

Slope Protection



8.5 Water Flow

- Additional Water Monitoring Effort (Water Flow)

River Debit

No.	Unit	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-9
1	m ³ /s	0.22	0.16	1.15	0.95	2.71	0.32	0.43

8.6 Aquatic Biota

- Summary of Aquatic Biota Monitoring as follow:

Measurement Period	Construction Phase: Two times Operation & Post Operation Phase: Every 6 months	Any concerns and measures taken: N/A																								
Measurement Method	Data analysis of number of types, composition, abundance, and diversity of plankton and benthos																									
Measurement Points	<ul style="list-style-type: none"> Aquatic Biota <table border="1"> <thead> <tr> <th>No</th> <th>Location Code</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SW-1</td> <td>Upstream Bangko Karuah River</td> </tr> <tr> <td>2</td> <td>SW-2</td> <td>Downstream Bangko Karuah River</td> </tr> <tr> <td>3</td> <td>SW-3</td> <td>Upstream Bangko Putih River</td> </tr> <tr> <td>4</td> <td>SW-4</td> <td>Downstream Bangko Putih River</td> </tr> <tr> <td>5</td> <td>SW-5</td> <td>Downstream Bangko Hitam River</td> </tr> <tr> <td>6</td> <td>SW-6</td> <td>Batang Liki River</td> </tr> <tr> <td>9</td> <td>SW-9</td> <td>Upstream Bangko Hitam River</td> </tr> </tbody> </table>	No	Location Code	Reference	1	SW-1	Upstream Bangko Karuah River	2	SW-2	Downstream Bangko Karuah River	3	SW-3	Upstream Bangko Putih River	4	SW-4	Downstream Bangko Putih River	5	SW-5	Downstream Bangko Hitam River	6	SW-6	Batang Liki River	9	SW-9	Upstream Bangko Hitam River	
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9	SW-9	Upstream Bangko Hitam River																								

Phytoplankton Community

Parameter	Location						
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-9
Total Taxa	4	4	5	3	4	3	4
Abundance (Ind/L)	40	69	80	34	40	34	57
Diversity Index	1.28	1.29	1.43	1.01	1.28	1.01	1.28
Uniformity Index	0.92	0.93	0.89	0.92	0.92	0.92	0.92
Domination Index	0.31	0.29	0.27	0.39	0.31	0.39	0.30

Cyanophyceae (1 type), *Chlorophyceae* (6 types), Bacillariophyceae (10 types) and *Euglenophyceae* (2 types)

Zooplankton Community

Parameter	Location						
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-9
Total Taxa	4	4	5	3	4	3	4
Abundance (Ind/L)	40	69	74	23	51	51	34
Diversity Index	1.28	1.29	1.48	1.04	1.15	0.96	1.33
Uniformity Index	0.92	0.93	0.92	0.95	0.83	0.88	0.96
Domination Index	0.31	0.29	0.25	0.38	0.38	0.41	0.28

Crustacea (2 types), *Rotifera* (3 types), *Nematodes* (1 type), and *Oligochaeta* (1 type)

Benthos Community

Parameter	Location						
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-9
Total Taxa	3	3	4	3	4	4	3
Abundance (Ind/m ²)	31	25	44	19	38	44	25
Diversity Index	1.52	1.50	1.95	1.58	1.92	1.84	1.50
Uniformity Index	0.96	0.95	0.98	1.00	0.96	0.92	0.95
Domination Index	0.36	0.38	0.27	0.33	0.28	0.31	0.38

Gastropoda (3 types), *Diptera* (1 type), dan *Odonata* (2 types)

8.7 Flora / Fauna

- Summary of Flora / Fauna Monitoring as follow:

Measurement Period	Construction Phase: Two times Post operation Phase: Every 6 months	Any concerns and measures taken: N/A											
Measurement Method	Data collection method through Inventory /direct observation of the area to be cleared and re-vegetated. Data analysis through vegetation analysis.												
Measurement Points	<table border="1"> <thead> <tr> <th>No</th> <th>Location Code</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FF-2</td> <td>ML-B</td> </tr> <tr> <td>2</td> <td>FF-3</td> <td>ML-H</td> </tr> <tr> <td>3</td> <td>FF-4</td> <td>ML-E</td> </tr> </tbody> </table>		No	Location Code	Reference	1	FF-2	ML-B	2	FF-3	ML-H	3	FF-4
No	Location Code	Reference											
1	FF-2	ML-B											
2	FF-3	ML-H											
3	FF-4	ML-E											

- Flora

No	Local Name	Scientific Name	Location			Habitus	P.106/2018 (Status)
			ML-B	ML-H	ML-E		
1	Gadog	<i>Bischofia javanica</i>	-	+	+	Tree	Not protected
2	Medang keladi	<i>Cinnamomum spp</i>	+	+	+	Tree	Not protected
3	Tembesu putih	<i>Fagraea fragrans</i>	-	-	-	Tree	Not protected
4	Kenari	<i>Dacryodes</i>	+	+	+	Tree	Not protected
5	Meranti embun	<i>Dacrydium elatum</i>	+	+	+	Tree	Not protected
6	Pasang kapur	<i>Quercus/Lithocarpus</i>	+	+	-	Tree	Not protected
7	Jambu-jambu	<i>Eugenis sp,</i>	+	+	-	Tree	Not protected
8	Puspa	<i>Schima walichii,</i>	+	+	+	Tree	Not protected
9	Bintangur	<i>Calophyllum pulcherrimum</i>	+	+	+	Tree	Not protected
10	Sapat	<i>Cratoxylon ligustrinum</i>	-	-	+	Tree	Not protected
11	Pagar	<i>Ixonanthes icosandra</i>	-	-	-	Tree	Not protected
12	Semasam	<i>Aporosa sp</i>	+	+	+	Tree	Not protected
13	Medang kuning	<i>Alseodaphne sp,</i>	+	+	+	Tree	Not protected
14	Surian bawang	<i>Toona sp</i>	+	+	+	Tree	Not protected
15	Medang putih	<i>Litsea spp</i>	+	+	+	Tree	Not protected
16	Pasang batu	<i>Quercus wallichiana</i>	+	+	+	Tree	Not protected
17	Bayur putih	<i>Pterospermum javanicum</i>	-	+	-	Tree	Not protected
18	Medang cengkeh	<i>Litsea spp</i>	+	+	-	Tree	Not protected
19	Kayu kasai	<i>Pometia</i>	+	+	+	Tree	Not protected

No	Local Name	Scientific Name	Location			Habitus	P.106/2018 (Status)
			ML-B	ML-H	ML-E		
20	Kayu aro	<i>Ficus sp</i>	+	+	+	Tree	Not protected
21	Anggrum/gamal	<i>Gliricidia maculate</i>	-	+	+	Shrub	Not protected
22	Kayu mara	<i>Macaranga tanarius</i>	+	+	+	Shrub	Not protected
23	Kayu bodi	<i>Ficus religiosa</i>	+	+	+	Shrub	Not protected
24	Sikejut	<i>Mimosa pudica</i>	+	+	+	Herb	Not protected
25	Rotan	<i>Calamus,</i>	+	+	+	Herb	Not protected
26	Pakis	<i>Diplazium esculentum</i>	+	+	+	Herb	Not protected
27	Tepus	<i>Achasmacoccineum</i>	+	+	+	Shrub	Not protected
28	Pepaitan	<i>Paspalum conjugatum</i>	+	-	-	Herb	Not protected
29	Balik angin	<i>Macaranga recurvata</i>	+	+	+	Herb	Not protected
30	Harendong	<i>Melastoma affine</i>	+	+	+	Bush	Not protected
31	Resam	<i>Gleichenia linearis</i>	+	+	+	Bush	Not protected
32	Semantung	<i>Ficus sp</i>	+	+	+	Shrub	Not protected
33	Kayu labu	<i>Endospermum sp</i>	-	+	+	Shrub	Not protected
34	Kayu sirih	<i>Piper aduncum</i>	-	-	+	Herb	Not protected



Clearing of Invasive Species

- Mammals**

No.	Local Name	Latin Name	Conservation Status		Remarks
			IUCN	PerMen LHK P.106	
1	Babi	<i>Sus scrofa</i>	LC	TL	Footprints
2	Simpai	<i>Presbitys melalophus</i>	EN	L	Observation
3	Tupai	<i>Callosciurus notatus</i>	LC	TL	Observation
4	Karo/ekor panjang	<i>Macaca fascicularis</i>	LC	TL	Observation
5	Baruak	<i>Macaca nemestrina</i>	VU	TL	Camera Trap
6	Siamang	<i>Sympalangus syndactylus</i>	EN	L	Voice
7	Kalong	<i>Pteropus vampyrus</i>	NT	TL	Observation
8	Rusa sambar	<i>Cervus unicolor</i>	EN	L	Camera Trap
9	Binturong	<i>Arctictis binturong</i>	VU	L	Camera Trap
10	Linsang	<i>Prionodon linsang</i>	LC	TL	Camera Trap

No.	Local Name	Latin Name	Conservation Status		Remarks
			IUCN	PerMen LHK P.106	
11	Kucing emas	<i>Catopuma temminckii</i>	NT	L	Camera Trap
12	Sigung Sumatera	<i>Arctonyx collaris</i>	NT	L	Camera Trap
13	Puyuh	<i>Arborophila sp</i>	LC	TL	Camera Trap
14	Kuau kerdil	<i>Polyplectron chalcurum</i>	LC	TL	Camera Trap
15	Kijang	<i>Muntiacus muntjak</i>	LC	TL	Camera Trap
16	Bajing tanah	<i>Lariscus insignis</i>	LC	TL	Camera Trap
17	Trenggiling	<i>Manis javanica</i>	CR	L	Camera Trap
18	Tupaia akar	<i>Tupaia glis</i>	LC	TL	Camera Trap
19	Puyuh gonggong	<i>Arborophila rubrirostris</i>	LC	TL	Camera Trap
20	Musang congkok	<i>Prionodon linsang</i>	LC	L	Camera Trap
21	Musang bulan	<i>Paguma larvata</i>	LC	TL	Camera Trap

Note: LC (Least concern)= resiko rendah; NT (Near threatened)=hamper terancam; CR (Critical)=kritis; VU (Vulnerable) rentan; EN (Endangered)=terancam; L (Protected); TL (Not Protected); E (endemic); CT (camera trap)

