



LAMPIRAN

Lampiran 1. Kuesioner Implementasi ISO 45001

INSTRUMEN PENELITIAN LEMBAR PERMOHONAN KESEDIAAN INFORMAN “PENERAPAN ISO 45001:2018 TERHADAP PENINGKATAN PRODUKTIVITAS”

Yth. Bapak/Ibu/Saudara
Assalaamu’alaikum warahmatullaahi wabarakaatuh
Salam Sehat Selalu!

Perkenalkan, Saya Anang Novida Harinurdin, mahasiswa Program Teknik Industri Fakultas Sains, Teknologi dan Kesehatan Universitas Sahid Solo Surakarta. Saat ini saya sedang menyusun tugas akhir saya sebagai syarat memperoleh gelar sarjana. Penelitian ini bertujuan untuk mengetahui **Penerapan ISO 45001:2018 Terhadap Peningkatan Produktivitas**. Hasil penelitian diharapkan menjadi bahan masukan kepada manajemen di tempat kerja sehingga dapat membantu meningkatkan produktivitas kerja.

Berkaitan dengan penelitian ini saya membutuhkan informasi dari Bapak / Ibu / Saudara sebagai data penelitian, saya memohon kesediaannya untuk menjawab kuesioner ini. Semua jawaban akan sangat membantu dalam menyelesaikan tugas akhir ini. Data yang diberikan akan dijaga kerahasiaannya dan hanya digunakan untuk keperluan penelitian.

Atas partisipasi, kesediaan dan kerjasamanya, saya ucapkan terimakasih.

Wassalaamu’alaikum warahmatullaahi wabarakaatuh

Hormat Saya,
Peneliti

Anang Novida Harinurdin

KUESIONER

“PENERAPAN ISO 45001:2018 TERHADAP PENINGKATAN PRODUKTIVITAS”

A. IDENTITAS INFORMAN

Nama : _____
Jabatan : _____
Departemen / Unit Kerja : _____

B. PETUNJUK PENGISIAN

Berikan penilaian terhadap masing masing pertanyaan dibawah ini sesuai dengan pendapat Anda, dengan memberikan tanda checklist (√) pada kolom jawaban yang tersedia.

Keterangan:

SS = 5 : Sangat Setuju R = 3 : Ragu-ragu STS = 1 : Sangat Tidak Setuju
S = 4 : Setuju TS = 2 : Tidak Setuju

C. KUESIONER

BAGIAN 1: Konteks Organisasi

Sub-klausul 4.1 Memahami Organisasi dan konteksnya

1. Saya memahami dengan baik prinsip-prinsip ISO 45001

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 4.2 Memahami harapan dan kebutuhan pihak berkepentingan

2. Tim Manajemen memahami dan mendukung implementasi ISO 45001

Opsi	Jawaban

SS	
S	
R	
TS	
STS	

Sub-klausul 4.3 Menentukan lingkup SMK3

3. Pemimpin organisasi menunjukkan komitmen tinggi terhadap K3

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 4.4 SMK3 dan proses nya

4. SMK3 dan prosesnya mendukung keberlanjutan

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

BAGIAN 2: Kepemimpinan dan Keterlibatan Pemangku Kepentingan

Sub-klausul 5.1 Kepemimpinan dan komitmen

5. Pemimpin organisasi menunjukkan komitmen terhadap K3

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 5.2 Kebijakan K3

6. Kebijakan K3 terintegrasi dengan baik

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 5.3 Peran, tanggungjawab dan wewenang

7. Peran dan tanggung jawab dalam K3 sudah jelas

Opsi	Jawaban
SS	
S	

R	
TS	
STS	

Sub-klausul 5.4 Konsultasi dan Partisipasi

8. Terdapat konsultasi dan partisipasi aktif terkait K3

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

BAGIAN 3: Perencanaan

Sub-klausul 6.1 Tindakan untuk menangani resiko dan peluang

9. Perencanaan tindakan untuk risiko K3 efektif.

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 6.2 Sasaran K3 dan perencanaan untuk mencapainya

10. Sasaran K3 terencana dengan baik

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

BAGIAN 4: Dukungan

Sub-klausul 7.1 Sumberdaya

11. Sumber daya yang disediakan cukup untuk K3

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 7.2 Kompetensi

12. Apakah Kompetensi karyawan dalam K3 sudah memadai.

Opsi	Jawaban
SS	
S	

R	
TS	
STS	

Sub-klausul 7.3 Kesadaran

13. Kesadaran karyawan terhadap K3 sangat baik

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 7.4 Komunikasi

14. Komunikasi terkait K3 di organisasi efektif

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 7.5 Informasi terdokumentasi

15. Informasi terdokumentasi untuk K3 jelas

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

BAGIAN 5: Operasi

Sub-klausul 8.1 Perencanaan dan pengendalian operasi

16. Operasi direncanakan dan dikendalikan dengan baik

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 8.2 Kesiapan dan tanggap darurat

17. Kesiapan dan tanggap darurat K3 terkelola baik

Opsi	Jawaban
SS	
S	
R	
TS	

STS	
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BAGIAN 6: Evaluasi Kinerja

Sub-klausul 9.1 Pemantauan, pengukuran, analisis dan evaluasi kinerja

18. Pemantauan dan analisis kinerja K3 rutin dilakukan.

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 9.2 Audit Internal

19. Audit internal K3 dilakukan secara berkala.

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 9.3 Tinjauan Manajemen

20. Tinjauan manajemen untuk K3 rutin dilakukan

Opsi	Jawaban
SS	

S	
R	
TS	
STS	

BAGIAN 7: Peningkatan

Sub-klausul 10.1 Umum

21. Kegiatan organisasi membantu peningkatan produktivitas

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 10.2 Ketidaksesuaian dan Tindakan perbaikan

