for the contractor PLN NPS in April 2024, PLN NPS received a score of 88.06% then increased to 93.28% in May 2024. It's because the form is more in line with SMK3 PP No. 50 of 2012 Initial Level.*

### KEYWORDS

Safety, Form, Asses, Adjustment



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## INTRODUCTION

Occupational safety and health are very important to be implemented in the workplace because every worker is always faced with potential hazards from work and the work environment that are at risk of causing work accidents and work-related diseases. Factors that influence the occurrence of work accidents and work-related diseases include workplace conditions, worker factors, and interaction factors between workers and elements in the workplace.

According to data from BPJS Ketenagakerjaan, the number of work accidents in Indonesia in 2023 was 370,747 cases. This number shows an increase of 39.7% from the previous year which showed a figure of 265,334 cases. Because the number of work accidents shows an increase from year to year, the implementation of occupational safety and health must be carried out properly, so that the work carried out is free from work accidents or zero accidents are realized.

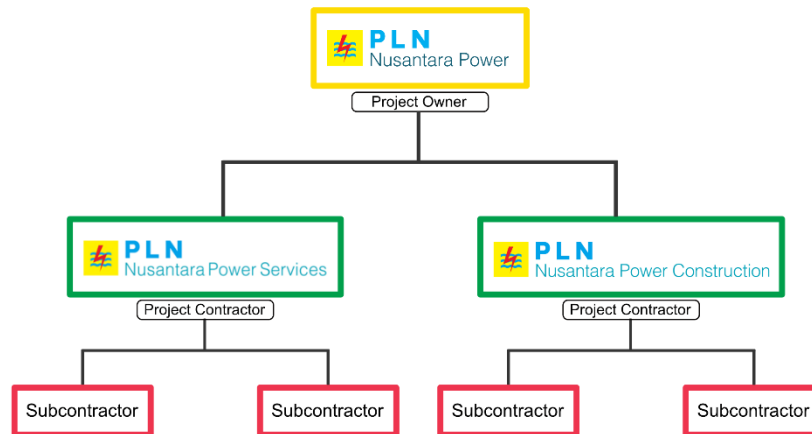


Figure 1. Project Structure

PT PLN Nusanantara Power works as the owner for the Project. There are 2 contractors, namely PLN Nusanantara Power Services and PLN Nusanantara Power Construction. PLN Nusanantara Power supervises the work carried out by the two contractors, one of which is in the aspect of occupational safety and health.

To help realize zero accidents, PT PLN Nusanantara Power uses the Work In Progress Form. This form is a tool used to assess the implementation of contractor occupational safety and health programs. In this form, 40 assessment items are used to assess the implementation of contractor occupational safety and health. Assessment of the implementation of contractor occupational safety and health is carried out once a month for each contractor. The HSSE staff is tasked with assessing the contractor's occupational safety and health implementation.

However, the form currently used is only made based on best practices, so that the assessment of the contractor's occupational safety and health implementation is incomplete, which then increases the potential for accidents. Considering the importance of assessing the contractor's occupational safety and health implementation to achieve zero accidents, the author made adjustments to the Work In Progress form by adjusting the form to the SMK3 PP No. 50 of 2012 Initial Level criteria.

Therefore, by adjusting the Work In Progress Form in accordance with SMK3 PP No. 50 of 2012 at the Initial Level, it is hoped that it can help improve the assessment of occupational safety and health implementation and achieve zero accidents in the Project at PT PLN Nusanantara Power.

## RESEARCH METHOD

### Occupational Health and Safety Program Assesment

Occupational health and safety assessment is a process to provide information about the extent to which an occupational health and safety program has been achieved, how the achievement differs from a certain standard to determine whether there is a

difference between the two, and how the benefits of the occupational health and safety program compare to the expectations that are desired to be achieved.

Scoring is a term commonly used to refer to the results of an assessment. Scoring involves assigning a value to the performance of something based on certain criteria. Scoring can be used in a variety of contexts, including education, sports, and other fields. Scoring in occupational health and safety program assessment refers to the process of assessing or measuring the level of success of an occupational health and safety program. In this project assignment, scoring involves assigning a value to the contractor's occupational health and safety program. The use of scores in occupational safety and health program assessments helps to measure and monitor the effectiveness of occupational health and safety efforts and identify areas that need improvement.