- Birds

No	Family	Nama Indonesia	Nama Jenis	Endemik	IUCN	CITES	P106
1	Motacillidae	Apung tanah	<i>Anthus rufulus</i>	-	LC	-	-
2	Laniidae	Bentet kelabu	<i>Lanius schach</i>	-	LC	-	-
3	Estrildidae	Bondol haji	<i>Lonchura maja</i>	-	LC	-	-
4	Estrildidae	Bondol Peking	<i>Lonchura punctulata</i>	-	LC	-	-
5	Cuculidae	Bubut Alang - alang	<i>Centropus bengalensis</i>	-	LC	-	-
6	Nectariniidae	Burung Madu Ekor Merah	<i>Aethopyga temminckii</i>	-	LC	-	-
7	Nectarinidae	Burung Madu sp.	<i>Cinnyris sp.</i>	-	-	-	-
8	Dicaeidae	Cabai sp.	<i>Dicaeum sp.</i>	-	-	-	-
9	Alcedinidae	Cekakak sungai	<i>Todirhamphus chloris</i>	-	LC	-	-
10	Cisticolidae	Cinenen kelabu	<i>Orthotomus ruficeps</i>	-	LC	-	-
11	Aegithinidae	Cipoh kacat	<i>Aegithina tiphia</i>	-	LC	-	-
12	Pycnonotidae	Cucak kutilang	<i>Pycnonotus aurigaster</i>	-	LC	-	-
13	Accipitridae	Elang hitam	<i>Ictinaetus malaiensis</i>	-	LC	App II	√
14	Accipitridae	Elang-ular bido	<i>Spilornis cheela</i>	-	LC	App II	√
15	Champephagidae	Jinjing Bukit	<i>Hemipus hirundinaceus</i>	-	LC	-	-
16	Bucerotidae	Julang Emas	<i>Rhyticeros undulatus</i>	-	VU	App II	√
17	Cuculidae	Kadalan Beruang	<i>Phaenicophaeus diardi</i>	-	NT	-	-
18	Campephagidae	Kapasan Kemiri	<i>Lalage nigra</i>	-	LC	-	-
19	Motacillidae	Kicuit Batu	<i>Motacilla cinerea</i>	-	LC	-	-
20	Rhipiduridae	Kipasan Belang	<i>Rhipidura javanica</i>	-	LC	-	√
21	Hirundinidae	Layang - layang Api	<i>Hirundo rustica</i>	-	LC	-	-
22	Hirundinidae	Layang-layang batu	<i>Hirundo tahitica</i>	-	LC	-	-
23	Pycnonotidae	Merbah cerukcuk	<i>Pycnonotus goiavier</i>	-	LC	-	-
24	Sittidae	Munguk Loreng	<i>Sitta azurea</i>	-	LC	-	-
25	Muscicapidae	Niltava Kumbang padi	<i>Niltava grandis</i>	-	LC	-	-
26	Picidae	Pelatuk Kuduk kuning	<i>Chrysoplegma flavinucha</i>	√	LC	-	-

No	Family	Nama Indonesia	Nama Jenis	Endemik	IUCN	CITES	P106
27	Cisticolidae	Perenjak Jawa	<i>Prinia familiaris</i>	-	LC	-	-
28	Leiothrichidae	Poksai Genteng	<i>Garrulax mitratus</i>	-	NT	-	-
29	Champephagidae	Sepah Gunung	<i>Pericrocotus miniatus</i>	-	LC	-	-
30	Muscicapidae	Sikatan Bubik	<i>Muscicapa dauurica</i>	-	LC	-	-
31	Muscicapidae	Sikatan bubik	<i>Muscicapa dauurica</i>	-	LC	-	-
32	Megalaimidae	Takur Bukit	<i>Psilopogon oorti</i>	√	LC	-	√
33	Megalaimidae	Takur ungu-ungku	<i>Psilopogon haemacephalus</i>	-	LC	-	-
34	Columbidae	Tekukur biasa	<i>Spilopelia chinensis</i>	-	LC	-	-
35	Coraciidae	Tiong Lampu Biasa	<i>Eurystomus orientalis</i>	-	LC	-	-
36	Columbidae	Uncal Kouran	<i>Macropygia ruficeps</i>	-	LC	-	-
37	Apodidae	Wallet Linci	<i>Collocalia linchi</i>	-	LC	-	-
38	Cuculidae	Wiwik kelabu	<i>Cacomantis merulinus</i>	-	LC	-	-
39	Cuculidae	Wiwik uncuang	<i>Cacomantis variolosus</i>	-	LC	-	-

Note: LC (Least concern)=resiko rendah; NT (Near threatened)=hamper terancam; CR (Critical)=kritis; VU (Vulnerable)=rentan; EN (Endangered)=terancam; L (Protected); TL (Not Protected); E (endemic); CT (camera trap)

- **Habitat Tracking Sheet and Habitat Mapping**

Habitat Tracking Sheet can be seen in Attachment 8. Biodiversity Habitat Database Mapping can be seen in Attachment 9.

The tracking sheet includes past data with a breakdown based on species (with latin name), IUCN status, national protected status, number of animals seen, type of observation (visual or camera trap). This tracking sheet is in line with the habitat mapping database for ease of reference.

8.8 Biodiversity (endangered species)

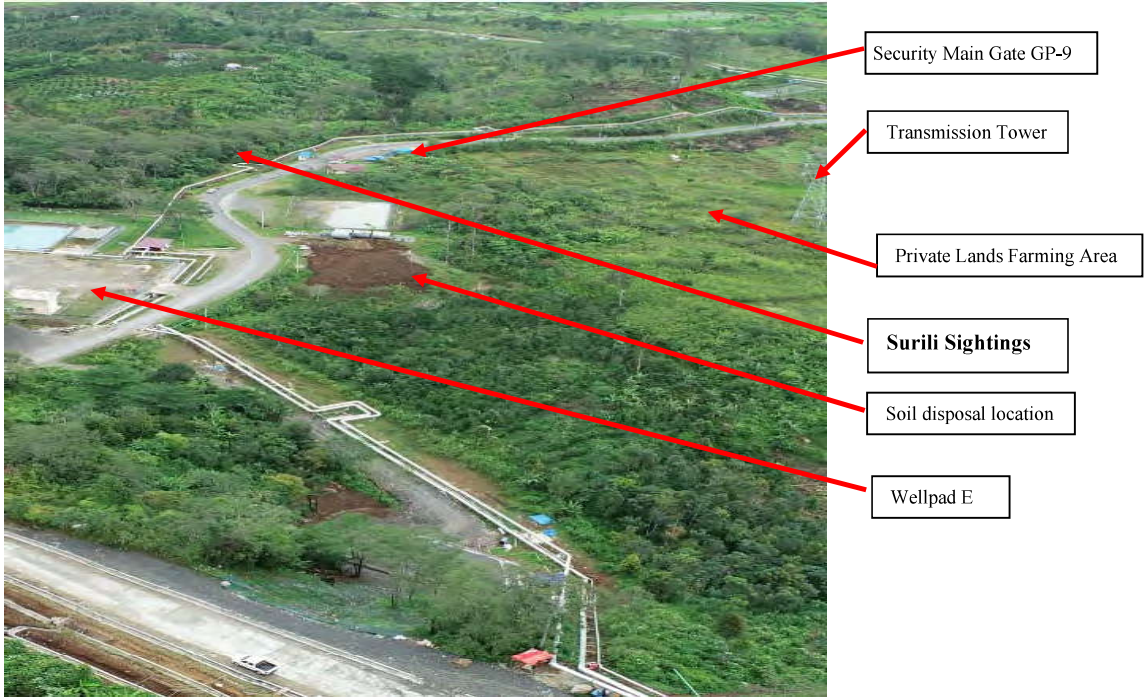
- Summary of Biodiversity (endangered species) Monitoring as follow:

Measurement Period	Construction Phase: Regularly (At least every 3 years) Operation Phase: Regularly (At least every 3 years)	Any concerns and measures taken: N/A Note: <ul style="list-style-type: none"> • Nursing amorphophalus sp (EN) at insitu nursery near WP-F. • Attachment 9 Habitat Database Mapping
Measurement Method	<ul style="list-style-type: none"> • Direct observation • Camera Trap 	
Measurement Points	<ul style="list-style-type: none"> • Number of locations will be determined later based on analysis of the observation data. The below are the previous locations during biodiversity study. 	

A location near WP-E and Security Posts GP-9 is often visited by Surili (*Presbytis melalophos*). They hang out at Sengon trees at the forest edge, at the other side of the road from the Post). The ownership of lands at the side of the Post is Private Land (Area Penggunaan Lain / APL) that are used for farmings, rice fields, shrubs, and transmission lines so it is deemed not appropriate to install an arboreal bridge at this location since it does not connect to another forest, can create conflicts with farmers and also has a potential for them to climb the transmission lines and disturb operations. See Biodiversity Action Plans (BAP) poins #6 and #27.

The location of Surili sightings is also recorded in the tracking sheet for all animals observed within the Project.

Plot of Surili Sightings Near WP-E / Security Post GP-9



9. Permit Compliance

9.1. Compliance with AMDAL Documents

- Summary of AMDAL Document compliance as follow:

Monitoring Item	Monitoring Results during Report Period
Conditions attached to AMDAL approval (Conditions shown in the Sixth Article and Seventh Article of AMDAL Approval Letter dated 22 October 2013 and Conditions shown in Addendum #1 AMDAL Approval Letter dated 14 January 2015 and Addendum #2 AMDAL Approval Letter dated 22 September 2020)	1. Please confirm if you have achieved all conditions attached to AMDAL approval. : [Yes / No]
	2. Describe the situation and measures taken if delays/complications in implementation of the conditions/obligations are identified. None

9.2. Compliance with Environmental Permit

- Summary of environmental permit compliance as follow:

Name	Competent Authority	Status
Permit for B3 Waste Temporary Storage (Izin Tempat Penyimpanan Sementara Limbah B3)	Regent of Solok Selatan (Bupati Solok Selatan)	Has the permit approved/ issued?: Yes / No
		If "Yes", please provide the approved/issued date (DD/MM/YYYY). Please also submit a copy of the permit together with this monitoring form. Decree of Regent of Solok Selatan no. 660.263-2017 dated 28 August 2017.
		If "No", please provide the expected approval/issuance date (DD/MM/YYYY).
Any issues regarding Monitoring Item mentioned above	Reasons/Background Information	Measures: <ul style="list-style-type: none"> Production rate of hazmat is low Keep minimum hazmat stock at site

10. Biodiversity Action Plan

- Summary of Biodiversity Action Plan as follow:

Monitoring & Action Item	Monitoring Results during Report Period
Completion of Biodiversity Action Plan	<p>Has Biodiversity Action Plan (BAP)(including Supplemental Report) been completed? : Yes / No</p> <p>If "Yes", please provide the information of the completion date (DD/MM/YYYY) : BAP v11, dated 23 June 2017 and approved by ADB on 24 July 2017.</p> <p>For each action item detail the actions taken and the current status and outcomes.</p>
Impacts on biodiversity in/around the project site	<p>Are there any problems regarding impacts on biodiversity pointed out by the National/Local authority? Yes/ No</p> <p>During this period of the project</p>
	<p>If yes, please describe the outline of the problems and measures taken.</p>

Any issues regarding Monitoring Item mentioned above	Reasons/Background Information	Mitigation Measures
N/A	N/A	N/A

