



Environmental and Social Consideration

Quarterly Progress Report

No.20

Period of October - December 2023



Directorate General of Sea Transportation

Ministry of Transportation

Republic of Indonesia

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Executive Summary

Table 1. Executive Summary

Items	Period/Survey date	Results	Details *Notes)
Sea water quality	Turbidity (TSS) For environmental monitoring the result depicts survey result that held since end of May and to comply with RPL-AMDAL and Technical Specification Phase 1-2 October 2023-December 20203	<p>13 points at the sea area</p> <p>Based on the recorded turbidity data, the estimated TSS values range from 0.32 to 41.99 for the surface layer and from 0.81 to 49.24 for the bottom layer. Despite the presence of some data outliers, the calculated monthly average Total Suspended Solids (TSS) from daily surveys comply with the required quality standards outlined in Government of Indonesia Regulation No. 22/2021, Appendix VIII (80mg/l). These outliers are primarily attributed to natural factors such as river inflow conditions, meteorological factors, and tidal movements.</p> <p>Higher turbidity/TSS values were observed at locations affected by the Cipunagara and Genteng river basins (T1, T2, T3, and T4 points on the east side of Patimban Port) and the Tanjung Pura River (T8 and T9 points on the south side of Patimban Port), particularly in the bottom measurements.</p> <p>Note: Related regulation used is Government Regulation no.22/2021 – Annex VIII</p>	O-6C, Other descriptions regarding environmental management action could be found at S-4A, S-5A
Temperature, Salinity, pH, Dissolved Oxygen, Transparency, Odor, Ammonium Nitrogen (NH ₃ -N), Phosphate (PO ₄ -P), Sulfide	12- points at sea area For environmental monitoring at for phase I-2 begin with baseline seawater sampling in full parameters. And then conducted every quarterly	<p>Last Sampling activities were conducted in December 2023, encompassing four offshore dumping locations and eight locations within the port area, resulting in a total of 12 samples collected.</p> <p>The analysis of seawater quality samples reveals that most parameters tested meet the quality standards outlined in PPRI No.22/2021, Appendix VIII, except for Transparency. Notably, mercury levels exceed the quality standards stipulated by Japan Standard.</p> <p>During the monitoring period, fluctuations were observed in certain parameters at each monitoring location, particularly in Transparency and coliform parameters.</p>	Other descriptions regarding management action at S-4A, S-5A

Items	Period/Survey date	Results	Details ^{*Notes)}
(H ₂ S), Total hydrocarbon, Total phenol, PCBs, Detergent (MBAS), Oil and grease, PCBs, TBT, Mercury, Cadmium, Copper, Lead, Zinc, Total coliform	period in reference to RPL-AMDAL and Technical Specification Phase 1-2. There was two sea water quality sampling that was reported during this reporting period. September 2023 & December 2023	<p>However, values for other parameters generally remain below the laboratory detection limit.</p> <p>Regarding Transparency, locations around the dumping area (W7-W10) generally exhibit values meeting quality standards (>3 m), ranging between 8 – 12 m. Conversely, Transparency values around the port area typically fall short of the quality standard, ranging between 1-3 m. This disparity can be attributed to the sediment carried by rivers that discharge into the waters of Patimban Port (Cipunegara, Genteng, and Tanjung Pura River), influencing the Transparency level of seawater.</p> <p>Six seawater quality parameters were monitored to compare surface and bottom conditions: pH, temperature, dissolved oxygen, turbidity, salinity, and total suspended solids.</p> <p>Surface pH ranges between 7.28 - 8.5, while bottom pH ranges between 7.78 – 8.4. Surface temperatures range between 30°C – 32°C, with bottom temperatures ranging from 28.6°C – 31.15 °C. Dissolved oxygen values range from 4.5 – 7.78 mg/L at the surface and 4.68 – 6.74 mg/L at the bottom. Turbidity ranges from 0.25 – 10.03 NTU at the surface and 1.15 – 14.32 NTU at the bottom. Salinity ranges between 19.4-29 o/oo at the surface and 27.6-29 o/oo at the bottom. Total suspended solids range from 1-12 mg/L at the surface and 0-22 mg/L at the bottom.</p> <p>Overall, the majority of water quality values are within the required standards outlined in PPRI No.22/2021, Appendix VIII.</p> <p>Note: Related regulation used is Government Regulation no.22/2021 – Annex VIII</p>	

Items	Period/Survey date	Results	Details ^{*Notes)}
Air quality TSP, PM10, NO ₂ , SO ₂ , CO	3 Locations at near access road (AN1, AN2, AN3) 1 Location at port area (AN4) In phase I-2, air quality measurement is conducted per season (approximately 6 months) as referred to RPL-AMDAL and Technical Specification. October 2023- December 20203	<p>The air quality sampling is conducted at September 2023 and December 2023. The parameters of air quality namely SO₂, CO, TSP, PM10, and TSP at the four locations were found to meet the quality standards outlined in PPRI No.22/2021, Appendix VII. The four locations namely: the entrance gate to the port area (AN1), near the settlement area vicinity (AN2), the access road to the port area (AN3), and the PICT port area (AN4).</p> <p>Measurements of SO₂ from both periods indicate that levels within the port area are within quality standards (75), with values below the laboratory detection limit (<29). Measurements of CO from both periods also demonstrate compliance with quality standards (4000), with values ranging from 172 to 275 in September 2023 and from 115 to 286 in December 2023. Similarly, measurements of NO₂ from both periods show that levels within the port area meet quality standards (65), with values below the laboratory detection limit in both September 2023 and December 2023. Additionally, measurements of PM10 from both periods indicate compliance with quality standards (75), with values ranging from 16.2 to 27.6 in September 2023 and from 18.8 to 26.4 in December 2023. Finally, measurements of TSP from both periods also indicate adherence to quality standards (230), with values ranging from 39.2 to 53.1 in September 2023 and from 33.9 to 43.4 in December 2023 within the port area. The recent highest CO levels were recorded at location AN1 (front gate road access) at 286 µg/m³. Similarly, the recent highest PM10 levels were recorded at AN1 with a value of 26.4 µg/m³. As for the TSP (dust) parameter, the highest levels were also observed at AN1, registering at 43.4 µg/m³. These elevated levels can be attributed to heavy traffic activity along the Patimban Port access road and the Pantura road.</p> <p>More detailed information is shown at subchapter 2.3.</p> <p>Note: Related regulation used is Government Regulation no.22/2021 – Annex VII</p>	S-3A, O-6A, O-7A

Items		Period/Survey date	Results	Details ^{*Notes)}
Noise	Noise level	<p>3 Locations at near access road (AN1, AN2, AN3)</p> <p>1 Location at port area/reclamation area AN4)</p> <p>In phase I-2, noise measurement is carried on in 6 monthly period as referred to RPL-AMDAL and Technical Specification</p>	<p>Noise level sampling was conducted in both September 2023 and December 2023. The measurements from both periods indicate that the noise levels within the port area comply with quality standards (70dbA), with values ranging from 45.1 to 65.3 dBA in September 2023 and from 52.5 to 69.3 dBA in December 2023.</p> <p>More detailed information is shown in subchapter 2.4.</p> <p>Note: Related regulation used is Ministerial Decree of Environmental (Kepmen LH) No. 48 year 1996 for port area</p>	O-3B, O-6B, O-7B
Aquatic life	Nekton and Benthos	<p>5 points at sea area for nekton</p> <p>10 points at sea area for benthos</p> <p>In phase I-2, nekton observation is conducted once in a year period and for benthos twice a year (per season) with reference to RPL-</p>	<p>The diversity index (H') for nekton ranged from 0.102 to 1.006. Regarding the equitability index (E'), values across all locations ranged from 0.109 to 0.388, and the dominance index ranges from 0.163 at location N4 to 0.883 at location N1.</p> <p>In the December 2024 sampling period, benthos diversity index (H') values in both dumping and port areas ranged from 0 (B12) to 1.64 (B8). For the equitability index (E'), locations B9 and B10, situated on the east side of Patimban Port, exhibit values of 1, indicating abundant species presence. However, other locations range from 0 to 0.92. The dominance index ranges from 0.33 at location B9 to 1 at location B12, suggesting individual species dominance in certain areas.</p> <p>More detailed result explained in subchapter 2.5 and 2.6.</p>	O-4A construction phase O-8E operation phase

Items		Period/Survey date	Results	Details ^{*Notes)}
		AMDAL and Technical Specification Phase 1-2 November 2023		
Sediment quality	Appearances, Odor, Color, Moisture content, Specific gravity, Volatile, Particle size distribution, Ash content, TOC, Mercury, Arsenic, Cadmium, Chromium, Copper, Nickel, Zinc, Lead	3 points at dumping area (1 time per year and 1 time after dumping) 7 points at sea area (1 time per year) December 20203	<p>In the December 2024 sampling period, sediment tests were conducted on 10 samples (S4-S13), revealing several parameters that fail to meet quality standards as per the Canadian Sediment Quality Guidelines for the Protection of Aquatic Life interim Sediment Quality Guideline (ISQG), Probable Effect Level (PEL), and Australian Government Screening Level National Assessment Guidelines for Dredging (NAGD).</p> <p>Arsenic levels at all 10 test locations exceeded the standards outlined in the ISQG guidelines. Additionally, only location S7 recorded mercury levels surpassing the ISQG standard, while locations S5 and S9 exceeded the mercury standards according to NAGD criteria.</p> <p>The particle size distribution is categorized into five groups: gravel, sand, silt, clay, and material finer than the No. 200 sieves. Gravel size ranges from 0.08 to 1.22, sand size ranges from 0.01 to 53.66, silt size ranges from 31.71 to 62.81, clay size ranges from 1.56 to 58.88, and material finer than No. 200 sieves ranges from 45.12 to 99.9 More detailed information is shown at subchapter 2.7.</p> <p>Note: CP6 is willing to conduct sediment resampling because there was concern about the possibility of sampling and analysis errors. The result from resampling will be used as baseline for construction activity especially dredging and dumping.</p>	O-5A construction phase O-8A operation phase
Fishing ground	Fishery Production and Fishing Ground area	4 Locations at TPI Truntum TPI Kali Genteng TPI Galian	Survey result shows average fish production by middlemen in the Genteng and Galian areas, December shows higher production compared to October and November. The same pattern is observed for average fish production by middlemen in the Terungtum area.	S-4B, O-4A

Items		Period/Survey date	Results	Details ^{*Notes)}																																								
		<p>TPI Tj. Pura</p> <p>For environmental monitoring at phase I-2 fishing ground measurement is conducted every month in reference to RPL-AMDAL and Technical Specification Phase 1-2</p> <p>October 2023-December 20203</p>	<p>While fluctuations exist in fish production between Genteng & Galian and Terungtum, the disparities are not significant.</p> <p>The following figures depict the results of the fish catch survey obtained from both TPI auctions and middlemen.</p> <table border="1"> <caption>Data for Monthly Fish Production (values in thousands)</caption> <thead> <tr> <th>Month</th> <th>Genteng and Galian (Blue)</th> <th>Terungtum (Orange)</th> <th>Total Fish Production (Blue Dot)</th> </tr> </thead> <tbody> <tr><td>Mar</td><td>5367</td><td>2750</td><td>8117</td></tr> <tr><td>May</td><td>4372</td><td>2938</td><td>7309</td></tr> <tr><td>Jun</td><td>3202</td><td>2252</td><td>5454</td></tr> <tr><td>Jul</td><td>4265</td><td>2219</td><td>6484</td></tr> <tr><td>Aug</td><td>2085</td><td>3101</td><td>5186</td></tr> <tr><td>Sep</td><td>2468</td><td>2523</td><td>4991</td></tr> <tr><td>Oct</td><td>2478</td><td>3899</td><td>6377</td></tr> <tr><td>Nov</td><td>2767</td><td>3921</td><td>6688</td></tr> <tr><td>Des</td><td>3220</td><td>4060</td><td>7280</td></tr> </tbody> </table> <p>More detailed information is shown at subchapter 2.8.</p>	Month	Genteng and Galian (Blue)	Terungtum (Orange)	Total Fish Production (Blue Dot)	Mar	5367	2750	8117	May	4372	2938	7309	Jun	3202	2252	5454	Jul	4265	2219	6484	Aug	2085	3101	5186	Sep	2468	2523	4991	Oct	2478	3899	6377	Nov	2767	3921	6688	Des	3220	4060	7280	
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Nov	2767	3921	6688																																									
Des	3220	4060	7280																																									
Social environment	Land acquisition and resettlement	October – December 2023	The subjects of compensation payment related to the access road construction, was 97,42 % of the total 194 PAHs and 99.81% of the total 538 PAHs at the backup area.	Table 11: Progress of Compensation Payment and Land Vacation																																								

Items		Period/Survey date	Results	Details ^{*Notes)}
	Livelihood Restoration Program	October – December 2023	In the monitoring period from October to December 2023, all 13 LRP training were implemented with a total of 1,975 participants.	S-2A
	Job opportunities for local people	October – December 2023	<p>The project for car terminal construction under Contractor of Package 5 started on March 31st, 2023. The number of local people that was recruited during respective period was 121 people or equal to 20.23% in October 2023, of a total of 598 workers, 137 people or equal to 21.08% in November 2023, of a total of 650 workers and 145 people or equal to 26.61% in December 2023, of a total of 545 workers. The percentage of local workers recruited was still below 37% since the current activity needed skilled workers, even though for non-skilled work, recruitment prioritized in hiring local people. The percentage of local people recruited during this quarterly period was still below 37% due to the activity needs requiring particular technical skill to be performed, while non-skilled worker positions had been prioritized for hiring local people.</p> <p>The project for container terminal construction under Contractor of Package 6 started on January 5th, 2023. The number of local people that was recruited during respective period was 133 people or equal to 20.92% in October 2023, of a total of 635 workers, 131 people or equal to 14.24% in November 2023, of a total of 920 workers and 143 people or equal to 16.42% in December 2023, of a total of 871 workers.</p> <p>The PT PPI as Port Operator hiring local workers, reached up to 31 people, that is 44.93% of total 69 workers. The percentage of local people recruited within operation for port operation recorded above the standards (30%).</p> <p>The PT PICT as Car Terminal Operator hiring local workers, reached up to 84 people, that is 44.92% of total 187 workers. The percentage of local people recruited within operation for Car Terminal operation recorded above the standards (30%).</p>	S-2A

Items	Period/Survey date	Results	Details ^{*Notes)}
Public unrest	October – December 2023	<p>Most of the respondents from the interview conducted by the Contractor of Package 5 and 6 replied they weren't worried (61.53% of 60 respondents) about heavy equipment and materials mobilization. But on the other hand, there are 38.47 % of respondents who consider that the mobilization of the project vehicles has a negative impact namely traffic jam/accident, noise, and dust exposure. Dust exposure occurs on damaged roads. To maintain the public unrest condition to meet the minimum level for people not to feel worried, the contractors conducted material and heavy equipment transportation of heavy equipment transport vehicles by using the access road and no longer the public road.</p> <p>Public unrest of reclamation and offshores facility development conducted by Contractor Package 5 and 6 shown that 63.19 % of 168 respondents consider that the construction activities have positive impact to the community. The positive impact due to employment opportunities for the community and provision additional livelihood program. The remaining 36.81 % of respondents felt that the project activities had a negative impact on fishermen's activities. To mitigate such request, the Livelihood Restoration Program (LRP) of fisheries activity had been implemented, in which the participants shared training equipment of a gill net to acquire a new fishing technique (Rampus Net Technique), for effective catch fish with efficiently. The priority program for the community related to Assembling Rampus Net had been conducted for 10 batches with the number of participants, 442 people in total.</p>	S-3D, S-4C Table 20: Public Unrest, Protest and Demonstration
	Road damage	No road damage was newly reported from October to December 2023.	O-3A
	Grievance	About 94 houses that were damaged due to access road development were repaired by the contractor in March 2020. There are no other additionally damaged houses reported from October to December 2023.	O-7E
Working environment	Accidents and diseases	No accident on onshore was reported from October to December 2023.	O-2B

Items		Period/Survey date	Results	Details ^{*Notes)}
Increasing Water Run-off	Observation of the availability green open area (RTH) and no flooding condition	April – June 2023	<p>According to observation, the availability of green open area (RTH) at Wika-PP JO /CP3 office was 942,62 m² or 34,92% of project area (as project office area).</p> <p>There was no flooding situation where run offs flew towards the retention pond through drainage channel with velocity between 0,04 – 0,29 m/sec</p>	O-6A
Traffic accidents and disruptions	Sea and land traffic	October – December 2023	No accident on offshore was reported in the period of October to December 2023.	S-3B, S-3C

‘S- ‘: codes of ‘Significant Impact’ in the table of Implementation of RKL-RPL (see the column of No. in Table 1)

‘O- ‘: codes of ‘Other Impact’ in the table of Implementation of RKL-RPL (see the column of No. in Table 1)

I. Implementation of RKL-RPL (Environmental Management and Monitoring Plan in EIA)

A. Pre-Construction Phase

Reported in the ESC Quarterly No.1 (January – March 2019)

B. Construction Phase and Transitional Phase

Implementation of RKL RPL (Environmental Management and Monitoring Plan) is regularly conducted semester-based as stipulated in Environmental Permit No. 136/Menlhk/Setjen/PLA 4/2/2017 regarding the Development of Patimban Port at Patimban Village, Kalentambo Village, Gempol Village, Kotasari Village, Pusakaratu Village, Pusakanagara District, and Pusakajaya Village at Pusakajaya District, Subang Regency, West Java Province that amended to SK No 120/MENLHK/SETJEN/PLA.4/2/2022. The RKL RPL Implementation Report of Construction-Operation Phase Semester X had been already submitted in December 2023 to relevant agencies; the Ministry of Environmental and Forestry, the Environment Agency of West Java Province, and the Environment Agency of Subang Regency.

Regarding completion of the construction project of package 1, which was announced by letter ref.no: PTMBN/PTRPW/2021/875 pertaining to the Take-over Certificate of the Whole of the Works, dated 24 June 2021, was followed up by package 2 in November 2021 which was announced by letter ref.no. PTMBN/TAW/2021/640. Also, followed up by package 3 in July 2022 which was announced by letter ref.no. PTMBN/WP/P.3/2022/370C.

Therefore, all obligations of construction activities of package 1, 2 and package 3 were accomplished as well as their environmental activities.

Starting in November 2021, the transitional environmental monitoring began, taking over the monitoring responsibilities from the former contractors of Packages 1, 2, 3, and 4. This transition was approved and carried out by the subcontractor PT Inasha Sakha Kirana, in collaboration with PT Anindya Karya Desain under Contract No. PTMBN/SCA-02/EM/X/2021, dated October 27, 2021. After the transition period, Phase I-2 was initiated.

The Project Package for Phase I-2 comprises two project packages, as follows:

1. The car terminal construction works under the contractor of Package 6 commenced on January 5, 2023.
2. The car terminal construction works under the contractor of Package 5 commenced on March 31, 2023.

In accordance with the background explanation provided above, the content of this ESC Report in ESC Quarterly No. 20 is being reported based on the following sources:

1. Construction monitoring from CP5 in Environmental Monthly No. 6 (October 2023), No. 7 (November 2023), No. 8 (December 2023).
2. Construction monitoring from CP6 in Environmental Baseline Survey (March 2023), Environmental Monthly No. 6 (October 2023), Environmental Monthly No 7 (November 2023), Environmental Monthly No. 8 (December 2023) and Environmental Monitoring Report No.3 (October – December 2023).

C. Current Activities Status

During this quarterly period (October - December 2023), the construction activities of phase 1 stage 1 have already been accomplished, while the operational phase has just started to conduct some limited activities.

KSOP and the operator PT Pelabuhan Patimban International have been trying to establish their environmental management format since the operation took place in March 2022.

In the meantime, the Project Package for terminal container construction began in January 2023, while the Project Package for car terminal construction started in March 2023. Some reclamation activities at the sea during this period have been started such as CDM.

The Contractor of Package 6 is currently obligated to conduct environmental monitoring as stipulated in Technical Specifications. Current activities status on going are described as follows:

Table 2. Patimban Port Activities Status During October – December 2023

No.	Activities	Status	Remarks
Construction Stage			
1.	Sea/marine facilities construction	Has been accomplished for Phase 1 Stage 1, and Phase 1 stage 2 has just started	Office buildings at reclamation land construction has been accomplished since June 2021. As per January 2023, the Terminal Container works of Contractor Package 6 has been started. Meanwhile, the Car Terminal construction works of Contractor Package 5 has been started on March 2023.
2.	Reclamation	Has been accomplished for Phase 1 Stage 1, and Phase 1 stage 2 has just started	Reclamation using the CPM method has been accomplished since October 2020. The new reclamation activities have been started of Contractor Package 6 and 5 for container and car berth respectively.
3.	Dredging and dumping	Has been accomplished for Phase 1 Stage 1, and Phase 1 stage 2 has just started	Dredging and dumping activities for reclamation and shaping the channel shipping lane for phase I-1 has been accomplished since March 2021. The dredging and dumping activities has been started on 21 September 2023 for Contractor Package 5 and 6 October 2023 for Contractor Package 6.
4.	On-shore facilities construction	Has been accomplished for Phase 1 Stage 1, and Phase 1 stage 2 has just started	<p>The finishing construction items comprise:</p> <ul style="list-style-type: none"> • The construction of the KSOP dormitory on the land and some project construction offices (temporarily). • The terrestrial access road was developed, connecting the port access road to KSOP dormitory building.

No.	Activities	Status	Remarks
5.	Access road construction	Has been accomplished	The flyover access road connecting national road Pantura to Patimban Port was completed in November 2020.
6.	Connecting bridge	Has been accomplished	Connecting bridge to connected access road and port area were officially accomplished in July 2022.

Operational

1.	Sea/marine facilities operation	Has been started to operate	<p>Some activities have just started to operate, such as:</p> <ul style="list-style-type: none"> • The activity covers the distribution of certain vehicles as one of the products to be shipped by a transportation ship every 2 weeks. • Office activities by KSOP and operator at reclamation land.
2.	Access road operational	Has been operated	The presence of the access road in connecting national road Pantura to Patimban Port as a transportation route which is commonly used for mobilization of Patimban workers and products to the ships for shipping.

Both Construction and Operational

1.	Heavy equipment and material mobilization	Ongoing	<p>Some construction materials such as cement mixing trucks and soil were transferred by dump truck for APBN project (at back up area).</p> <p>Other heavy equipment such as <i>tronton</i> truck used for transportation of vehicles production and distribution to the port.</p>
2.	Procurement labor	Conducted as per required	Labor/workforce recruitment for operational stage in port activities and construction activities.

Table 3. Implementation of RKL RPL (Environmental Management and Monitoring Plan)

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)	
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)		
Managed Significant Impacts (referred to EIA)							
CONSTRUCTION PHASE							
2.	Procurement of Labor and Basecamp Operation						
2A	Opening Job and business opportunity.	People affected/local people that recruited as workers > 37%).	Procurement of Labor and Basecamp operation.	<p>a. Prioritize local workers from the affected area as required, educational background, qualification needed, and inclusion of workers social assurance, and in reference to Regional Minimum Wage (Upah Minimum Regional).</p> <p>b. Coordinating with related institutions for the implementation of a livelihood restoration program for affected people, as stated in the LARAP document as follows:</p> <ul style="list-style-type: none"> - Conducting training program. - Conducting venture capital aid program. - Conducting new business activity program 	<p>a. Identifying the number of local workers.</p> <p>b. Identifying the number and type of business opportunities that evolve nearby.</p> <p>c. Evaluating the livelihood restoration program for affected people.</p> <p>d. Regarding the information and data that need to be explored deeper, an in-depth interview with key informants shall be conducted, such as with local elderly representatives.</p> <p>e. Monitoring workers recruitment relevant to qualifications.</p> <p>f. Monitoring of safety work implementation especially in the construction phase.</p> <p>[c, d: DGST] [a, b, e, f: CP5, CP6,]</p>	<p>The implementation of Job and business opportunities in the period from October to December 2023 consisted as follows:</p> <p>Implementation of Contractor Package 5</p> <p>The project for car terminal construction under Contractor of Package 5 started on March 31st, 2023. The number of local people that was recruited during respective period was 121 people or equal to 20.23% in October 2023, of a total of 598 workers, 137 people or equal to 21.08% in November 2023, of a total of 650 workers, 145 people or equal to 26.61% in December 2023, of a total of 545 workers. The percentage of local workers recruited was still below 37% since the current activity need particular skilled workers, even though for non-skilled work, recruitment prioritized in hiring local people.</p> <p>Implementation of Contractor Package 6</p> <p>The project for container terminal construction under Contractor of Package 6 started on January 5th, 2023. The number of local people that was recruited during respective period was 133 people or equal to 20.94% in October 2023, of a total of 635 workers, 131 people or equal to 14.24% in November 2023, of a total of 920 workers. 143 people or equal to 16.42% in December 2023, of a total of 871 workers. The percentage of local workers recruited was still below 37% since the current activity needs particular skilled workers, even though for non-skilled work, recruitment prioritized in hiring local people.</p> <p>13 training programs of the Livelihood Restoration Program (LRP) was completed in July 2021 with number of participants as much as 1.975 people. The training programs were namely, The culinary entrepreneurship, Basic safety training, urban farming, Processing livestock products, Catfish cultivation, Assembling and installation of small rampus net, Food court business development, Business for vulnerable people, Welding, Security, Forklift operation, Stevedoring and workforce, and cleaning service.</p>	

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				<ul style="list-style-type: none"> - Conducting; marketing assistance program - Conducting equipment aid program. <p>c. Coordinating with Pusakanagara and Pusakajaya sub-district due to Job vacancy information</p> <p>[a: DGST, CP5, CP6, b,c:DGST]</p>		<p>The internal monitoring of the Livelihood Restoration Program (LRP) was implemented during each training conducted. In addition, an external monitoring was also implemented in terms of the Program. Based on the internal LRP team assessment and evaluation, results showed that some of the LRP participants were allowed to switch the training program they had chosen before. Meanwhile, based on external monitoring evaluation on the implementation of LRP revealed that 100% of 1.999 respondents answered that they already participated in the LRP training, and 13% didn't participate due to reasons such as, passed away without replacement, while no family members attended the training instead, nor those who were sick, nor not interested to participate. Most of training participants were laborers in the agricultural sectors, as much as 58%, and the most popular training that was selected was operation training of the Forklifts as much as 24 %, the Culinary training as much as 24%, and then the Stevedoring and workforce training as much as 12%. The training participants who joined the training program from the People Affected Projects category were 39 participants or 1.9% of 1.999 respondents, and the fishermen training 18 participants or 3.6% of 500 respondents.</p> <p>The external monitoring was implemented through interviews with the key informants such as the elderly, LRP participants and the local government to identify the LRP implementation state of being.</p>
3.	Heavy equipment and materials mobilization					
3A	Deterioration of air quality (TSP and emission).	Concentration of SO ₂ , CO, NO ₂ , and TSP doesn't exceed air quality standard based on Government regulation No. 41 years 1999 on Air pollution control.	Heavy equipment and materials mobilization.	<ul style="list-style-type: none"> a. Heavy equipment and materials mobilizations use access road of Patimban seaport which is relatively quiet and away from settlements (Red soil road) b. Closing the tanks of transporting material vehicle with tarps c. Transporting the materials to the location using 	<p>Conduct air quality measurement and laboratory analysis, after which the results shall be compared with air quality standards based on Government Regulation No. 22 of the year 2021 in Annex. VII.</p> <p>Furthermore, monitoring results will be compared with baseline result as well in order to see the tendency of environment quality change and controlled status by comparative analysis with</p>	<p>❖ <u>Environmental Management Implementation:</u></p> <p>Environmental management aimed at mitigating the impact on air quality (TSP and emissions) during the mobilization of heavy equipment and materials, which was carried out and reported during this construction period, encompasses the following measures:</p> <ul style="list-style-type: none"> - Heavy equipment and material transportation vehicles utilize the access road (flyover) situated away from residential areas. This strategic routing helps minimize the release of harmful pollutants like particulate matter (PM), nitrogen oxides (NOx), and volatile organic compounds (VOCs, contributing to improved air quality in the vicinity and a reduction in pollutants for nearby communities.