### Work In Progress Form Adjustment

To adjust the WIP Form to make it more in line with SMK3 PP No. 50 of 2012 Initial Level, the following steps are taken:

1. Study the Current Work In Progress Form  
The first step in adjusting the Work In Progress Form is to study the Work In Progress Form, to find the suitability of the Work In Progress Form with SMK3 PP No. 50 of 2012 Initial Level. After being studied and discussed in the FGD, the current Work In Progress Form is in line with 17 of 64 criteria of SMK3 PP No. 50 of 2012 at Initial Level.
2. Studying SMK3 PP No. 50 of 2012 Initial Level  
The next step is to study SMK3 PP No. 50 of 2012 Initial Level. The initial level was chosen because it is in the project phase. This is done to determine which criteria can be included in the Work In Progress Form. After studying SMK3 PP No. 50 of 2012 Initial Level, an FGD was held and attended by the HSSE Section of PLN Nusantara Power to determine which criteria can be included in the Work In Progress Form. From the results of the FGD, 38 out of 64 criteria of SMK3 PP No. 50 of 2012 Initial Level can be included in the Work In Progress Form.
3. Compiling the Work In Progress Form  
The 38 SMK3 criteria of PP No. 50 of 2012 Initial Level then arranged into 77 assessment points in the Work In Progress Form. Then in categorizing the adjustment of the Work In Progress Form, the author is guided by the safety and health program self-evaluation tools sheet from OSHA 3886 Recommended Practices for Safety & Health Programs in Construction. OSHA 3886 divides the assessment of occupational safety and health implementation into 7 categories as seen in figure 2.

### 7 Core Elements of OSHA 3886 Recommended Practices for Safety & health Programs in Construction

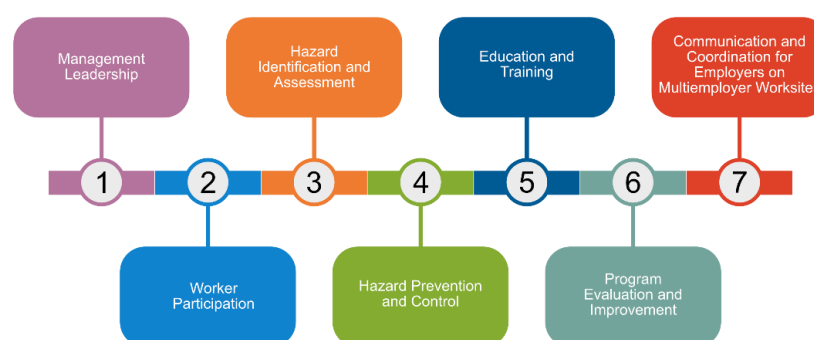


Figure 2. OSHA 3886 7 Core Elements

4. Creating a Scoring Matrix

The scoring matrix is created to determine the assessment of the application of assessment points from the adjustment of the Work In Progress Form. The scoring for each assessment point varies, namely 0-1, 0-2, and 0-3. The Work In Progress Form scoring matrix was created by FGDs conducted with the HSSE Team. Scoring matrix score example can be seen in figure 3.