• PT SEML Biodiversity Action Plan Status

No	Action Plan	Status	Date
1	Appoint a Site Support Manager to supervise SHE aspects at site	Done. <ul style="list-style-type: none"> • Yulnofrins Napilus has been appointed as Site Support Manager. • Asharry Sofyan has been appointed as Site Biodiversity Offset Manager. • Ryski Darma Busta and Hans Primananda have been appointed as biodiversity offset officers. 	December 2016
2	Implement adaptive management measure	Done. <p>Established procedure: SE-MSHE-ENA-PRO-0001 Chance Finds Procedure (4 February 2017)</p> <p>SHE meetings between parties include discussion of any biodiversity issues and requirements for adaptive measures. Adaptive management measures are implemented on site in response to fauna sightings.</p>	Procedure has been issued on 4 February 2017 and will be revised when required.
3	Develop protocols for the management of injured wildlife	Done; refer to: <ul style="list-style-type: none"> • ML-MSHE-WOR-GUI-0002-Wildlife Sheperding Protocol (13 June 2017) • 27-SE-MSHE-WOR-PRO-0014 Wild Animal Interference (12 February 2018) 	Date Composed: <ul style="list-style-type: none"> • 13 June 2017 • 12 February 2018
4	Establish an incident reporting mechanism	Done; refer to: <ul style="list-style-type: none"> • SE-MSHE-IRI-PRO-0001 Incident Notification Reporting (17 April 2018) • SE-MSHE-IRI-PRO-0002 Incident Accident Reporting & Investigation (24 October 2012) 	Date Composed: <ul style="list-style-type: none"> • 17 April 2018 • 24 October 2012
5	Identification of Wildlife Crossing Points	Done. Not needed. <p>Based on current observation, the installation of a wildlife crossing point is not needed.</p>	Current Update: <p>No report is received to require the installation of wildlife crossings for terrestrial and arboreal mammals.</p>
6	Assess the need for the installation of artificial crossing for endangered arboreal mammals	Done. Not needed. <p>A location near Security Posts-GP9 is often visited by Surili. They hangout at Sengon trees at the forest edge, at the other side of the road from the Post). The land at the side of the Post is used for farmings, rice fields, shrubs, and transmission lines so it is deemed not appropriate to install an arboreal bridge at this location since it does not connect to a forest, can create conflicts with farmers and also has a potential for them to climb the transmission lines and disturb operations. See #27 and Attachment 16 for Arboreal Crossing Review</p>	
7	Conduct a flora and fauna survey prior to construction of wellpad	Done by UNAND University and EPC-C.	The survey was done prior to clearing for Wellpad F (See attached report) <ul style="list-style-type: none"> • Biodiversity Study of area surrounding Wellpad F was conducted in early March 2017 • 1 protected fauna species (Siamang) was identified by sound, but is located far from the project boundary • Endangered flora (amorphophalus sp. Was encountered)

			<ul style="list-style-type: none"> Initial amorphophalus relocation and nursery 24 March 2017 <p>Current Update: Done in conjunction with Biodiversity Offset Program</p>
8	Wildlife shepherding activities	<p>Done.</p> <ul style="list-style-type: none"> Procedure has been established: ML-MSHE-WOR-GUI-0002-Wildlife Shepherding Protocol (13 June 2017) Socialisation to SEML and contractor employees. No critical activities related to wildlife shepherding was required during construction. Wild Animal Interference (including Injured Wildlife Protocol) will be referred to in the event that injured wildlife is encountered. Land clearance for project is marked and monitored by SEML and Contractor. 	<p>Current Update: During the reporting period, no sensitive incident involving wildlife was encountered. Biodiversity campaign is maintained and monitored by Biodiversity Offset Officers.</p>
9	Ensure clearing has been limited to the identified area	<p>Done.</p> <p>Monitored by SEML Project and EPC Contractor. SHE personel from both SEML and EPC ensured the limit and checked during biodiversity study prior to land clearing.</p>	<p>No additional vegetation clearance had occurred since March 2017 (wellpad F)</p> <p>Current Update: None</p>
10	Brief all involved personnel on wildlife shepherding activities	<p>Done.</p> <ul style="list-style-type: none"> Prior to conducting work, SEML & EPC-C have conducted a kick-off-meeting to discuss SHE matters including biodiversity issues. Site coordination meeting was conducted after a preland-clearing survey to discuss findings and method of clearings to prevent unnecessary damage. Trainings on procedures and biodiversity awareness, both through induction and refresher trainings, have been conducted for employees. 	<p>Conducted regularly during induction of employees, through refresher trainings, and campaigns.</p>
11	Establish a site nursery	<p>Done</p> <ul style="list-style-type: none"> A site Main Nursery has been established adjacent to the Admin Block in 2017 and improved in 2020/2021 . The nursery cultivates local seedlings for use in revegetation around the Project site; no pesticides are used. An in-situ nursery for endangered species Amorphophalus is established near well pad F. A flying nursery has been established at the TNKS restoration area sine December 2020. 	<p>March 2017 and improved in 2021.</p>
12	Develop a comprehensive Offsite Biodiversity Offset Design	<p>Done.</p> <p>Latest version 3.5 of the BOMP has been approved by ADB in April 2020</p>	<p>April 2020.</p>
13	Conduct a water extraction pre-feasibility assessment	<p>Done.</p> <ul style="list-style-type: none"> Water extraction pre-feasibility was conducted prior to initial drilling campaign and again in 2017. Drilling campaign has been completed and water is now mainly to supply domestic needs. 	<p>2017</p> <p>End 2019.</p>

14	Collect native flora seed before land clearance	<p>Done.</p> <ul style="list-style-type: none"> Conducted by Site Environment Engineer and Biodiversity Officers. Since 2H19, some local seedlings were collected from project area and its surrounding. Other seedlings were also procured via various instances. 	<p>On a regular basis by daily labor (used for nursery establishment)</p> <p>Current update: Native seedlings and species planted are monitored and inventorized regularly. Nursery balance sheet is updated monthly (See attachment)</p> <ul style="list-style-type: none"> 27,000 trees have been planted at the restoration site. Approx. 9,000 trees are maintained in main nursery.
15	Local community engagement to raise awareness of the conservation value of forest	<p>Done</p> <ul style="list-style-type: none"> Socialisation has been completed with the local community to raise awareness of biodiversity issues. Socialisation on forestry management protection (signs, campaign, coaching, etc.) Other activities : <ul style="list-style-type: none"> Patrols Focus Group Discussions Offset surveys Meetings with government employees CSR related to environment and biodiversity CSR during flood / landslide occasions at broader Muara Laboh area. Radio Talks with TNKS 	<p>Conducted as necessary:</p> <ul style="list-style-type: none"> When poaching occurs When deforestation occurs Prior to land clearing During offset surveys <p>Other than additional signs, no critical socializations were required</p>
16	Undertake regular monitoring of PT SEML access roads to secure them from poaching activity	<p>Done.</p> <p>Daily patrol within project site is conducted by SEML Security</p> <p>Drone surveys are conducted regularly, at least once a month.</p>	<p>Current Update: Due to the Covid-19 pandemic, regular joint (onsite) patrol with forestry could not be conducted.</p> <ul style="list-style-type: none"> Onsite Patrol: Daily patrol within project site is conducted by SEML Security. SEML did not invite external parties to enter project area due to Covid-19 prevention. Offset Patrol: Patrol at Restoration Area is conducted by the Planting Contractor (a conservationist group) and TNKS staff assigned specially at site to supervise the restoration. This activity is done outside project area.
17	Company drivers to receive internal defensive driving training	<p>Done.</p> <p>Company drivers receive Defensive Driving Course (DDC).</p>	<p>Company drivers are given DDC prior to hiring and when starting as well as refreshment training on a yearly basis. They will receive further training during violation of driver's ethics.</p>
18	Conduct speed check	<p>Done.</p> <p>Conducted on a monthly basis by site Safety and/or Security Officers using radar guns.</p>	<p>Conducted regularly.</p>
19	Lighting management	<p>Done.</p> <p>Conducted during drilling/construction activities. Site SHE will socialize and monitor the limitation of lighting use to prevent</p>	<p>Is conducted during drilling/construction activities (night time)</p>

		any impact on surrounding wildlife (ie. Not pointing lights towards the forest, not using excessive lighting for nightwork, etc.)	Current Update: Construction has been completed.
20	Ensure night works will not disturb wildlife	Done	<p>Nightwork impact on wildlife monitoring is done daily when there is a night time construction activity.</p> <p>Monitoring of flora and fauna is done regularly. Monthly through camera traps, daily through fauna sightings, weekly through invasive species clearing and 6 monthly through RKL-RPL monitoring.</p> <p>Biodiversity awareness is currently done infrequently.</p> <p>Ecological awareness information is posted all over project site.</p> <p>Wildlife conflict, illegal logging and poaching monitoring is done on a monthly basis. No wildlife conflict, illegal logging and poaching has been found in the restoration site during 1H21.</p>
21	Conduct regular monitoring of flora and fauna in Project areas	<ul style="list-style-type: none"> SEML SHE and EPC SHE have been conducting surveys, socialisation with workers and nearby settlers, creating signs, award campaigns, discussions, etc. to ensure the success of biodiversity campaign. Monitoring of flora and fauna is conducted through activities such as: camera trap monitoring, fauna sighting, invasive species clearing, revegetation, routine patrol, etc. Biodiversity signs are installed all over the project area (at every wellpad, every facility, every junction and near biodiversity monitoring spots and are regularly maintained and replaced if needed. Compliance to environmental protection policy is inspected on a daily, weekly monthly basis by SEML and EPC SHE team. A 6 monthly RKL-RPL survey is conducted to monitor all parameters with respect to relevant environmental protection policies. Monitoring for signs of wildlife conflict and illegal logging and poaching is done on a monthly basis by way of joint patrol. As of 2H18, only one instance of potential illegal logging was encountered near access road to wellpad H. This is immediately assessed and resolved during the monthly patrol. Biodiversity awareness training is currently not done on a scheduled basis, but done infrequently. 	
22	All construction personnel and PT SEML staff will undertake biodiversity awareness training		
23	Put up and maintain information posters and literature on ecological awareness		
24	Monitor compliance with PT SEML environmental protection policy		
25	Monitor construction areas for signs of potential wildlife conflict, illegal logging and poaching		
26	Workers to be trained in noise-reduction behaviours		Done
27	Crossing points/ arboreal crossing bridge is retained in good functional condition	Done	N/A
28	Measure long term population changes and trends for key species	Done / On going	<p>Habitat database mapping has been produced.</p> <p>Current update:</p> <ul style="list-style-type: none"> Habitat Database Mapping has been updated until Dec 2021. Attachment 9.
29	Consultation relevant stakeholders to determine the composition and type of planting to be achieved	Done.	Consultation with local and provincial forestry agencies

		<ul style="list-style-type: none"> Onsite: Padang Forestry Department, Agronursery, local suppliers (PT UAP), ICS NGO, and Conservationist Group Bangunrejo are consulted for nursery/ revegetation purposes. Offsite: Kartaraharja Utama and ERM has been selected as Biodiversity Offset program consultants 	<ul style="list-style-type: none"> PT UAP has commissioned Main Nursery in May 2021. Conservationist Group Bangunrejo has completed planting at the 52 ha TNKS restoration site and continue with 1st year Maintenance since May 2021. A TNKS staff from Padang Office has been appointed as site restoration guide and stay in Muara Labuh.
30	Develop a community based forest restoration project	<p>Ongoing</p> <ul style="list-style-type: none"> Community is engaged during forestry restoration project through the use of local contractors. A Community Conservation Agreement Area (CCAA) is being prepared to support the Biodiversity Offset Program. 	<p>Current Update:</p> <ul style="list-style-type: none"> Ex farmers are working as planters under supervision of KPKM Bangun Rejo and TNKS. Potential CCAA location has been identified (Attachment 10) Discussions regarding CCAA with stakeholders have been conducted intensively since end of 2021 and will be continued with socioeconomic surveys and stakeholder engagement in 2022.
31	Install warning signs regarding hunting and poaching at the border of the buffer area of the Protection Forest.	<p>Done</p> <ul style="list-style-type: none"> Many protection signs have been installed. Currently every wellpad, every facility, and critical junction. Will be a continuous effort and additional signs will be added if necessary. 	<p>In November 2019, 65 TNKS marker posts have been repaired, 127 new TNKS boundary markers and 88 new zinc signs have been installed in the restoration area. These have been maintained by SEML. Four additional signs have been installed in December 2021.</p>
32	Establish a communication system with the local forestry office and report illegal hunting / logging.	<p>Done</p> <ul style="list-style-type: none"> SEML identifies areas suspected of illegal poaching/logging through regular patrols and drone flights for both Project area and offset site. Socialisation is carried out by SEML and local authorities to try to discourage land clearance by the local community. TNKS has assigned a site representative and he is working together with SEML Biodiversity staff. SEML can directly call and/or make report to TNKS (both in Solok Selatan, Padang and Sungai Penuh Offices). 	<p>Continuous.</p>
33	Develop and update habitat mapping database	<p>Done.</p> <ul style="list-style-type: none"> Will be conducted every 3 years. SEML has established a database for habitat mapping reflecting data gathered from camera trap and visual observations since 2018. SEML has shown the habitat mapping to TNKS (during the evaluation of yearly program) and Environmental Office of Solok Selatan. SEML has developed a tracking sheet for all observations (visual and camera trap) which includes species, IUCN status, national protected status, number of observations and observation type to be filtered by year. This allows for easy tracking for future analysis and reference. See Attachments 8 and 9. 	<p>Habitat mapping database has been updated to December 2021.</p> <p>Attachment 9 SEML Habitat Database Mapping (December 2021)</p>