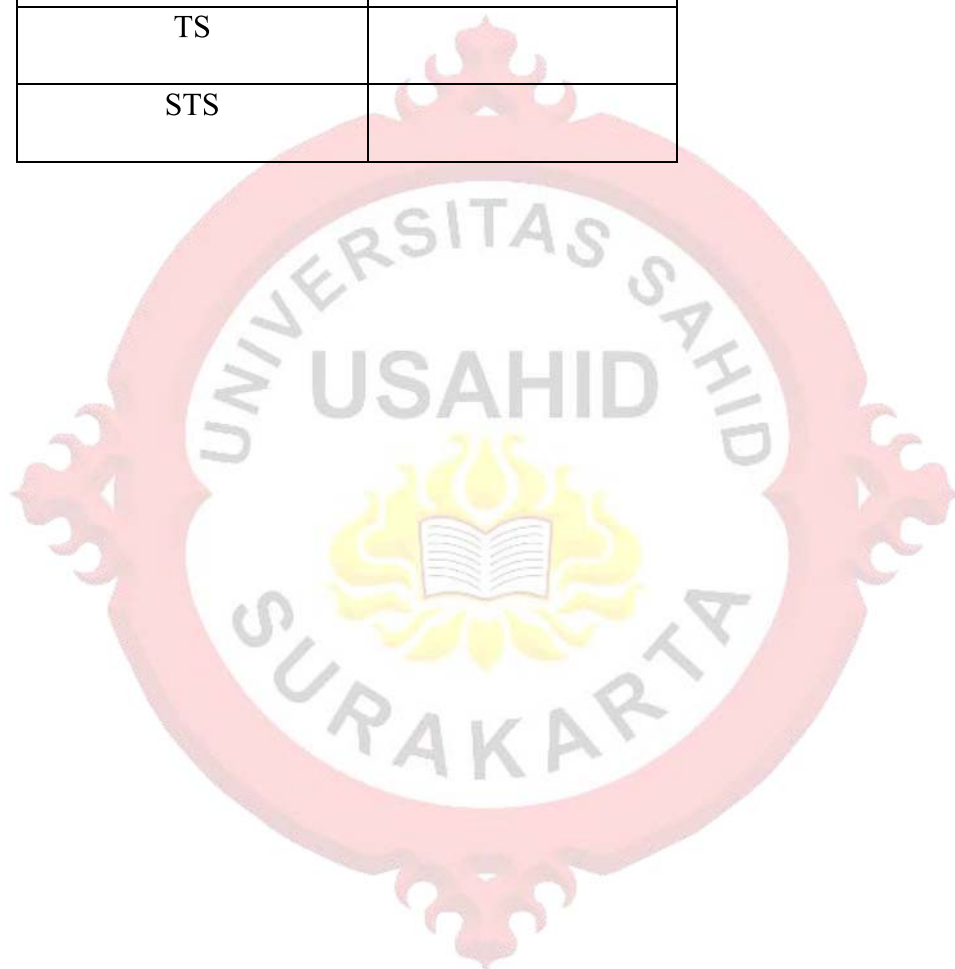
22. Ketidaksesuaian ditangani dengan tindakan perbaikan.

Opsi	Jawaban
SS	
S	
R	
TS	
STS	

Sub-klausul 10.3 Perbaikan terus-menerus

23. Terdapat upaya perbaikan terus-menerus dalam K3.

Opsi	Jawaban
SS	
S	
R	
TS	
STS	



Lampiran 2. Rekapitulasi Kuesioner

Responden	X1_1	X1_2	X1_3	X1_4	X2_1	X2_2	X2_3	X2_4	X3_1	X3_2	X4_1	X4_2	X4_3	X4_4	X4_5	X5_1	X5_2	X6_1	X6_2	X6_3	Y1	Y2	Y3	Total	X1	X2	X3	X4	X5	X6	Y	
R1	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4	5	4	4	4	4	4	5	97	17	17	9	20	9	12	13	
R2	5	5	5	5	5	5	4	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	113	20	19	10	24	10	15	15	
R3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R4	5	5	4	5	5	5	4	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	111	19	20	9	25	9	15	14	
R5	3	3	4	3	4	3	3	3	4	3	3	3	3	3	3	3	4	3	3	3	3	3	4	74	13	13	7	15	7	9	10	
R6	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4	5	4	4	4	4	4	5	97	17	17	9	20	9	12	13	
R7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	69	12	12	6	15	6	9	9	
R10	5	5	4	5	4	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	5	5	4	110	19	19	9	25	9	15	14	
R11	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	5	97	17	17	9	20	9	12	13	
R12	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R13	3	3	4	3	3	3	4	3	3	4	3	3	3	3	3	3	4	3	3	3	3	3	3	4	74	13	13	7	15	7	9	10
R14	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R15	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R16	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	69	12	12	6	15	6	9	9	
R18	5	5	4	5	4	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	5	5	4	110	19	19	9	25	9	15	14	
R19	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	97	17	17	9	20	9	12	13	
R20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R21	3	3	4	3	4	3	3	3	3	4	3	3	3	3	3	3	4	3	3	3	3	3	3	4	74	13	13	7	15	7	9	10
R22	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R23	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R24	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	
R25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	69	12	12	6	15	6	9	9	
R26	5	5	4	5	4	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	5	5	4	110	19	19	9	25	9	15	14	
R27	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4	5	4	4	4	4	4	4	97	17	17	9	20	9	12	13	
R28	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	115	20	20	10	25	10	15	15	
R29	3	3	4	3	3	3	4	3	3	4	3	3	3	3	3	3	4	3	3	3	3	3	3	4	74	13	13	7	15	7	9	10
R30	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	92	16	16	8	20	8	12	12	