Matrik Skoring Form Work In Progress				
NO	POIN PENILAIAN	SKORING		
		Skor 0	Skor 1	Skor 2
<b>Keperimpinan Manajemen ( Management Leadership )</b>				
1	Koordinator pekerjaan ada di Tempat Kerja dan tertera di struktur organisasi	Kontraktor tidak memenuhi semua syarat berikut ini: 1. Terdapat koordinator pekerjaan di struktur organisasi dan diukur pekerja di work permit 2. Koordinator ada di area kerja	Kontraktor hanya memenuhi salah satu dari syarat berikut ini: 1. Terdapat koordinator pekerjaan di struktur organisasi atau dalam pekerjaan di work permit 2. Koordinator ada di area kerja	Kontraktor telah memenuhi semua syarat berikut ini: 1. Terdapat koordinator pekerjaan di struktur organisasi dan diukur pekerja di work permit 2. Koordinator ada di area kerja
2	Kompetensi Pengawas Teknis Kontraktor sesuai dan hadir di lokasi Pekerjaan	Kontraktor tidak mempunyai pengawas teknis dengan latar belakang dan sertifikasi yang tepat untuk pekerjaan ini (berdasarkan data sesuai)	Kontraktor sudah mempunyai pengawas teknis dengan latar belakang dan sertifikasi yang tepat untuk pekerjaan ini (berdasarkan data sesuai)	
3	Kompetensi pengawas K3 Kontraktor sesuai dan hadir di lokasi Pekerjaan	Kontraktor tidak memenuhi semua syarat berikut ini: 1. Terdapat pengawas K3 2. Pengawas K3 memiliki sertifikat kompetensi	Kontraktor hanya memenuhi salah satu dari syarat berikut ini: 1. Terdapat pengawas K3 2. Pengawas K3 memiliki sertifikat kompetensi	Kontraktor telah memenuhi semua syarat berikut ini: 1. Terdapat pengawas K3 2. Pengawas K3 memiliki sertifikat kompetensi
4	Safetyman ada di Tempat Kerja dan tertera di struktur organisasi	Kontraktor tidak memenuhi semua syarat berikut ini: 1. Terdapat safetyman di struktur organisasi 2. Safetyman ada di area kerja	Terdapat safetyman di struktur organisasi namun tidak ada di area kerja	Kontraktor telah memenuhi semua syarat berikut ini: 1. Terdapat safetyman di struktur organisasi 2. Safetyman ada di area kerja
5	Kompetensi Pelaksana Pekerjaan Kontraktor sesuai dan hadir di lokasi pekerjaan	Pelakuan yang dilakukan kontraktor tidak dibarengi dengan pelaksanaan pekerjaan kontraktor yang kompeten (misal pekerjaan radiografi maka harus memiliki sertifikat radiografi, pekerjaan erection harus memiliki sertifikat erection)	Pelakuan yang dilakukan kontraktor dibarengi dengan pelaksanaan pekerjaan kontraktor yang kompeten (misal pekerjaan radiografi maka harus memiliki sertifikat radiografi, pekerjaan erection harus memiliki sertifikat erection)	
6	Pelaksanaan khusus dilakukan oleh orang yang berkemampuan (misal pekerjaan radiografi dikerjakan oleh pekerja sertifikasi radiografi)	Pelaksanaan khusus yang dilakukan kontraktor tidak dibarengi dengan pelaksanaan pekerjaan kontraktor yang kompeten (misal pekerjaan radiografi maka harus memiliki sertifikat radiografi, pekerjaan erection harus memiliki sertifikat erection)	Pelaksanaan khusus yang dilakukan kontraktor dibarengi dengan pelaksanaan pekerjaan kontraktor yang kompeten (misal pekerjaan radiografi maka harus memiliki sertifikat radiografi, pekerjaan erection harus memiliki sertifikat erection)	
7	Peralatan memiliki sertifikat peralatan yang masih berlaku sesuai dengan persyaratan	Kontraktor tidak memiliki sertifikat peralatan untuk seluruh sarana produksinya	Kontraktor memiliki sertifikat peralatan hanya untuk sebagian sarana produksinya	Kontraktor memiliki sertifikat peralatan untuk semua produksinya
8	Adanya personil di Tempat Kerja yang berkemampuan / bersertifikasi mengoperasikan peralatan	Semua peralatan diperalatkan oleh personil yang tidak kompeten (tidak memiliki sertifikat)	Hanya sebagian peralatan yang diperalatkan oleh personil yang kompeten (memiliki sertifikat)	Semua peralatan diperalatkan oleh personil yang kompeten (memiliki sertifikat)
9	Pekerja ada di Tempat Kerja sesuai jadwal pekerjaan dan struktur organisasi proyek	Kontraktor tidak memenuhi semua syarat berikut ini: 1. Pekerja yang hadir di lokasi work permit sesuai struktur organisasi 2. Jumlahnya sesuai pekerja	Sebagian pekerja yang hadir di lokasi work permit sesuai struktur organisasi	Kontraktor telah memenuhi semua syarat berikut ini: 1. Pekerja yang hadir di lokasi work permit sesuai struktur organisasi 2. Jumlahnya sesuai pekerja
10	Ukuran driver kendaraan kontraktor di Tempat Kerja	Driver kendaraan kontraktor tidak memenuhi semua persyaratan berikut ini: 1. Memiliki SIM A 2. Memiliki SIMPER	Driver kendaraan kontraktor memiliki SIM K	Driver kendaraan kontraktor memenuhi semua persyaratan berikut ini: 1. Memiliki SIM A 2. Memiliki SIMPER

Figure 3. Scoring Matrix

**RESULT AND DISCUSSION**

**Gap Analysis**

Gap analysis is either a tool or a process to identify gaps and differences between the current WIP Form and the adjusted WIP Form on the conformity With SMK3 criteria at initial level. The improvement of the adjusted WIP Form can be seen through gap analysis. The comparison of conformity between existing WIP Form and adjusted WIP Form can be seen on the table 1.