34	Construct security gates to restrict access of vehicle	Done 24-hours manned security posts have been constructed at access to Project area .ie Kerinci Post and GP-9 Post. A security camera has also been installed at GP-9 post	March 2017
35	Conduct regular patrols of the project boundary	Done <ul style="list-style-type: none"> Regularly conducted by PT SEML security, and often accompanied by local and provincial forestry agency (onsite patrol). Vandalism to vegetation (chopping of trees) was reported at the road access before MLC junction and near Taratak tinggi junction on 20 October 2020. This has been reported to the local police. Investigation is in progress. Intensified patrolling around the project area Aerial survey using drone is conducted regularly. 	Current update : Due to the Covid-19 pandemic, regular joint (onsite) patrol with forestry could not be conducted. <ul style="list-style-type: none"> Onsite Patrol: Daily patrol within project site is conducted by SEML Security. SEML did not invite external parties to enter project area due to Covid-19 prevention. Offset Patrol: Patrol at Restoration Area is conducted by the Planting Contractor (a conservationist group) and TNKS staff assigned specially at site to supervise the restoration. This activity is done outside project area.
36	Conduct regular drone flight	Done. <ul style="list-style-type: none"> Drone survey is conducted in a monthly basis; also during instances of possible land clearing. Upon sighting or discovery of illegal clearance, a report will be made to TNKS or the forestry department for further action. 	Current Update: Drone patrol is conducted regularly. The latest was in December 2021.
37	Conduct and clearing of invasive species.	Done <ul style="list-style-type: none"> Has been conducted prior land clearing. Regularly cleared using daily manpower. A wheel wash station has been installed to minimise the spread of invasive species. 	Continuous effort throughout construction and operation
38	Educate local people and restrict clearing by local people	Done. <ul style="list-style-type: none"> PT SEML has conducted socialization with local forestry agency. Local Disaster Agency, and TNKS. 	<ul style="list-style-type: none"> Restriction due to Covid-19 pandemic limits this activity. During this condition, education is limited to ex-farmers who work as planting staff in the restoration area and main nursery. Conducted socialization through Radio Talk with TNKS on 9 December 2021
39	Interviews with local people on their ecosystem service use within Project Area and Aol	Done <ul style="list-style-type: none"> An ecosystem services assessment was completed by ERM in November 2017 A census has been done by local consultant (ICS NGO) (Census) in May 2019. 	November 2017 and May 2019.
40	Monitor land clearing and assess feasibility of providing alternative income	Done <ul style="list-style-type: none"> SEML monitor land clearing through patrols and drone flights. To be noted that the surrounding area is categorized as Other Use Land (APL) and is free to be used by the owners. Any illegal activity has notified to the authorities. Livelihood Restoration Program has been developed for Project Affected Persons (PAP). 	Land clearing is monitored on a regular basis. If spotted during patrol, drone will be deployed for observation. Once confirmed, Biodiversity team will contact the local forestry and/or TNKS and/or other authority for further action.

11. Information Disclosure


<p>Are the results of environmental and social safeguards monitoring disclosed? (Yes / No)</p> <ul style="list-style-type: none"> • This Safeguard E&S Monitoring Report is issued to lenders every semester. • RKL-RPL report will be submitted to certain parties as specified in AMDAL document. 	<p>If yes, please provide RKL-RPL or Monitoring reports.</p> <ul style="list-style-type: none"> • This Safeguard E&S Monitoring Report is sent to lenders. • RKL/RPL report for 2nd Semester 2021 has been issued to the government. <p>JBIC,ADB, and will disclose URL or Monitoring reports on their websites, unless disagreement expressed.</p>
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ATTACHMENTS

- ATTACHMENT 1 BUSINESS CONTINUITY PLAN REV 4
- ATTACHMENT 2 SOCIALIZATION OF BCP REV 4
- ATTACHMENT 3 DECREE OF MINISTER OF KLHK REGARDING 2021 PROPER EVALUATION RESULTS
- ATTACHMENT 4 BOMP SEQUENCE OF EVENTS
- ATTACHMENT 5 PLANTING OF OFFSET SITE - YEAR-1 MAINTENANCE REPORT
- ATTACHMENT 6 DECREE OF MINISTER OF ENERGY REGARDING 3RD AMENDMENT OF CONCESSION AREA
- ATTACHMENT 7 IMPLEMENTATION REPORT OF LIVELIHOOD RECOVERY PROGRAM : 3RD YEAR
- ATTACHMENT 8 HABITAT TRACKING
- ATTACHMENT 9 HABITAT DATABASE MAPPING
- ATTACHMENT 10 POTENTIAL LOCATION FOR CCAA
- ATTACHMENT 11 SOEBROTO AWARD 2021 FOR ENVIRONMENTAL MANAGEMENT : ADITAMA PRIZE (HIGHEST LEVEL)
- ATTACHMENT 12 SOEBROTO AWARD 2021 FOR SAFETY & HEALTH MANAGEMENT : ADITAMA PRIZE (HIGHEST LEVEL)
- ATTACHMENT 13 RECEIPT FROM KLHK : ACCEPTANCE OF 2H21 RKL/RPL REPORT

ATTACHMENT 1

	SAFETY HEALTH AND ENVIRONMENT	PROCEDURE
	SITE BUSINESS CONTINUITY PLAN PROCEDURE FOR COVID-19 PANDEMIC	ML-MSHE-WOR-PRO-0004 Rev : 4

APPROVAL

	POSITION	NAME	SIGNATURE	DATE
Prepared by	Production Superintendent	Munggang HP	Signed	26-Mar-20
	Site SHE Coordinator	Fikry Rhidany	Signed	26-Mar-20
	Sr. Site Contract Engineer	Achmad Novianto	Signed	26-Mar-20
Reviewed by	Construction Manager	Achmad Gunawan	Signed	26-Mar-20
	Site Manager	Christian Pintea	Signed	26-Mar-20
	Plant Manager / KTPB (Technical Head of Geothermal)	Yoza Jamal	Signed	26-Mar-20
	Project Manager	Wahyu Mulyana	Signed	26-Mar-20
	Sr. SHE Manager	M. Arief Tarunaprawira	Signed	26-Mar-20
	Sr. Manager Human Resources	Hardinald Aslam	Signed	26-Mar-20
Approved by	Executive Vice President Relations & Support Services	Prijandaru Effendi	Signed	26-Mar-20
	Chief Financial Officer	Akio Kajimoto	Signed	26-Mar-20
	Chief Operating Officer	Victor Van Der Mast	Signed	26-Mar-20
	President & CEO	Nisriyanto	Signed	26-Mar-20

REVISION HISTORY

REV	DATE	PREPARED	REVIEWED	APPROVED	DESCRIPTION
0	26-Mar-2020	ANV/MHP/FR,	CP/AG/YJ, WM/MAT/HA	PE/AK, VVDM/NIS	ISSUED FOR USE
1	18-Apr-2020	EA	HA/MAT/YJ/ WM	PE/ NIS	ISSUED FOR USE
2	08-Jan-2021	FR/DR/SYI	HA/AS/AG/MAT/ WM	PE/TY/VVDM/ NIS	ISSUED FOR USE
3	15-Jul-2021	FR/DR/TH/TT	HA/AS/AG/MAT/ DJK/WM	PE/TY/VVDM/ NIS	ISSUED FOR USE
4	24-Nov-2021	FR/DR/TT	HA/AS/AG/MAT/ DJK/WM	PE/AK/VVDM/ NIS	ISSUED FOR USE

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1. BACKGROUND

The Indonesian government has taken numerous measures to respond to the COVID-19 pandemic with an evaluation of public activity restriction (PPKM) in all provinces, recently weekly new cases and deaths have dropped by 23% and 16% at the province and national levels, this trend align with the current condition in SEML site area with have **1 (one) active case only**.

As many as **134,614,136** Indonesians have received their first vaccinations meanwhile, **89,426,870** people have received their second vaccinations.

The Ministry of Home Affairs has issued Minister of Home Affairs Instruction (Inmendagri) No. 60/2021 on the implementation of PPKM Level 3 to Level 1 on the islands of Java and Bali.

The Ministry of Home Affairs has issued Minister of Home Affairs Instruction (Inmendagri) **No. 60/2021** on the amendment to Minister of Home Affairs Instruction No. 55/2021 on the implementation of PPKM Level 3 to Level 1 on Java and Bali, as well as Inmendagri No. **61/2021** on the amendment to Minister of Home Affairs instruction No. 56/2021 on the implementation of PPKM level 3 to Level 1 in areas outside of Java Bali

PT Supreme Energy Muara Laboh (“SEML or Company”) Site Business Continuity Plan Procedure (BCP / Procedure) is amended to reflect this change of regulation. This Procedure will be effective from **15 Dec 2021** until further notice made by the President & CEO.

2. REFERENCE

- 1) CEO Memo - Mitigation for the Spread of COVID-19 dated 12-Mar-20
- 2) CEO Memo - Guidelines Business Continuity Plan – Jakarta Office dated 16-Mar-20
- 3) SEML Site Emergency Response Procedure ML-MSHE-EMP-PRO-0001 Rev. 2

3. SCOPE

This Procedure describes a guideline to minimize the possibility of the employees to be exposed to the COVID-19 and at the same time limits the impact in case any employee is infected by the COVID-19.