Keterangan koding variabel:

- X1_1 s/d X1_4: Item untuk variabel Konteks Organisasi
- X2_1 s/d X2_4: Item untuk variabel Kepemimpinan
- X3_1 s/d X3_2: Item untuk variabel Perencanaan
- X4_1 s/d X4_5: Item untuk variabel Dukungan
- X5_1 s/d X5_2: Item untuk variabel Operasi
- X6_1 s/d X6_3: Item untuk variabel Evaluasi Kinerja
- Y1 s/d Y3: Item untuk variabel Peningkatan

Data Responden Sesuai Klausul Standar ISO 45001:2018

Klausul	Mean	Std. Deviation	Modus (%)
Konteks Organisasi	4.13-4.30	0.651-0.776	4 (40%)
Kepemimpinan	4.33	0.661	4 (46.7%)
Perencanaan	4.13-4.30	0.651-0.776	4 (50%)
Dukungan	4.13	0.776	4 (40%)
Operasi	4.3	0.651	4 (50%)
Evaluasi Kinerja	4.13	0.776	4 (40%)
Peningkatan	4.13-4.30	0.651-0.776	4 (50%)



Lampiran 3. Hasil Uji Validitas & Reliabilitas

		Correlations																	
Konteks organisasi (X1)	Pearson Correlation	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)	Konteks organisasi (X1)
		1	1,000	.600	1,000	.650	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000
	Sig. (2-tailed)			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Konteks organisasi (X1)	Pearson Correlation	1,000	.600	1,000	.650	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000	.972
	Sig. (2-tailed)			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Konteks organisasi (X1)	Pearson Correlation	.600	1,000	.600	.961	1,000	.565	.600	1,000	.600	.565	.600	1,000	.600	.565	.600	1,000	.600	.565
	Sig. (2-tailed)			0,000	0,000	0,000	0,001	0,000	0,000	0,000	0,001	0,000	0,000	0,000	0,001	0,000	0,000	0,000	0,000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Konteks organisasi (X1)	Pearson Correlation	1,000	1,000	.600	.650	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000	.972	1,000	.600	1,000	.972
	Sig. (2-tailed)			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Konteks organisasi (X1)	Pearson Correlation	.650	.650	.961	1	.650	.619	.650	.961	.650	.619	.650	.961	.650	.619	.650	.961	.650	.619
	Sig. (2-tailed)			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	Total																		

Ringkasan Uji Validasi dengan korelasi Bivariate Pearson

Variabel	Rentang r-hitung	Korelasi dengan Total	Signifikansi
Konteks Organisasi (X1)	0.600 – 1.000	0.987	0.000
Kepemimpinan (X2)	0.619 – 1.000	0.757	0.000
Perencanaan (X3)	0.600 – 1.000	0.987	0.000
Dukungan (X4)	0.972 – 1.000	0.987	0.000
Operasi (X5)	0.600 – 1.000	0.987	0.000
Evaluasi Kinerja (X6)	0.972 – 1.000	0.987	0.000
Peningkatan (Y)	0.600 – 1.000	0.987	0.000

Uji Reliabilitas

		N	%
Cases	Valid	30	100,0
	Excluded ^a	0	0,0
	Total	30	100,0

Reliability

Cronbach's Alpha	N of Items
0,993	23

Nilai Reliabilitas

Aspek	Nilai
Jumlah Item	23
Jumlah Responden Valid	30 (100%)
Data Excluded	0 (0%)
Cronbach's Alpha	0,993

Lampiran 4. ISO 45001:2018 Checklist Gap Analysis

ISO 45001:2018 Checklist

Company: _____

Department: _____

Completed by _____ Date completed _____

4. Context of the organisation

4.1 Understanding the organisation and its context

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
4.1	Have you determined external and internal issues that are relevant to your purpose and your strategic direction and that affect your ability to achieve the intended outcomes of your Occupational Health and Safety Management System?			Yes/No
	How do you monitor and review information about these external and internal issues?			Yes/No
Additional Notes:				

4.2 Understanding the needs and expectations of workers and other interested parties

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
4.2	Have you determined the following:			
	a) the interested parties in addition to workers that are relevant to the Occupational Health and Safety Management System?			Yes/No
	b) the needs and expectations of these interested parties that are relevant to the Occupational Health and Safety Management System?			Yes/No
	c) which of these needs and expectations are, or could become legal requirements and other requirements?			Yes/No
	How do you monitor and review information about these interested parties and their relevant needs and expectations?			Yes/No
Additional Notes:				

4.3 Determining the scope of the OH&S management system

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
4.3	Have you determined the boundaries and applicability of the OH&S management system to establish your scope?			Yes/No
	When determining the scope of the OH&S management system how did you consider:			
	a) the external and internal issues referred to in 4.1?			Yes/No
	b) the requirements of relevant interested parties referred to in 4.2?			Yes/No
	c) take into account the planned or performed work related activities?			Yes/No
	Is the scope available as documented information?			Yes/No
Additional Notes:				