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				<p>operation worthy vehicle and passed the KIR test.</p> <p>d. Developing of washhouse to clean transporting vehicle wheels before out from project site location</p> <p>e. If there are materials spills on the passing road from construction materials mobilization, it will be cleaned as soon as possible.</p> <p>f. Water sprinkling on the road periodically.</p> <p>g. Inform the community who live of the heavy equipment and material mobilization through the district officer.</p> <p>h. Coordinating with the Pusakanagara and Pusakajaya District officer.</p>	<p>the standaard guideline level.</p> <p>[CP6]</p> <p><u>Note:</u> Regulation for ambient air quality standard guideline has been amended from Government Regulation no.41/1999 to Government Regulation no.22/2021 in Annex VII</p>	 <p>Closing the tanks of material transport vehicles with tarps plays a vital role in preventing the deterioration of air quality since it could reduce the release of particulate matter and potentially harmful emissions from carry out material.</p>  <p>Vehicles using transporting materials that have passed the KIR test and properly maintained and inspected vehicles have a lower environmental impact since those vehicles emit fewer pollutants and reduce the risk of accidents or incidents that may harm air quality. These kinds of vehicles are responsible and environmentally conscious choices when considering the impact on air quality.</p>  <p>Regular water sprinkling of roads in areas for both pedestrian and vehicular traffic. These measures can be highly beneficial for improving air quality. This practice helps mitigate dust and</p>

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						<p>particulate matter, enhancing the overall environment and the well-being of people in these areas.</p>   <ul style="list-style-type: none"> - Coordinating with the Pusakanagara and Pusakajaya District officer.   <ul style="list-style-type: none"> ❖ <u>Environmental monitoring of air quality:</u> The air quality samplings are conducted in September 2023 and December 2023. The parameters of air quality namely SO2, CO, TSP, PM10, and TSP at the four locations were found to meet the quality standards outlined in PPRI No.22/2021, Appendix VII. The four locations namely: the entrance gate to the port area (AN1), near the settlement area vicinity (AN2), the access road to the port area (AN3), and the PICT port area (AN4). Measurements of SO2 from both periods indicate that levels within the port area are within quality standards (75), with values below the laboratory detection limit (<29). Measurements of CO from both periods also demonstrate compliance with quality standards (4000), with values ranging from 172 to 275 in September 2023 and from 115 to 286 in December 2023. Similarly, measurements of NO2 from both periods show that levels within the port area meet quality standards (65), with values below the laboratory detection limit in

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						<p>both September 2023 and December 2023. Additionally, measurements of PM10 from both periods indicate compliance with quality standards (75), with values ranging from 16.2 to 27.6 in September 2023 and from 18.8 to 26.4 in December 2023. Finally, measurements of TSP from both periods also indicate adherence to quality standards (230), with values ranging from 39.2 to 53.1 in September 2023 and from 33.9 to 43.4 in December 2023 within the port area.</p> <p>The recent highest CO levels were recorded at location AN1 (front gate road access) at 286 µg/m³. Similarly, the recent highest PM10 levels were recorded at AN1 with a value of 26.4 µg/m³. As for the TSP (dust) parameter, the highest levels were also observed at AN1, registering at 43.4 µg/m³. These elevated levels can be attributed to heavy traffic activity along the Patimban Port access road and the Pantura road.</p>  

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						  <p>Notes: The information regarding air quality sampling (TSP and emission) from is shown at Detail Natural Sub Chapter 2-3</p>

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3B	Land traffic disruption	No occurrence of traffic jam as negative effect of heavy equipment and materials mobilization	Heavy equipment and materials mobilization	<p>a. Coordinating with transportation institution to install traffic signs around the development site of Patimban seaport under ministerial regulation No.13 year 2014 regarding the traffic sign.</p> <p>b. Coordinating with police agencies to control traffic around the Patimban seaport development site.</p> <p>c. Installing construction warning signs at the entry and exits to the access road of Patimban seaport development site.</p> <p>d. Arranging schedule of heavy equipment and materials mobilization not in the vehicle peak hours.</p> <p>e. Allocation of traffic control personnel.</p> <p>f. Implementing ANDALLALIN (Assessment</p>	<p>a. Monitoring traffic conditions.</p> <p>b. Identifying the accident number that occurred.</p> <p>[CP5, CP6]</p>	<p>Package 5 Implementation:</p> <p>During October to December 2023, no accident and traffic jam related to the project component conducted by Package 5 was reported. The regulation was applied to avoid accident and traffic jams; regular traffic counting was applied. As of June 2020, heavy equipment material transportation used the temporary access road to avoid influence on the public road.</p>  <p>Traffic count at Patimban Village Road</p> <p>Package 6 Implementation:</p> <p>The traffic count conducted by contractor of Package 6 on October and December 2023 was reported that during the monitoring period, there was no accident nor traffic jam related to the project committed by Package 6. The regulation was applied and met to avoid accident and traffic jams; as well as for regular traffic counting. As of June 2020, trucks for heavy equipment material transportation used the temporary access road to avoid influence at the public road.</p>

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				Impact of Traffic recommendation. [DGST, CP5, CP6]		 <p>8 Des 2023 07:03:47 6°14'27.234"S 107°53'52.272"E 29° NE Jalan Tanpa Nama Patimban Kecamatan Pusakanagara Kabupaten Subang Jawa Barat Altitude: 26.2m #PT. Sucifindo Index number: 2078</p> <p>Traffic count at Patimban Port Gate</p>
3C	Sea traffic disruption	No occurrence of ship collision on the Patimban area.	Heavy equipment and materials mobilization.	a. Coordinating with KSOP Class II Patimban about material sea transportation routes. b. Coordinating with Navigation District Class I Tanjung Priok about materials transportation sailing line. c. Socializing materials of sea transportation route to the fishermen. d. Organizing material sea transportation time. e. Project proponents and contractors open	a. Monitoring sea traffic conditions. b. Identifying the accident number that occurred. [CP5, CP6]	The traffic condition affected by the project was monitored periodically. During the period of October – December 2023, Contractors of Packages 5 and 6 monitored the sea traffic accidents situation. Based on the monitoring report, it showed that there were no ships that had collision in the Patimban port area. Coordination with Navigation District Class I Tanjung Priok had been conducted at the early stage of port construction activity, on 20 th February 2019, concerning the Discussion of the initial design of navigation aids placement for the sailing channel of Patimban Port. The contractor of Package 2 coordinated with Navigation District Class I Tanjung Priok Regarding Mobilization / Demobilization and Installation for Aid of Navigation as shown in the picture below.

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						<p>of the village, Head of the Cooperative, Police, fishermen representatives. The stakeholder supported the port development. The fishermen hoped for empowerment training of themselves. Reflecting the result of the Meeting, Livelihood Restoration Program (LRP) was planned for fisheries activity-related training, including assembling and installation of small rumpus net, catfish cultivation, basic safety training, etc.</p>  <p>Socialization for fishermen at Patimban Village</p> <p>Contractors are already organizing and monitoring the conditions of sea transportation traffic, including materialization of transportation records periodically. Information regarding sea traffic monitoring is shown in Table 21. Sea Traffic Monitoring and Table 22. Sea traffic condition and amount of occurred accidents. Each ship that enters the construction facility is obligated to propose and submit the permit letter to KSOP Class II Patimban. Only ships that meet the criteria, thereafter will be able to start work at the construction area.</p> <p>Contractor Implementation:</p> <p>From October to December 2023, no occurrence was recorded of ship collision at Patimban Waters. Offshore activities coordinated with KSOP Class II Patimban and necessary permit has been secured before the start of works.</p>

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3D	Public unrest	No public unrest occurrence.	Heavy equipment and materials mobilization	<p>a. Socializing transportation route of heavy equipment and materials mobilization to the nearest community.</p> <p>b. Socializing the materials transportation route to the fishermen.</p> <p>c. Establishing a Grievance Redress Center /Fast Response Team to accommodate and respond to public unrest related to the Patimban Seaport.</p> <p>d. Organizing community discussion forums with local government to seek solutions to problems aroused by the development activity.</p>	<p>a. Counting the number of grievances raised by heavy equipment and materials mobilization activity. The interview survey shall acquire its identification.</p> <p>b. Counting the number of protesters and demonstrations raised against the representative office. The data shall be collected by evidence of related reports to the local government or to project implementing representatives (secondary data)</p> <p>c. Regarding the information and data that need to be explored more deeply, an in-depth interview shall be conducted with key informants, such as with local elderly representatives.</p> <p>d. The sampling population shall be calculated purposively.</p>	<p>Socialization to the fishermen regarding material sea transportation routes was conducted at the early construction stage. On 18 August 2018, the Directorate General of Sea Transportation conducted stakeholder meeting that invited all stakeholders, such as the local government, the Head of the village, Head of Cooperative, Police, fishermen representatives. The stakeholders supported the port development. The fishermen hoped for empowerment training of themselves. Reflecting the result of socialization, Livelihood Restoration Program (LRP) was established for fisheries activity-based training, including assembling and installation of small rampus net, catfish cultivation, and basic safety training.</p>  <p>Socialization to the fishermen regarding Port Development including sea transportation.</p> <p>Package 5 Implementation.</p> <p>Based on the interview conducted in December 2023 regarding the heavy equipment and material mobilization showed that a total of 24 respondents, 12 respondents stated that they had worries, but 12 respondents stated had no worries. The reason for the worries respondents is 50 % related to the road damage and 50 % about noise and dust pollution.</p> <p>To keep the concerns minimized, the contractor conducted a certain number of mitigation measures; strict regulation on drivers who carry out project vehicle mobilization with the maximum speed of 40 Km/hour. As of June 2020, until today, heavy equipment material transportation vehicles are using the temporary access road and flyover</p>

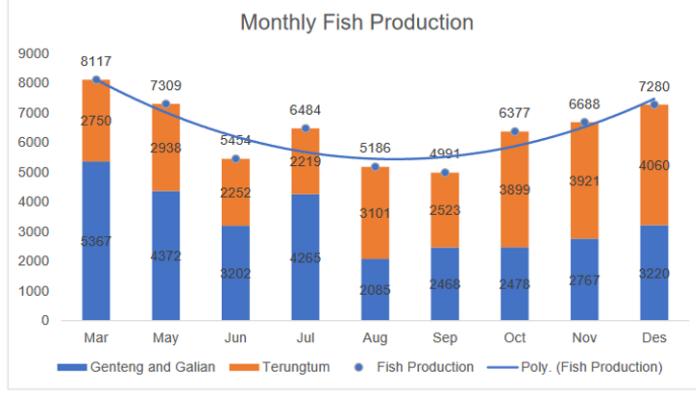
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						<p>access road to avoid influence on the public road. The public road condition in the period of October – December 2023 was monitored in good condition.</p> <p>Package 6 Implementation.</p> <p>Based on the interview conducted in December 2023 regarding the heavy equipment and material mobilization showed that a total of 24 respondents, 7 respondents stated that they have worries, but 17 respondents stated had no worries. As for the reasons for the worries, 25% respondents mentioned that it is related to the traffic/accident, 8 % about noise, vibration, dust, and about air pollution and 25 % related to the road damage.</p> <p>To overcome the concerns that were raised, the contractor conducted a certain number of mitigation measures; adopting strict regulation on drivers who carry out project vehicle mobilization at maximum speed of 40 Km/hour. As of June 2020, until today, heavy equipment material transportation vehicles are using the Patimban seaport access road to avoid influence to the public road. The public road condition in period of October – December 2023 was monitored and revealed to be in good condition.</p> <p>On the other hand, the survey results indicate that there are positive impacts from port construction. 85% of the 24 respondents felt that the surrounding community experienced improvements in increasing family income and local economic conditions, as well as improvements in public infrastructure.</p>
4. Reclamation and off-shores facility development						
4A	Deterioration of seawater quality (TSS).	TSS concentration below environment quality standard based on Kepmen LH (Ministerial Decree of Environmental) No 51-year 2004 Seawater quality standard Appendix I (80 mg/L).	Reclamation activity and offshore facility development.	<p>a. Reclamation activity is conducted in the water area which has been bordered by seawall.</p> <p>b. Minimizing dumping volume as much as possible by adopting the latest technology, such as Cement Pipe Mixing.</p>	<p>Conducting seawater quality laboratory analysis, after which the results are compared with the sea water quality standard based on Government Regulation no.22-year 2021 in Annex VIII.</p> <p>Furthermore, monitoring results are converted into average values and will be compared from time to time to see the tendency</p>	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <p>Environmental management that was implemented such as:</p> <ul style="list-style-type: none"> - Reclamation activities such as CDM for Phase I-2 started in July 2023. All reclamation work is carried out behind the seawall, which was completed in the previous phase.  

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			[CP5, CP6]	(or data trend) of environment quality change and controlling status with the threshold level. [CP6] <u>Note:</u> ■ CP6 continues to employ the Turbidity-TSS conversion value from the previous Phase I-1 formula, as the results from Phase I-2 may potentially lead to an underestimation of TSS values. Quarterly period sampling for full parameters of sea water quality based on regulation.	<p style="text-align: center;">CDM activity</p> <ul style="list-style-type: none"> - The use of the cement pipe mixing method as a construction method on reclamation as stated in the contract.  	

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						<p>❖ <u>Implemented Environmental Monitoring</u></p>  <p>Sea water quality sampling with van dorn tube and indirect measurement of TSS using turbidity meter.</p> <p>Most recent quarterly sampling activities were conducted in December 2023, encompassing four offshore dumping location and eight locations within the port area, resulting in a total of 12 samples collected. The analysis of seawater quality samples reveals that most parameters tested meet the quality standards outlined in PPRI No.22/2021, Appendix VIII, except for Transparency. Notably, mercury levels exceed the quality standards stipulated by Japan Standard. During the monitoring period, fluctuations were observed in certain parameters at each monitoring location, particularly in Transparency and coliform parameters. However, values for other parameters generally remain below the laboratory detection limit. Regarding Transparency, locations around the dumping area (W7-W10) generally exhibit values meeting quality standards (>3 m), ranging between 8 – 12 m. Conversely, Transparency values around the port area typically do not meet the quality standard, ranging between 1-3 m. The variance is attributed to sediments transported by rivers that flow into the waters of Patimban Port, namely the Cipunegara River, Genteng River, and Tanjung Pura River, which impact the transparency of seawater.</p>

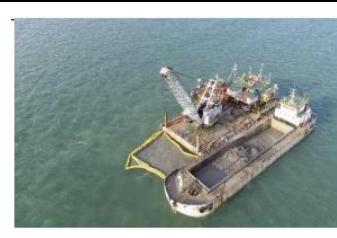
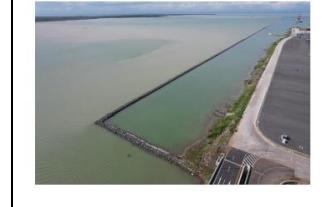
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						<p>Six seawater quality parameters were monitored to compare surface and bottom conditions: pH, temperature, dissolved oxygen, turbidity, salinity, and total suspended solids.</p> <p>Surface pH ranges between 7.28 - 8.5, while bottom pH ranges between 7.7 - 8 - 8.4.</p> <p>Surface temperatures range between 30°C – 32 °C, with bottom temperature s ranging from 28.6 °C – 31.15 °C.</p> <p>Dissolved oxygen values range from 4.5 – 7.78 mg/L at the surface and 4.6 8 – 6.74 mg/L at the bottom.</p> <p>Turbidity ranges from 0.25 – 10.03 NTU at the surface and 1.15 – 14.32 N TU at the bottom.</p> <p>Salinity ranges between 19.4-29 o/oo at the surface and 27.6-29 o/oo at the bottom.</p> <p>Total suspended solids range from 1-12 mg/L at the surface and 0-22 mg/L at the bottom.</p> <p>Overall, the majority of water quality values are within the required standards outlined in PPRI No.22/2021, Appendix VIII.</p> <p>Based on daily recorded turbidity data, the estimated TSS values range from 0.32 to 41.99 for the surface layer and from 0.81 to 49.24 for the bottom layer. Despite the presence of some data outliers, the calculated monthly average Total Suspended Solids (TSS) from daily surveys comply with the required quality standards outlined in Government of Indonesia Regulation No. 22/2021, Appendix VIII (80mg/l). These outliers are primarily attributed to natural factors such as river inflow conditions, meteorological factors, and tidal movements.</p> <p>Higher turbidity/TSS values were observed at locations affected by the Cipunagara and Genteng river basins (T1, T2, T3, and T4 points on the east side of Patimban Port) and the Tanjung Pura River (T8 and T9 points on the south side of Patimban Port), particularly in the bottom measurements.</p> <p>Note: More detailed description is reported in Subchapter 2.1 & 2.2</p>
4B	Fishing ground change.	No report of fishing area disruption and/or decreasing of fishermen's production/income.	Reclamation activity and offshore facility development	a. Communicating and socializing with the fishermen community about reclamation and	a. Collecting data of number of grievances raised by analyzing the results of consultations taken during the survey.	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <ul style="list-style-type: none"> - Socialization by the project executor to the local fisherman with regards to securing the fishing route was carried out. Based on the Minute of meeting, the fishermen are welcoming the idea for port development in Patimban estuary, but perhaps because the development of Patimban port did not restrict fishermen's access to the ocean for fishing. Also, the fishermen's request for training to

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				<p>offshores facility development.</p> <p>b. Installation of basic Rumpon (artificial fish shelter) according to the Regulation of Marine and fisheries ministry Republic of Indonesia No. 26/Permen-KP/2014 around Patimban waters out of DLKP (Regional Sphere of Interest) and DLKR (working area) Patimban seaport.</p>	<p>b. Monitoring fisheries production and its condition by interview with fishermen.</p> <p>[CP6]</p> <p><u>Note:</u></p> <ul style="list-style-type: none"> ▪ Fish production survey is planned to be carried out every month at 4 TPI arround Port Patimban Project area but data limited only from TPI Truntum and TPI Kali Genteng due to Galian and Tj.Pura being closed. ▪ Other source contributes to collect fish production data of DKP Subang region reported on previous report. 	<p>empower their skill for fishing were realized. Furthermore, the stakeholder consultation results became the base of initial background information on affected people's needs to create the Livelihood Restoration Program.</p> <p> Socialization to the fishermen</p> <p>- Rumpon (artificial fish shelter) installation is under preparation. Meanwhile, based on community assessment, most of the community requested for gillnet training (Rampus) as a program to restore their livelihood. Based on this demand, the Assembling Rampus Net training as part of the priority reduction program for the community, has been conducted for ten batches of training with a total of 442 participants (as described in LRP training in 2020).</p> <p>❖ <u>Implemented Environmental Monitoring</u></p> <p>Fish catch survey is conducted monthly by Contractor of Package 6. Information are gathered from TPI and Middlemen. The highest record of yield from the Patimban sea water occurred in March 2023 during the baseline survey, reaching 8,116 kg/day. However, it's important to note that this value fluctuates. According to interviews, natural conditions such as tides and winds are factors that influence the yield. Result of fish production could be seen on below graphics along with documentary and map of patimban fishing ground</p> <p> Fishery auction at TPI Truntum & Kali Genteng as well as interview with the fishermen and middleman</p>

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						 <p>Map of fishing ground area in adjacent Patimbang area</p>  <table border="1"> <caption>Monthly Fish Production</caption> <thead> <tr> <th>Month</th> <th>Genteng and Galian</th> <th>Terungtum</th> <th>Fish Production</th> <th>Poly. (Fish Production)</th> </tr> </thead> <tbody> <tr><td>Mar</td><td>5367</td><td>2750</td><td>8117</td><td></td></tr> <tr><td>May</td><td>4372</td><td>2938</td><td>7309</td><td></td></tr> <tr><td>Jun</td><td>3202</td><td>2252</td><td>5454</td><td></td></tr> <tr><td>Jul</td><td>4265</td><td>2219</td><td>6484</td><td></td></tr> <tr><td>Aug</td><td>2085</td><td>3101</td><td>5186</td><td></td></tr> <tr><td>Sep</td><td>2468</td><td>2523</td><td>4994</td><td></td></tr> <tr><td>Oct</td><td>2478</td><td>3899</td><td>6377</td><td></td></tr> <tr><td>Nov</td><td>2767</td><td>3921</td><td>6688</td><td></td></tr> <tr><td>Des</td><td>3220</td><td>4060</td><td>7280</td><td></td></tr> </tbody> </table> <p>Result of fish catch survey</p>	Month	Genteng and Galian	Terungtum	Fish Production	Poly. (Fish Production)	Mar	5367	2750	8117		May	4372	2938	7309		Jun	3202	2252	5454		Jul	4265	2219	6484		Aug	2085	3101	5186		Sep	2468	2523	4994		Oct	2478	3899	6377		Nov	2767	3921	6688		Des	3220	4060	7280	
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4C	Public unrest.	No public unrest occurrence.	Reclamation activity and offshore facility development	a. Socializing to the fishermen regarding Rumpon (artificial fish shelter) installation plan according to the Regulation of Marine and fisheries ministry Republic of Indonesia No. 26/Permen-KP/2014 around	a. Identification of the number of grievances risen due to reclamation activity b. Identification by interview using a questionnaire (primary data). c. Identification of the number of people protesting and demonstrating against the project implementing representative office,	<p><u>Implementation Package 5.</u></p> <p>The monitoring results on public unrest due to reclamation and offshore facility development showed that 13 of 24 were worried about reclamation activities and offshore facilities development. The interview results revealed that the partial negative perception arises because some fishermen feel that decline in fish catches is caused by the construction activities.</p>																																																		

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
				<p>Patimban waters out of DLKP (Regional Sphere of Interest) and DLKR (Area Work) Patimban seaport.</p> <p>b. Making Grievance Redress Center/Fast Response team to accommodate and respond to public unrest related to the Patimban Seaport development project.</p> <p>c. Organizing community discussion forums with local governments to solve problems that arise during the development activity.</p>	<p>shall be gained from such cases reported to the local government or the project implementing representative office (secondary data);</p> <p>d. Regarding the information and data that need to be explored deeper, an in-depth interview with key informants shall be conducted, such as with local elderly representatives.</p> <p>e. The sampling population is calculated purposively.</p>	 <p>8 Des 2023 08.55.38</p> <p>Public unrest interview at Galian</p> <p><u>Implementation Package 6.</u></p> <p>Interview with the community around the project site took place in December 2023. The sample number was determined by purposive sampling method of people affected. The respondent was selected from various background such as local elderlies, project affected persons (PAPs) and fishermen. Public unrest percentage regarding concern on reclamation and offshore facility development showed that 6 of 36 respondents felt that there was negative impact due to reclamation activity. The respondents rose examples of negative impacts, such as decreased fish catch of fishermen, deterioration of marine ecosystem quality, and damages caused to fishing vessels.</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						 Public unrest interview at Genteng Village
5 Dredging and Dumping						<p>To minimize the negative impact of port construction, the employer implemented certain countermeasures to overcome the fears that may arise. This included such as tighter supervision on construction activities in general, that may cause environmental pollution, providing soft skill training (as part of the Livelihood Restoration Program) in respect of needs and opportunities of employment in the vicinity, prioritizing the introduction of local workers in terms of vacant worker positions, facilitating business development in light of results of LRP for further project management improvements, including installation of Rampus and Small net training for 442 fishermen in Livelihood Restoration-Program.</p>
5a	Decreasing of sea water quality (TSS)	TSS concentration below environment quality standard based on PP No 22 Year 2021 Kepmen LH No 51-year 2004 Appendix VIII (80 mg/L)	Dredging and dumping	a. Constructing seawall in the early phase b. Installing silt protector around dredging area by grab dredging c. Disposing dumping materials is not in one point but disperses in dumping area.	Conducting TSS measurement, then the results are compared with sea water quality standard PP No 22 regarding the implementation of Environmental management and protection (Appendix VIII). Furthermore monitoring results are	<p>❖ Implemented Environmental Management/Mitigation Measures</p> <p>Implemented Environment Mitigation Measures that have been implemented include:</p> <ul style="list-style-type: none"> a. Constructing seawall in the early phase b. Installing silt protector around dredging area by grab dredging c. Disposing dumping materials is not in one point but disperses in dumping area. d. Using proper equipment for dredging and dumping <p>Documentation of Environmental Mitigation Measures that have been implemented can be seen below.</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				<p>disperses in dumping area.</p> <p>d. Using proper equipment for dredging and dumping.</p>	<p>made the average and compared from time to time (data trend) to see the tendency of environment quality change and critical level.</p>	   