This Procedure shall apply to all Personnel who are currently working at Muara Laboh Geothermal Project Site including but not limited to:

- All direct contract and permanent employees under SEML
- All contractors, vendors, suppliers, and/or business partners.
- All local stakeholders and government agencies personnel.
- All visitors (including Supreme Energy employees from Jakarta office and other entities)

All employees who perform overseas or domestic (outside Solok Selatan) business travel must obtain an approval TAF (Travel Authorization Form) from the President & CEO and must strive to implement the stipulated health protocol. All employees will require additional self-isolation for 3 days and taken additional COVID-19 test on Days 4 (four) with negative result prior to entering the SEML premises. The details of self-isolation period and additional COVID-19 test shall refer to Section 4.6

4. PROCEDURE

4.1 General

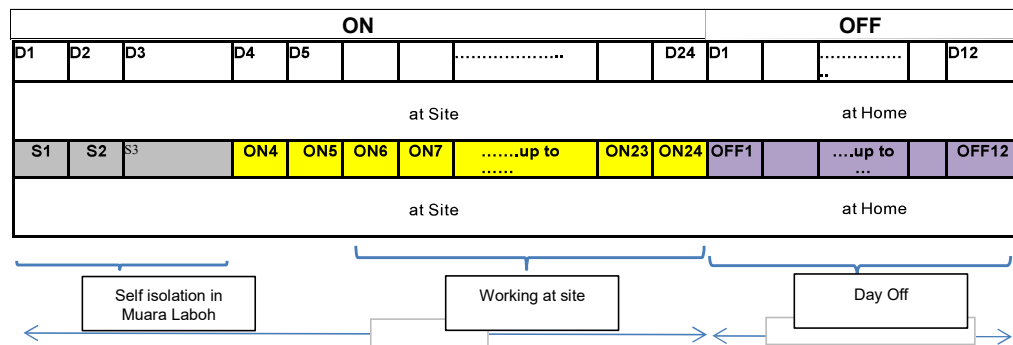
- a) SEML and Contractor employees shall submit complete vaccine certificates prior to entering SEML site area
- b) SEML and Contractor employees (from Java Island or outside West Sumatra region) must take Antigen swab test is 24 hours before departure PCR from an approved and registered laboratory.
- c) Closely monitor Covid-19 authority information of COVID-19 in all region community in Indonesia.
- d) Minimize exposure to public crowd and/or environment potential for exposure to COVID-19 including public transportation
- e) All persons who enter SEML sites must wear a double mask e.g. surgical mask inside underneath a fabric cloth mask 3-ply or single mask of N95.
- f) Promote, facilitate, and improve personal hygiene protocol, by obeying 7M COVID-19 prevention practices (wear mask(s), wash hands with soap or hand sanitizer, keep safe distance, stay away from crowds, limit mobilization, do not eat together and increase immunity)
- g) Each employee shall be responsible to declare any situation related to COVID-19 infection of his/her, the family or people surrounding, to their direct supervisor or user manager and to HR.
- h) Company supports the promotion of safe COVID-19 behavior by regularly distributing Multivitamin, etc
- i) **Company will impose a disciplinary action to personnel who violate this BCP rules**

4.2 Management of Site Workforce

A modified grouping and working schedule is established for SEML employees only to ensure the SEML business process will not be disrupted.

The working schedule of SEML employees under rotational basis is divided into two major groups:

- a) **Jakarta-based employees under 24 days ON-12 days OFF rotation**
The modified rotation consists of **24 days working at site (ON-Duty)** including 3 days self-isolation (at Self Isolation Area) and **12 days on leave (OFF-Duty)**.



This rotation schedule will be adjusted to reflect the Self-Isolation Period under Section 4.6

Day	Description	Remarks
D-1	- Take Rapid Antigen Swab test with validity 24 hours before departing from an approved and registered laboratory.	
D1 – D2	- Travel from Jakarta airport to Padang airport - Arrive at Padang Airport, directly go to Solok Selatan, upon arrival in appointed dedicated operational vehicle to self-isolation area, taken rapid antigen swab test - Continue self-isolation in Solok Selatan Appointed self-isolation area - Work from the appointed self-isolation area	ON Duty D1 – D24
D3	- On D+3, take PCR swab test at self-isolation area. - Upon receives the PCR swab test result: <ul style="list-style-type: none"> Negative result : wait for Company doctor’s clearance Positive result : follow procedure in Appendix 3 	
D4 – D24	- Upon Company doctor’s clearance , employee can be allowed to work at site area - Employee moves to the assigned Accommodation. - Every 7 days, all on-duty personnel must take regular Antigen swab test - Antigen Swab Test before departure <ul style="list-style-type: none"> Upon negative result, the Company doctor prepares a clearance letter for traveling. Upon positive result : follow procedure in Appendix 3 	

D25	<ul style="list-style-type: none"> - Travel home - OFF Days 	OFF Duty D1 – D12
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The rotational employees under self-isolation are prohibited to have interaction with personnel who has been released from self-isolation and working at site.

b) Muara Laboh-based employees

The majority of SEML Muara Laboh based employees is mainly assigned under SEML O&M, Site Support, and SHE Team.

b.1 Maintenance, Site Support, and SHE

The working schedule is become **20 days ON and 10 days OFF**.

The living quarter for Maintenance team, SHE under O&M, and medical team will stay at SEML Admin Blocks. Site Support and SHE under project will stay at an appointed accommodation.

Day	Description	Remarks
D1	<ul style="list-style-type: none"> - Traveling from home to site or from pick up points (Muara Laboh and Padang Aro) - Must fill-in and declare to SEML COVID-19 screening questionnaires - Take 1st antigen swab test - Work for self-isolation 	ON Duty D1 – D20
D2 – D2	<ul style="list-style-type: none"> - Continue self-isolation until day three (D+2) 	
D3	<ul style="list-style-type: none"> - On D+3, take PCR swab test at isolation area. - Upon receives the PCR swab test result: <ul style="list-style-type: none"> • Negative result : wait for Company doctor's clearance • Positive result : follow procedure in Appendix 3 	
D4 – D24	<ul style="list-style-type: none"> - Upon Company doctor's clearance , employee can be allowed to work at site area - Employee moves to the assigned Accommodation. - Every 7 days, all on-duty personnel must take regular antigen swab test on site - Antigen swab test before departure <ul style="list-style-type: none"> • Upon negative result, the Company doctor prepares a clearance letter for traveling. 	

	<ul style="list-style-type: none"> • Upon positive result : follow procedure in Appendix 3 	
D21	<ul style="list-style-type: none"> - Travel home - OFF Days 	OFF Duty D1 – D10

b.2 Production Shift

Due to the nature of SEML Production shift who require to be present physically at site, SEML Production Shift still follow schedule of **10 days ON and 5 days OFF**.

The living quarter of O&M Production shift workers will stay at SEML Accommodation Blocks.

Day	Description	Remarks
D1	<ul style="list-style-type: none"> - Must fill-in and declare to SEML COVID-19 screening questionnaires - Take 1st Rapid Antigen test at SEML clinic at 06:30 AM - Personnel with Rapid Antigen Test negative result, can allow to start working by strictly implementing health protocol and wearing specific visible vest until PCR test is obtained - Always maintain 7M COVID-19 prevention practices within their own group and among other group - Wearing double mask (surgery mask plus fabric cloth mask or single N95 mask) 	ON Duty D1 – D10
D2 – D3	<ul style="list-style-type: none"> - On D+3, take PCR swab test screening at SEML Clinic at 06:30 AM and wait for the result within 1 day after - Employee under this condition shall stay at their accommodation room. All basic needs will be delivered to the room. 	
D4 – D10	<ul style="list-style-type: none"> - Upon negative PCR swab test result, the employee receives medical clearance from the Company's appointed doctor - Employee can be allowed to work at site area - Employee move to the assigned Accommodation. - PCR swab test before departure <ul style="list-style-type: none"> • Upon negative result, the Company doctor prepares a clearance letter for traveling. • Upon positive result : follow 	

	procedure in Appendix 3	
D11 – D15	- Travel home - OFF Days	OFF Duty D1 – D5

4.3 Accommodation

In order to minimize the physical interaction among groups, SEML will also adjust the employee accommodation.

- SEML employees who work ON DUTY will stay at SEML Admin Block and Company's [appointed accommodation](#)
- Prior to enter the site area, the group will stay at an Appointed Self-Isolation Area until PCR negative test result obtained
- O&M employees who currently live in Solok Selatan will be temporarily relocated to SEML Admin Block.
- All food & beverage are processed through international HACCP (Hazard Analysis and Critical Control Points) standard, all SEML island mode employee are allowed to eat in restaurant (buffet) to reduce plastic wastes & Physical distancing implementation by maintaining minimum 1 meter distance
- Additional hand sanitizers are set up at the restaurant/lounge area.
- Sterilization atomic spray fogging will be conduct on weekly basis at all accommodation area (admin office and TO#2) and office (Plant office, control room, admin office, Supervisor room, permit office, pantry, workshop and warehouse)

[During Self-Isolation Period prior to entering the site, SEML will provide the isolation and observation facilities in an appointed hotel or other place \("Self-Isolation Area"\). The Company will provide logistics. Self-Isolation Period shall refer to Section 4.6.](#)

4.4 Travelling

a) Overseas Travel

- Overseas travel for business shall obtain SEML BOD Approval
- Overseas travel must follow Refer to Decree of the head of COVID-19 Handling Task Force No 9 of 2021 and Addendum Number 23 of 2021
 - [Indonesia will ban the entry of travellers who have been declared confirmed the new omicron coronavirus variant \(South Africa, Botswana and Hongkong\) and extend close country in eight African countries \(Angola, Zambia, Zimbabwe, Malawi, Mozambique, Namibia, Eswatini and Lesotho\) and extend quarantine times for all arrivals to curb the spread of the new Omicron coronavirus variant.](#)
 - Comply with the health protocols set by the Indonesian government
 - Show a negative RT-PCR test result which sample taken in the

- country of origin within a maximum of 3 x 24 hours before departure upon health checks or attach it on the Indonesian eHAC system on the PeduliLindungi App (download for Android / iOS)
- Show a complete (full dose) COVID-19 vaccine card/certificate (printed/digital) that has been done minimum 14 days before departure date written in English or origin country language
 - Foreign citizens are mandatory to show proof of health insurance/travel insurance ownership which include health financing for quarantine & treatment if exposed with COVID-19
 - Upon arrival, the passenger must go through an Isotermal Molecular test (NAAT/similar) or RT-PCR test and must undergo a centralized quarantine 7 x 24 hours or 14 x 24 hours
 - On the 6th day of the quarantine, both Indonesian (WNI) & Foreign Citizens (WNA) must go through another NAAT/RT-PCR test.
 - On the 13th day of the quarantine, both Indonesian (WNI) & Foreign Citizens (WNA) must go through another NAAT/RT-PCR test.
 - Negative results: the traveler may continue their journey and are recommended to continue 14 days of self-quarantine and keep following the health protocols
 - Positive results: medical treatment on a isolation/health facilities based on the symptoms level will be given to Indonesian Citizens at the Indonesian government expense and for Foreign Citizens at their own expense;
 - Traveling from Padang to dedicated isolation accommodation in Solok Selatan with using dedicated regular vehicle from site
 - Upon arrival in appointed dedicated isolation accommodation will conduct next PCR with result
 - Negative results: the Company doctor prepares a clearance letter for starting on duty
 - Positive result : follow procedure in appendix 3

b) Domestic Travel (Jakarta & outside Solok Selatan)

- Domestic personal travel for personal leisure shall be restricted
- Domestic business travel for rotational employees must follow the protocol of medical check and Self-Isolation as stipulated in this Procedure.
- Domestic business travel for unavoidable meeting or appointment shall be approved by the President & CEO.
- Company encourage all Jakarta based employee to take first flight (11:00 AM)

4.2 Visitors and Business Meeting

a) Visitor

The access and acceptance for the visitor to entering the SEML site shall

be strictly controlled and restricted. All visitors shall fill a Medical Clearance Form and get prior approval from SEML KTPB/WKTPB prior to entering any SEML site and facilities. Visitors who are not business related shall not be allowed to enter the SEML site and facilities. Such approval shall be in writing.