4.4 OH&S Management System

Clause	ISO 45001:2018 Requirements	Reference in your system	Auditor verification	Area of concern?
4.4	Have you implemented and have the system in place to maintain and continually improve your OH&S management system, including the processes needed and their interactions, in accordance with the requirements of ISO 45001?			Yes/No
Additional Notes:				

5. Leadership

5.1 Leadership and commitment

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
5.1	How does Top Management demonstrate leadership and commitment with respect to the OH&S management system:			
	a) taking overall responsibility and accountability for the prevention of work related injury and ill health, as well as the provision of safe and healthy workplaces and activities?			Yes/No
	b) ensuring that the OH&S policy and related OH&S objectives are established for the OH&S management system and are compatible with the strategic direction of the organization?			Yes/No
	c) ensuring the integration of the OH&S management system requirements into the organization's business processes?			Yes/No
	d) ensuring that the resources needed for the OH&S management system are available?			Yes/No
	e) communicating the importance of effective OH&S management and of conforming to the OH&S management system requirements?			Yes/No
	f) ensuring that the OH&S management system achieves its intended outcomes?			Yes/No
	g) directing and supporting workers to contribute to the effectiveness of the OH&S management system?			Yes/No
	h) ensuring and promoting continual improvement?			Yes/No
	i) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility?			Yes/No
	j) developing, leading and promoting a culture in the organisation that supports the intended outcomes of the OH&S management system?			Yes/No
	k) protecting workers from reprisals when reporting incidents, hazards, risks and opportunities?			Yes/No
	l) ensuring the organisation establishes and implements a process(es) for consultation and participation of workers?			Yes/No
	m) supporting the establishment and functioning of health and safety committee?			Yes/No
Additional notes:				

5.2 OH&S Policy

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
5.2	Have top management established, implemented and maintained a OH&S policy that:			
	a) includes a commitment to provide safe and healthy working conditions for the prevention of work related injury and ill health and is appropriate to the purpose, size and context of the organisation and to the specific nature of its OH&S risks and opportunities?			Yes/No
	b) provides a framework for setting OH&S objectives?			Yes/No
	c) includes a commitment to fulfil legal requirements and other requirements?			Yes/No
	d) includes a commitment to eliminate hazards and reduce OH&S risks?			Yes/No
	e) includes commitment to continual improvement of the OH&S management system?			Yes/No
	f) includes a commitment to consultation and participation of workers, and, where they exist workers representative?			Yes/No
	Is the OH&S policy			Yes/No

	<ul style="list-style-type: none"> • available as documented information • communicated within the organisation • available to interested parties • relevant and appropriate? 			
Additional Notes:				

5.3 Organisational roles, responsibilities and authorities

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
5.3	Does top management ensure that the responsibilities and authorities for relevant roles within the OH&S management system are assigned, available as documented information, communicated and understood at all levels within the organization?			Yes/No
	Do workers assume responsibility for those aspects of the OH&S management system for which they have control?			Yes/No
	Has top management assigned the responsibility and authority for:			
	a) ensuring that the OH&S management system conforms to the requirements of ISO 45001?			Yes/No
	b) reporting on the performance of the OH&S management system to top management?			Yes/No
Additional Notes:				

5.4 Consultation and of workers

5.4	Has your organisation established, implemented and maintained a process (es) for consultation and participation of workers at all applicable levels and functions, and where they exist, workers representatives, in the development, performance evaluation and actions for improvement of the OH&S system?			Yes/No
	Does the organisation:			
	a. provide mechanisms, time, training and resources necessary for consultation and participation?			Yes/No
	b. provide timely access to clear, understandable and relevant information about the OS&H management system?			Yes/No
	c. determine and remove obstacles or barriers to participation and minimise those that cannot be removed?			Yes/No
	d. emphasize the consultation of non-managerial workers on the following: 1. determining the needs and expectations of interested parties? 2. establishing the OH&S policy? 3. assigning organisational roles, responsibilities and authorities, as applicable? 4. determining how to fulfil legal and other requirements? 5. establish and plan to achieve OH&S objectives? 6. determining applicable controls for outsourcing, procurement and contractors? 7. determining what needs to be monitored, measured and evaluated? 8. planning, establishing, implementing and maintaining an audit programme? 9. ensuring continual improvement?			Yes/No
	e. emphasize participation of non-managerial workers in the following: 1. determining the mechanisms for their consultation and participation? 2. identifying hazards and assessing risks and			Yes/No

	opportunities? 3. determining actions to eliminate hazards and reduce OH&S risks? 4. determining competence requirements, training needs, training and evaluating training? 5. determining what needs to be communicated and how it is to be done? 6. determining control measures and their effective implementation and use? 7. investigating incidents and nonconformities and determine corrective action?			
Additional Notes:				

6. Planning

6.1 Actions to address risks and opportunities

6.1.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.1	When planning for the OH&S management system, have you considered the issues referred to in 4.1 and the requirements referred to in 4.2 and 4.3 and determined the risks and opportunities that need to be addressed to:			
	a) give assurance that the OH&S management system can achieve its intended outcomes?			Yes/No
	b) prevent, or reduce, undesired effects?			Yes/No
	c) achieve continual improvement?			Yes/No
	When determining the risks and opportunities for the OH&S management system and its intended outcome has the organisation taken into account: <ul style="list-style-type: none"> • hazards • OH&S risks and other risks • OH&S opportunities and other opportunities • Legal and other requirements? 			Yes/No
	Has your organization in its planning process determined and assessed the risks and opportunities relevant to the intended outcomes of the OH&S system associated with planned changes permanent or temporary before the change is implemented?			Yes/No
	Does your organization maintain documented information on: <ul style="list-style-type: none"> • risks and opportunities? • the process and actions needed to determine and address its risks and opportunities to the extent necessary to have confidence that they are carried out as planned? 			Yes/No
Additional Notes:				