❖ Implemented Environmental Monitoring



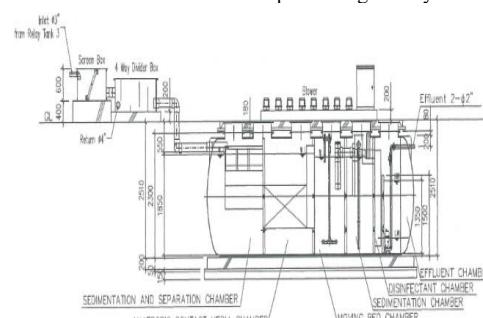
Sea water quality sampling with van dorn tube and indirect measurement of TSS using turbidity meter.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
						<p>Most recent quarterly sampling activities were conducted in December 2023, encompassing four offshore dumping location and eight locations within the port area, resulting in a total of 12 samples collected.</p> <p>The analysis of seawater quality samples reveals that most parameters tested meet the quality standards outlined in PPRI No.22/2021, Appendix VIII, except for Transparency. Notably, mercury levels exceed the quality standards stipulated by Japan Standard.</p> <p>During the monitoring period, fluctuations were observed in certain parameters at each monitoring location, particularly in Transparency and coliform parameters. However, values for other parameters generally remain below the laboratory detection limit.</p> <p>Regarding Transparency, locations around the dumping area (W7-W10) generally exhibit values meeting quality standards (>3 m), ranging between 8 – 12 m. Conversely, Transparency values around the port area typically do not meet the quality standard, ranging between 1-3 m. The variance is attributed to sediments transported by rivers that flow into the waters of Patimban Port, namely the Cipunegara River, Genteng River, and Tanjung Pura River, which impact the transparency of seawater.</p> <p>Six seawater quality parameters were monitored to compare surface and bottom conditions: pH, temperature, dissolved oxygen, turbidity, salinity, and total suspended solids.</p> <p>Surface pH ranges between 7.28 - 8.5, while bottom pH ranges between 7.78 – 8.4.</p> <p>Surface temperatures range between 30°C – 32°C, with bottom temperatures ranging from 28.6°C – 31.15°C.</p> <p>Dissolved oxygen values range from 4.5 – 7.78 mg/L at the surface and 4.68 – 6.74 mg/L at the bottom.</p> <p>Turbidity ranges from 0.25 – 10.03 NTU at the surface and 1.15 – 14.32 NTU at the bottom.</p> <p>Salinity ranges between 19.4-29‰ at the surface and 27.6-29‰ at the bottom.</p> <p>Total suspended solids range from 1-12 mg/L at the surface and 0-22 mg/L at the bottom.</p> <p>Overall, the majority of water quality values are within the required standards outlined in PPRI No.22/2021, Appendix VIII.</p> <p>Based on daily recorded turbidity data, the estimated TSS values range from 0.32 to 41.99 for the surface layer and from 0.81 to 49.24 for the bottom layer. Despite the presence of some data outliers, the calculated monthly average Total Suspended Solids (TSS) from daily surveys comply with the required quality standards outlined in Government of Indonesia</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>Regulation No. 22/2021, Appendix VIII (80mg/l). These outliers are primarily attributed to natural factors such as river inflow conditions, meteorological factors, and tidal movements.</p> <p>Higher turbidity/TSS values were observed at locations affected by the Cipunagara and Genteng river basins (T1, T2, T3, and T4 points on the east side of Patimban Port) and the Tanjung Pura River (T8 and T9 points on the south side of Patimban Port), particularly in the bottom measurements.</p>
6.	On-shore facility development					
6A	Increasing water run-off rate	No flooding	Onshore facility development	<p>a. Installation of drainage for draining water run-off.</p> <p>b. Optimization of RTH (Green Open Space) at unused open land.</p> <p>c. Coordinating with Directorate General of Highways (Direktorat Jenderal Bina Marga) and Irrigation Agency, related to drainage construction at the seaport site.</p>	<p>Direct monitoring on the state and function of drainage channel and RTH (Green Open Space).</p> <p>[DGST]</p>	<ul style="list-style-type: none"> ❖ <u>Implemented Environmental Management/Mitigation Measures</u> <ul style="list-style-type: none"> - Providing drainage channel at KSOP Class II Patimban office (Temporary Administration Building) on built reclamation at phase I-1.     <p>Drainage channel construction land</p> <p>- Landscaping application at KSOP office (Temporary Administration Building) on reclamation land and Construction office of Wika-PP including grass planting (strip sodding) and shading with trees. These activities had purpose to provide green open area (RTH).</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						 <ul style="list-style-type: none"> ❖ <u>Implemented Environmental Monitoring</u> <ul style="list-style-type: none"> - For about 11.977,8 m² or around 38,95% of total office area (temporary administration building) at reclamation land; And around 942,62 m² or around 34,92% of total office area at WIKA-PP office in PKG 3. - The onshore facility development is currently limited to the construction of outer roads. In addition, KSOP Class II Patimban is presently building the drainage to anticipate the potential of water runoff and prevent flooding.
6B	Public unrest	No public unrest occurrence	On-shore facility development	<ul style="list-style-type: none"> a. Develop a new irrigation channel to replace disconnected irrigation channels affected by On-shore facility development. b. Develop underpass/fly over or altering the road route of public access road, that crosses with the Patimban seaport access road. c. Develop grievance redress center/fast response team to accommodate and respond to public unrest related to 	<ul style="list-style-type: none"> a. Monitoring of new irrigation channel as replacement of disconnected irrigation channel; b. Monitoring underpass/flyover at the public access road which crosses with the Patimban seaport access road c. Monitoring on number of people who have concerns over the on-shore facility development activity. d. Monitoring conducted by interview utilizing the questionnaire toolkit (primary data); e. Monitoring the amount of people protesting and demonstrating against the initiator representative office, 	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <p>Package 4 Contractor who built the access road had been developing the new irrigation channel to replace disconnected irrigation channels affected by the development of the access road. In addition, the access road development construction was completed by the end of October 2020.</p>  <p>Irrigation channel under the access road development</p> <p>The onshore facility development is currently limited to the construction of outer roads. In addition, KSOP Class II Patimban is presently building the drainage to anticipate the potential of water runoff and prevent flooding.</p>

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				<p>the Patimban Seaport development.</p> <p>d. Organize community discussion forums with local government to resolve problems related to the development activity.</p> <p>[DGST]</p>	<p>gained from information achievable from local government or office representative (as secondary information and/or data).</p> <p>f. For information and data that needs to be explored more deeply, an in-depth interview shall be conducted with key informants, such as with local elderly representatives.</p> <p>g. The sampling population is calculated purposively.</p> <p>[DGST]</p>	<p>run-off and prevent flooding. Therefore, we assume that no public unrest may occur due to onshore facility development.</p>
Managed other environmental impact						
CONSTRUCTION PHASE						
2.	Procurement of Labor and Basecamp operation					
2A	Deterioration of seawater quality	The worker's domestic waste does not pollute seawater.	Procurement of labor and basecamp operation	<p>Installation of portable toilet and wastewater processing facility such as septic tank and its maintenance</p> <p>[CP5, CP6]</p>	<p>Monitoring on maintenance situation of sanitary facilities, and wastewater management facilities.</p> <p>[CP5, CP6]</p>	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <p>- Installation of portable toilets</p> 

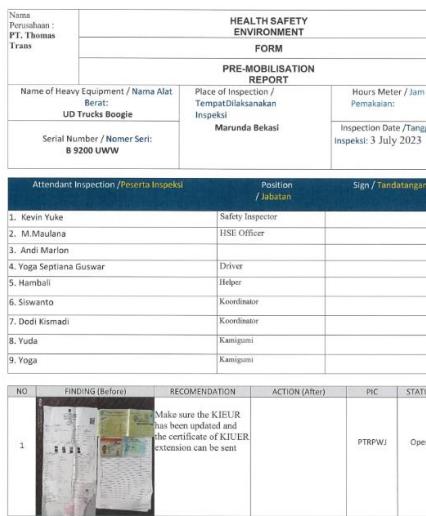
NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>- Installation of wastewater processing facility for administration office.</p>  <p>❖ <u>Implemented Environmental Monitoring</u></p>    <p>Documentation of maintenance of closet and urinous/sanitation facility at administration office</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
2B	Appearance of infectious diseases.	The number of patients and infectious diseases is not increasing related to workers in the construction phase.	Procurement of labor and Basecamp operation	<p>a. Coordinating with related institution and NGO regarding HIV/AIDS prevention program, include socialization on sexual infectious diseases prevention.</p> <p>b. Coordinating with related institutions on treatment of sexual infectious disease patients, gonorrhea, and syphilis by injection and oral method in the Pusakanegara public health center (Puskesmas). Routine examination (every 3 months) by VCT (Voluntary Counseling and Testing) method.</p> <p>c. Cooperating with Warga Peduli AIDS (WPA) – HIV/AIDS Community Awareness at the village level to conduct ODHA positive activity</p>	<p>a. Collecting report about implementation of HIV / AIDS prevention program.</p> <p>b. Collecting maintenance report of sanitary facility, wastewater management facility, and garbage dump.</p> <p>c. Identifying the number of patients compared with data before construction.</p> <p>[CP5, CP6]</p>	<p>The implementation of the appearance of infectious diseases, including the HIV / AIDS prevention program has been prepared for Contractor of Package 5 and Contractor of Package 6.</p> <p>Implementation of Package 5</p> <p>In December 2023, the Contractor of Package 5 has conducted socialization activities (Small group session) on HIV/AIDS awareness to 50 employees and subcontractors. The socialization was conducted by a dedicated HIV Expert from Contractor Package 5 accompanied by HSE team. The target of workers included 50 people /month.</p> <p>Implementation of Package 6</p> <p>During December 2023, Package 6 Contractor held socialization activities, including small group discussions, to raise awareness about HIV/AIDS. A total of 61 employees and subcontractors participated, while 217 employees attended the Large Group Session. The HIV/AIDS task force focused on implementing HIV/AIDS Prevention measures, including information, education, and communication about the definition, transmission, symptoms, and prevention of HIV/AIDS. The session concluded with discussions and the distribution of condoms.</p>  <p>HIV/AIDS Socialization to Contractor Package 5 Worker</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				<p>(People with HIV / AIDS), such as gathering activity.</p> <p>d. Developing sanitary facility, temporary garbage collection place (TPS), and processing facility</p> <p>[CP5, CP6]</p>		 <p>HIV Awareness Event of Contractor Packages 6</p>
3. Heavy equipment and materials mobilization						
3A	Road damage	Minimized road damage.	Equipment and materials mobilization	<p>a. Minimizing transporting of equipment and material to prevent excessive load in accordance with road capacity.</p> <p>[CP5, CP6]</p>	<p>Monitoring directly of road condition Analysis based on consultant survey</p>	<p>The road damage affected by the project was monitored periodically. During the period of October – December 2023, The Contractor of Package 5 and 6 in preparation for the monthly environmental monitoring period. Heavy equipment and material mobilization vehicles have been using the temporary access road. Meanwhile, the road condition showed no damage caused by the Patimban Port activity (No road damage was reported from October to December 2023).</p>

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	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
				<p>b. Material transportation for construction shall be based on road class and driving license.</p> <p>c. Heavy equipment shall meet the requirement of Directorate General of Land Transportation regarding technical guidelines for the massive vehicle operation on the road (Ministry of Transportation Regulation Number PM 32 Years 2016).</p> <p>d. Rehabilitation of road if there is damage caused by project activity.</p> <p>e. Vehicle using tarpaulin.</p> <p>f. Coordinating with Directorate General of Highways (<i>Direktorat Jenderal Bina Marga</i>) and Irrigation Agency of Subang Regency in managing (repairing) if there is Road damage.</p>		Packages 5 and 6 chose the best route for vehicle access based on the tonnage of the vehicle road to prevent road damage along the access road. All drivers had a driving license, and all vehicles equipped with KIR, fit passing the authorized proper test. Road damage caused by mobilization activity or material transporting was repaired. The road damage monitoring showed that the monitoring met the recommendation in RKL and RPL to minimize the road damage. Heavy equipment and material mobilization of Contractor Package 5 and 6 uses the flyover access road.

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				[CP5, CP6]		
3B	Increasing noise.	Noise intensity, according to Ministerial decree of environment ministry No. Kep. 48/MENLH/II/1996.	Heavy Equipment and materials mobilization.	<p>a. Heavy equipment and materials mobilization using Patimban seaport construction access road which is relatively quiet and away from settlements.</p> <p>b. Heavy equipment and materials mobilization are not conducted in convoy.</p> <p>c. Vehicle speed setting.</p> <p>d. Using proper vehicle.</p>	<p>Conducting noise laboratory analysis, the results shall be compared with the noise standard referred in Ministerial Decree of Environmental (Kepmen LH) No. 48 year 1996. Furthermore, monitoring results shall be converted into average values and compared with baseline result to see the tendency of environment quality change and controlled status in comparison with the threshold level.</p> <p>[CP6]</p>	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <ul style="list-style-type: none"> - Mobilization of materials used the patimban access road which is relatively quiet and away from settlements of which construction had been accomplished (by CP4) to avoid local road usage;   <ul style="list-style-type: none"> - Heavy equipment and materials mobilizations are not conducted in convoy.  <ul style="list-style-type: none"> - Providing sign board for limiting the speed of project vehicles, especially in terms of trucks loaded with construction materials.  <ul style="list-style-type: none"> - Inspection to ensure proper vehicle.

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	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
						<p></p> <p>❖ <u>Implemented Environmental Monitoring</u></p> <p>Noise level sampling was conducted in both September 2023 and December 2023. The measurements from both sampling indicate that the noise levels within the port area comply with quality standards (70dBa), with values ranging from 45.1 to 65.3 dBa in September 2023 and from 52.5 to 69.3 dBa in December 2023</p>

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						 <p>Documentation of noise intensity measurement</p>
Note: More detail is described in subchapter 2.4.						
4	Reclamation and Marine Facility Construction (Supplementary Note on Approved AMDAL/EIA)					
4A	Disturbance of marine life (Nekton and Benthos)	Marine life is not much disturbed by the project	Reclamation and marine facility construction.	N/A	<p>Monitoring nekton and benthos then comparing with baseline survey result</p> <ul style="list-style-type: none"> ■ at 5 site locations at the sea for nekton (N1-N5) in 6 monthly period. ■ at 10 site locations at the sea for benthos (S4-S13) in yearly period as transition monitoring. [CP6] 	<p>❖ <u>Implemented Environmental Monitoring</u></p> <p>The diversity index (H') for nekton ranged from 0.102 to 1.006. Regarding the equitability index (E'), values across all locations ranged from 0.109 to 0.388, and the dominance index ranges from 0.163 at location N4 to 0.883 at location N1.</p> <p>In the December 2024 sampling period, benthos diversity index (H') values in both dumping and port areas ranged from 0 (B12) to 1.64 (B8). For the equitability index (E'), locations B9 and B10, situated on the east side of Patimban Port, exhibit values of 1, indicating abundant species presence. However, other locations range from 0 to 0.92. The dominance index ranges from 0.33 at location B9 to 1 at location B12, suggesting individual species dominance in certain areas.</p>
Note: More detail is described in subchapter 2.5 and 2.6.						

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
5.	Dredging and Disposal (Supplementary Note on Approved AMDAL)					
5A	Disturbance of marine life (Nekton and Benthos) <u>Note:</u> Previously this impact was Supplementar y Note on Approved AMDAL/EIA	Sediment quality is not deteriorated	Dumping activity	N/A	a. Monitoring of dredging material sediment quality before dumping b. Bathymetry survey in dumping location [CP1]	<p>❖ <u>Implemented Environmental Monitoring</u></p> <p>In the December 2024 sampling period, sediment tests were conducted on 10 samples (S4-S13), revealing several parameters that fail to meet quality standards as per the Canadian Sediment Quality Guidelines for the Protection of Aquatic Life interim Sediment Quality Guideline (ISQG), Probable Effect Level (PEL), and Australian Government Screening Level National Assessment Guidelines for Dredging (NAGD).</p> <p>Arsenic levels at all 10 test locations exceeded the standards outlined in the ISQG guidelines. Additionally, only location S7 recorded mercury levels surpassing the ISQG standard, while locations S5 and S9 exceeded the mercury standards according to NAGD criteria.</p> <p>Result of sediment particle size distribution is categorized into five groups: gravel, sand, silt, clay, and material finer than the No. 200 sieves. Gravel size ranges from 0.08 to 1.22, sand size ranges from 0.01 to 53.66, silt size ranges from 31.71 to 62.81, clay size ranges from 1.56 to 58.88, and material finer than No. 200 sieves ranges from 45.12 to 99.9.</p> <p>Note: More detail is described in subchapter 2.7.</p>
6.	On-shore facility development					
6A	Deterioration of air quality (TSP and emission)	Concentration of SO ₂ , CO, NO ₂ , and TSP doesn't exceed air quality standard based on Government regulation No. 41 year of 1999 on Air pollutions control	On-shore facility development	a. Maintenance of trucks and equipment to keep them in good condition. b. Using tarpaulin sheets whenever transporting construction materials. c. Providing guardrail made of iron sheeting with a minimum height	Conduct air quality measurement and laboratory analysis, after which the results shall be compared with air quality standards based on Government Regulation No. 22 of the year 2021 in Annex. VII. Furthermore, monitoring results will be compared with baseline result in order to see the tendency of environment quality trend and managed status	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <p>- Maintenance of trucks and equipment to keep them in good condition.</p> 

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	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
				<p>of 2.5 meters (if necessary).</p> <p>[DGST, CP5, CP6]</p> <p><u>[CP6]</u> <u>Note:</u> The regulation for ambient air quality standard guideline was amended, from Government Regulation no.41/1999 to Government Regulation no.22/2021 in Annex VII</p>	<p>by comparative analysis with the standard threshold.</p> <p>- Using tarpaulin sheets during material construction transportation</p>  <p>- Providing guardrail made of iron sheeting with a minimum height of 2.5 meters (if necessary).</p>  <ul style="list-style-type: none"> ❖ <u>Environmental monitoring of air quality:</u> <p>The air quality samplings are conducted in September 2023 and December 2023.</p> <p>The parameters of air quality namely SO₂, CO, TSP, PM10, and TSP at the four locations were found to meet the quality standards outlined in PPRI No.22/2021, Appendix VII. The four locations namely: the entrance gate to the port area (AN1), near the settlement area vicinity (AN2), the access road to the port area (AN3), and the PICT port area (AN4).</p> <p>Measurements of SO₂ from both periods indicate that levels within the port area are within quality standards (75), with values below the laboratory detection limit (<29). Measurements of CO from both periods also demonstrate compliance with quality standards (4000), with values ranging from 172 to 275 in September 2023 and from 115 to 286 in December 2023. Similarly, measurements of NO₂ from both periods show that levels within the port area meet quality standards (65), with values below the laboratory detection limit in</p>	

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>both September 2023 and December 2023. Additionally, measurements of PM10 from both periods indicate compliance with quality standards (75), with values ranging from 16.2 to 27.6 in September 2023 and from 18.8 to 26.4 in December 2023. Finally, measurements of TSP from both periods also indicate adherence to quality standards (230), with values ranging from 39.2 to 53.1 in September 2023 and from 33.9 to 43.4 in December 2023 within the port area.</p> <p>The recent highest CO levels were recorded at location AN1 (front gate road access) at 286 µg/m³. Similarly, the recent highest PM10 levels were recorded at AN1 with a value of 26.4 µg/m³. As for the TSP (dust) parameter, the highest levels were also observed at AN1, registering at 43.4 µg/m³. These elevated levels can be attributed to heavy traffic activity along the Patimban Port access road and the Pantura road.</p> 
6B	Increasing noise	Noise level stays below environment quality standard based on Ministerial Decree of Environmental (Kepmen LH) No 48	On-shore facility development	a. Regular maintenance of trucks and equipment to keep them in good condition and operational.	The results of noise level analysis shall be compared with the noise quality standard based on Ministerial Decree of Environmental (Kepmen LH) No. 48 year 1996.	<p>Notes: Described more detailed in Sub Chapter 2-3</p> <p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <ul style="list-style-type: none"> - Maintenance and inspection of trucks and other heavy equipment to keep them in good condition.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
		Year 1996 about Noise level standard.		b. Avoiding construction activities that cause noise at night, such as pile mounting. [DGST, CP5, CP6]	Furthermore, monitoring results shall be converted into average values and compared with the baseline data to see the tendency of environment quality change and managed status with the threshold level. [CP6]	<p>❖ <u>Implemented Environmental Monitoring</u></p> <p>Noise level sampling was conducted in both September 2023 and December 2023. The measurements from both periods indicate that the noise levels within the port area comply with quality standards (70dBa), with values ranging from 45.1 to 65.3 dBA in September 2023 and from 52.5 to 69.3 dBA in December 2023</p>  
6C	Deterioration of seawater quality	Seawater quality will not deteriorate drastically because of project activity.	On-shore facility construction	Reducing or regulating wastewater discharge volume from former fishpond location during landfilling process. [DGST, CP5, CP6]	Conducting sampling of seawater quality, after which the results are compared with environmental standard based on Government Regulation No.22-year 2021 in Annex VIII.	<p>❖ <u>Implemented Environmental Management/Mitigation Measures</u></p> <ul style="list-style-type: none"> - Environmental management was implemented by providing temporary retention pond and using pump to control discharge volume.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
					<p>Furthermore, monitoring results shall be converted into average values and compared from time to times to see the tendency of environment quality change and control status with the threshold level.</p> <p>[CP6]</p>	 <p>Retention pond before discharging to sea.</p>  <p>Controlled dewatering of former fishpond at proposed temporary yard area.</p> <p>❖ <u>Implemented Environmental Monitoring</u></p> <p>Recent quarterly sampling activities were conducted in December 2023, encompassing four offshore dumping location and eight locations within the port area, resulting in a total of 12 samples collected.</p> <p>The analysis of seawater quality samples reveals that most parameters tested meet the quality standards outlined in PPRI No.22/2021, Appendix VIII, except for Transparency. Notably, mercury levels exceed the quality standards stipulated by Japan Standard.</p>

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	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
						<p>During the monitoring period, fluctuations were observed in certain parameters at each monitoring location, particularly in Transparency and coliform parameters. However, values for other parameters generally remain below the laboratory detection limit.</p> <p>Regarding Transparency, locations around the dumping area (W7-W10) generally exhibit values meeting quality standards (>3 m), ranging between 8 – 12 m. Conversely, Transparency values around the port area typically do not meet the quality standard, ranging between 1-3 m. The variance is attributed to sediments transported by rivers that flow into the waters of Patimban Port, namely the Cipunegara River, Genteng River, and Tanjung Pura River, which impact the transparency of seawater.</p> <p>Six seawater quality parameters were monitored to compare surface and bottom conditions: pH, temperature, dissolved oxygen, turbidity, salinity, and total suspended solids.</p> <p>Surface pH ranges between 7.28 - 8.5, while bottom pH ranges between 7.78 – 8.4.</p> <p>Surface temperatures range between 30oC – 32 oC, with bottom temperatures ranging from 28.6 oC – 31.15 oC.</p> <p>Dissolved oxygen values range from 4.5 – 7.78 mg/L at the surface and 4.68 – 6.74 mg/L at the bottom.</p> <p>Turbidity ranges from 0.25 – 10.03 NTU at the surface and 1.15 – 14.32 NTU at the bottom.</p> <p>Salinity ranges between 19.4-29 o/oo at the surface and 27.6-29 o/oo at the bottom.</p> <p>Total suspended solids range from 1-12 mg/L at the surface and 0-22 mg/L at the bottom.</p> <p>Overall, the majority of water quality values are within the required standards outlined in PPRI No.22/2021, Appendix VIII.</p> <p>Based on daily recorded turbidity data, the estimated TSS values range from 0.32 to 41.99 for the surface layer and from 0.81 to 49.24 for the bottom layer. Despite the presence of some data outliers, the calculated monthly average Total Suspended Solids (TSS) from daily surveys comply with the required quality standards outlined in Government of Indonesia Regulation No. 22/2021, Appendix</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>VIII (80mg/l). These outliers are primarily attributed to natural factors such as river inflow conditions, meteorological factors, and tidal movements.</p> <p>Higher turbidity/TSS values were observed at locations affected by the Cipunagara and Genteng river basins (T1, T2, T3, and T4 points on the east side of Patimban Port) and the Tanjung Pura River (T8 and T9 points on the south side of Patimban Port), particularly in the bottom measurements.</p> <p>Note: Detail description is reported in Subchapter 2.1 and 2.2</p>
6D	Disruption of terrestrial fauna (bird)	Presence of habitats for terrestrial fauna	On-shore facility development	<p>a. Providing new habitat (such as plant mangrove) for terrestrial fauna and for preservation of their habitat.</p> <p>b. Workers are not allowed to disturb terrestrial fauna around activity locations.</p> <p>[a; DGST, b; CP5, CP6]</p>	<p>a. Reporting of the newly created habitat.</p> <p>b. Direct monitoring in the fields.</p> <p>[DGST]</p>	<p><u>Implementation:</u></p> <ul style="list-style-type: none"> ❖ Environmental management was once implemented by PTRPW/CP1 and TAW/CP2 by planting mangrove at South Sea wall (construction area) in April 2021 and adjacent area to TOYO-Adhi Karya workshop at the same period.  <p>❖ Monitoring fauna was conducted.</p> <p>The total type of fauna monitored during this period was recorded as 45 species, consisting of 6 types of mammals, 29 types of avifauna, 3 types of amphibians and 7 types of reptiles. Based on location, the highest fauna composition is found at location F#03 (former rice fields and ponds) and the lowest at location F#01 (shrubs/bushes). Based on family, mammal groups/taxa are divided into 5 families with the largest number of species in the Viverridae family. The group of birds/taxa (avifauna) is divided into 20 families with the largest number of species in the Apodidae, Ardeidae and Estrildidae families, each with 3 species. Amphibian groups/taxa are divided into 2 families with the largest number of species in the Ranidae family. Reptile groups/taxa are divided into 6 families with the largest number of species in the Colubridae family. As for the protection status, there are 2 types of mammals and 5 types of avifauna that are protected based on Government Regulation Number 7 of 1999; Meanwhile, based on</p>