Table 1. Gap Analysis

Existing WIP Form Conformity to SMK3		Adjusted WIP Form Conformity to SMK3	
No.	Initial Level SMK3 Criteria	No.	Initial Level SMK3 Criteria
		1	1.1.3
1	1.2.2	2	1.2.2
2	1.2.5	3	1.2.5
		4	2.4.1
		5	4.1.1
		6	5.1.2
3	6.1.1	7	6.1.1
4	6.1.5	8	6.1.5
5	6.1.6	9	6.1.6
6	6.1.7	10	6.1.7
7	6.2.1	11	6.2.1
8	6.3.2	12	6.3.2
		13	6.4.1
		14	6.4.3

		15	6.4.4
		16	6.5.3
		17	6.5.4
		18	6.5.7
		19	6.5.8
9	6.5.9	20	6.5.9
10	6.7.4	21	6.7.4
11	6.7.6	22	6.7.6
12	6.8.1	23	6.8.1
		24	6.8.2
		25	7.1.1
		26	7.4.1
13	7.4.3	27	7.4.3
		28	8.3.1
		29	9.1.1
		30	9.1.2
14	9.2.1	31	9.2.1
15	9.2.3	32	9.2.3
		33	9.3.1
		34	9.3.3
16	9.3.4	35	9.3.4
17	12.2.2	36	12.2.2
18	12.3.1	37	12.3.1
		38	12.5.1

Previously the WIP form was in accordance with 18 SMK3 and at initial level criteria and have 40 assessment point, then after adjustments were made the WIP form was in accordance with 38 SMK3 and at initial level criteria and have 77 assessment point

#### **Implementation**

The assessment result of the implementation of occupational safety and health program implementation of contractors using the Work In Progress Form was carried out in April and May 2024. The contractors that were assessed were PT. PLN Nusantara Power Services (PLN NPS) and PT. PLN Nusantara Power Construction (PLN NPC) which can be seen on table 2.

Table 2. Implementation Score

Contractor names	April 2024		May 2024	
	Existing WIP Form	Adjusted WIP Form	Existing WIP Form	Adjusted WIP Form
PLN NPS	100%	88,06%	100%	93,28%
PLN NPC	100%	90,3%	100%	95,52%

From the results of the assessment using existing WIP Form carried out on the contractors, the implementation of occupational safety and health on both contractor got 100% in April 2024 and May 2024. Different result show when the assessment of occupational safety and health program use the adjusted WIP Form.

When use the adjusted WIP Form, both contractors no longer got 100% score. results of the assessment using the adjusted WIP Form carried out on the contractors, the implementation of occupational safety and health for both contractors in May 2024 increased compared to April 2024. In April 2024 PT. PLN NPS received an occupational safety and health implementation score of 88.06% then in May 2024 it increased to 93.28%. In April 2024, PLN NPC received an occupational safety and health implementation score of 90.3%, then in May 2024, it increased to 95.52%.

## CONCLUSION

Back then all contractors always got 100% score on occupational safety and health program implementation. Adjustment of the adjusted Work In Progress Form provides a more complete occupational safety and health program assessment of the implementation of the contractor's occupational safety and health program because it contains 38 of 64 criteria of SMK 3 PP No. 50 of 2012 Initial Level and have 40 assessment points compared to the previous Form which only complies with 18 of 64 criteria of SMK3 PP No. 50 of 2012 Initial Level and have 77 assessment points. In April 2024, PLN NPC received an occupational safety and health implementation score of 90.3%, then in May 2024, it increased to 95.52%. Then in April 2024 PT. PLN NPS received an occupational safety and health program implementation score of 88.06% then in May 2024 it increased to 93.28%. There was an increase in the value of implementing the contractor's occupational safety and health program in May compared to April due to increased supervision of the contractor's occupational safety and health program.

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