6.1.2 Hazards identification and assessment of risks and opportunities

6.1.2.1 Hazard identification

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.2.1	Has the organisation established, implemented and maintained a process(s) for hazard identification that is ongoing and proactive? Do the processes take into account, but not be limited to:			
	a) how work is organised, social factors (including workload, work hours, victimization, harassment and bullying) leadership and the culture of the organisation?			Yes/No
	b) routine and non-routine activities and situations, including hazards arising from: <ol style="list-style-type: none"> 1. infrastructure, equipment, materials, substances and the physical conditions of the workplace? 2. product and service design, research, 			Yes/No

	development, testing, production, assembly, construction, service delivery, maintenance and disposal?			
	3. human factors?			
	4. how work is performed?			
c)	past relevant incidents, internal or external to the organisation, including emergencies, and their causes?			Yes/No
d)	potential emergency situations?			Yes/No
e)	people, including consideration of: <ol style="list-style-type: none"> 1. those with access to the workplace and their activities, including workers, contractors, visitors and other persons? 2. those in the vicinity of the workplace who can be affected by the activities of the organisation? 3. workers at a location not under the direct control of the organisation? 			Yes/No
f)	other issues, including consideration of: <ol style="list-style-type: none"> 1. the design of work areas, processes, installations, machinery/equipment, operating procedures and work organisation, including their adaptation to the needs and capabilities of the workers involved? 2. situations occurring in the vicinity of the workplace caused by work-related activities under the control of the organisation? 3. Situations not controlled by the organisation and occurring in the vicinity of the workplace that can cause injury and ill health to persons in the workplace? 			Yes/No
g)	actual or proposed changes in organisation, operations, processes, activities and the OH&S management system?			Yes/No
h)	changes in knowledge of, and information about, hazards?			Yes/No
Additional Notes:				

6.1.2.2 Assessment of OH&S risks and other risks to the OH&S management system

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.2.2	Has the organisation established implemented and maintained a process to:			
	a) assess OH&S risks from the identified hazards, while taking into account the effectiveness of existing controls?			Yes/No
	b) determine and assess the other risks related to the establishment, implementation, operation and maintenance of the OH&S management system?			Yes/No
	Has the organisation's methodologies and criteria for the assessment of OH&S risks been defined with respect to the scope, nature and timing to ensure they are proactive rather than reactive and are used in a systematic way?			Yes/No
	Does the organisation maintain and retain documented information on the methodologies and criteria?			Yes/No
Additional Notes:				

6.1.2.3 Assessment of OH&S opportunities and other opportunities for the OH&S management system

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.2.3	Have the organisation established, implemented and maintained processes to assess:			
	a) OH&S opportunities to enhance OH&S performance, while taking into account planned changes to the organisation, its policies, its processes and its activities and:			Yes/No

	1. opportunities to adapt work, work organisation and work environment to workers?			
	2. Opportunities to eliminate hazards and reduce OH&S risks?			
	b) Other opportunities for improving the OH&S system?			Yes/No
Additional Notes:				

6.1.3 Determination of legal requirements and other requirements

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.3	Has the organisation established, implemented and maintained processes to:			
	a) determine and have access to up to date legal requirements and other requirements that are applicable to the hazards, OH&S risks and OH&S management system?			Yes/No
	b) determine how these legal requirements and other requirements apply to the organisation and what needs to be communicated?			Yes/No
	c) take legal and other requirements into account when establishing implementing, maintaining and continually improving its OH&S management system?			Yes/No
	Does the organisation maintain and retain information on its legal and other requirements?			Yes/No
	How does the organisation ensure its legal requirements are up to date and reflect any changes?			Yes/No
Additional Notes:				

6.1.4 Planning Action

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.1.4	Does the organisations plan include:			
	a) Actions to address these risks and opportunities, address legal and other requirements and prepare for and respond to emergency situations?			Yes/No
	b) How to integrate and implement the actions into its OH&S management system processes or other business processes?			Yes/No
	Has the organisation taken into account the hierarchy of controls and outputs and outputs from OH&S management system when planning to take action?			Yes/No
	Does the organisation take into account best practice, technological options and financial, operational and business requirements when planning its actions?			Yes/No
Additional Notes:				

6.2 OH&S objectives and planning to achieve them

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
6.2.1	Has your organization established OH&S objectives at relevant functions, levels that are needed to maintain and continually improve the OH&S management system?		Tion	Yes/No
	Are the OH&S objectives:			
	a) consistent with the OH&S policy?			Yes/No
	b) measurable or capable of performance evaluation?			Yes/No
	c) take into account applicable requirements, the results of the assessment of risks and opportunities and the results of consultation with worker and workers representatives?			Yes/No

	d) monitored?			Yes/No
	e) communicated?			Yes/No
	f) updated as appropriate?			Yes/No
	Do you maintain and retain documented information on the OH&S objectives?			Yes/No
6.2.2	When planning how to achieve your OH&S objectives, has your organization determined:			
	a) What will be done?			Yes/No
	b) What resources will be required?			Yes/No
	c) Who will be responsible?			Yes/No
	d) When it will be completed?			Yes/No
	e) How the results will be evaluated including indicators for monitoring?			Yes/No
	f) How the actions to achieve OH&S objectives will be integrated into the organisations business processes?			Yes/No
	Do you maintain and retain documented information on the OH&S plans?			Yes/No
Additional Notes:				