For visitors under Supreme Energy employees from Jakarta office and other entities, the regulation shall refer to Memorandum for Guidelines Business Continuity Plan - Jakarta Office.

All visitors shall be Self-isolated prior to entering site area as specified under Section 4.6.

Level of potential contact shall be determined prior additional self-isolation required for visitors.

b) Business Meeting

Business meeting with other parties shall be limited as much as possible. The conference meeting by telephone and/or by internet access facilities is the first option.

Any unavoidable important and urgent meeting that needs to be attended is subject to fill up a Medical Clearance Form prior to entering the site and get approval of SEML KTPB/WKTPB. Such approval shall be in writing. The meeting as much as practical shall be held outside SEML site facilities.

7M COVID-19 prevention practices shall be implemented.

4.3 Safety Guidelines

a) Before & During Traveling

- Ensure all travel requirements are in-hand e.g. vaccine card / form, Antigen Swab Test result [from the approved and registered laboratory](#), and when applicable, a Letter of Worker Registration (*Surat Tanda Registrasi Pekerja / STRP*)
- Do not travel if you do not feel well / sick or do not plan to travel with someone who is sick;
- Bring your valid ID Card/Passport/Visa
- Respect COVID-19 health protocol and follow the relevant Company regulations
- Provide appropriate PPE such as wear masks (N95) & Safety Goggles or Face Mask, pocket hand sanitizer before leaving the house
- Be attention to minimize using public facilities during the traveling.
- Filling Health Alert Card (Peduli lindungi apps) during onboarding or at the arrival terminal

b) Protocol arrival in terminal destination and entering hotel/Self-Isolation

- All arriving passengers should have their body temperatures taken
- Keep the vaccine card, PCR or Antigen Test result, and Health Alert Card ready to be shown to authorities
- The SEML Jakarta based employees will be picked up by Company's assigned vehicle and directly travel to Solok Selatan.
- Immediately after arrive at self-isolation area, take 1st antigen swab test, take off your shoes and clothes and place those in your laundry basket
- Take shower immediately
- Clean up your mobile phone or safety goggles/eyeglasses with alcohol or disinfectant including with all of your belongings
- Stay in your appointed self-isolation room and eat in your room with room services or delivery services
- Employees shall notify Company doctor or SHE personnel if they become symptomatic
- After receive 1st PCR result that shows negative result, the SEML employee will travel to Solok Selatan using an assigned vehicle.

c) Self-Isolation in appointed accommodation

- Upon arrival in Muara Laboh, Company will determine self-isolation accommodation
- Both (Jakarta and Muara Laboh) employee will stay for 3 days until obtain PCR result that shows negative result
- Company's appointed Doctor will issue a letter declared that the employee condition is fit to work and allowed to enter SEML premises
- All Crew change employee under self-isolation period, totally forbidden to leave the accommodation and return to his/her home without official approval from Contract Owner.
- Conduct incidental inspection to ensure all employees under isolation do not return back to his/her home without permit.
- NON Island mode employee is prohibited to entering SEML area. NON Island mode employee to support project or O&M on call basis is strongly advised to limit physical interaction with ISLAND MODE operation. Non-island mode employee will wear SPECIAL visible vest.
- Regular (weekly basis) disinfection will be done for frequently touch points at power plant area including operational vehicles.

4.4 Supporting Contractors

All direct supporting contractor's employees who are working within SEML facilities such as SEML Admin Block, Power Plant, CCR, Plant Office Building and other facilities shall follow the same regulation as describes in this Procedure including but not limited to drivers, camp services, and labor supply.

The direct supporting contractors who are working with SEML employees shall follow the SEML working schedule pursuant to Section 4.2 above. A segregation among the contractor employees shall also be applied. Additional

temporary employees will be considered to fill the gap, if necessary.

For EPC contractor and SEMML Direct Contractors, a separate and specific procedure will be developed and shall align with this Procedure.

For other contractors, SEMML will apply medical clearance certificate upon arrival and prior to entering site. Such medical clearance shall include PCR test results. Self-isolation period shall be applied to the contractor as described in Section 4.6. The personnel is obliged to wear mask and perform weekly antigen swab test during working at site.

4.5 Access Control and Check Point

At access control point Security Post SEMML Admin Block, SEMML will conduct body temperature screening and spraying hand sanitizers prior to entering the Muara Laboh Project Site in daily basis.

At access control point at Security Post GP9, SEMML & EPC Contractor will also do the same for all workers prior entering the SEMML site and facilities

At access control point at Power Plant Gate, SEMML will conduct body temperature screening, spraying hand sanitizer and check Permit's validity, work document and/or reason to entering power plant site.

Any abnormal body temperature (equal and above 37.5 degree Celsius) will be immediately reported to the Site SHE and User Manager. He/she will be further screened for his/her health condition by a medical doctor from Company and/or Contractor.

4.6 Medical Arrangement

Company will provide and allocate a dedicated medical room at power plant for early medical treatment and examination by Doctor/Paramedic. The medical room will be also be utilized as a temporary and short-term isolation / quarantine room.

Company will assign dedicated doctor(s) during this period.

Specific arrangement to monitor the hygiene and health practices at site will be established. Specific procedure or occupational health program will be developed.

Attachment 3 of this Procedure shows protocol when found an employee with or suspected with COVID-19.

4.7 Emergency Response Team

Emergency Response Team shall refer to the applicable Emergency Response Team Procedure.

5. Mitigation Plan (When the Situation Getting More Serious)

Further mitigation procedure will be assessed based on site development and/or through instruction from the President & CEO of Supreme Energy, including but not limited to:

- Number of COVID-19 case is increasing significantly
- Government declaration of emergency situation in Indonesia
- Lock down of Solok Selatan or Padang or Jakarta
- There is suspected case of COVID-19 from SEML site employee
- There is suspected case of COVID-19 at SEML site premises.
- There is suspected case of COVID-19 from SEML site employee's family member.

In the event of any one of the above situations occurs, the President & CEO may instruct the followings:

a) Scale Down Site Activities

- Scale down the site activities and limit to only critical works, with the operations of Muara Laboh Geothermal Power Plant Unit-1 as priority.
- Stop any incoming person to the site.
- Self-Isolation protocol under Section 4.6 item a will be applied.
- The salary of all affected standby employees will still be paid.
- Further arrangement on SEML site employees who still be working during this period will be conducted.
- If required, all O&M production team will be relocated to SEML Admin Complex.

b) Project Isolation

- Project Isolation will be called if there or suspected case of COVID-19 from SEML site employee and/or at SEML site premises or other cases. See Attachment 2.
- Such Self-Isolation protocol under Section 4.6 will be applied.
- If possible, the site activities will only be limited to the operations of Muara Laboh Geothermal Power Plant Unit-1 (O&M Operation personnel who are working in Power Plant CCR).
- Stop any incoming person to the site.
- The salary of all affected standby employees will still be paid.
- Further arrangement on SEML site employees who still be working during this period will be conducted.

c) Project Suspension

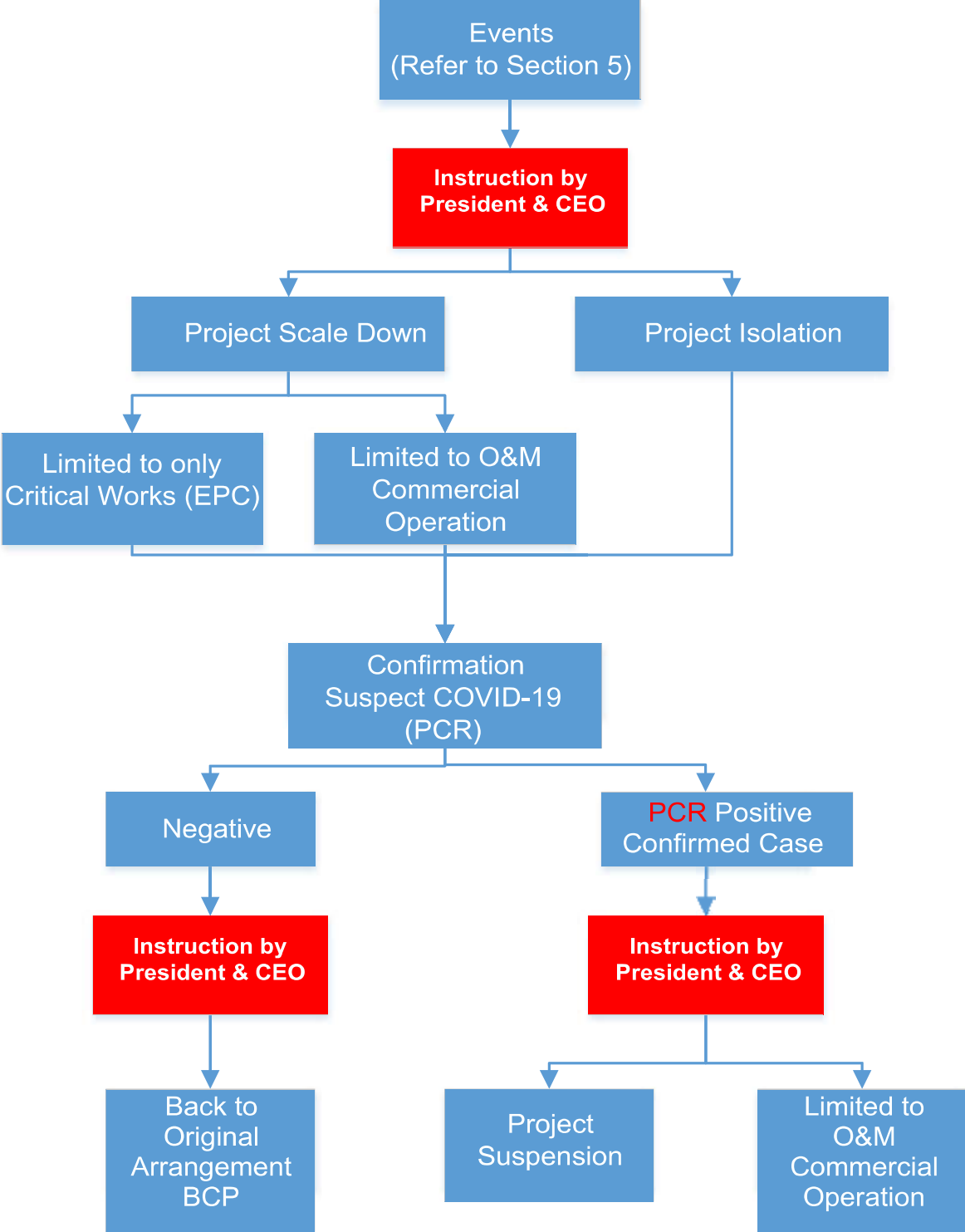
- If any PCR swab test has confirmed case of COVID-19 found from SEML site employee and/or at SEML site premises, then all site activities will be suspended except power generation
- If possible, the site activities will only be limited to the operations of Muara Laboh Geothermal Power Plant Unit-1 (O&M Operation personnel who are working in Power Plant CCR).