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						<p>the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P-106/2018, only 1 type of mammal is protected. Based on international trade status, there are 5 fauna species included in the CITES Appendix (effective from May 2023); with details: 1 mammal species including App. I, 1 mammal species and 2 reptile species including App. II and 1 mammal species including APP III. Based on global rarity status, there are 44 species included in the IUCN Red List (version 2022-2) with details: 1 mammal species included in the NT/Near Threatened category and 5 mammal species, 29 avifauna species, 2 amphibian species and 7 reptile species included in the LC/Least Concern category.</p>  <p style="text-align: center;">Fauna survey documentation</p>
6E	Disruption of terrestrial flora	Presence of habitats for terrestrial flora	On-shore facility development	<p>a. Providing new habitat (such as planting mangroves) for terrestrial flora and maintain that habitat. b. Workers are not allowed to disturb terrestrial flora around the activity locations.</p>	<p>Reporting of the newly created habitat. [DGST]</p>	<p><u>Implementation:</u></p> <ul style="list-style-type: none"> ❖ The environmental management was implemented by TAW/CP2 and Wika-PP/CP3 (phase I-1) in respect of policies to avoid all works activities at mangrove area, in order not to disturb its habitat. <p>Another activity that had been conducted was planting mangrove at south seawall by PTRPW/CP-1 in April 2021 and at adjacent Toyo-Adhi-Wakachiku workshop by TAW/CP-2 (phase I-1)</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				[a; DGST, b; CP5, CP 6]		   <p>Existing mangrove area at adjacent project area, some of those were planted by TAW/CP2</p> <p>❖ Implemented environmental monitoring on flora.</p> <p>Based on data monitoring of terrestrial biological conditions (flora and fauna) in the period October 2023 has been carried out in 4 (four) locations which are considered to represent land cover (habitat) conditions around Patimban Harbor, including scrub/shrubs, ex-rice fields and mangrove ponds.</p> <p>The total number of plant species monitored during this period was recorded at 110 species which were divided into 6 habitat types, namely: Climbers (14 species), Epiphytes (1 species), Herbaceous (41 species), Palms (2 species), Shrubs (17 species) . species) and Trees (35 species).</p> <p>Based on location, the highest flora composition was at location F#01 (Grass/Shrubs) and the lowest was at location F#04 (Mangrove).</p> <p>Furthermore, Flora Composition Based on Botanical Taxa Overall, the total flora found and identified can be grouped into 2 taxa, namely Pteridophyta (1 family and 1 species) and Spermatophyta which are divided into Monocotyledonae (6 families and 18 species) and Dicotyledonae (34 families and 91 species).</p> <p>For Flora Composition Based on family, the types of flora monitored are grouped into 41 families. The largest species composition is in the Fabaceae family (20 species).</p> <p>Flora Composition Based on Conservation Status Based on its protection status, there are no plant species that are protected species either based on Government Regulation Number 7 of 1999 or</p>

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						<p>Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P-106/2018.</p> <p>In addition, no species are included in the CITES Appendix (effective from May 2023). Meanwhile, based on global rarity status, there are 51 species included in the IUCN Red List (2022-2 version) with details: 2 species are included in the EN/Endangered category, 47 species are included in the LC/Least Concern category and 2 species are included in the DD/Deficiency category.</p> <p>At Mangrove Location F#04 (natural mangrove), from the results of the vegetation analysis carried out it can be seen that the species with the highest INP are as follows: herbs and seedlings (n/a), poles of the White Apis species (<i>Avicennia alba</i>) and trees in Black Flames (<i>Avicennia marina</i>). The total density values of the species present are as follows: poles (1,600 indv/ha) and trees (750 indv/ha). The species diversity index (H') values are as follows: herbs and seedlings (n/a), poles (0.562) and trees (0.673). Thus the level of species diversity is in the low category (<1). Meanwhile, the species evenness index (E) values are as follows: herbs and seedlings (n/a), poles (0.811) and trees (0.971); falls into the almost even category. As a form of concern for environmental sustainability, the management has carried out a mangrove planting program at the back of the breakwater in the KSOP area. The type planted was Red Mangrove (<i>Rhizophora mucronata</i>) with the number of individuals planted at that time amounting to 750</p>

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						<p>seeds.</p> 

OPERATION PHASE

Operational phase issue is presenting the transition monitoring activity which as included the environmental monitoring for operational phase

Managed Significant Impacts (referred to EIA)

7. Procurement of Labor						
7A	Opening job and business opportunity	People affected/local people that recruited as workers > 30%)	Operation workers recruitment	a. Obligating BUP (Port Business Entities) to prioritize local workers from the people affected as required, educational background, qualification needed, and inclusion of workers social assurance, also payment according to Upah	b. Identifying local workers that hired c. Sample number is determined by purposive sampling, which the determination of sample is based on the research needs and	<p>The container operations were planned to be commenced from 2024, however, currently PPI is the only supporting Tol Laut vessel with truck losing operation scheme, so at this point, it has minimal impact to the port environment, especially at the container terminal.</p> <p>To support the Tol Laut stevedoring activity, together with PBM, PT. PPI are using the local worker from Koperasi Sarana Patimban Raya to employ the surrounding local people who had been affected by the port development. Total number of local people that were employed by PPI is reaching 45 % (31 of 69 workers) already surpassing well over the 30% target.</p> <p>Meanwhile, The PT. PICT as Car Terminal Operator hiring local workers, reached up to 84 people, that is 80% of total 105 workers. The percentage of local people recruited within operation for Car Terminal operation recorded meet the standards (30%).</p>

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				<p>Minimum Karyawan / UMK (Regional Minimum Wage)</p> <p>b. Giving business opportunities to the people around the project site on the ±5 hectares area that have been provided in the seaport onshore.</p>	<p>taken from community that has been known its characteristic</p> <p>[Operator/KSOP]</p>	<p>The compensation paid followed suite to the Subang regional minimum wage, as baseline for shift basis rates, with social insurance being paid as well.</p>
8.	Sea Facility Operational					
8A	Sedimentation Note: Previously this impact was a Supplementar y Note on Approved AMDAL/EIA	Waters depth as planed.	Off-shore facility operation Note: Previously this impact as supplementary for reclamation and sea facilities construction activities in construction phase	<p>a. Doing maintenance dredging preserve the depth in the port basin (-14 meter) and in the port channel (-14 meter)</p> <p>(Supplementary Note on Approved AMDAL)</p> <p>b. Doing maintenance dredging for access channel for the fishing boats as well.</p> <p>c. Placing materials from dredging result to the dumping area location</p>	<p>a. Monitoring of dredging material sediment quality before dumping.</p> <p>b. Sediment sampling is conducted at 10 site locations at the sea (S7-S11) in yearly period.</p> <p>c. Bathymetry survey in dumping location</p> <p>[KSOP]</p>	<ul style="list-style-type: none"> ❖ <u>Implemented Environmental Management/Mitigation Measures</u> Maintenance of the shipping lane channel by dredging, still yet requires to determine the schedule (once in 5-10 years). ❖ <u>Implemented Environmental Monitoring</u> Environmental monitoring was implemented by CP6 with sediment sampling at 13 sites of Patimban waters area annually. <p>The information regarding sediment quality is described at subchapter 2.7</p>

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8B	Shoreline change	Shoreline change does not affect infrastructure damage or existing land	Off-shore facility operation	Building and maintaining revetments in shoreline area which is abraded.	a. Tracking shoreline along 5 km to the east and west of Patimban seaport, selected time for tracking is at the highest tide while monitoring. b. Measuring bathymetry periodically on the sailing line area of vessels and fisheries ships to know the sediment thickness during operational.	The tracking measurement line was conducted in October-November 2022. The bathymetric measurement is conducted once a year, including fishing boats navigation.
8.C	Fishing Ground Change	No report of fishing area disruption and/or decreasing of fishermens' production/income	Reclamation activity and offshore facility development	a. Making basic rumpon (artificial fish reef) according to the Regulation of Marine and fisheries ministry Republic of Indonesia No. 26/Permen-KP/2014 around Patimban waters out of DLKP (Regional Sphere of Interest) and DLKR (Area Work) Patimban seaport. b. Obligating BUP to do CSR to the fishermen community around the Patimban waters including TPI Kali Genteng,	Fields observation and interview to the fishermen of TPI Kali Genteng, Trumtum and Tanjung Pura about productivity in the rumpon installation location and CSR implementation then analyzed descriptively [Operator/KSOP] – Subcon Inasha Note: ▪ fishing ground and fish production survey is conducted every month at 4 TPI around Port Patimban Project area;	<ul style="list-style-type: none"> ❖ <u>Implemented Environmental Management/Mitigation Measures</u> <ul style="list-style-type: none"> - Rumpon (artificial fish shelter) installation is under preparation. Meanwhile, based on community assessment, the majority of the community requested for gillnet training (Rampus) as a program to restore their livelihood. Based on this demand, the Assembling Rampus Net training as part of the priority program for the community, has been conducted for ten batches of training with a total of 442 participants (as described in LRP training in 2020). ❖ <u>Implemented Environmental Monitoring</u> <ul style="list-style-type: none"> Fish catch survey is conducted monthly by Contractor of Package 6. Information is gathered from TPI and Middlemen. The highest record of yield from the Patimban sea water occurred in March 2023 during the baseline survey, reaching 8,116 kg/day. However, it's important to note that this value fluctuates. According to interviews, natural conditions such as tides and winds are factors that influence the yield. Result of fish production could be seen on below graphics along with documentary and map of patimban fishing ground

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
			Truntum and Tanjung Pura. [KSOP]	❖ Other source contributes to collect fish production data of DKP Subang region, that reported on fish production since 2016 – 2020 but only limited to data from TPI Truntum and TPI Kali Genteng.	 <p>Fishery auction at TPI Truntum & Kali Genteng as well as interview with the fishermen and middleman</p>	 <p>Map of fishing ground area in adjacent Patimban area</p>

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
8.D	Public unrest	No public unrest occurred	Off-shore facility operation	Socializing sailing channel from and head to Patimban seaport to the fishermen	<ul style="list-style-type: none"> a. Reporting the number of complaints b. Monitoring production and condition of fishermen <p>[Operator/KSOP]</p>	A drainage system and outer ring road have been built to accommodate the community access needs and prevent flooding, so it helps to maintain the public unrest level at the minimum.
11	Access Road Operation					
11.A	Land traffic disruption	Traffic jam is not occur as the effect of seaport access road operation	Access road operation	<ul style="list-style-type: none"> a. Optimizing truck waiting yard area b. Expanding crossing between Pantura road with seaport access road according to the criteria c. Placement of officer to arrange traffic in the entry and exit access of patimban seaport development location. d. Implementing ANDALLALIN / Analisis Dampak Lingkungan Lalu Lintas (Assessment Impact of Traffic) recommendation <p>[KSOP]</p>	<ul style="list-style-type: none"> a. Direct monitoring to the traffic. b. Giving information about accident number <p>[KSOP]</p>	<p>KSOP Class II Patimban manage the access road operation by assigning flagman and traffic control to manage the seaport access road with no traffic jam.</p>  <p>Road cleansing</p>  <p>Flagman to organize the traffic</p>

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	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						 Speed vehicle limitation information
11.B	Increasing noise	Noise level is below environment quality standard based on Kepmen LH No 48 Year 1996 about Noise level standard	Access road operation	<p>a. Optimize space for green activities.</p> <p>b. Organizing of vehicle speed</p> <p>c. Using proper vehicle</p> <p>(<i>Supplementary Note on Approved AMDAL</i>) If the noise level is above the Indonesian standard based on the noise monitoring and it is derived from the access road traffic, necessary measures such as installation of noise barrier shall be conducted.</p> <p>[KSOP]</p>	<p>Conducting noise intensity analysis, of which the results are compared with noise standard quality Kepmen LH No. 48 year 1996. Furthermore, monitoring results are evened to average and compared to check the tendency of environment quality change and critical level.</p> <p>[KSOP]</p>	<p>❖ <u>Implemented Environmental Monitoring</u></p> <p>Noise level sampling was conducted in both September 2023 and December 2023. The measurements from both periods indicate that the noise levels within the port area comply with quality standards (70dBA), with values ranging from 45.1 to 65.3 dBA in September 2023 and from 52.5 to 69.3 dBA in December 2023</p> 
11.C	Public unrest	No public unrest occurred	Access road operation	<p>a. Maintaining underpass/fly over on access road which is crossed with</p>	<p>a. Measurement of people number who feel worried about operational access road activity.</p>	A drainage system, fly over and outer ring road have been built to accommodate the community access needs and prevent flooding, so it helps to maintain the public unrest level at the minimum.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)	
	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)		
				Patimban seaport access road. b. Optimizing traffic in the crossing between Pantura road dan Seaport access road.	b. Measurement is done by interview using a questionnaire (primary data) from owner's representative and local subdistrict government with any secondary data. Measurement of people protest and demonstration number to the initiator representative office is obtained by notes and information from environment caretaker, village government, or initiator representatives (secondary data) c. Information and data that need to be explored more deeply, will be done deep interviews with key informants, such as with public figures. d. e. Sample numbers are determined by purposive sampling, which the determination of sample is based on the research needs and taken from community that has been known its characteristic. [KSOP]	[Operator/KSOP]	Complaints and problems were appropriately handled related to the completed access road development, and on 94 houses rehabilitation impacted by access road development (located at 45 houses in Pusakaratu Village, 12 houses in Kotasari Village, and 37 houses located in Gempol Village). The details of the complaint are shown in Table 30 Form on Record of Grievance Redress Mechanism.

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	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)		
Managed Other Environmental Impact							
5. Procurement of Labor							
5.A	Infectious diseases emergencies	The number of infectious diseases is not increased	Procurement of labor	<p>a. Coordinating with related institution and civil society organizations in the making and providing of HIV/AIDS prevention program, including holding socialization about sexual infectious diseases prevention</p> <p>b. Coordinating with related institutions to hold treatment for patients suffering sexual infectious diseases, gonorrhea, and syphilis by injection and oral method in the Pusakanegara public health center (Puskesmas). Routine examination (every 3 months) by VCT (Value Clarification Technique) method</p> <p>c. Cooperating with Warga Peduli</p>	<p>a. Compiling report about implementation of HIV / AIDS prevention program</p> <p>b. Compiling report regarding maintenance of sanitary facility, water waste management facility, and garbage dump.</p> <p>c. Identifying patient number and comparing with data before construction</p> <p>[Operator/KSOP]</p>	<p>The operator is under preparation for infectious disease emergencies, including the implementation of HIV/AIDS prevention program.</p> <p>Regarding Developing sanitary facility, temporary garbage collection place (TPS), and processing facility, the operator will report to KSOP Class II Patimban regarding sanitary facility and domestic waste from the portable toilets which operated in Patimban Car Terminal.</p>	

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)																												
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)																													
				<p>AIDS (WPA) at the village level to do many positive activity ODHA (People with HIV / AIDS), such as gathering activity. At this moment, WPA organization at the village level only exist in Patimban Village and Kotasari Village while WPA at District level has not formed yet.</p> <p>d. Developing sanitary facility, temporary garbage collection place (TPS), and processing facility</p>	[KSOP]																													
6. Sea Facilities Operational																																		
6A	Decreasing of Air Quality	The concentration of SO ₂ , CO, NO ₂ , and TSP doesn't exceed air quality standard based on Government regulations No. 41-year 1999 on Air pollutions control	Off-shore facility operation at seaport location	Planting and maintaining perennials to absorb pollutants around seaport area. [Operator]	Direct monitoring in the fields [Operator/KSOP]	<p>❖ Implemented Environmental Management</p> <p>Seaport area has been planting certain kinds of tree and grass after construction phase located around the temporary admin building.</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Type of vegetation</th> <th>unit</th> <th>qty</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Ketapang Kencana tree</td> <td>Pcs</td> <td>464</td> </tr> <tr> <td>2.</td> <td>Ketapang Laut tree</td> <td>Pcs</td> <td>10</td> </tr> <tr> <td>3.</td> <td>Pucuk merah tree</td> <td>Pcs</td> <td>338</td> </tr> <tr> <td>4.</td> <td>Cemara tree</td> <td>Pcs</td> <td>5</td> </tr> <tr> <td>5.</td> <td>The-tehan tree</td> <td>m</td> <td>1.332,84</td> </tr> <tr> <td>6.</td> <td>Gajah grass</td> <td>m2</td> <td>5.468,28</td> </tr> </tbody> </table>	No.	Type of vegetation	unit	qty	1.	Ketapang Kencana tree	Pcs	464	2.	Ketapang Laut tree	Pcs	10	3.	Pucuk merah tree	Pcs	338	4.	Cemara tree	Pcs	5	5.	The-tehan tree	m	1.332,84	6.	Gajah grass	m2	5.468,28
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1.	Ketapang Kencana tree	Pcs	464																															
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NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success	of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	
						   <p>Vegetation planting at seaport area with trees</p> <ul style="list-style-type: none"> ❖ <u>Environmental monitoring of air quality</u> <p>The air quality samplings are conducted in September 2023 and December 2023. The parameters of air quality namely SO₂, CO, TSP, PM10, and TSP at the four locations were found to meet the quality standards outlined in PPRI No.22/2021, Appendix VII. The four locations namely: the entrance gate to the port area (AN1), near the settlement area vicinity (AN2), the access road to the port area (AN3), and the PICT port area (AN4). Measurements of SO₂ from both periods indicate that levels within the port area are within quality standards (75), with values below the laboratory detection limit (<29). Measurements of CO from both periods also demonstrate compliance with quality standards (4000), with values ranging from 172 to 275 in September 2023 and from 115 to 286 in December 2023. Similarly, measurements of NO₂ from both periods show that levels within the port area meet quality standards (65), with values below the laboratory detection limit in both September 2023 and December 2023. Additionally, measurements of PM10 from both periods indicate compliance with quality standards (75), with values ranging from 16.2 to 27.6 in September 2023 and from 18.8 to 26.4 in December 2023. Finally, measurements of TSP from both periods also indicate adherence to quality standards (230), with values ranging from 39.2 to 53.1 in September 2023 and from 33.9 to 43.4 in December 2023 within the port area. The recent highest CO levels were recorded at location AN1 (front gate road access) at 286 µg/m³. Similarly, the recent highest PM10</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>levels were recorded at AN1 with a value of 26.4 µg/m3. As for the TSP (dust) parameter, the highest levels were also observed at AN1, registering at 43.4 µg/m3. These elevated levels can be attributed to heavy traffic activity along the Patimban Port access road and the Pantura road.</p> 
6B.	Deterioration of sea water quality	<p>a. Environmental and Forestry Ministry Decree no.68 Year 2016 about DOMESTIC wastewater quality standard.</p> <p>b. Sea water quality remains below environment quality standard based on GOI no.22-year 2021 in Annex VIII</p>	Off-shore facility operation	<p>a. Maintaining reception facility, IPAL (Wastewater Treatment Plant) in order to remain optimally functional.</p> <p>b. Managing waste from ships that transit and indirectly discharge waste to the sea, includes cooperation with licensed third</p>	<p>a. Sampling and lab analysis of IPAL's (Wastewater Treatment Plant) treated domestic wastewater.</p> <p>Sampling is still pending due to installation and technical agreement has not been approved.</p> <p>b. Conducting sea water quality sampling and lab analysis, of which the results are compared with the seawater quality</p>	<p>Notes: The information regarding air quality is shown in Sub Chapter 2-3</p> <ul style="list-style-type: none"> ❖ Implemented Environmental Management <p>Generated waste from Contractor Vessel is collected and disposed by licensed third party.</p> ❖ <u>Implemented Environmental Monitoring</u> <ul style="list-style-type: none"> - Sea water quality Environmental monitoring implemented by PT. Sucofindo laboratory as subcontractor of Contactor Package 6. Turbidity measurement to measure TSS conducted daily, and complete seawater quality sampling conducted quarterly.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
		about sea water standard quality		<p>parties for waste handling.</p> <p>[Operator]</p> <p>Note: Reception facility still yet to be established</p>	<p>standard based on GOI no.22-year 2021 in Annex VIII. Furthermore, monitoring results are converted into average values and compared over time to see the tendency of environment quality change and whether it is meeting the environmental standard.</p> <p>[Operator] – Subcon PT. Inasha</p>	 <p>Sea water quality sampling with van dorn tube and indirect measurement of TSS using turbidity meter.</p> <p>Sampling results from the sea water quality quarterly laboratory indicate that almost all parameters met the Indonesian standards, except for transparency and pH (exceed Japanese standard). Note: Further detailed description is reported in Subchapter 2.1</p>
6C	Sea traffic disruption	No disruption of fishermen ships and vessels passing through the sailing channel	Off-shore facility operation	<p>a. Developing security control plan including but not limited in installing sea traffic signs, safety regulation navigation, work safety training, and the possibility of oil spills</p> <p>b. Planning steps needed related with the presence of Pertamina's pipeline on the sailing channel.</p> <p>[KSOP]</p>	Direct monitoring	<p>Coordination with Navigation District Class I Tanjung Priok had been conducted at the early stage of port construction activity, on 20th February 2019, concerning the Discussion of the initial design of navigation aids placement for the sailing channel of Patimban Port.</p> <p>The contractor of Package 2 coordinated with Navigation District Class I Tanjung Priok Regarding Mobilization / Demobilization and Installation for Aid of Navigation including avoid Pertamina pipeline for sailing channel of Patimban Port.</p> <p>The arrangement of sea traffic in the sailing channel working area (Daerah Lingkup Kerja – DLKR) Patimban Port car terminal regulated by KSOP Class II Patimban.</p> <p>In addition, there was no material mobilization related to the Patimban port construction and operation.</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
6D	Waste generation	No waste pollution in the sea	Off-shore facility operation	<p>a. Accommodating and accepting waste from the ships in the reception facility, to be handed to the licensed third party.</p> <p>b. B3 waste such as a fluorescent lamp, ink cartridge, and other B3 waste are stored in B3 waste TPS (Temporary Waste Disposal) to be handed to the licensed third party.</p> <p>c. Domestic waste from offshore facilities activities are collected in the temporary storage, and will cooperate with the local sanitary agency</p>	<p>Monitoring the presence and function of RF (Receiving facility), TPS B3 (collection of toxic and hazardous waste/B3) and domestic collection</p> <p>[Operator/KSOP]</p>	<p>Although RF has yet to be provided waste handling management has already been applied for domestic and construction non-hazardous waste and hazardous waste by Wika-PP/CP3.</p> <p><u>Non-hazardous waste</u></p> <ul style="list-style-type: none"> ❖ Providing segregation dust bin located in temporary <i>admi</i> building; ❖ Providing segregation dust bin as many as 20 unit that is 5m³ per unit; ❖ Cooperate with local Bank Sampah Patimban to remove the waste to dedicated TPS under government authority. Waste removal in 2 times a week; ❖ Assigning some manpower to execute waste management; ❖ Reporting the activity in their monthly environmental report    <p>Segregation dust bin at office and construction area</p> <p>Temporary Solid Waste Storage (TPS)</p> <p>Cleaning manpower in collecting waste 3 times a week</p>
6E	Disturbance of Marine Life (Nekton and Benthos) <u>Note:</u> Previously this impact	Marine life is not much disturbed by the project	Sea/Marine facility operation <u>Note:</u> Previously this impact as supplemental	N/A	<p>Monitoring nekton and benthos then comparing with baseline survey result</p> <ul style="list-style-type: none"> ▪ at 5 site locations at the sea for nekton (N1-N5) in 6 monthly period. 	<p>Monitoring implementation</p> <p>The diversity index (H') for nekton ranged from 0.102 to 1.006. Regarding the equitability index (E'), values across all locations ranged from 0.109 to 0.388, and the dominance index ranges from 0.163 at location N4 to 0.883 at location N1.</p> <p>In the December 2024 sampling period, benthos diversity index (H') values in both dumping and port areas ranged from 0 (B12) to 1.64 (B8). For the equitability index (E'), locations B9 and B10, situated on the east</p>

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
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	was a supplemental note on approved AMDAL		y for dredging and disposal activities in the construction phase		<ul style="list-style-type: none"> ▪ at 5 site locations at the sea for benthos (S7-S11) in yearly period as transition monitoring. <p>[Operator/KSOP]</p>	side of Patimban Port, exhibit values of 1, indicating abundant species presence. However, other locations range from 0 to 0.92. The dominance index ranges from 0.33 at location B9 to 1 at location B12, suggesting individual species dominance in certain areas.
9	Access Road Operation					
9A	Decreasing of air quality (TSP and emission)	Air quality does not decrease because of operation	Access road operation	<p>a. Maintaining vehicle condition in order to remain in the good condition</p> <p>b. Planting trees along green road area</p> <p>[KSOP]</p>		<p><u>Implementation:</u></p> <ul style="list-style-type: none"> ❖ Environmental management to mitigate air quality (TSP and Emission) impact during heavy equipment and materials mobilization that had been carried out along access road and connecting bridge construction was reported by Wika-PP/CP3 in the period September 2022 as follows: <ul style="list-style-type: none"> ▪ Maintenance and inspection of trucks and other heavy equipment in order to keep them in good condition. ▪ Planting trees along the access road is still yet to be planned. However, the elevated access road construction has barrier as parapeted since the air quality result may be considered good. Moreover, the air ambient quality results so far has shown good condition, thus the requirement of planting trees maybe considered not an urgent necessity. ❖ Environmental monitoring The air quality samplings are conducted in September 2023 and December 2023. The parameters of air quality namely SO₂, CO, TSP, PM10, and TSP at the four locations were found to meet the quality standards outlined in PPRI No.22/2021, Appendix VII. The four locations namely: the entrance gate to the port area (AN1), near the settlement area vicinity (AN2), the access road to the port area (AN3), and the PICT port area (AN4). Measurements of SO₂ from both periods indicate that levels within the port area are within quality standards (75), with values below the laboratory detection limit (<29). Measurements of CO from both periods also demonstrate compliance with quality standards (4000), with values ranging from 172 to 275 in September 2023 and from 115 to 286 in December 2023. Similarly, measurements of NO₂

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						<p>from both periods show that levels within the port area meet quality standards (65), with values below the laboratory detection limit in both September 2023 and December 2023. Additionally, measurements of PM10 from both periods indicate compliance with quality standards (75), with values ranging from 16.2 to 27.6 in September 2023 and from 18.8 to 26.4 in December 2023. Finally, measurements of TSP from both periods also indicate adherence to quality standards (230), with values ranging from 39.2 to 53.1 in September 2023 and from 33.9 to 43.4 in December 2023 within the port area.</p> <p>The recent highest CO levels were recorded at location AN1 (front gate road access) at 286 µg/m³. Similarly, the recent highest PM10 levels were recorded at AN1 with a value of 26.4 µg/m³. As for the TSP (dust) parameter, the highest levels were also observed at AN1, registering at 43.4 µg/m³. These elevated levels can be attributed to heavy traffic activity along the Patimban Port access road and the Pantura road.</p> 
9B	Increasing of water run-off rate	No occurrence of excess water run-off	Access road operation	a. Strengthening the existing drainage condition (if necessary)	Direct monitoring for the condition of the drainage [KSOP]	<p><u>Implementation</u></p> <ul style="list-style-type: none"> ❖ The access road development is equipped with a drainage system to anticipate the potential of water run-off and prevent flooding.

NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
				b. Maintaining drainage [KSOP]		<p>❖ Construction of Side drain and Cross drain, as well as several retention ponds (from ex-site clearing basin or ponds), are still maintained to support the area's drainage system.</p>  <p>Box culvert in drainage system at pond's area Construction of Side drain, Cross drain Temporary retention pond</p>
9C	Alteration of land use/land conversion	The appearance of settlements and various public facilities and economic facilities around the access road location	Access road operation	a. Making guardrail along Patimban access road was constructed, but still provides underpass/overpass access, box curvet, or bridge for people access. b. Developing appropriate design which is regulated by Subang regency RTRW (Spatial Plan) c. Directorate General of Sea Transportation give suggestions to local government regarding land use policy around project area. [KSOP]	a. Direct monitoring to changes in land use that appropriate with RTRW (Spatial Plan) regulation of Subang regency. b. Monitoring and maintaining planted trees (park and protector road) [KSOP]	<p>a. The construction of the access road is carried out above ground level or known as pile slab and is equipped with a guardrail. b. The underpass has been built to make it easier for people who want to cross the access road safely. c. Patimban Port international stipulated in the National spatial plan as National Strategic Project, and judicial review for Subang Regency spatial plan revision to revise the status from feeder port to main port. d. ROW area aside access road has been restricted by panel wall, but at some location crossing with the existing road, there were underpasses provided for local people's accessibility. e. In addition, the outer ring road was built to accommodate community access.</p> 

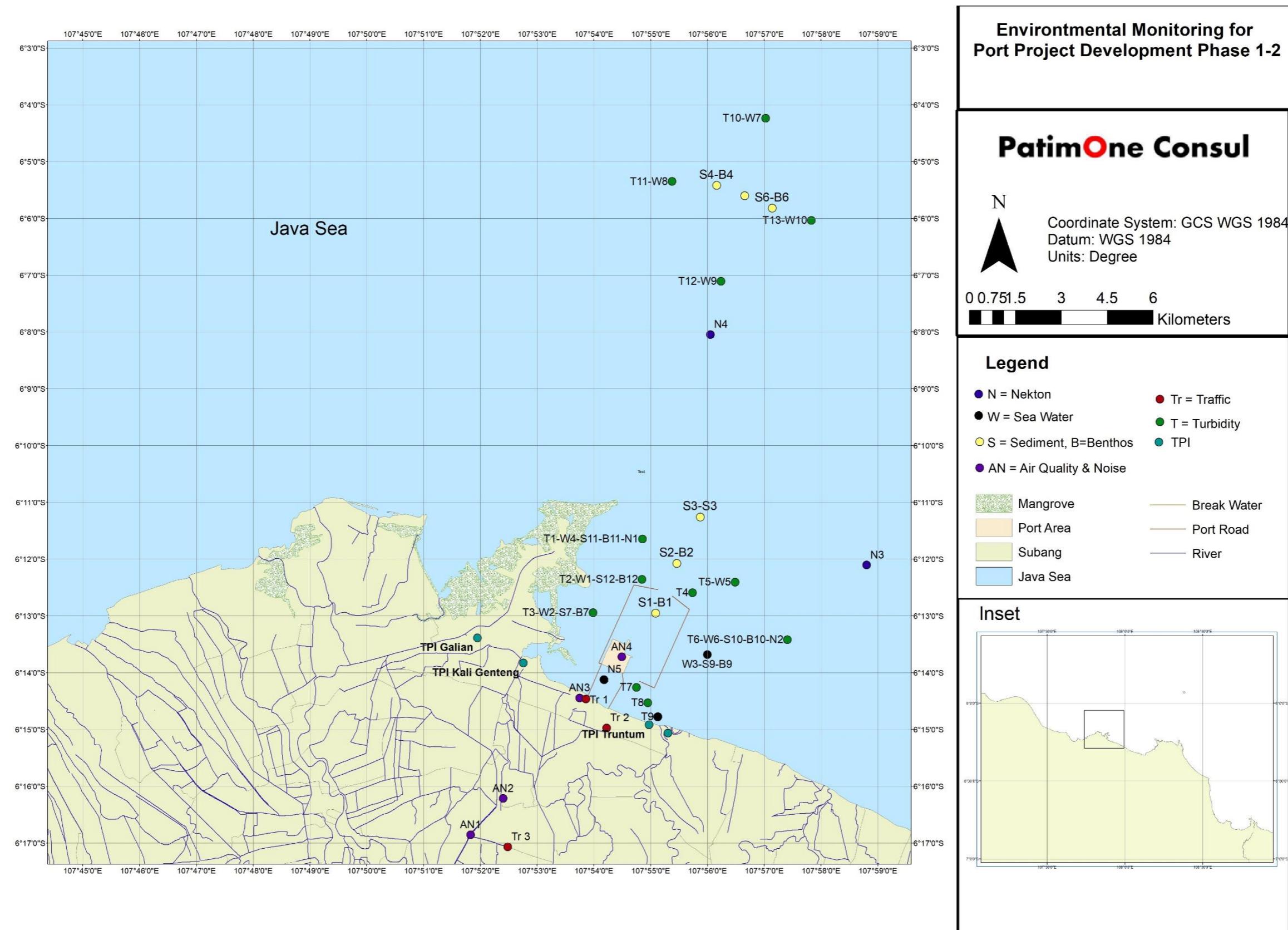
NO	Potential Environmental Impact			Descriptions of RKL/RPL		Implemented Mitigation Measures / Monitoring Results (Data and Photos are attached)
	Type of Impact	Indicators of success of Environmental Management	Impact source	Method of Environmental Management Plan (RKL)	Method of Analysis and Data Collection (RPL)	
						<p>Guardrail along the access road.</p>  <p>Underpass access</p>  <p>Panel wall as ROW boundary with the underpass</p>
9D	Road damage	Road damage can be minimized	Traffic on the access road operation	Coordinating with related institutions to conduct the increasing and repairing of road which is connected to seaport access road	Direct monitoring of roadway deterioration	<p>KSOP Class II Patimban manages the access road by regularly maintaining the access road condition so that vehicles can pass the access road.</p> <p>The road damage monitoring showed that the monitoring met the recommendation in RKL and RPL to minimize the road damage. There are no Heavy equipment and material mobilization for this period. The Contractor used the temporary access road then switched to flyover access road from October 2020. The contractor did not use the public road since June 2020 but used the temporary access road, and since October 2020, used the flyover access road.</p>

Note: DGST; Directorate General of Sea Transportation, Ministry of Transportation Republic of Indonesia

KSOP; Port Authority and Harbormaster Office (under DGST)

Operator; PT Pelabuhan Patimban Internasional

II. Details on Natural Environment



2.1. Sea Water Quality

Seawater quality monitoring is carried out every three months in accordance with the requirements outlined in the Environmental Impact Assessment (EIA) document. Within this timeframe, two rounds of sampling and analysis were conducted in September and December, encompassing 12 monitoring stations labeled from W1 to W12.

The sampling and laboratory analysis were conducted by PT Sucofindo, acting as the subcontractor for Contractor Package 6. Sampling results were screened against relevant Indonesian and Japanese standards.

The location of sampling can be seen in **Table 4** below:

Table 4. Sampling station location for sea water

No	Parameter	Sample ID	Location	Remark
1	Sea Water	W1	6°12'20.83"S, 107°54'51.79"E	West side of Patimban Port Area
2	Sea Water	W2	6°12'56.60"S, 107°53'59.33"E	
3	Sea Water	W4	6°11'38.62"S, 107°54'50.61"E	
4	Sea Water	W3	6°13'40.59"S, 107°56'0.29"E	East side of Patimban Port Area
5	Sea Water	W5	6°12'23.47"S, 107°56'29.02"E	
6	Sea Water	W6	6°13'23.76"S, 107°57'23.88"E	
7	Sea Water	W11	6°14'7.39"S, 107°54'11.00"E	South side of Patimban Port Area (near shoreline)
8	Sea Water	W12	6°14'45.99"S, 107°55'7.71"E	
9	Sea Water	W7	6° 4'11.75"S, 107°57'1.24"E	Surround dumping area
10	Sea Water	W8	6° 5'20.82"S, 107°55'23.50"E	
11	Sea Water	W9	6° 7'5.75"S, 107°56'14.37"E	
12	Sea Water	W10	6° 6'0.70"S, 107°57'50.52"E	

Source: Contractor of Package 6 Baseline Survey Report Rev.1 (June 2023)



Figure 2. Documentation for Seawater Quality Sampling

Source: Contractor of Package 6 Environmental Monthly Monitoring Report No. 3 Period of July 2023 Rev.1

Summaries of the seawater quality results for December are provided in Table 5. The results reveal variations in transparency among different monitoring sites. However, it is noteworthy that most other seawater quality parameter values generally remained within or below the stipulated Indonesian standards.

Regarding Transparency, locations around the dumping area (W7-W10) generally exhibit values meeting quality standards (>3 m), ranging between 8 – 12 m. Conversely, Transparency values

around the port area typically fall short of the quality standard, ranging between 1-3 m. This disparity can be attributed to the sediment carried by rivers that discharge into the waters of Patimban Port (Cipunegara, Genteng, and Tanjung Pura River), influencing the Transparency level of seawater.

Six seawater quality parameters were monitored to compare surface and bottom conditions: pH, temperature, dissolved oxygen, turbidity, salinity, and total suspended solids.

❖ Surface

- pH

Water with pH levels above 9 and below 4 is deadly to some aquatic organisms, especially fish. Anthropogenic activity which can influence pH in water includes the discharge of industrial pollutants directly into water.

Based on the measurement results, it is known that the pH level of seawater in the surface layer all still meets the Indonesian quality standards, with pH levels ranging from 7.28-8.5. The lowest pH level is at location W6, and the highest pH level is at location W12 (west side of the Patimban port). pH level at all locations also meets the Japanese standards requirements.

- Temperature on site

Temperature is an important factor in determining water quality; temperature can influence several other parameters and can alter the physical, chemical, and biological properties of water, including density, pH, metabolic rate and photosynthesis, salinity, conductivity, etc.

Measured temperatures range from 30 °C (at location W7 and W8) to 32 °C (at location W12), with measurement times around 07:16 am to 11:40 pm.

- Dissolved Oxygen on site

Dissolved Oxygen (DO) represents the amount of dissolved oxygen available in a water body. High levels of DO indicate good quality of water. DO is essential for the metabolism of microorganisms and for degradation of water pollutants in the form of organic materials. Low levels of DO indicate that waters are polluted.

The measured dissolved oxygen (DO) level ranged from 4.5-7.78 mg/L.

- Turbidity on site

Turbidity is a crucial parameter in sea water quality analysis, as it measures the cloudiness or haziness of seawater due to the presence of suspended particles, including sediments, plankton, and other fine matter. Turbidity in sea water is an essential aspect of water quality assessment, and it is typically measured in nephelometric turbidity units (NTU).

The presence of suspended particles in seawater can have various implications for marine ecosystems and coastal areas. High turbidity levels can be caused by natural processes such as coastal erosion, river inflows, or the resuspension of sediments due to wave action. Human activities, such as construction and dredging, can also contribute to increased turbidity in coastal waters.

Turbidity levels were measured within the range of 00.25 – 10.03 NTU with the highest turbidity levels typically observed in the vicinity of the port area. These levels are influenced by the influx of water from the surrounding rivers (W2, W11, W12).

The survey results and a comparison with the previous survey conducted in March can be found in the figure below.

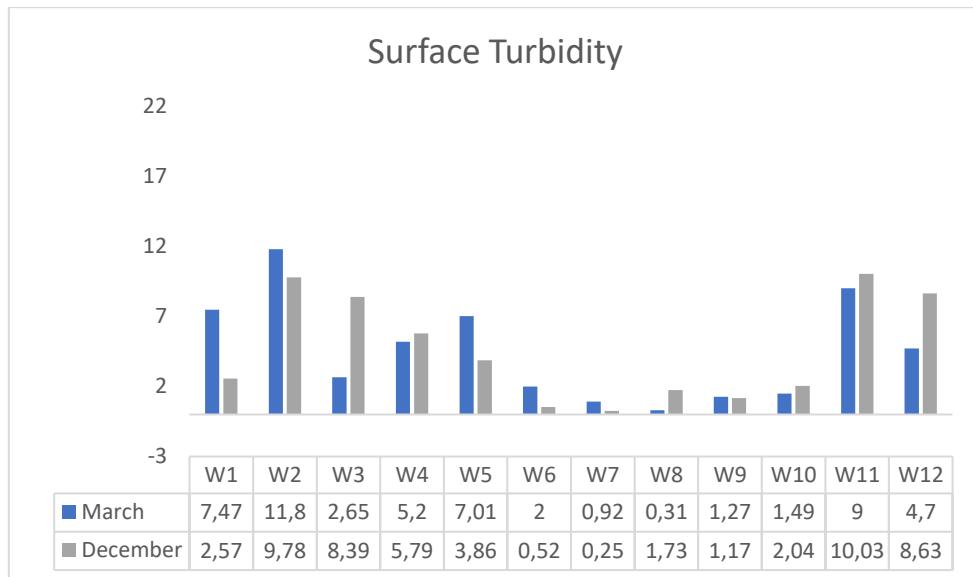


Figure 3 Surface Turbidity Comparison

From the figure above, it clearly shows fluctuations in turbidity parameters.

- Salinity in site

Salinity in sea water quality refers to the measurement of the concentration of dissolved salts, primarily sodium chloride (table salt), in seawater. Salinity is a crucial parameter that affects the physical and chemical properties of seawater and plays a significant role in marine ecosystems and ocean circulation.

Measured salinity range during this sampling range from 19.4-29 ‰.

There is no significant difference in the value of salinity between locations adjacent to the estuary/port area and offshore locations (around the dumping area).

- TSS (Total Suspended Solids)

TSS, or Total Suspended Solids, encompasses sediment, silt, sand, plankton, algae, and other organic materials suspended or floating in the water column. Elevated levels of suspended solids can have adverse effects on both human health and aquatic ecosystems. High concentrations of suspended solids can obstruct sunlight and reduce photosynthesis rates.

The results of the TSS sample analysis showed that all results met the quality standard (<80 mg/L), with higher TSS levels generally recorded around the port area which are affected by the flow of the surrounding rivers (W12). The TSS concentrations at the surface layer ranged from 1-12 mg/L. W12). The TSS concentrations at the surface layer ranged from 1-12 mg/L.

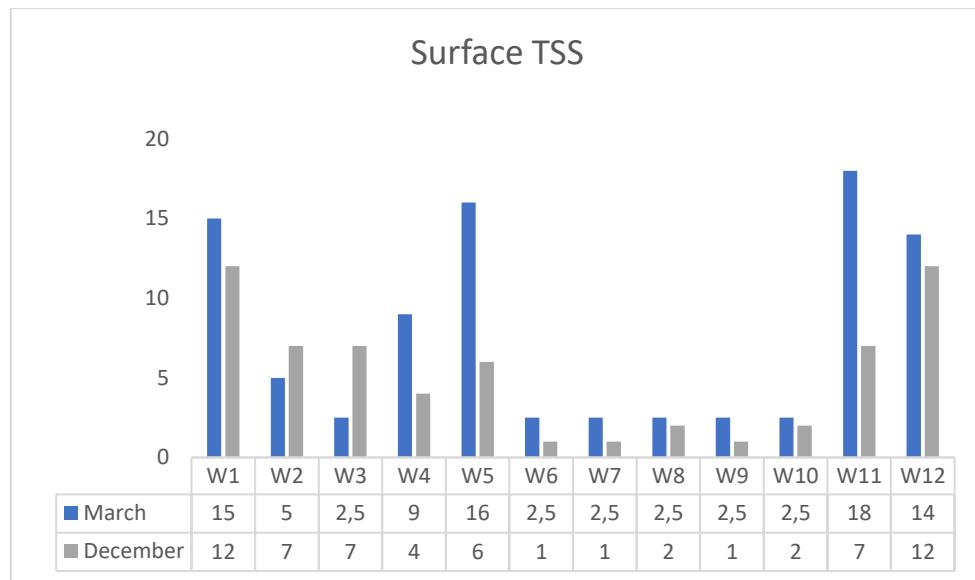


Figure 4 Surface TSS Comparison

Figure above is TSS comparison in March and December. TSS parameter is fluctuated, in general TSS in March is higher than December.

❖ Bottom

- pH

the pH level of seawater in the surface layer all still meets quality standards, with pH levels ranging from 7.78-8.4. The lowest pH level is at location W12, and the highest pH level is at location W5. pH level at all locations also meets the Japanese standards requirements.

- Temperature on site

Measured temperatures range from 28.6 oC (at location W6) to 31.5 oC (at location W2), with measurement times around 07:16 am to 11:40 pm.

- Dissolved Oxygen on site

The measured DO level was 4.68-6.74 mg/L L.

- Turbidity on site

Measured turbidity levels of 1.5 – 14.32 NTU, with higher turbidity levels generally recorded around the port area which are affected by the flow of the surrounding rivers (W2, W11, W12). The turbidity levels generally higher in the bottom layer than in the surface, this can be caused by strong currents on the seabed which cause the sediment resuspension, although on some locations it is higher in the surface.

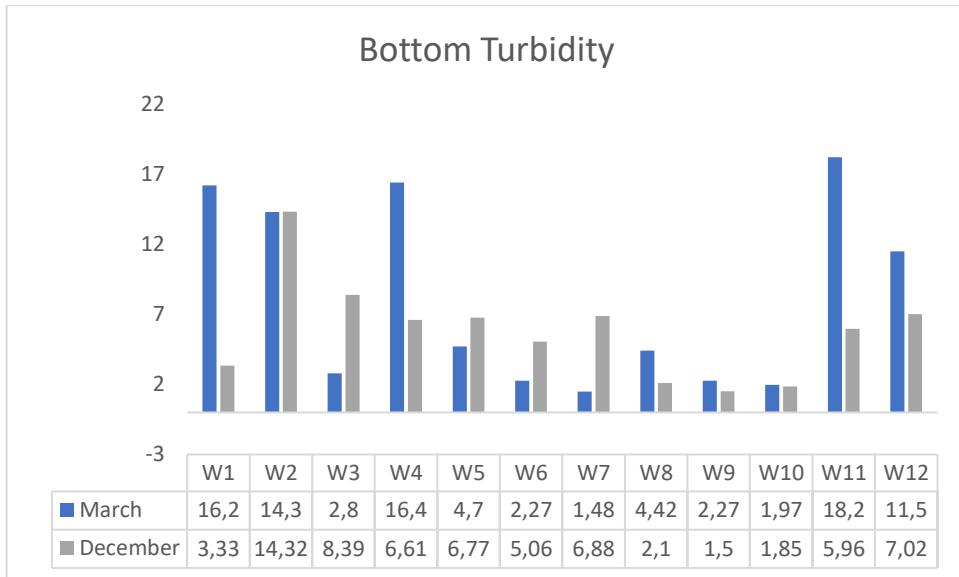


Figure 5 Bottom Turbidity Comparison

Figure above is turbidity comparison in March and July. Bottom turbidity in March is higher than December.

- Salinity in site

Salinity levels range from 27.6-29 o/oo. There is no significant difference between locations adjacent to the estuary and offshore locations (around the dumping area).

- TSS

The results of the TSS sample analysis showed that all results met the quality standard (<80 mg/L), with higher TSS levels generally recorded around the port area which are affected by the flow of the surrounding rivers (W12). The TSS concentrations at the bottom layer ranged from 0-22 mg/L.

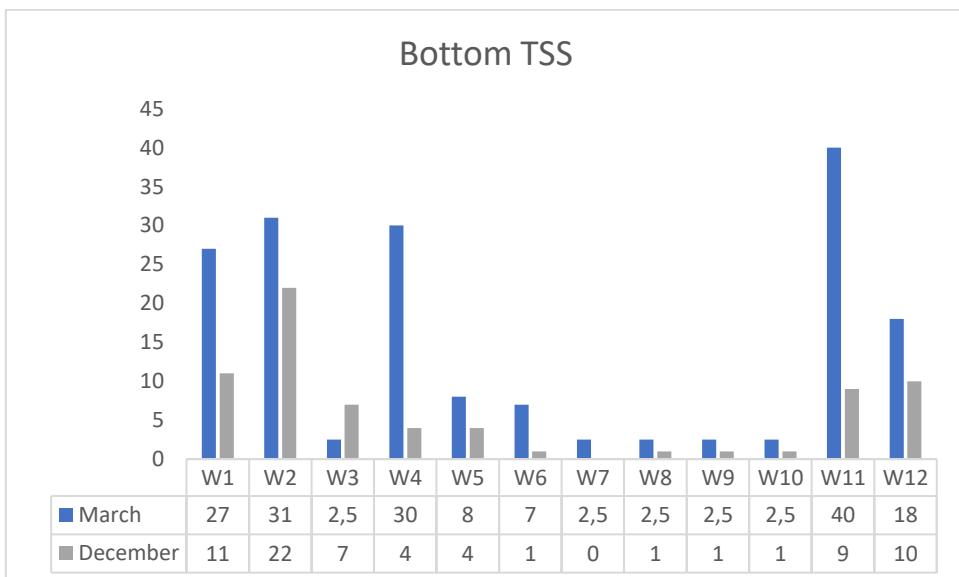


Figure 6 Bottom TSS Comparison

The figures presented above indicate a comparison of the Total Suspended Solids (TSS) parameter with the baseline survey. In March, the bottom TSS levels were observed to be higher than those in December.

Table 5. Result of sea water sampling. Of December 2023

No	Parameter	Unit	Test Results												Threshold Limit Value	
			W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	Indonesian	Japanese
	Date of Sampling		13-Dec-23	13-Dec-23	13-Dec-23	13-Dec-23	13-Dec-23	14-Dec-23	14-Dec-23	14-Dec-23	14-Dec-23	15-Dec-23	15-Dec-23	15-Dec-23		
	Time of Sampling		9:48	10:24	7:59	9:15	8:41	7:16	8:14	9:00	11:09	10:30	11:10	11:40		
<i>Physical:</i>																
1	Transparency on site	Meter	2	1	2	2	3	3	8	8	8	12	1	1	> 3	-
2	Odour	-	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Odourless	-
<i>Chemical:</i>																
3	Ammonia Total (as N)	mg/L	< 0.01	0.02	0.11	0.02	< 0.01	0.16	0.01	0.01	< 0.01	< 0.01	0.08	0.01	0.3	-
4	Phosphate as P *	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.015	-
5	Sulfide as H ₂ S	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.01	-
6	Hydrocarbon	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.003	-
7	Phenol Compound	mg/L	0.0009	0.0006	0.0006	0.0006	0.0003	0.0003	0.0005	0.0006	0.0009	0.0007	0.0007	0.0007	0.002	-
8	Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.01	0.01
9	Surfactant Anionic as MBAS	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	1	-
10	Oil & Grease	mg/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	1	-
11	Tributyl Tin (TBT)*	µg/L	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	0.01	-
<i>Heavy Metals dissolved:</i>																
12	Mercury	mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	0.001	0.0005
13	Cadmium	mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	0.001	0.003
14	Copper	mg/L	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.008	-
15	Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.008	0.01
16	Zinc	mg/L	0.01	0.01	0.04	0.01	0.01	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.05	-
<i>Microbiology:</i>																
17	Total Coliform	MPN/100 mL	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	1000	1000

■ Exceed Japan Standard

■ Exceed Indonesia Standard

Note: For mercury result of analysis, the level of mercury detected is below the detection limit of the laboratory equipment used, but still exceeded the Japanese quality standards

Source: Primary Data, 2023.

Note: *) Data according to Monitoring Report No 03 (July 2023) Contractor Package 6

**) Quality Standards according to PPRI No.22/2021, Appendix VIII.

Table 6. Sea Water Survey Results (2 Layers)

A. Surface

No	Parameter	Unit	Test Results												Threshold Limit Value	
			W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	Indonesian	Japanese
1	pH on site	-	8.3	8.23	8.33	8.24	8.38	7.28	7.35	8.31	8.22	8.13	8.33	8.5	6.5-8.5	7.0-8.3
2	Temperature on site	°C	31.1	31.5	30.1	30.8	30.6	30.1	30	30	31	31.2	31.3	32	Natural	-
3	Dissolved Oxygen on site	mg/L	5.16	5.59	5.89	5.47	7.44	5.18	5.04	5.65	7.78	5.89	5.76	4.5	-	-
4	Turbidity on site	NTU	2.57	9.78	8.39	5.79	3.86	0.52	0.25	1.73	1.17	2.04	10.03	8.63	-	-
5	Salinity on site	%oo	28.7	28.4	28.6	28.9	28.6	28.8	28.1	28.8	29	28.8	28.4	19.4	Natural	-
6	Total Suspended Solid	mg/L	12	7	7	4	6	1	1	2	1	2	7	12	80	-

B. Bottom

No	Parameter	Unit	Test Results												Threshold Limit Value	
			W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	Indonesian	Japanese
1	pH on site	-	8.37	8.15	8.33	8.25	8.4	8.01	8.3	8.4	8.15	8.05	8.23	7.78	6.5-8.5	7.0-8.3
2	Temperature on site	°C	31.1	31.5	30.1	30.8	30.9	28.6	30	30.2	30.5	31	31.5	31.5	Natural	-
3	Dissolved Oxygen on site	mg/L	4.68	4.89	5.89	5.52	5.06	5.85	5.9	5.66	5.54	5.19	6.74	5.87	-	-
4	Turbidity on site	NTU	3.33	14.32	8.39	6.61	6.77	5.06	6.88	2.1	1.5	1.85	5.96	7.02	-	-
5	Salinity on site	%oo	28.7	28.5	28.6	28.7	28.6	28.9	28.9	28.9	29	28.9	28.1	27.6	Natural	-
6	Total Suspended Solid	mg/L	11	22	7	4	4	1	0	1	1	1	9	10	80	-

Source: Primary Data, 2023.