7. Support

7.1 Resources

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.1	Has your organization determined and provided the resources needed for the establishment, implementation, maintenance and continual improvement of the OH&S management system?			Yes/No
Additional Notes:				

7.2 Competence

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.2	Has your organization:			
	a) determined the necessary competence of workers that affects the performance and effectiveness of the OH&S management system?			Yes/No
	b) ensured that these workers are competent (including the ability to identify hazards) on the basis of appropriate education, training, or experience?			Yes/No
	c) where applicable, taken actions to acquire and maintain the necessary competence, and evaluated the effectiveness of the actions taken?			Yes/No
	d) retained appropriate documented information as evidence of competence?			Yes/No
Additional Notes:				

7.3 Awareness

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.3	How does the organization ensure that workers are aware of:			
	a) the OH&S and objectives policy?			Yes/No
	b) their contribution to the effectiveness of the OH&S system including the benefits of improved OH&S performance?			Yes/No
	c) the implications of not conforming to the OH&S management system requirements?			Yes/No
	d) incidents and the outcomes of investigations that are relevant to them?			Yes/No
	e) hazards, OH&S risks and actions determined that are relevant to them?			Yes/No

	f) the ability to remove themselves from work situations that they consider present an imminent and serious danger to their life or health, as well as the arrangements for protecting them from undue consequences for doing so?			Yes/No
Additional Notes:				

7.4 Communication

7.4.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.4.1	How have you determined the internal and external communications relevant to the OH&S management system, including:			
	a) On what it will communicate?			Yes/No
	b) when to communicate?			Yes/No
	c) with whom to communicate:			Yes/No
	1. Internally among the various levels and functions of the organisation?			
	2. Among contractors and visitors to the workplace?			
	3. Among other interested parties?			
	d) how to communicate?			Yes/No
	How does the organisation take into account diversity (Gender, language, culture, literacy, disability) aspects when considering communication needs?			Yes/No
	How are the views of interested parties considered in establishing communication processes?			Yes/No
	In establishing communication processes has legal and other requirements been taken into account and that the information is consistent with other information generated from the system and reliable?			Yes/No
	Who responds to relevant communications on its OH&S management system?			Yes/No
	In what form is documented information retained as evidence of communications?			Yes/No
	Additional Notes:			

7.4.2 Internal communication

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.4.2	Has the organisation ensured that:			
	a) Internally communicated information is relevant to the OH&S management system among various levels and functions of the organisation. Does it include changes to the OH&S management system?			Yes/No
	b) Workers are able to contribute to continual improvement?			Yes/No
Additional Notes:				

7.4.3 External communication

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
	Has the company got an external communication process?			Yes/No
	How does external communication of OH&S information take into account legal and other requirements?			Yes/No
Additional Notes:				

7.5 Documented information

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
7.5.1	Does your organization's OH&S management system include:			
	a) documented information required by ISO45001?			Yes/No

	b) documented information determined by the organization as being necessary for the effectiveness of the OH&S management system?			Yes/No
7.5.2	When creating and updating documented information, how does your organization ensure appropriate:			
	a) identification and description (e.g. a title, date, author, or reference number)?			Yes/No
	b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic)?			Yes/No
	c) review and approval for suitability and adequacy?			Yes/No
7.5.3	How do you ensure documented information required by your OH&S management system and by ISO45001 is controlled to ensure:			
	a) it is available and suitable for use, where and when it is needed?			Yes/No
	b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity)?			Yes/No
7.5.3.2	For the control of documented information, how does your organization address the following activities, as applicable:			
	a) distribution, access, retrieval and use?			Yes/No
	b) storage and preservation, including preservation of legibility?			Yes/No
	c) control of changes (e.g. version control)?			Yes/No
	d) retention and disposition?			Yes/No
	How do you ensure documented information of external origin is identified and controlled?			Yes/No
Additional Notes:				

8. Operation

8.1 Operational planning and control

8.1.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
8.1.1	Does your organization plan, implement and control the processes (see 4.4) needed to meet the requirements of the OH&S management system and to implement the actions determined in Clause 6 by:			
	a) establishing criteria for the processes?			Yes/No
	b) implementing control of the processes in accordance with the criteria?			Yes/No
	c) maintaining and keeping documented information to the extent necessary to have confidence that processes are being carried out as planned?			Yes/No
	d) adapting to workers?			Yes/No
	How does your organization coordinate the relevant parts of OH&S management system with other organisations in multi-employer situations?			Yes/No
	How does your organization ensure that outsourced processes are controlled (see 8.4)?			Yes/No
Additional Notes:				

8.1.2 Eliminating hazards and reducing OH&S risks

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
8.1.2	Has the organisation established, implemented and maintained processes for the elimination of hazards and reduction of OH&S risks using the following hierarchy of controls:			
	a) eliminate the hazard?			Yes/No
	b) substitute with less hazardous process, operations, materials or equipment?			Yes/No
	c) use engineering controls and reorganisation of work?			Yes/No
	d) use administration controls, including training?			Yes/No
	e) use adequate personal protective equipment?			Yes/No
Additional Notes:				