6. Attachments

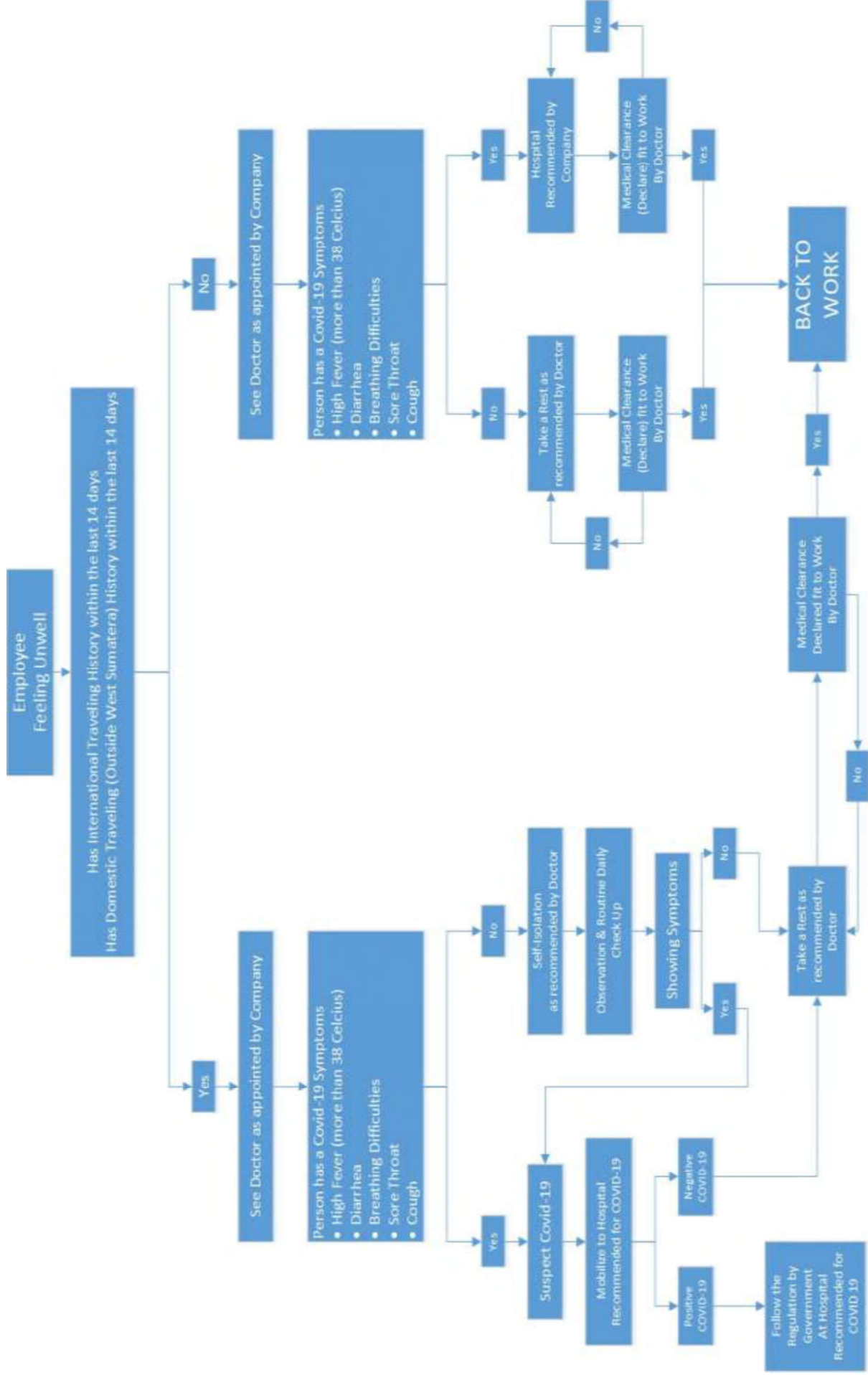
- Attachment 1 – BCP Site Employee Arrangement
- Attachment 2 – Flowchart Protocol if Suspected Case is Found
- Attachment 3 – Flowchart Protocol if Found a Sick Employee / Worker

ATTACHMENT - 1
BCP Site Employee Arrangement

ATTACHMENT 2
Flowchart Protocol if Suspected Case is Found



ATTACHMENT 3 Flowchart Protocol if Found a Sick Employee / Worker





supreme energy

ATTACHMENT 2

SEML SITE BUSINESS CONTINUITY PLAN PROCEDURE FOR COVID-19 PANDEMIC REV 04

26 NOV 2021



OBJECTIVE BCP

- Ensure the business continuation of site operations of Muara Laboh Geothermal Power Plant Unit-1
- Minimize the possibility of the employees to be exposed to the COVID-19 and at the same time limits the impact in case any employee is infected by the COVID-19.
- Implemented Island Mode Operation and enhance robust screening prior allow employee (SEML and Contractors) entering SEML Site area
- Provide mitigation plan if a suspected case found at SEML site premises (handling and evacuation process)





Jadikan 2022 Tahun Terakhir Indonesia dalam Pandemi



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Individuals also need to strictly apply personal protective measures such as getting vaccinated, maintaining physical distance, wearing a mask, avoiding poorly ventilated spaces, washing hands, staying home if unwell and following respiratory hygiene.



BACKGROUND TO CHANGE

◆ INDONESIA COVID-19 STATUS

- Recently weekly new cases and deaths have **dropped by 23% and 16%** at the province and national levels
- As many as **134,614,136** Indonesians have received their **first** vaccinations meanwhile, **89,426,870** people have received their **second** vaccinations.
- Change of regulation from Government of Indonesia
 - ✓ The COVID-19 Task Force has issued an Amendment to COVID-19 Task Force Circular No. 23/2021 on health protocols for international travel during the COVID-19 pandemic
 - ✓ The Ministry of Home Affairs has issued Minister of Home Affairs Instruction (Inmendagri) No. 60/2021
 - ✓ Inmendagri No. 61/2021 on the amendment to Minister of Home Affairs instruction No. 56/2021 on the implementation of PPKM level 3 to Level 1 in areas outside of Java Bali

◆ SEML COVID-19 STATUS

- **Zero COVID-19 active case**
- **18 days free** from additional COVID-19 Positive case, last positive case was encountered on **12 Nov 2021**
- **SEML Vaccine Status:**
 - ✓ **SEML Employee : 98%**
 - ✓ **Contractor Employee : 95%**
 - ✓ **Family : 65 %**
- **Maintaining robust surveillance to rapidly detect** and investigate suspected SARS-CoV-2 cases with weekly antigen swab test
- implementation of public health measures, such as **timely isolation of confirmed cases and quarantine of contacts, is essential.**

SEML Site Business Continuity Plan Procedure During COVID-19 Pandemic



PPKM Darurat (Emergency Public Activity Restriction)

- Change Working Schedule 50 DAY ON & 22 DAY OFF
 - 14 days Self Quarantine required outside West Sumatra
 - Conduct General Blood Test
 - Hired Additional Doctor and Paramedic
 - Rapid Test (Serology)
 - WFH implementation
 - Split into 2 Group & 3 M COVID-19 Protocol
- Change Working Schedule 36 DAY ON & 18 DAY OFF
 - WFH implementation is not longer required
 - 7 days Self Quarantine required with PCR test in D+3 and Rapid Test in D+7
 - Colour Zone (Red, Orange, Yellow and Green)
- Lesson Learn from SERD cases*
- Island Mode Operation
 - Required 6 days quarantine time period
 - Dual PCR Test (1st PCR in Padang or SEML Clinic and 2nd PCR in Self Isolation (D+5)
 - Every Week Antigen Swab test
 - NON Island Mode Employee are prohibited to entering SEML area
 - ANY VIOLATION WILL subject to a DISPLINARY ACTION
- Complete vaccine required
 - Strengthen Island Mode Operation with install CCTV and Assign Army Taskforces
 - PCR Swab Test Required before departure with validity 48 hours from outside Solok Selatan and Antigen Swab test 24 Hours from Solok Selatan
 - Required 7 days quarantine time period
 - Dual PCR Test (1st PCR in Padang or SEML Clinic and 2nd PCR in Self Isolation (D+6)
 - Required Double Mask or Single Mask (N-95)
 - Obeying 7M COVID-19 Protocol
 - Every Week Antigen Swab test
 - ANY VIOLATION WILL subject to a DISPLINARY ACTION

Rev 0
26 Mar 2020

Rev 1
18 Apr 2020

Rev 02
08 Jan 2021

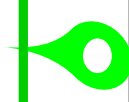
Rev 03
15 July 2021

SEML Site Business Continuity Plan Procedure

During COVID-19 Pandemic



- Complete vaccine required (SEML, Contractor & visitor) for who will entering SEML area
- **Rapid Antigen Swab Test** Required before departure with validity 24 hours before departure from an approved and registered laboratory
- **Change Working Schedule** with below arrangements
 - ✓ Jakarta Based Employee (24:12)
 - ✓ Muara Laboh Based Employee (20:10)
 - ✓ Production shift (10:5)
- Required 3 days quarantine time period and all basic need will be delivered to his/her room
- **Direct Traveling from Padang to appointed self-isolation area**, upon arrival taken **rapid antigen swab test** by SEML Doctor or SEML Paramedic
- **On D+3 take PCR Swab test**, waiting result, D+4 after received clearance from doctor, employee can be allowed to work at site area with respect 7M
- Every Week Antigen Swab test
- Antigen swab test before departure (Field break time)
- All food & beverage are processed through international HACCP (Hazard Analysis and Critical Control Points) standard, all SEML island mode employee are allowed to **eat in restaurant (buffet) to reduce plastic wastes & Physical distancing implementation** by maintaining minimum 1 meter distance
- Sterilization atomic spray fogging will be conduct on weekly basis at all accommodation area (admin office and TO#2) and office (Plant office, control room, admin office, Supervisor room, permit office, pantry, workshop and warehouse)
- **ANY VIOLATION WILL subject to a DISCIPLINARY ACTION**