Note: *) Data according to Environmental Monitoring Report Contractor Package 6

**) Quality Standards according to PPRI No.22/2021, Appendix VIII.

2.2. Total Suspended Solid from Turbidity as Sea Water Quality

TSS, or Total Suspended Solids, encompasses sediment, silt, sand, plankton, algae, and other organic materials suspended or floating in the water column. Elevated levels of suspended solids can have adverse effects on both human health and aquatic ecosystems. High concentrations of suspended solids can obstruct sunlight and reduce photosynthesis rates. Furthermore, elevated TSS levels can lead to higher water temperatures and lower dissolved oxygen levels.

The estimated TSS value is ascertained by conducting in-situ turbidity measurements using a turbidity meter. Following the turbidity measurements, the turbidity values are then converted into mg/l units utilizing a linear regression equation¹⁾:

$$Y = 1,2329 X^{*})$$

Whereas Y is TSS (mg/l), and X is turbidity (NTU).

Turbidity measurements were carried out at 13 stations, representing four areas susceptible to construction activity and port operation in the sea. The specific locations of these 13 stations are provided in Table 7, and the results of the turbidity measurements can be found in Table 8.

Table 7. Turbidity survey ID and locations

No	Parameter	Sample ID	Location	Remark
1	Turbidity	T1	6°11'38.62"S, 107°54'50.61"E	West side of Patimban Port Area
2	Turbidity	T2	6°12'20.83"S, 107°54'51.79"E	
3	Turbidity	T3	6°12'56.60"S, 107°53'59.33"E	
4	Turbidity	T4	6°12'35.56"S, 107°55'44.23"E	East side of Patimban Port Area
5	Turbidity	T5	6°12'23.47"S, 107°56'29.02"E	
6	Turbidity	T6	6°13'23.76"S, 107°57'23.88"E	
7	Turbidity	T7	6°14'15.69"S, 107°54'44.62"E	South side of Patimban Port Area
8	Turbidity	T8	6°14'31.96"S, 107°54'56.91"E	
9	Turbidity	T9	6°14'45.99"S, 107°55'7.71"E	South side of Patimban Port Area (near shoreline)
10	Turbidity	T10	6° 4'11.75"S, 107°57'1.24"E	Surround dumping area
11	Turbidity	T11	6° 5'20.82"S, 107°55'23.50"E	
12	Turbidity	T12	6° 7'5.75"S, 107°56'14.37"E	
13	Turbidity	T13	6° 6'0.70"S, 107°57'50.52"E	

^{1*)} The formula is derived from the previous Phase I-1 experiment because the newly acquired CP6 formula may potentially result in an underestimation of the measured TSS.

Table 8 Turbidity Measurement Result

Time	Surface (NTU)													Bottom (NTU)												
	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13
1-Oct-23	26.96	21.44	34.06	18.35	8.85	6.63	21.7	27.17	29.61					29.69	24.97	39.94	19.91	10.9	8.57	23.66	28.25	30.05				
2-Oct-23	16.1	14.43	20.1	9.83	4.77	4.48	19.4	22.64	23.93					18.37	19.27	23.89	10.77	5.88	4.84	20.28	23.54	24.58				
3-Oct-23	7.81	10.58	26.12	13.81	3.08	3.16	14.23	17.59	17.45	2.08	2.61	5.38	2.99	9.68	12.72	28.01	14.68	3.84	3.91	16.38	19.62	19.83	1.58	1.99	2.8	2.75
4-Oct-23	7.05	10.52	21.15	10.42	3.41	4.5	13.64	16.8	19.79					11.3	13.15	22.27	12.65	4.01	6.21	16.85	18.83	20.83				
5-Oct-23	15.25	16.65	25.05	8	4.02	2.49	16.85	15.63	17.79					19.31	17.06	26.58	9.18	5.75	3.53	18.56	18.54	19.14				
6-Oct-23	19.5	16.06	20.4	18.66	5.5	3.13	21.23	23.2	24.54					21.64	17.67	21.26	19.76	6.25	4.46	22.14	24.98	25.13				
7-Oct-23	11.25	17.75	27.72	12	6.28	3.83	19.04	21.62	22.53					15.99	19.11	28.88	14.68	6.63	4.58	20.18	23.5	23.88				
8-Oct-23	17.78	15.76	30.93	15.58	6.47	4.75	23.05	23.27	22.54					18.31	18.89	32.09	16.72	10.15	6.68	25.03	24.17	23.06				
9-Oct-23	16.19	20.19	28.82	17.04	8.07	5.97	17.98	22.57	21.01					18.21	21.18	29.75	18.38	9.21	6.64	19.13	25.94	25.81				
10-Oct-23	12.08	18.58	19.89	11.54	10.08	9.27	15.53	17.94	18.41	2.44	3.03	2.1	2.47	14.32	20.51	21.12	13.36	12.13	10.72	17.12	19.37	19	2.72	4.07	3.23	2.65
11-Oct-23	8.37	11.53	22.01	8.51	4.57	3.76	16.64	16.34	17.97					12.78	15.03	23.22	9.24	5.13	4.46	17.9	18.7	19.25				
12-Oct-23	9.49	10.89	21.21	5.18	3.15	1.67	19.45	18.25	18.56					10.47	13.5	23.36	7.68	4.11	2.91	20.1	19.45	20.45				
13-Oct-23	15.98	17.96	23.49	9.75	2.63	5.42	20.72	20.83	27.83					16.07	20.24	26.45	11.94	3.57	7.12	26.97	22.57	28.55				
14-Oct-23	18.79	20.16	30.73	16.95	6.42	6.3	19.99	17.17	20.34					19.37	21.2	31.75	17.23	8.11	7.12	22.19	20.92	21.38				
15-Oct-23	21.49	18.09	32.71	16.01	4.61	6.5	17.96	18.79	20.29					24.47	20.73	35.47	18.6	5.72	11.56	18.44	20.75	23.78				
16-Oct-23	17.98	19.02	30.09	15.81	7.77	7.21	19.13	21.13	26.43					18.85	20.24	33.09	17.99	8.48	10.1	21.08	22.4	27.16				
17-Oct-23	10.32	13.57	24.52	11.88	7.61	6.16	17.12	20.76	32.24	3.45	1.58	1.03	1.74	14.04	15.38	30.09	13.34	8.41	6.84	19.02	21.15	33	4.49	2.44	2.84	3.56
18-Oct-23	16.69	18.63	27.7	15.95	11.31	6.88	16.6	20.48	20.03					17.52	24.35	28.07	16.77	12.04	8.86	17.03	21.64	23.98				
19-Oct-23	18.73	21.93	23.89	14	4.89	7.38	16.79	18.03	19.4					19.62	23.82	24.09	15.85	5.87	9.4	17.37	18.25	20.31				
20-Oct-23	14.38	13.01	26.42	14.95	8.67	7.93	17.15	18.42	18.62					15.54	16.31	27.19	16.63	9.08	8.77	19.46	19.44	21.2				
21-Oct-23	8.47	14.19	18.39	10.19	7.17	6.78	15.54	17.1	16.83					9.2	17.42	19.48	13.09	8.39	7.79	16.7	19.87	18.57				
22-Oct-23	7.14	8.64	24.59	8.96	4.25	3.49	11.09	16.27	17.78					7.56	9.02	27.15	9.73	5.14	4.05	12.96	19.96	18.73				
23-Oct-23	4.66	3.28	19.51	8.12	3.44	4.47	4.67	15.04	15.69					5.49	4.8	20.66	9.56	9.04	7.03	5.34	16.03	16.63				
24-Oct-23	5.01	4.81	16.67	2.08	3.2	3.1	13.3	11.56	15.82	1.38	1.83	3.57	4.74	10.44	7.57	18.22	3.14	8.5	6.47	14.31	13.52	19.03	1.94	2.49	4.84	7.74
25-Oct-23	3.74	5.83	17.23	9.05	3.24	3.61	10.83	15.91	16.77					5.25	6.92	19.12	9.3	4.49	4.2	12.37	17.15	17.5				
26-Oct-23	3.8	3.67	18.37	2.84	3.14	2.12	5.68	13.18	15.94					6.35	4.41	19.73	4.21	6.05	2.85	9.88	16.42	17.5				
27-Oct-23	5	3.39	17.06	4.65	1.87	1.35	5.68	9.89	16.52					6.68	4.49	17.37	5.46	3.76	4.99	8.89	12.95	17				
28-Oct-23	7.87	5.21	16.46	4.32	3.31	4.23	11.2	12.05	16.94					8.25	8.35	18.54	7.21	5.45	5.89	13.91	12.93	18.06				
29-Oct-23	3.24	4.47	20.93	6.83	3.63	3.61	17.45	16.92	19.96					5.71	8.2	22.14	8.09	5.51	4.56	18.31	17.72	20.8				
30-Oct-23	6.31	8.95	19.97	3.55	6.13	5.73	9.09	10.79	18.9					7.62	11.67	20.85	4.9	8.07	8.99	11.56	11.33	20.26				
31-Oct-23	2.78	4.27	15.3	5.49	4.95	3.02	9.84	12.52	15.62	1.87	2.59	1.52	2.39	3.58	5.6	15.93	6.31	4.96</								

Time	Surface (NTU)													Bottom (NTU)												
	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13
9-Nov-23	4.33	5.47	16.74	4.1	2.88	2.51	8.74	9.48	14.88					5.71	6.35	18.45	6.12	4.36	5.32	10.64	12.97	15.05				
10-Nov-23	3.51	4.96	16.74	3.05	2.85	4.09	6.34	11.82	16.28					4.16	6.35	19.9	3.79	5.13	5.98	8.05	12.23	19.43				
11-Nov-23	4.01	4.48	12.28	3.31	2.77	4.58	9.88	12.78	9.03					5.64	5.64	15.17	4.85	3.11	5.39	11.84	13.47	10.79				
12-Nov-23	2.27	2.9	4.81	2.79	1.47	2.21	3.6	4.41	6.84					3.13	3.42	5.95	3.02	1.91	3.16	7.28	6.39	7.64				
13-Nov-23	4.83	6.06	15.57	2.94	3.04	2.99	7.74	8.54	14.77					8.83	8.97	16.13	4.15	4.49	4.96	9.49	9.3	17.13				
14-Nov-23	4.77	7.76	17.68	6.92	2.77	4.36	10.06	12.97	20.2	0.84	0.47	0.39	0.45	7.5	8.1	21.77	8.84	4.49	7.7	11.34	16.42	21.55	1.6	1.9	2.84	0.91
15-Nov-23	5.56	6.28	11.1	5.97	3.4	3.71	11.07	10.13	14.99					8.94	8.69	12.12	6.84	4.63	6.25	12.86	16.56	20.2				
16-Nov-23	4.27	4.87	13.82	4.29	2.25	2.93	10.28	8.04	16.27					5.53	5.83	16.95	7.42	3.63	5.03	11.1	8.68	18.63				
17-Nov-23	4.06	5.05	17.68	7.74	3.54	3.09	6.53	10.2	9.45					5.31	10.8	19.44	9.52	6.67	4.32	8.82	14.96	15.4				
18-Nov-23	4.46	4.98	15.77	3.98	3.47	3.86	3.81	9.04	8.98					7.67	9.08	17.29	6.33	6.84	5.41	4.23	12.61	11.78				
19-Nov-23	4.71	4.69	13.41	4.83	4.99	3.71	3.58	5.01	10.39					8.69	5.64	15.86	5.92	6.87	5.42	4.34	8.55	13.89				
20-Nov-23	5.75	5.2	18.62	6.88	4.21	7.5	6.2	6.09	18.79					6.49	6.05	19.31	9.7	7.33	8.32	9.16	7.43	19.45				
21-Nov-23	3.88	5.97	16.41	5.7	3.82	5.96	5.12	13.05	15.75	0.44	1.23	0.73	0.32	4	6.03	17.9	6.2	5.22	7.53	9.71	14.6	19.77	0.66	3	1.13	0.86
22-Nov-23	6.76	8.62	16.22	4.6	3.56	2.31	15.95	15.21	18.99					8.35	9.51	19.1	6.91	4.48	3.75	16.04	16.75	20.27				
23-Nov-23	3.59	5.93	17.38	5.38	4.39	3.09	7.09	15.6	12.18					5.7	7.5	18.49	7	5.53	4.79	8.8	16.91	19.14				
24-Nov-23	10.01	10.57	13.28	15.18	7.92	8.89	14.12	16.77	20.95					16.87	12.12	19.46	16.31	9.93	9.56	19.1	19.58	22.57				
25-Nov-23	7.81	8.56	9.34	8.53	5.39	3.27	10.86	18.29	21.01					8.41	10.95	11.93	9.02	7.61	4.87	12.29	20.03	21.99				
26-Nov-23	13.67	13.24	22.81	8.32	4.86	4.2	16.41	11.63	15.76					15.18	16.18	24.88	11.43	9.21	7.96	18.38	12.48	16.47				
27-Nov-23	7.61	7.87	9.93	4.51	4.98	3.79	16.06	8.59	11.96					8.07	8.99	10.31	5.54	6.93	5.94	18.67	10.54	14.42				
28-Nov-23	5.12	4.22	11.88	7.09	4.96	3.39	11.06	10.9	15.96	2.19	1.44	1.63	2.59	8.66	6.91	13.05	8.88	6.99	5.72	12.58	11.26	17.68	3.4	2.49	3.33	4.49
29-Nov-23	6.16	7.88	15.89	7.72	4.79	3.63	12.77	12.23	15.57					8.97	10.06	17.24	8.63	6.09	6.83	15.78	14.84	20.75				
30-Nov-23	9.58	12.62	17.83	8.95	4.69	4.01	14.17	14.55	20.35					10.56	14.19	20.5	9.36	5.54	5.45	14.87	15.96	22.18				
1-Dec-23	7.37	7.53	16.15	4.92	4.4	4.96	17.57	7.6	10.61					8.89	8.95	19.75	7.22	8.52	6.01	20.24	9.27	11.43				
2-Dec-23	5.93	7.51	22.03	7.21	5.01	5.58	11.24	6.41	10.18					6.03	8.32	23.16	9.09	9.09	7.51	12.66	9.44	12.67				
3-Dec-23	6.31	5.2	21.02	4.54	5.27	4.75	7.7	9.58	13.29					7.35	6.62	22.89	8.12	6.23	5.53	9.59	10.02	14.48				
4-Dec-23	8.48	9.23	16.1	5.55	4.7	3.85	11.77	10.23	16.41					10.37	11.6	17.99	7.05	7.62	4.1	13.81	12.26	17.84				
5-Dec-23	5.79	8.93	13.61	9.7	7.24	4.25	4.99	9.67	19.34	1.1	2.01	3	2.53	9.66	13.93	15.41	11.32	8.39	7.64	8.34	11.89	20.06	1.69	3.28	5.38	4.05
6-Dec-23	5.97	6.1	16.41	7.39	4.2	3.33	4.77	6.74	13.96					6.81	6.78	17.65	8.01	6.2	5.56	5.59	7.37	16.47				
7-Dec-23	3.93	5.05	9.84	3.03	3.59	1.73	6.05	6.45	17.41					4.06	6.87	10.48	4.63	4.14	2.41	7.2	8.06	18.72				
8-Dec-23	6.16	6.14	18.44	7.56	4.84	3.3	6.6	9.54	16.82					9.84	8.53	20.11	8.46	5.8	5.2	9.24	13.52	17.64				
9-Dec-23	3.52	5.49	16.1	2.72	2.88	1.87	7.84	4.99	14.99					5.29	7.46	20.33	3	3.02	2.33	8.09	8.18	18.3				
10-Dec-23	2.93	4.52	7.7	4.65	2.44	1.03	2.71	5.04	18.26					4.17	6.49	8.14	7.56	3.71	2.18	5.8						

Time	Surface (NTU)													Bottom (NTU)												
	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13
19-Dec-23	3.87	4.8	19.99	2.9	6.58	3.04	7.96	4.62	7.53	1.71	1.73	2.41	1.69	6.16	8.28	21.02	4.15	7.21	4.61	10.89	10.26	10.57	3.89	2.77	2.71	2.29
20-Dec-23	4.16	5.28	11.8	3.5	4.19	4.02	5.63	8.28	9.21					5.6	7.73	16.25	7.24	6.88	7.31	7.41	12.77	12.31				
21-Dec-23	4.53	4.61	11.31	3.09	3.32	1.87	5.55	4.72	8.5					8.92	5.51	13.72	4.72	4.35	2.38	6.78	7.28	10.57				
22-Dec-23	6.01	4.94	17.27	4.71	5.38	3.71	6.43	4.42	9.24					9.1	5.2	18.23	6.16	7.8	4.57	9.22	5.58	10.9				
23-Dec-23	7.91	4.72	5.09	4.72	4.02	3.65	6.21	4.72	4.64					9.36	8.74	8.79	7.86	6.37	4.66	7.66	5.91	8.93				
24-Dec-23	3.98	4.45	12.14	4.18	3.41	2.21	6.21	4.44	5.84					4.81	7.15	13.45	5.01	4.4	3.74	9.34	8.97	7.37				
25-Dec-23	7.85	3.33	8.69	3.8	2.73	2.6	6.93	5	8.13					8.45	4.9	9.42	4.15	3.09	3.44	9.13	6.5	10.55				
26-Dec-23	5.63	4.36	6.54	3.68	3.43	3.25	4.21	5.3	7.88	1.18	0.39	1.26	0.26	7.68	6.39	9.56	8.79	5.81	5.08	6.22	7.24	8.28	2.93	1.71	2.5	1.74
27-Dec-23	8.43	3.3	11.53	3.82	4.41	2.44	3.67	4.05	3.3					10.26	4.64	13.95	4.9	5.2	4.32	8.55	4.54	6.35				
28-Dec-23	11.44	5.85	10.84	3.53	3.95	3.73	6.39	5.71	7.25					14.16	7.41	11.87	4.95	4.46	4.02	7.12	7.24	10.9				
29-Dec-23	4.86	4.43	19.48	3.44	2.9	3.12	10.74	6.41	10.49					6.75	5.97	23.64	8.5	6.66	4.5	14.93	7.54	11.26				
30-Dec-23	3.94	4.27	9.63	4.68	0.33	0.34	5.24	8.7	6.26					4.59	7.43	13.37	5.06	2.65	3	7.08	9.47	9.41				
31-Dec-23	3.55	4.33	13.44	1.77	2.05	2.05	7.18	4.6	12.91					4.84	7.55	14.77	5.66	5.6	4.03	9.14	6.22	14.81				

Source: Primary Data, 2023.

Note: *) Data according to Environmental Report Contractor Package 6

The graph of monthly TSS distribution from daily measurements for each monitoring point can be seen in the figures below.

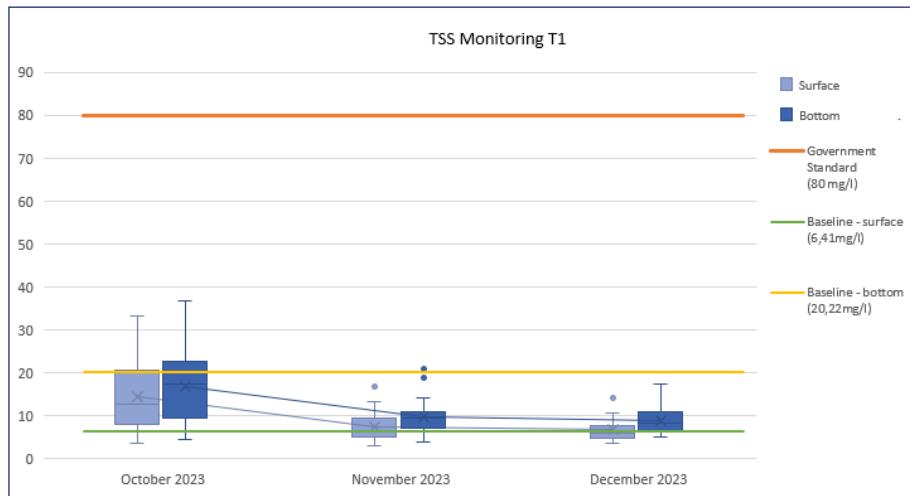


Figure 7 TSS Monitoring result at T1 during October to December period.

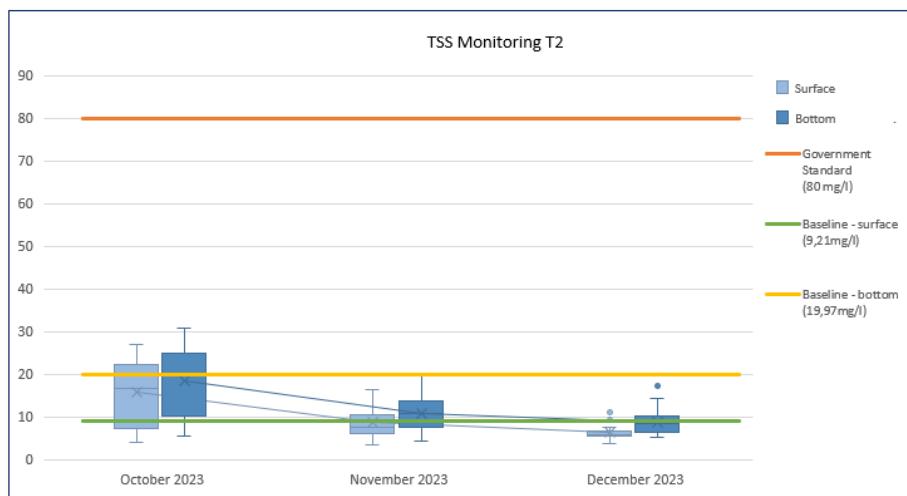


Figure 8 TSS Monitoring result at T2 during October to December period.

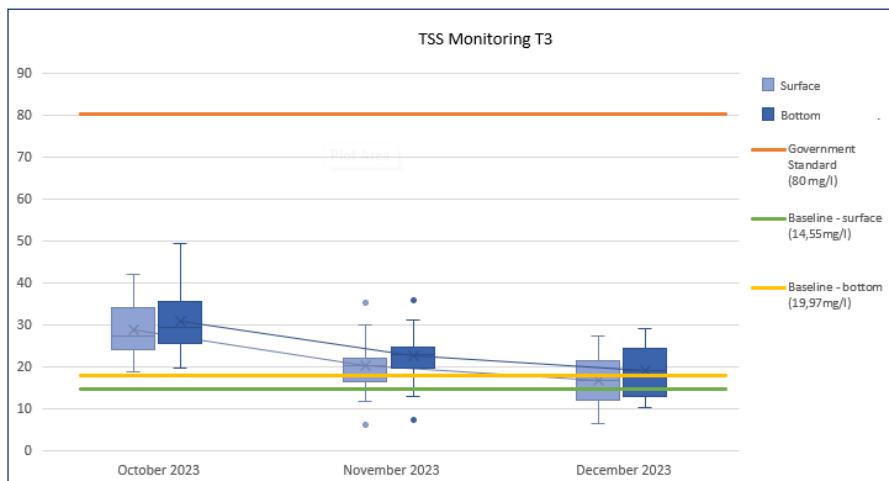


Figure 9 TSS Monitoring result at T3 during October to December period

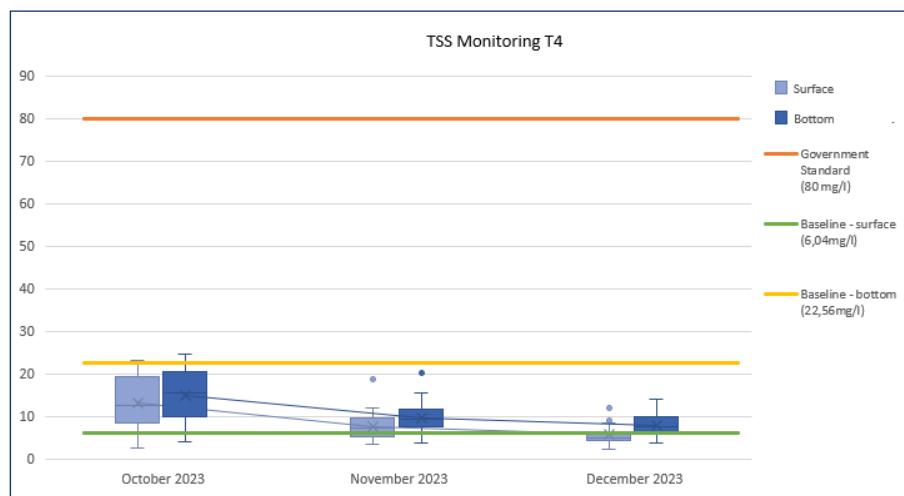


Figure 10 TSS Monitoring result at T4 during October to December period.

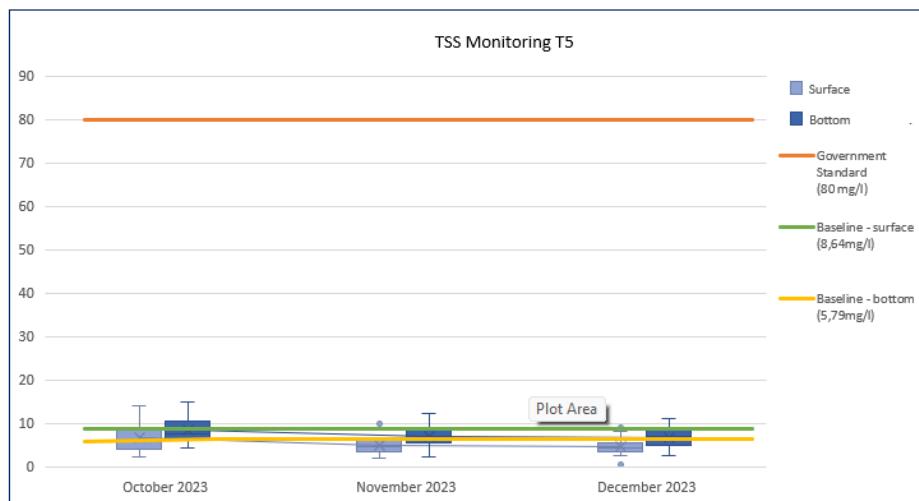


Figure 11 TSS Monitoring result at T5 during during October to December period .