8.1.3 Management of change

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
8.1.3	Has the organisation established processes for the implementation and control of planned temporary and permanent changes that impact performance including:			
	a) new products, services and processes, or changes to existing products, services and processes, including: <ul style="list-style-type: none"> workplace locations and surroundings? working organisation? working conditions? Equipment? work force? 			Yes/No
	b) changes to legal requirements and other requirements?			Yes/No
	c) changes to knowledge or information about hazards and OH&S risks?			Yes/No
	d) developments in knowledge and technology?			Yes/No
	Does the organisation review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary?			Yes/No
Additional Notes:				

8.1.4 Procurement

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
8.1.4.1	Has the organisation established, implemented and maintained processes to control the procurement of products and services in order to ensure their conformity to its OH&S management system?			Yes/No
8.1.4.2	Does the organisation coordinate its procurement processes with its contractors, in order to identify hazards and assess and control the OH&S risks arising from:			
	a) the contractors' activities and operations that impact the organisation?			Yes/No
	b) the organisation's activities and operations that impact the contractors workers?			Yes/No
	c) the contractors' activities and operations that impact other interested parties in the workplace?			Yes/No
	How does the organisation ensure that the requirements of its OH&S management system are met by contractors and their workers?			Yes/No
8.1.4.3	Does the organisations procurement processes define and apply occupational health and safety criteria for the selection of contractors?			Yes/No
	How does the organisation ensure outsourced functions and processes are controlled?			Yes/No
	Does the organisation ensure that its outsourcing arrangements are consistent with legal requirements and other requirements and with achieving the intended outcomes of the OH&S management system?			Yes/No
	Has the type and degree of control to be applied to these functions and processes been defined within the OH&S management system?			Yes/No
Additional Notes:				

8.2 Emergency preparation and response

Clause	ISO 45001:2018 Requirements	Reference in your system	verification	Area of concern?
8.2	Has the organisation established, implemented and maintained the processes needed to prepare for and respond to potential emergency situations identified in 6.1.2.1 and do they include:			
	a) establishing a planned response to emergency situations including provision of first aid?			Yes/No
	b) providing training for the planned response?			Yes/No
	c) periodically testing and exercising the planned response capability?			Yes/No
	d) evaluating performance and as necessary, revising the planned response, including after testing and in particular after the occurrence of an emergency situation?			Yes/No
	e) communicating and providing relevant information to all workers on their duties and responsibilities?			Yes/No
	f) communicating relevant information to contractors, visitors, emergency response services, government authorities, and as appropriate local community?			Yes/No
	g) taking into account the needs and capabilities of all relevant interested parties and ensuring their involvement, as appropriate, in the development of the planned response?			Yes/No
	Has the organisation maintained documented information on the process and on the plans for responding to potential emergency situations?			Yes/No
Additional Notes:				

9. Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
9.1.1	The organisation shall establish, implement and maintain processes for monitoring, measurement analysis and performance evaluation. How does your organization determine:			
	a) What needs to be monitored and measured: 1. the extent to which legal requirements and other requirements are met? 2. its activities and operations related to identified hazards, risks, and opportunities? 3. progress towards achieving OH&S objective? 4. effectiveness of operational and other controls?			Yes/No
	b) the methods for monitoring, measurement, analysis and performance evaluation needed to ensure valid results?			Yes/No
	c) the criteria against which the organisation will evaluate its OH&S performance?			
	d) when the monitoring and measuring shall be performed?			Yes/No
	e) when the results from monitoring and measurement shall be analysed and evaluated and communicated?			Yes/No
	How does your organization evaluate the performance and the effectiveness of the OH&S management system?			Yes/No
	How does the organisation ensure that monitoring and measuring equipment is calibrated or verified as applicable, and used and maintained as appropriate?			Yes/No
	In what form does your organization retain appropriate documented information as evidence of the monitoring, measurement, analysis and performance evaluation and maintenance, calibration or verification of measuring equipment?			Yes/No
Additional Notes:				

9.1.2 Evaluation of compliance

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
9.1.2	How does your organization establish implement and maintain processes for evaluating compliance with legal and other requirements?			Yes/No
	Does the evaluation include:			
	a) determining the frequency and method(s) for the evaluation of compliance?			Yes/No
	b) evaluate compliance and take action if needed?			Yes/No
	c) maintaining knowledge and understanding of its compliance status with legal requirements and other requirements?			Yes/No
	d) retaining documented information of the compliance evaluation results?			Yes/No
Additional Notes:				

9.2 Internal audit

9.2.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
9.2.1	Does your organization conduct internal audits at planned intervals to provide information on whether the OH&S management system:			
	a) Conforms to: 1. the organization's own requirements for its OH&S management system, including policy and objectives? 2. the requirements of this International Standard?			Yes/No
	b) Is effectively implemented and maintained?			Yes/No
Additional Notes:				

9.2.2 Internal audit programme

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
9.2.2	Does your organization:			
	a) plan, establish, implement and maintain an audit programme(s) including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned, and the results of previous audits?			Yes/No
	b) define the audit criteria and scope for each audit?			Yes/No
	c) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process?			Yes/No
	d) ensure that the results of the audits are reported to relevant management; ensure results of internal audits are reported to workers and where they exist, workers representatives, and other relevant interested parties?			Yes/No
	e) take action to address nonconformity and continually improve its OH&S audit programme and the audit results?			Yes/No
	f) retain documented information as evidence of the implementation of the audit programme and the audit results?			Yes/No
Additional Notes:				