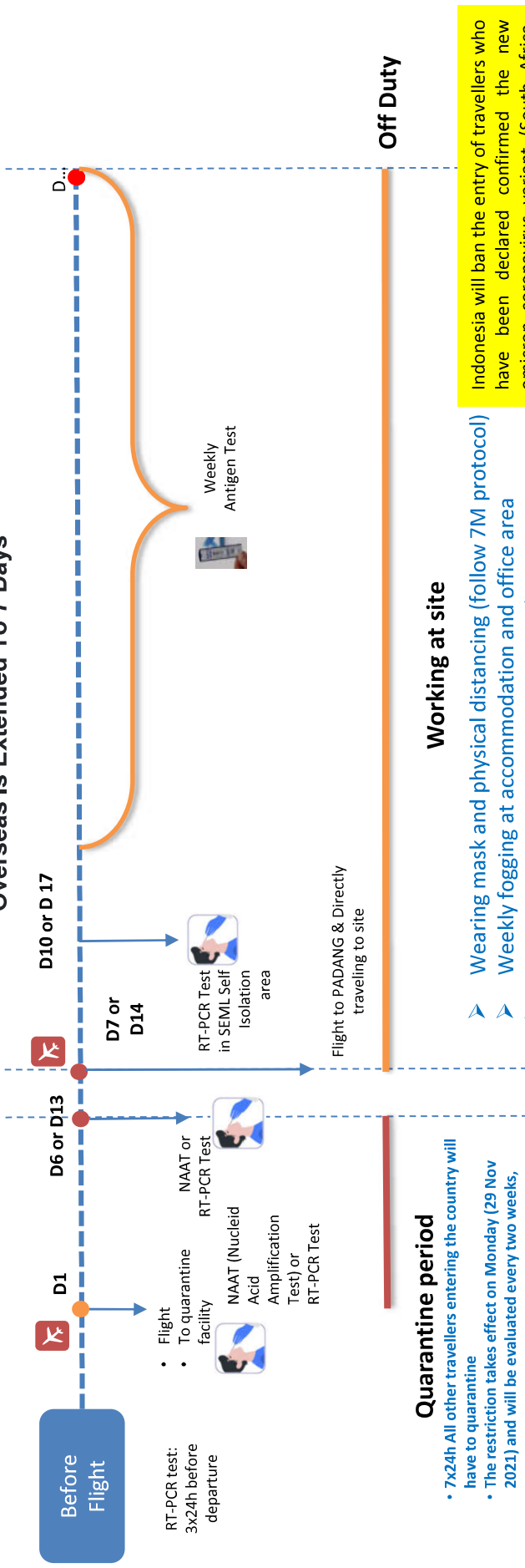
Rev 4
27 Nov 2021



FLOWCHART COVID-19 SCREENING AND PREVENTION OVERSEAS TRAVEL



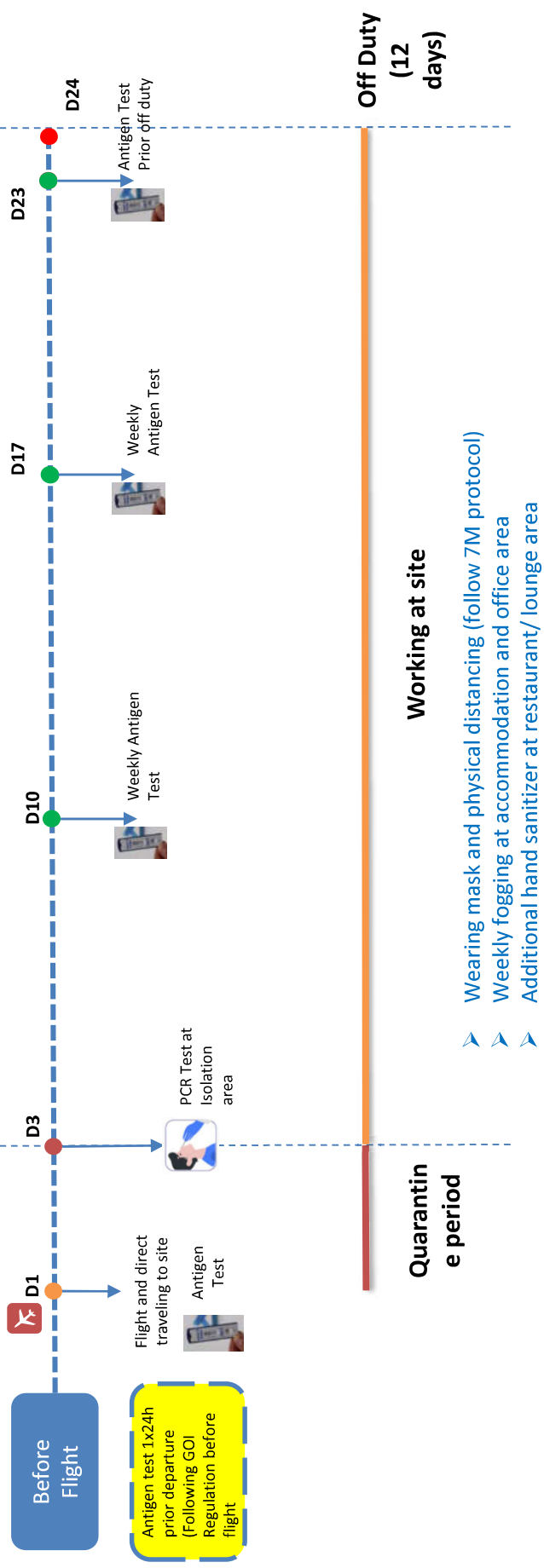
The Omicron Variant Of COVID-19, The Quarantine Of Travel From Overseas Is Extended To 7 Days



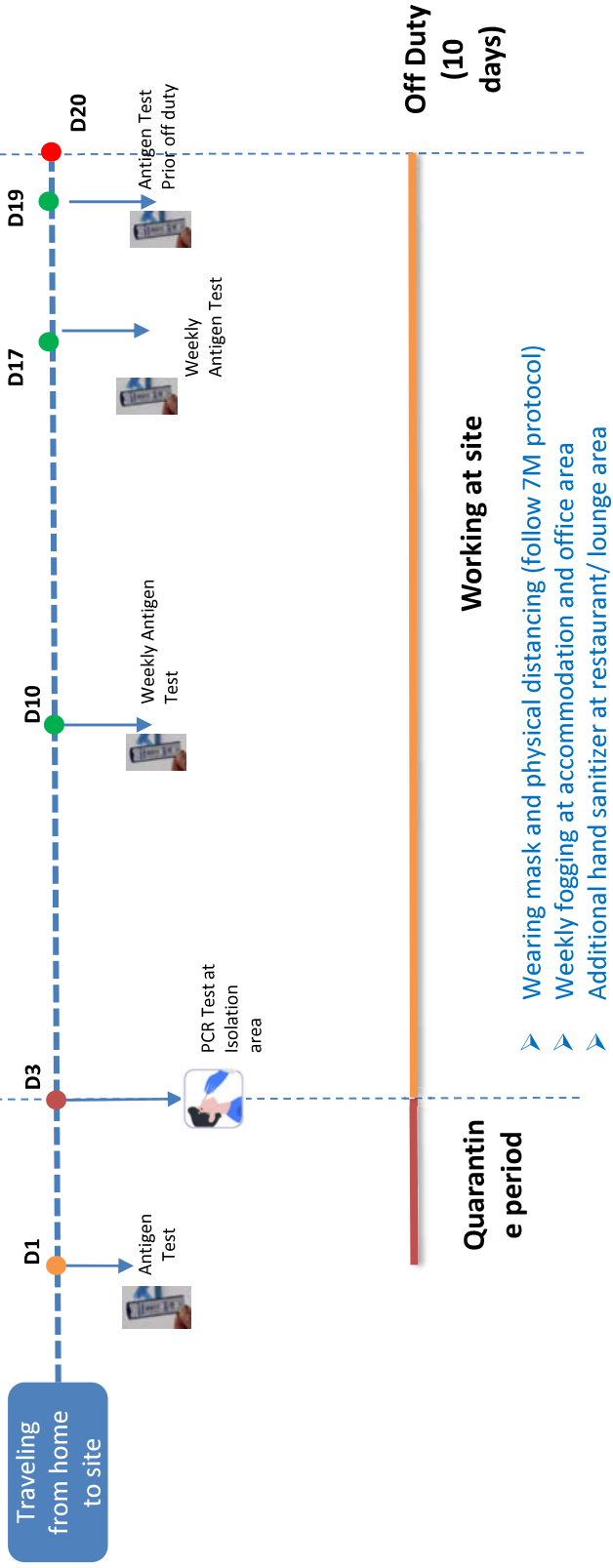
Indonesia will ban the entry of travellers who have been declared confirmed the new omicron coronavirus variant (South Africa, Botswana and Hongkong) and extend close country in eight African countries (Angola, Zambia, Zimbabwe, Malawi, Mozambique, Namibia, Eswatini and Lesotho) and extend quarantine times for all arrivals to curb the spread of the new Omicron coronavirus variant

Reference: Decree of the head of COVID-19 Handling Task Force No 9 of 2021 and Addendum Number 23 of 2021, intended to prevent the entry the COVID-19 variant B.1.1.529 or Omicron

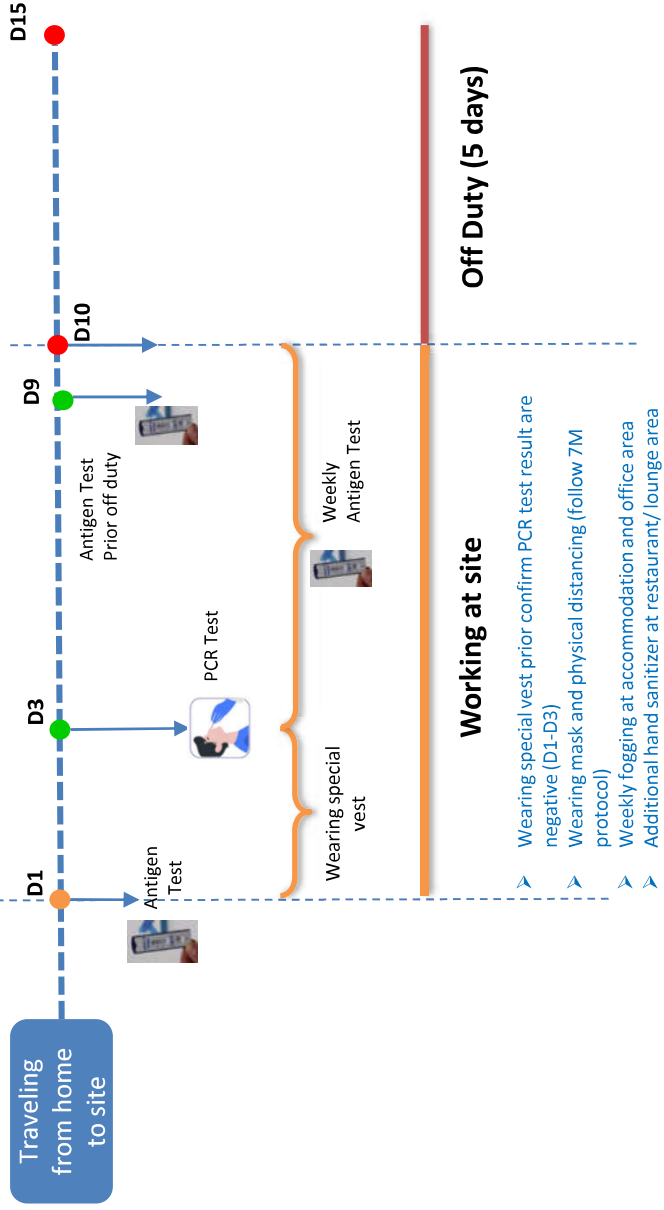
FLOWCHART COVID-19 SCREENING AND PREVENTION JAKARTA BASED EMPLOYEE



FLOWCHART COVID-19 SCREENING AND PREVENTION MUARALABOH BASED EMPLOYEE



FLOWCHART COVID-19 SCREENING AND PREVENTION SHIFT GROUP PRODUCTION





Looking For An Answer?

BACKGROUND



ATTACHMENT 3



**MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA**

KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA

NOMOR SK.1307/MENLHK/SETJEN/KUM.1/12/2021

TENTANG

HASIL PENILAIAN PERINGKAT KINERJA PERUSAHAAN DALAM
PENGELOLAAN LINGKUNGAN HIDUP TAHUN 2020 - 2021

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA,

- Menimbang : a. bahwa untuk melaksanakan ketentuan Pasal 43 Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 1 Tahun 2021 tentang Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup, perlu menetapkan peringkat kinerja pengelolaan lingkungan hidup;
- b. bahwa pelaksanaan penetapan peringkat kinerja sebagaimana dimaksud dalam huruf a berdasarkan hasil evaluasi kriteria penilaian program penilaian peringkat kinerja perusahaan dalam pengelolaan lingkungan hidup;
- c. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a dan huruf b, perlu menetapkan Keputusan Menteri Lingkungan Hidup dan Kehutanan tentang Hasil Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup Tahun 2020-2021;