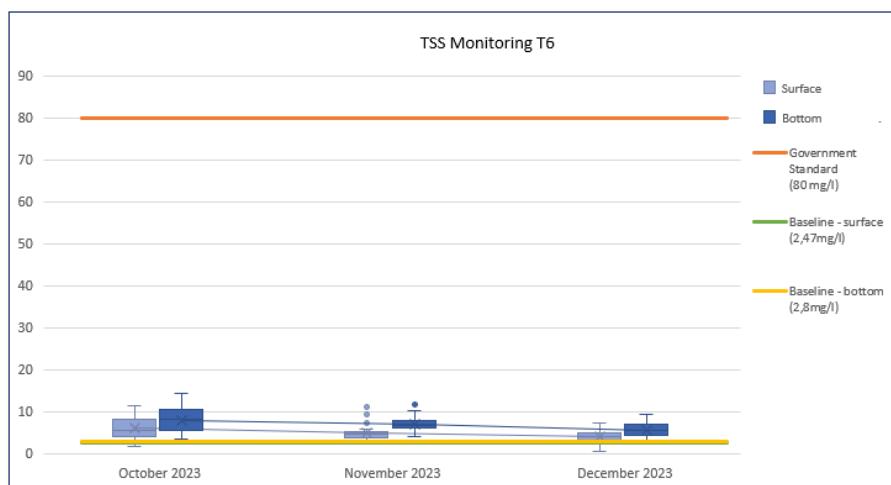


Figure 12 TSS Monitoring result at T6 during October to December period.

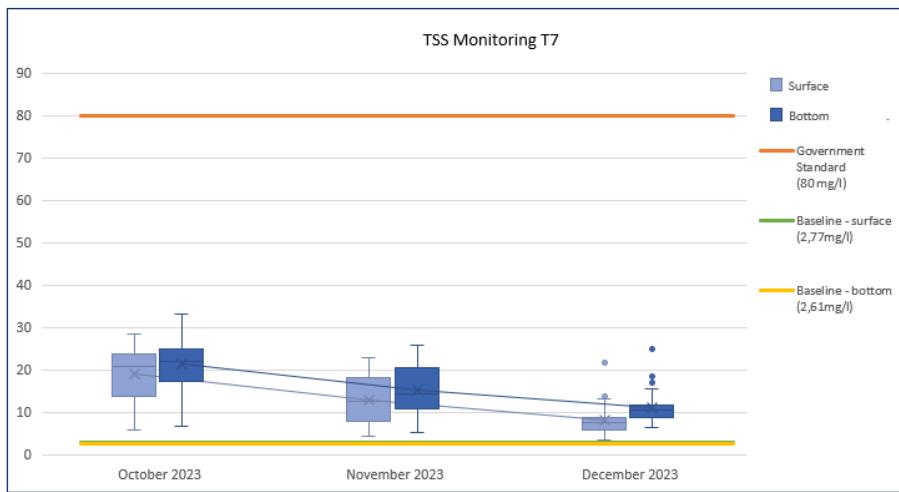


Figure 13 TSS Monitoring result at T7 during October to December period .

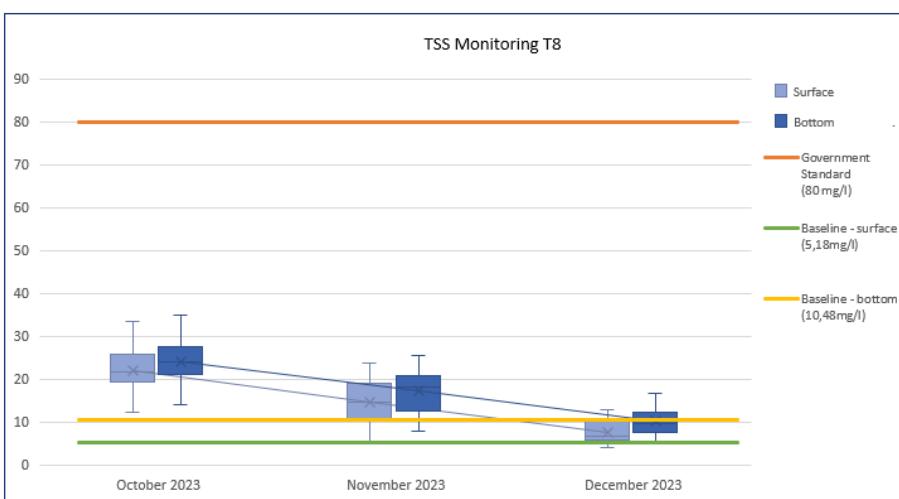


Figure 14 TSS Monitoring result at T8 during October to December period.

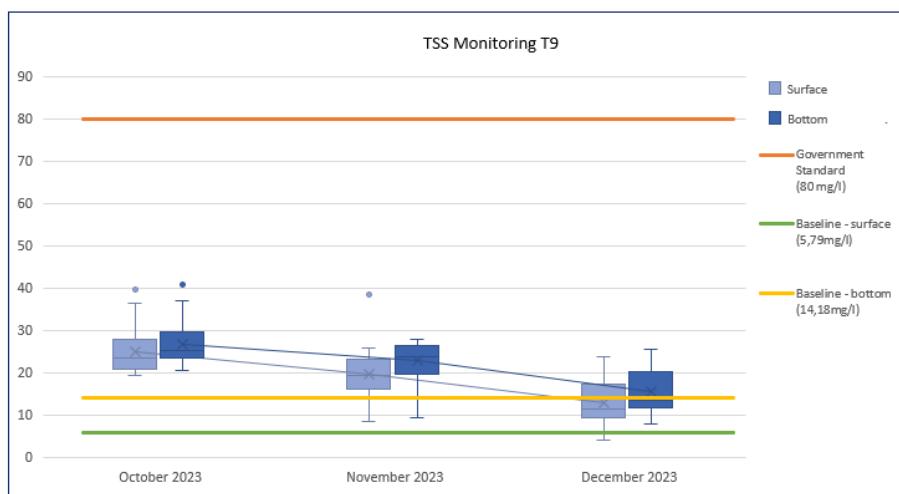


Figure 15 TSS Monitoring result at T9 during October to December period.

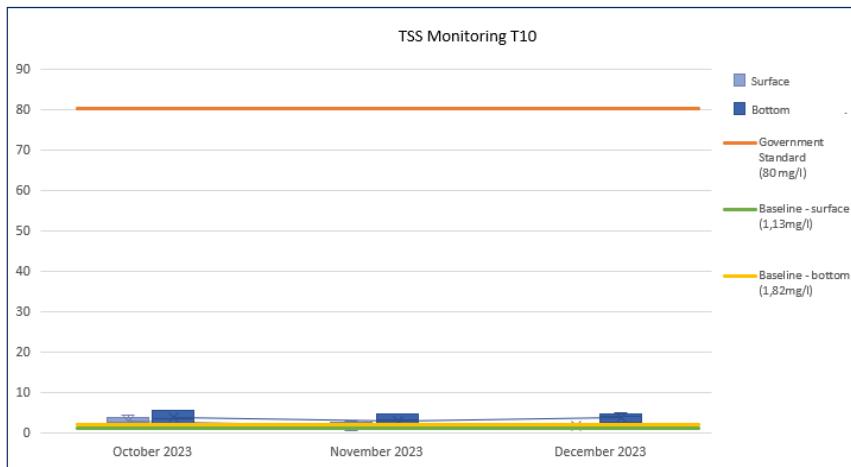


Figure 16 TSS Monitoring result at T10 during October to December period.

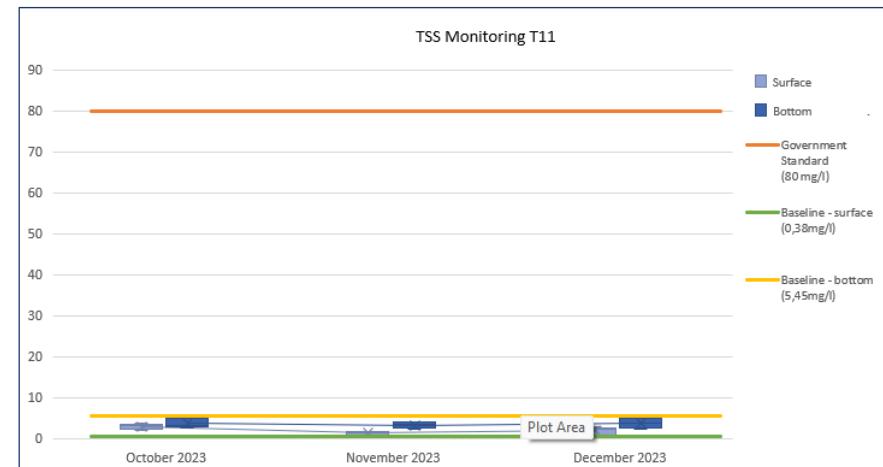


Figure 17 TSS Monitoring result at T11 during October to December period.

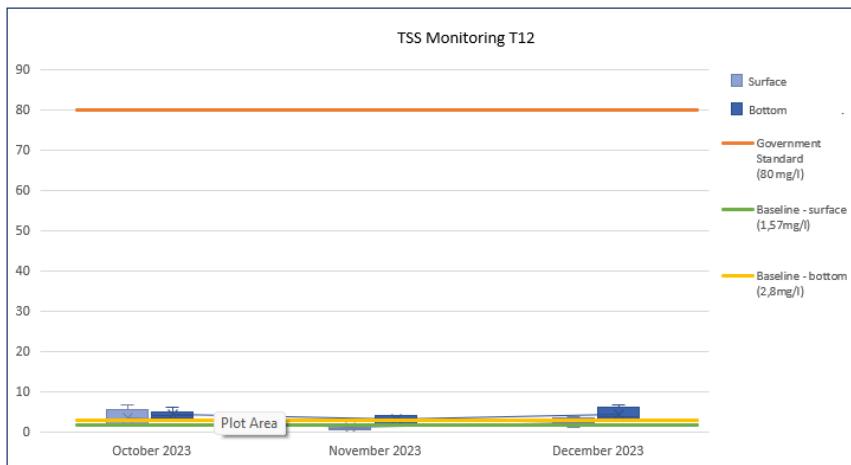


Figure 18 TSS Monitoring result at T12 during October to December period.

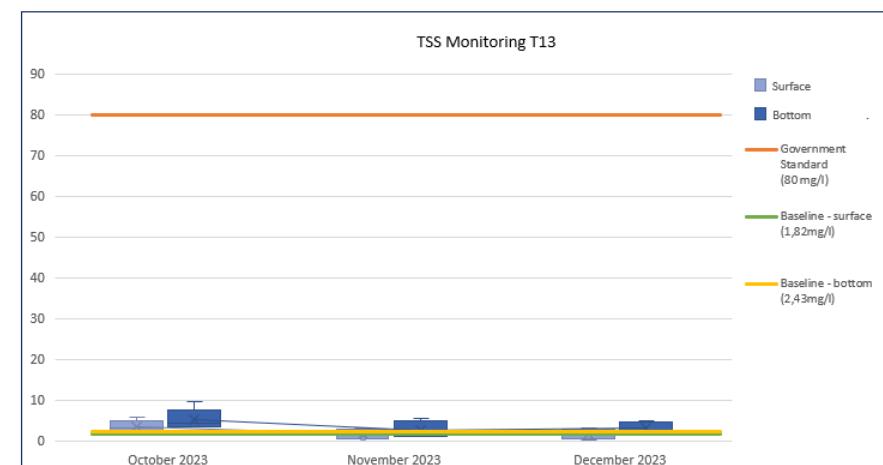


Figure 19 TSS Monitoring result at T13 during October to December period.

Source: Data Analysis, 2023.

Note: *) Graph analysis based on Environmental Weekly Report Contractor Package 6

Based on the recorded turbidity data, the estimated TSS values range from 0.32 to 41.99 for the surface layer, and from 0.81 to 49.24 for the bottom layer.

Despite the presence of some data outliers, as shown in the graphs above, the calculated monthly average Total Suspended Solids (TSS) from daily surveys comply with the required quality standards outlined in Government of Indonesia Regulation No. 22/2021, Appendix VIII (80mg/l). These outliers are primarily attributed to natural factors such as river inflow conditions, meteorological factors, and tidal movements.

Higher Turbidity/TSS values were observed at locations affected by the Cipunagara and Genteng river basin (T1, T2, T3, and T4 points on the east side of Patimban Port) and the Tanjung Pura River (T8 and T9 points on the south side of Patimban Port), particularly in the bottom measurements.

2.3. Ambient Air Quality

Construction activities can have a significant impact on ambient air quality, leading to various environmental and health concerns. These impacts are primarily due to the release of various pollutants into the atmosphere during construction.

Ambient air quality measurements were conducted at three (3) designated stations for 24 hours, and their specific locations are detailed in **Tables 09**.

Table 10 & Table 11 show the results of the sampling of ambient air quality.

Table 9. Ambient Air survey ID and locations

No	Parameter	Sample ID	Location	Remark
1	Ambient Air	AN1	6°16'51.30"S 107°51'50.00"E	Access Road (Front gate)
2	Ambient Air	AN2	6°16'12.91"S, 107°52'23.76"E	Access Road
3	Ambient Air	AN3	6°14'27.00"S, 107°53'45.56"E	
4	Ambient Air	AN4	6°13'43.37"S, 107°54'29.53"E	PICT Area

Table 10. Ambient Air Survey Results for September 2023

No	Parameter	Unit	Test Results				Requirement
			AN1	AN2	AN3	AN4	
1	Sulfur Dioxide (SO2)	µg/m3	<29	<29	<29	<29	75
2	Carbon Monoxide (CO)	µg/m3	275	218	172	183	4000
3	Nitrogen Dioxide (NO2)	µg/m3	18.3	< 4	< 4	< 4	65
4	PM10	µg/m3	27.6	23.1	25.3	16.2	75
5	TSP (Dust)	µg/m3	46.8	47.8	53.1	39.2	230

Table 11. Ambient Air Survey Results for December 2023

No	Parameter	Unit	Test Results				Requirement
			AN1	AN2	AN3	AN4	
1	Sulfur Dioxide (SO2)	µg/m3	< 21	< 21	< 21	< 21	75

No	Parameter	Unit	Test Results				Requirement
			AN1	AN2	AN3	AN4	
2	Carbon Monoxide (CO)	µg/m3	286	<115	<115	206	4000
3	Nitrogen Dioxide (NO2)	µg/m3	<4	<4	<4	<4	65
4	PM10	µg/m3	26,4	24,9	23,4	18,8	75
5	TSP (Dust)	µg/m3	43,4	36,2	41,1	33,9	230

Source: Primary Data, 2023.

Note: *) Data according to Environmental Monitoring Report Contractor Package 6

Drawing from the information presented in the table above, ambient air quality values at all points in compliance with the quality standards according to Government Regulation no 22-year 2021 (appendix VII).

Recent air quality sampling found that highest CO levels were recorded at location AN1 (front gate of access road), with a value of 217 µg/m3. The highest PM10 levels were also recorded at location AN1 with a value of 18.6 µg/m3. The high levels of these parameters can be influenced by the sampling location where there is a lot of traffic activity from the Patimban Port access road and Pantura road.

For TSP parameter, the highest levels were recorded at location AN3 with the value of 23.2 µg/m3. This condition can be affected by the area around the sampling location which is in an open land area (next to the access road).

Documentation of sampling and measurement can be seen in the figures below.



AN1 Location (Access road - front gate)



AN2 Location (Settlement area near access road)

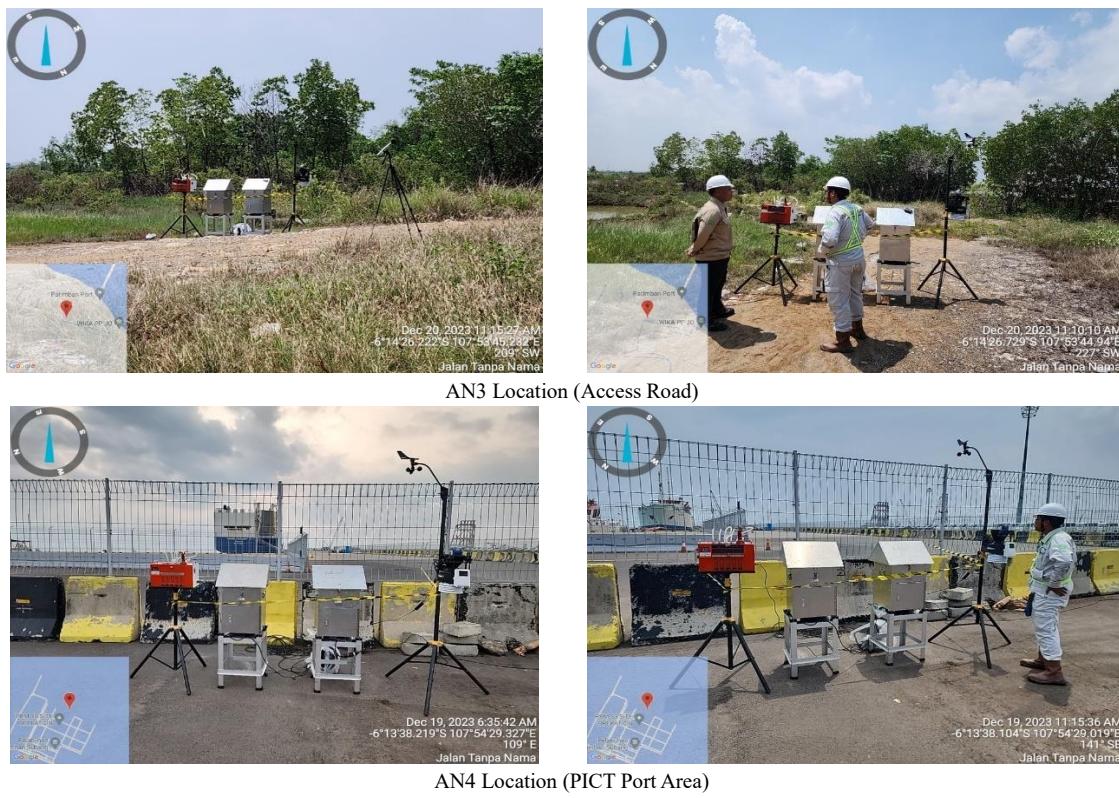


Figure 20 Documentation of Air quality Sampling

2.4. Noise

The mobilization of construction materials will increase traffic flow, particularly along the route to and from the project site, resulting in an associated rise in noise levels.

Noise level measurements were conducted at four monitoring stations, comprising three points along the access road and one location in the vicinity of the port area. Specific locations are detailed in **Table 12**.

Table 12. Noise survey ID and locations

No	Parameter	Sample ID	Location	Remark
1	Noise	AN1	6°16'51.30"S, 107°51'50.00"E	Access Road (Front gate)
2	Noise	AN2	6°16'12.91"S, 107°52'23.76"E	Access Road
3	Noise	AN3	6°14'27.00"S, 107°53'45.56"E	
4	Noise	AN4	6°13'43.37"S, 107°54'29.53"E	

Table 13. Noise Sampling Results for September 2023

No	Time of Measurement	Unit	Test Results				Requirement
			AN1	AN2	AN3	AN4	
1	L Day (06.00 – 21.00)	dB(A)	65.1	49.9	48.9	56.8	-
2	L Night (22.00 – 05.00)	dB(A)	58.1	47.1	45.3	51.1	-
3	L Day Night	dB(A)	64.5	50.8	49.4	56.6	70

Table 14. Noise Sampling Results for December 2023

No	Time of Measurement	Unit	Test Results				Requirement
			AN1	AN2	AN3	AN4	
1	L Day (06.00 – 21.00)	dB(A)	67.7	50.9	50.6	54.9	-
2	L Night (22.00 – 05.00)	dB(A)	66.3	49.5	50.2	50.9	-
3	L Day Night	dB(A)	69.3	52.5	52.7	55.3	70

Source: Primary Data, 2023.

Note: *) Data according to Report of Baseline Survey Contractor Package 6.

**) Quality Standards according to Kep. 48/MENLH/11/1996.

Drawing from the information presented in the table above, it's clear that the noise measurements for noise intensity measurement at phase I-2 at all points conform to the quality standards established for the port area, as specified in Decree of Ministry of Environmental No. 48 year 1996, which sets the standard for port area at 70 dB.

For the period of December 2023, the highest noise level for the port area was recorded at location AN1, at 69.3 dB(A). This high noise can be affected by traffic activity at the front gate of the access road and the Pantura road. The noise level ini AN1 exceeds the standard for settlement area (55 dB(A)), but still meets the quality standards for port area according to Kep. 48/MENLH/11/1996 (70 dB(A)).

The noise level at settlement area AN2 (52.5 dB(A)) still meets the quality standard for settlement area (55 dB(A)), and for port area (70 dB(A)). This settlement area is located near the port access road (under the port access road fly over). Sources of noise are generally caused by vehicle traffic, both on access roads and residential neighborhood roads, but the recorded noise levels still meet the required quality standards.

For AN3 location, noise level (52.7 dB(A)) still meets standards, both for settlement area (55dB(A)) and port area (70 dB(A)). AN3 is in an open land area (next to the access road), a relatively quiet area, with sources of noise generally caused by vehicle traffic from the access road and motorcycles passing.

For AN4 location, noise level (55.3 dB(A)) still meets standards for port area (70 dB(A)) but exceeds the standard for settlement area (55 dB(A)). AN4 located in PICT Port area, with sources of noise are generally caused by vehicle traffic for loading/unloading activity.

The noise level comparison graph is depicted in the following figure. From the graph, it is evident that at point AN1, the noise level exceeds the quality standard for residential areas but remains below the quality standard for port areas.

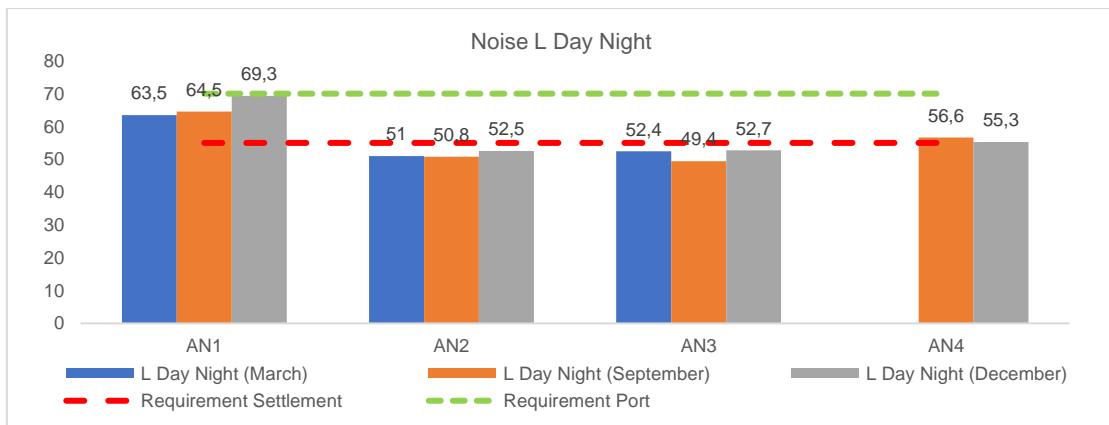


Figure 21 Noise measurement graph over time.

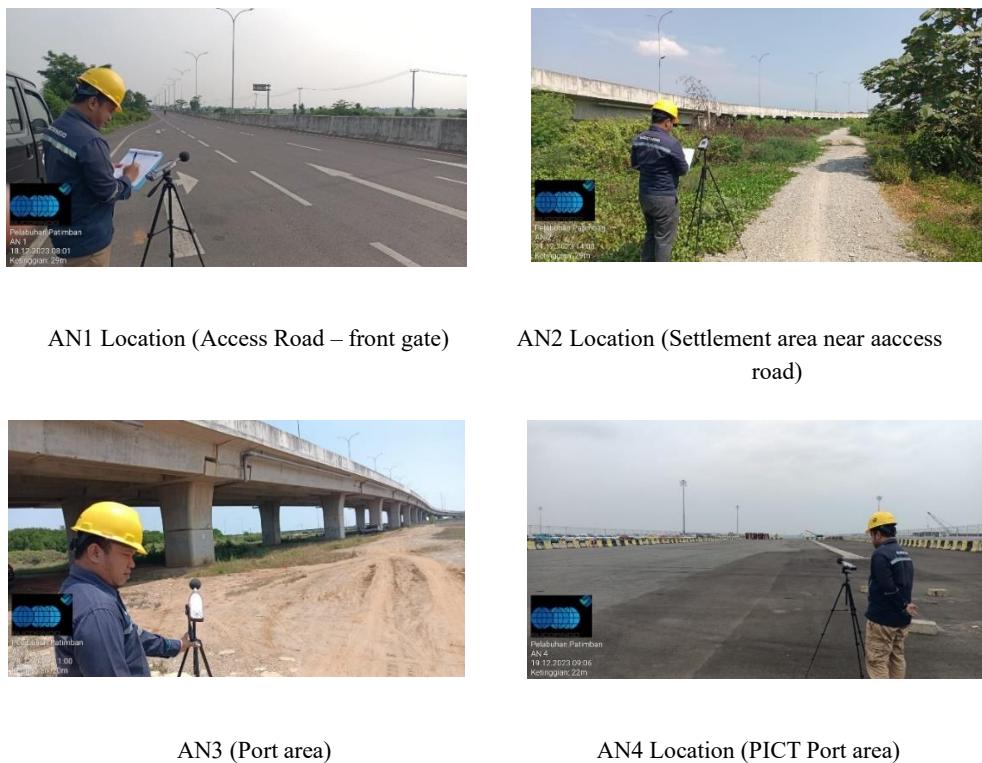


Figure 22 Noise sampling activities

2.5. Benthos

Construction and port activities in the sea can have significant impacts on marine life, particularly disruptions to benthic communities.

The Benthos survey was conducted at ten (10) monitoring stations, and their specific locations are detailed in **Tables 13**.