9.3 Management review

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
9.3	ISO 45001 requires "Top management shall review the organization's OH&S management system, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness". What format does this review(s) take?			Yes/No
	Is your organizations management review planned and carried out taking into consideration:			
	a) The status of actions from previous management reviews?			Yes/No
	b) Changes in external and internal issues that are relevant to the OH&S management system including: 1. Needs and expectations of interested parties? 2. Legal requirements and other requirements? 3. Risks and opportunities?			Yes/No
	c) The extent to which OH&S policy and objectives have been met?			Yes/No
	d) Information on the OH&S performance, including: 1. Incidents nonconformities and corrective actions and continual improvement? 2. Monitoring and measurement results? 3. Results of evaluation of compliance with legal requirements other requirements? 4. Audit results? 5. Consultation and participation of workers? 6. Risks and opportunities?			Yes/No
	e) Adequacy of resources for maintaining an effective OH&S system?			Yes/No
	f) Relevant communication with interested parties?			Yes/No
	g) Opportunities for continual improvement?			Yes/No
	Do the outputs of the management review include decisions and actions related to:			
	• The continuing suitability, adequacy, and effectiveness in achieving the intended outcomes?			Yes/No
	• Continual improvement opportunities?			Yes/No
	• Any need for changes to the OH&S management system?			Yes/No
	• Resource needs?			Yes/No
	• Actions needed?			Yes/No
	• Opportunities to improve integration of the OH&S system with other business processes?			Yes/No
	• Any implications for the strategic direction of the organisation?			Yes/No
	How are the relevant outputs from management review communicated to workers and where they exist workers representatives?			Yes/No
	In what form does your organization retain documented information as evidence of the results of management reviews?			Yes/No

Additional Notes:

10. Improvement

10.1 General

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
10.1	How do you determine and select opportunities for improvement and implement any necessary actions to achieve intended outcomes of your OH&S management system?			Yes/No
Additional Notes:				

10.2 Incident, nonconformity and corrective action

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
10.2	When an incident or nonconformity occurs, how does your organization:			
	a) React in a timely manner to the incident or nonconformity and, as applicable: 1) Take action to control and correct it? 2) Deal with the consequences?			Yes/No
	b) Evaluate, with the participation of workers and the involvement of other relevant interested parties, the need for corrective action to eliminate the root cause(s) of the incident or nonconformity, in order that it does not recur or occur elsewhere, by: 1) investigating the incident or reviewing the nonconformity? 2) determining the causes of the incident or nonconformity? 3) determining if similar incidents have occurred, if nonconformities exist, or if could potentially occur?			Yes/No
	c) review existing assessments of OH&S risks and other risks, as appropriate?			Yes/No
	d) determine and implement any action needed, including corrective action, in accordance with the hierarchy of controls and the management of change?			Yes/No
	e) assess OH&S risks and that relate to new or changed hazards, prior to taking action?			Yes/No
	f) review the effectiveness of any action taken, including corrective action?			Yes/No
	g) make changes to the OH&S management system, if necessary?			Yes/No
	Does your organization take corrective actions appropriate to the effects or potential effects of the incidents or nonconformities encountered?			Yes/No
	In what form does your organization retain documented information evidence of:			
	a) the nature of the incidents or nonconformities and any subsequent actions taken?			Yes/No
	b) the results of any action and corrective action including their effectiveness?			Yes/No
	How is this information communicated to relevant workers, and, where applicable, workers representatives, and other interested parties?			Yes/No
Additional Notes:				

10.3 Continual improvement

Clause	ISO 45001:2018 Requirements	Reference in your system	VERIFICATION	Area of concern?
10.3	How does your organization continually improve the suitability, adequacy and effectiveness of the OH&S management system?			Yes/No
	How does your organization:			
	a) enhance OH&S performance?			Yes/No
	b) promote a culture that supports the OH&S management system?			Yes/No
	c) promote the participation of workers in implementing actions for continual improvement of the OH&S management system?			Yes/No
	d) communicating the results of continual improvement workers and if appropriate workers representatives?			Yes/No
	e) maintain and retain documented information as evidence of continual improvement?			Yes/No
Additional Notes:				

Lampiran 5. Surat Kediaan Tempat Penelitian



Nomor : 328/SIS/SERA/HRGA/EXT/IV/2023
Perihal : Kediaan Tempat Penelitian

Kepada Yth,
Dekan Fakultas Sains, Teknologi, dan Kesehatan
Up. Firdhaus Hari Saputro Al Haris, S.T.,M.Eng.
Di_

Tempat

Dengan Hormat,

Menindak lanjuti surat yang kami terima dengan Nomor: 155/FSTK/D/Usahid-Ska/IV/2023 perihal permohonan ijin penelitian. Dengan data mahasiswa sebagaimana berikut :

No	Nama	NIM	Program Studi
1	Anang Novida Harinurdin	2020052002	Teknik Industri

Bersama ini kami sampaikan kepada Bapak/Ibu bahwa kami bersedia menerima Mahasiswa tersebut untuk bisa melaksanakan penelitian di PT. Saptaindra Sejati Site SERA. Dengan mengikuti ketentuan dan peraturan yang telah berlaku di PT. Saptaindra Sejati Site SERA.

Demikian disampaikan agar menjadi perhatian, Atas kerjasamanya diucapkan terimakasih.

PT. Saptaindra Sejati - SERA
Hormat kami,


Abraham Bada
Chief Operational