Table 15. Benthos survey ID and locations

No.	Parameter	Sample ID	Location	Remark
1	Benthos	B7	6°12'56.60"S, 107°53'59.33"E	West side of Patimban Port Area

No.	Parameter	Sample ID	Location	Remark
2	Benthos	B11	6°11'38.62"S, 107°54'50.61"E	
3	Benthos	B12	6°12'20.83"S, 107°54'51.79"E	
4	Benthos	B9	6°13'40.59"S, 107°56'0.29"E	East side of Patimban Port Area
5	Benthos	B10	6°13'23.76"S, 107°57'23.88"E	
6	Benthos	B8	6°14'7.39"S, 107°54'11.00"E	South side of Patimban Port Area (near shoreline)
7	Benthos	B13	6°14'45.99"S, 107°55'7.71"E	
8	Benthos	B4	6° 5'24.86"S, 107°56'9.68"E	Dumping area
9	Benthos	B5	6° 5'34.75"S, 107°56'39.49"E	
10	Benthos	B6	6° 5'49.55"S, 107°57'8.65"E	

Table 16. Benthos survey results

Organisme	Test Results									
	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
MACROBENTHOS										
GASTROPODA										
<i>Aliculastrum</i> sp.	-	-	-	-	-	25	25	-	-	-
<i>Calliostoma</i> sp.	25	25	-	-	-	-	-	-	-	-
<i>Cerithium</i> sp.	-	-	-	2700	300	-	-	-	-	-
<i>Eglisia</i> sp.	1675	600	625	25	-	25	-	-	-	-
<i>Nassarius</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Natica</i> sp.	25	-	-	-	-	-	-	-	-	-
<i>Oliva</i> sp.	-	-	-	-	-	25	-	-	-	-
<i>Terebra</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Turridula</i> sp.	25	25	-	-	-	-	-	-	-	-
BIVALVIA										
<i>Anadara</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Codakia</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Corbicula</i> sp.	175	-	-	-	-	-	-	-	25	-
<i>Corbula</i> sp.	25	125	50	-	-	-	-	-	-	-
<i>Dosinia</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Placamen</i> sp.	-	-	-	-	-	-	-	-	-	-
<i>Siliqua</i> sp.	-	-	-	50	100	-	-	-	-	-

Organisme	Test Results									
	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
<i>Tellina</i> sp.	-	-	-	-	-	-	-	-	-	-
CEPHALORHYNCHA										
<i>Priapulus</i> sp.	-	-	-	-	75	-	-	50	-	25
POLYCHAETA	-	-	-	-	50	-	-	25	-	-
OLIGOCHAETA	-	-	-	-	-	-	25	-	-	100
Taxa (S)	6	4	2	3	4	3	2	2	1	2
Abundance (Ind/m²)	1950	775	675	2775	525	75	50	75	25	125
Diversity Index (H')	0.82	1.03	0.38	0.2	1.64	1.58	1	0.92	0	0.72
Equitability Index (E)	0.32	0.52	0.38	0.13	0.82	1	1	0.92	0	0.72
Dominance Index (D)	0.75	0.63	0.86	0.95	0.39	0.33	0.5	0.56	1	0.68

Source: Primary Data, 2023.

Note: *) Data according to Baseline survey Report Contractor Package 6

In the December 2024 sampling period, the benthos diversity index (H') ranged from 0 at station B12 to 1.64 at station B8. This variation in the diversity index suggests that certain areas are experiencing conditions of water pollution. Such pollution could be attributed to sediments transported by river flows or could be a result of activities in the vicinity of Patimban Port. The presence of a site with a diversity index of 0, specifically at station B12, indicates an extreme level of disturbance or pollution, leading to an environment where benthic organisms are unable to sustain their populations. Conversely, the higher diversity index observed at station B8 suggests a relatively healthier benthic environment, possibly due to lesser impact from pollution or disturbances.

A comparison of benthos diversity indexes between the baseline survey and the monitoring period in December 2023 is depicted in the graph below.

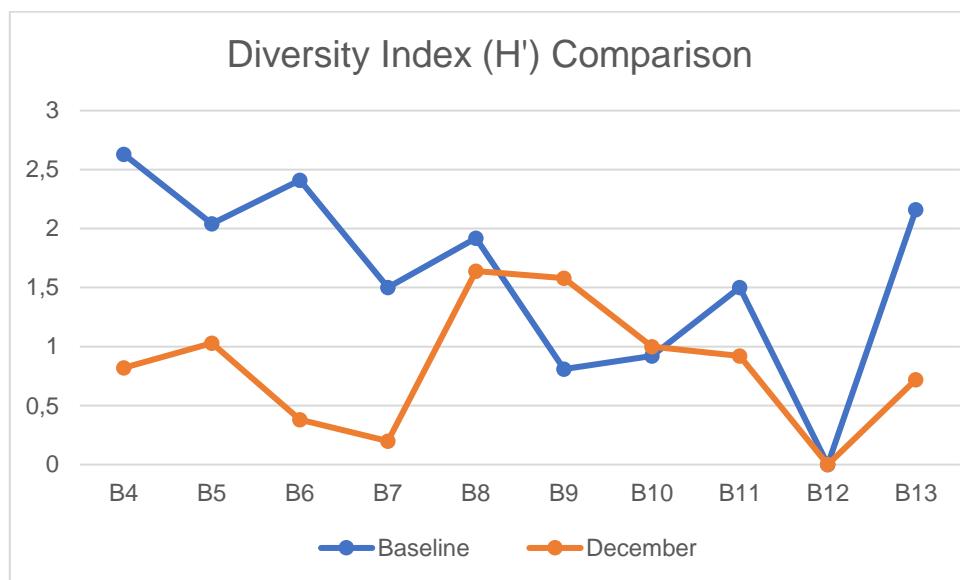


Figure 23 Diversity Index Comparison

For the equitability index (E'), two locations, namely B9 and B10, exhibit a value of 1, indicating a high level of species abundance. These locations are situated on the east side of Patimban Port. A value of 1 signifies that all species are evenly distributed within the community. In other locations,

the equitability index (E') ranges from 0 to 0.92. Notably, one location, B12, registers an index value of 0, indicating a lack of evenness in species distribution. This location, located near the mouth of the Cipunagara River, only yielded one species (*Corbicula* sp.).

The dominance index varies from 0.33 at location B9 to 1 at location B12. A dominance index value of 1 suggests the presence of individual species exerting significant dominance over others.

It is important to highlight that the diversity index at the sampling locations exhibits fluctuations, with a noticeable decrease observed at the dumping location. This reduction in the diversity index may be influenced by natural condition and activities conducted in and around the dumping area such as dredge material dumping.

2.6 Nekton

Construction and port activities in the sea can have significant impacts on marine life, including disruptions to nekton. Nekton refers to aquatic animals that are strong swimmers and are capable of active, horizontal movement in the water column, such as fish, squid, and some crustaceans.

The Nekton survey is conducted at five (5) designated stations, and their specific locations are detailed in Tables 15.

Table 17. Nekton survey ID and locations

No	Parameter	Sample ID	Location	Remark
1	Nekton	N1	6°11'38.52"S, 107°54'50.27"E	West side of Patimban Port Area
2	Nekton	N2	6°12'6.10"S, 107°58'48.50"E	East side of Patimban Port Area
3	Nekton	N3	6°12'20.83"S, 107°54'51.79"E	Far east side of Patimban Port Area
4	Nekton	N4	6° 8'2.64"S, 107°56'3.60"E	Far north side of Patimban Port Area
5	Nekton	N5	6°14'7.12"S, 107°54'10.85"E	South side near shoreline

Previous survey result could be seen in below table.

Table 18. Nekton Survey Results

Type	Local Name	Abundance				
		N1	N2	N3	N4	N5
Fish						
<i>Leiognathus equulus</i>	Pepetek		4	1	1	9
<i>Apogon pleuron</i>	Keperas				1	
<i>Gerres filamentosus</i>	Kapasan	6		2	1	2
<i>Nucchequula nuchalis</i>	Pepetek Jengger		5	1		
<i>Mene maculata</i>	Pirik			7		
Crustaceans						
<i>Penaeus Sp.</i>	Udang					1
Total		6	9	11	3	12

Source: Primary Data, 2023.

Note: *) Data according to Baseline survey Report Contractor Package 6

Based on data on nekton catches, it is known that the locations with the highest catches were locations N2 (62 individuals) and N3 (60 individuals). These locations are locations around the Patimban port area. The most caught fish is pepetek (*Leiognathus equulus*) which is found in almost all locations. This is also in accordance with the information obtained from the results of interviews with fishermen, that during the calm wave season, generally the availability of fish is quite a lot around

Patimban port waters (although there are several types of nektons which are more abundant during the high wave season).

Diversity indeks (H') for nekton ranged from 0,102 – 1,006. Overall, the value of the nekton species diversity index is in the low to moderate category. The highest Nekton diversity index (H') value are found in the dumping area (N4), with H' value at 1,006, while the lowest is in the northwest area (N1), with H' value 0,102.

For the equitability index (E'), the values in all locations ranged from 0,109 – 0,388. The equitability index (E') value are found in N5, with E' value at 0,388, while the lowest is in N2, with E' value 0,109.

For the dominance index ranges from 0,163 (location N4) – 0,883 (location N1). There is an index value with a value of 0,883 indicating that there is activity of individual dominance over other species..

2.7 Sediment

Sediment monitoring environmental survey is conducted at 10 stations and their specific locations are detailed in Tables 17.

Table 19. Sediment survey ID and locations

No	Parameter	Sample ID	Location	Remark
1	Sediment	S7	6°12'56.60"S, 107°53'59.33"E	West side of Patimban Port Area
2	Sediment	S11	6°11'38.62"S, 107°54'50.61"E	
3	Sediment	S12	6°12'20.83"S, 107°54'51.79"E	
4	Sediment	S9	6°13'40.59"S, 107°56'0.29"E	East side of Patimban Port Area
5	Sediment	S10	6°13'23.76"S, 107°57'23.88"E	
6	Sediment	S8	6°14'7.39"S, 107°54'11.00"E	South side of Patimban Port Area (near shoreline)
7	Sediment	S13	6°14'45.99"S, 107°55'7.71"E	
8	Sediment	S4	6° 5'24.86"S, 107°56'9.68"E	Dumping Area
9	Sediment	S5	6° 5'34.75"S, 107°56'39.49"E	
10	Sediment	S6	6° 5'49.55"S, 107°57'8.65"E	

Source: Primary Data, 2023.

Note: *) Data according to Environmental Quarterly Report Package 6

The sediment quality is compared to the standards as follow:

- Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (Canadian Council of Minister of the Environment; CCME) – Interim Sediment Quality Guideline (ISQG);
- National Assessment Guidelines for Dredging (NAGD), 2009, Australian Government Screening Level; and
- Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (Canadian Council of Minister of the Environment; CCME) – Probable Effect Level (PEL).

From the analysis of sediment samples, it is known that there are several parameters that do not meet the standards, namely:

1. Arsenic (As)

The results of sediment analysis showed that the Arsenic parameters at all sampling locations did not meet the standards of Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (Canadian Council of Minister of the Environment; CCME) – Interim Sediment Quality Guideline (ISQG). Whereas when compared to other standards, they mostly still meet the requirements, with parameter values ranging between 8,3-15 mg/kg.

Naturally Arsenic can enter the environment through weathering rocks and minerals containing Arsenic which then enters groundwater. Aside from natural causes, Arsenic can be caused by industrial activities, for example metal ore processing industry, pesticides industry, as well as the mining industry, and from agriculture activities using fertilizers or pesticides. Arsenic can also enter the environment through household waste.

The area around Patimban (Pantura Subang-Indramayu) is an agricultural area with large areas of land. Arsenic could come from agricultural activities around Patimban and end up on Patimban beach via rivers and sedimented in the sea.

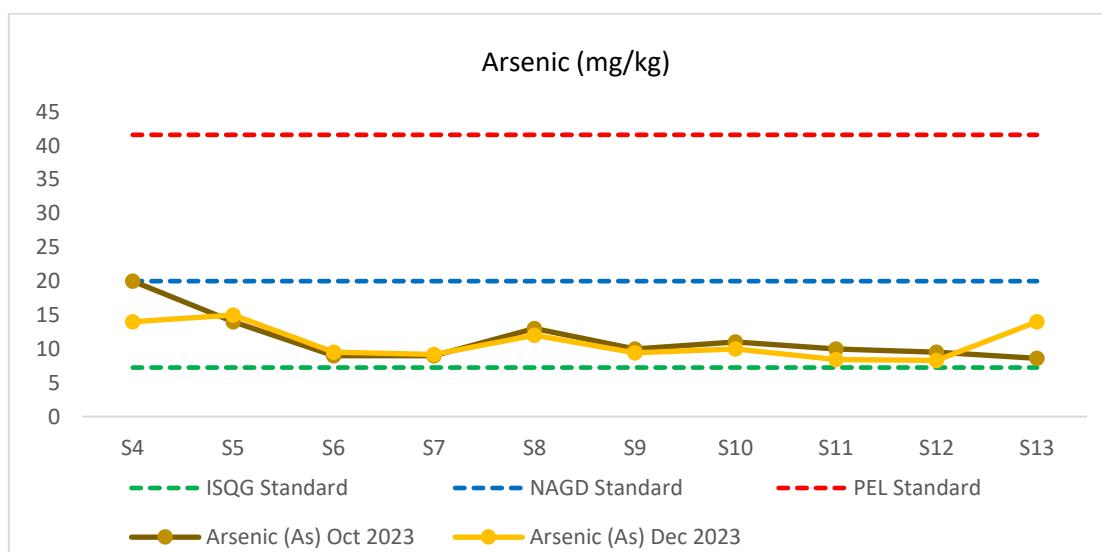


Figure 24 Comparison of arsenic levels with standard requirements

If compared between the result of Arsenic analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Arsenic is fluctuated, but mostly not much different.

2. Cadmium

Cadmium values at all sampling locations still meet the standards (ISQG, NAGD, and PEL), with values ranging between 0,02-0,18 mg/kg.

Cadmium in sea and river water comes from pollution by domestic and industrial waste. Industries that can produce cadmium waste are the textile, battery, paint, plastics industries, and others. According to WHO (1992) Cadmium in water bodies can be spread as far as 50 km from the source.

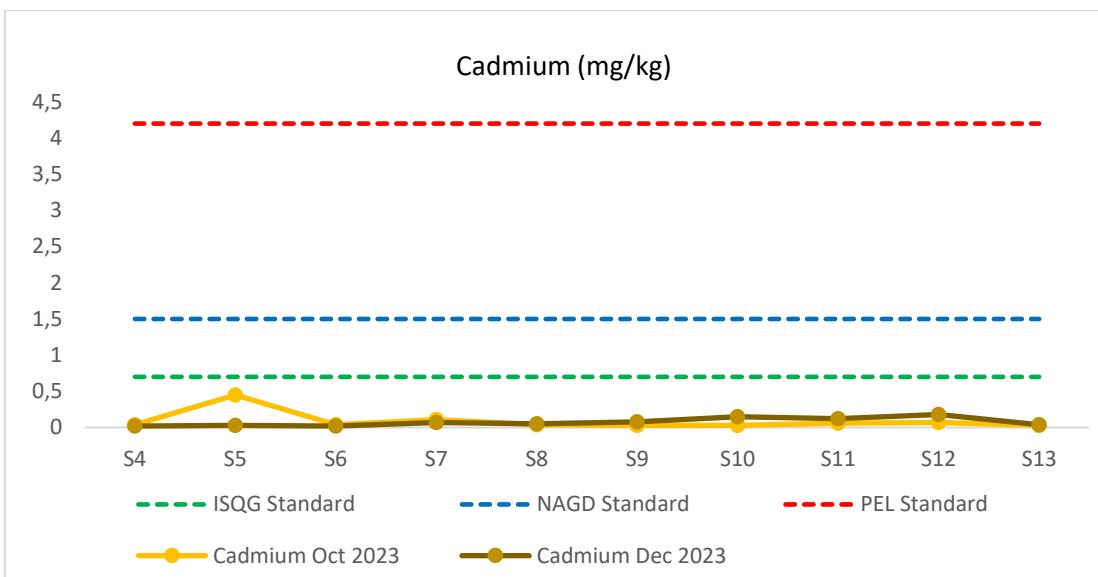


Figure 25 Comparison of cadmium levels with standard requirements

If compared between the result of Cadmium analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Cadmium is fluctuated, but mostly not much different.

3. Chromium

Chromium values at all sampling locations still meet the standards (ISQG, NAGD, and PEL), with values ranging between 10,6-23,5 mg/kg.

Chromium is generally used as a coating material (plating) on various equipment, ranging from industrial and household equipment. Chromium can get inside water bodies through two methods, namely natural and non-natural methods.

Chromium in the aquatic environment can be found from natural sources, such as the process of rock weathering and soil runoff. And for non-naturally by industrial activities, household waste and other activities.

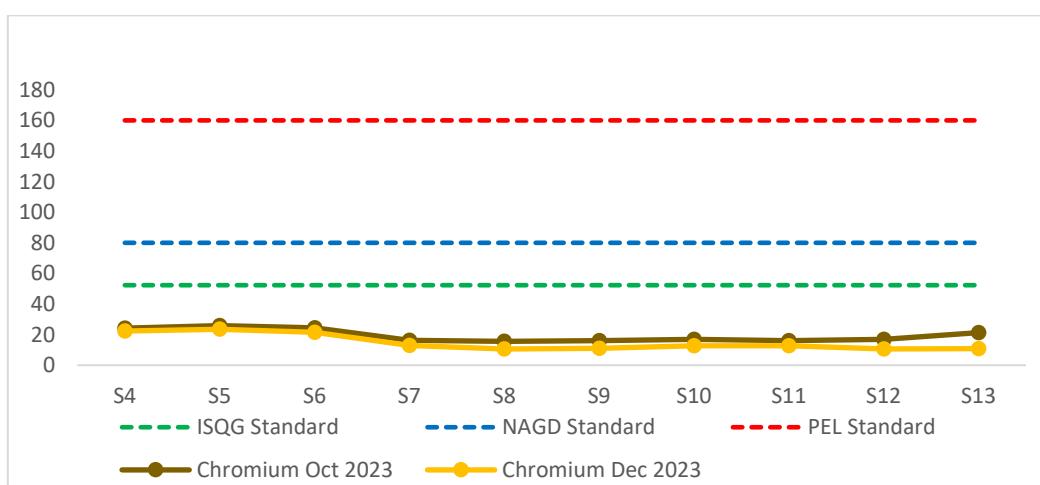


Figure 26 Comparison of chromium levels with standard requirements

If compared between the result of Chromium analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Chromium is not much different.

4. Copper

Copper values at all sampling locations still meet the standards (ISQG, NAGD, and PEL), with values ranging between 4,9-17,9 mg/kg.

Copper enters the aquatic environment because of human activities such as industrial waste disposal containing Copper, a mixture of preservatives, industrial wood processing, and household waste.

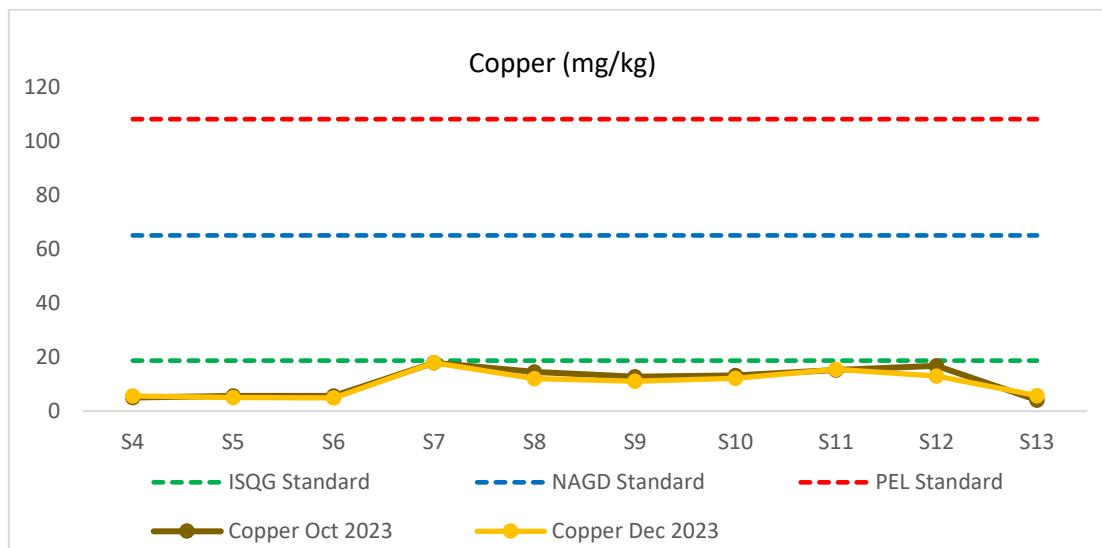


Figure 27 Comparison of copper levels with standard requirements

If compared between the result of Copper analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Copper values are mostly not much different.

5. Lead

Lead parameters at all sampling locations still meet the standards (ISQG, NAGD, and PEL), with values ranging between 12-15,9 mg/kg.

Lead (Pb) that enters the waters is because of human activities, including wastewater from industries related to Pb, wastewater from lead ore mining, waste from the battery industry and water transport (ship) fuel.

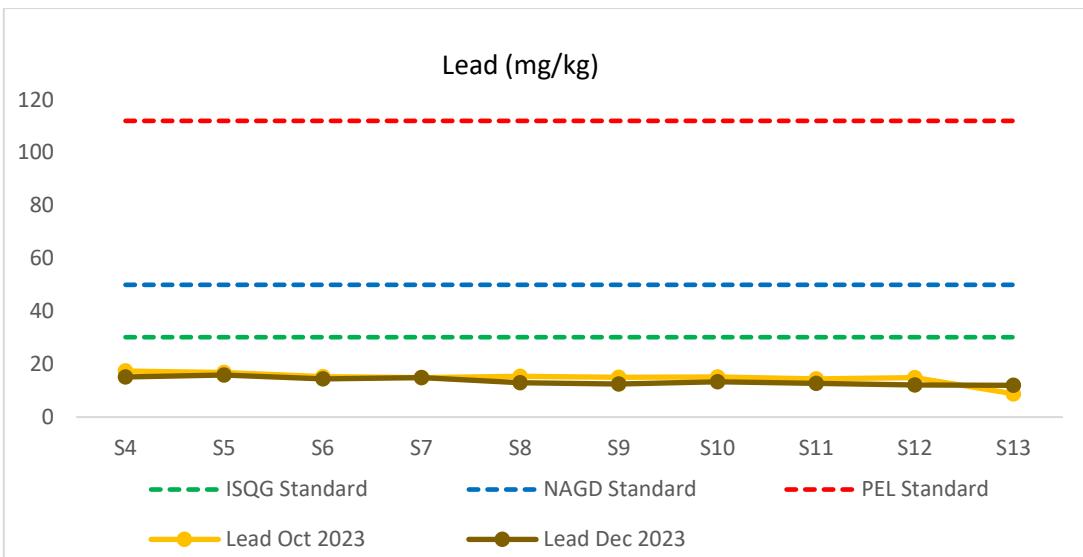


Figure 28 Comparison of lead levels with standard requirements

If compared between the result of Lead analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Lead values are mostly not much different, which are still under the standard of ISQG.

6. Mercury

The Mercury parameter at S5, S7, and S9 did not meet the standards of Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (Canadian Council of Minister of the Environment; CCME) – Interim Sediment Quality Guideline (ISQG), and National Assessment Guidelines for Dredging (NAGD), 2009, Australian Government Screening Level. While in the other locations still meet all the required standards, with parameter values ranging between 0,01-0,46 mg/kg.

Mercury in the environment can be caused by the waste products of various human activities, such as burning, mining, or factory wastes. Mercury emission waste can also be generated from power plants or the cement industry which uses a coal combustion process. There is also a coal fired steam power plant (PLTU) in the east of Patimban port, which the activity can cause effects to its surrounding environment.

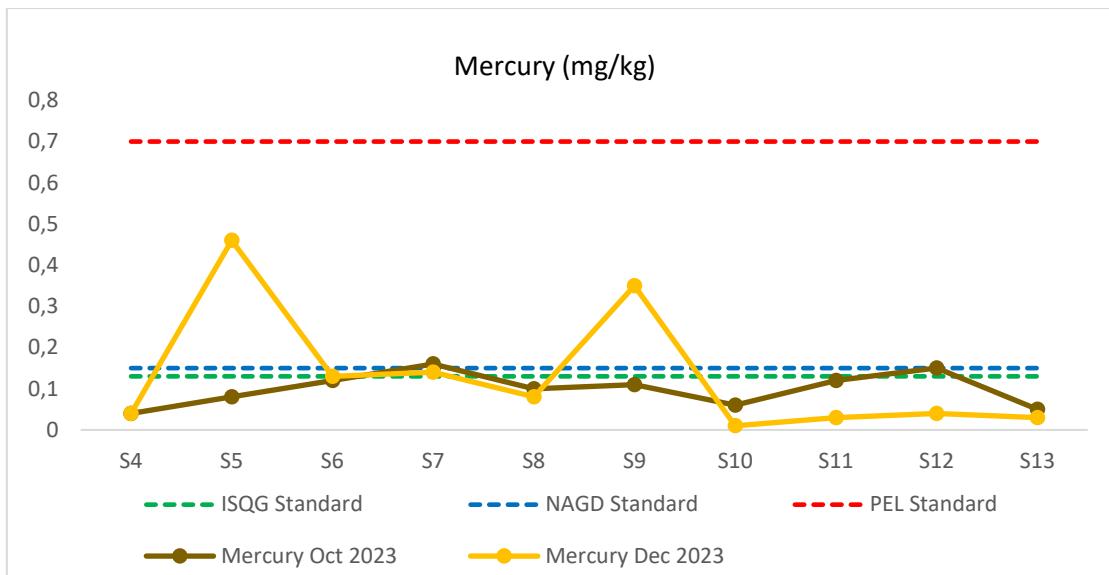


Figure 29 Comparison of mercury levels with standard requirements

If compared between the result of Mercury analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Mercury values in S5 and S9 in December 2023 are higher. This can be caused by community/industrial activities around the port area which are carried into Patimban waters.

7. Nickel

The Nickel parameters at all sampling locations still meet the NAGD standards, with values ranging between 8,3-18,1 mg/kg.

Nickel is a metal element that occurs naturally and has the characteristic of being shiny and silvery white in color. Nickel is one of the five metal elements that are most found, especially in the earth's crust.

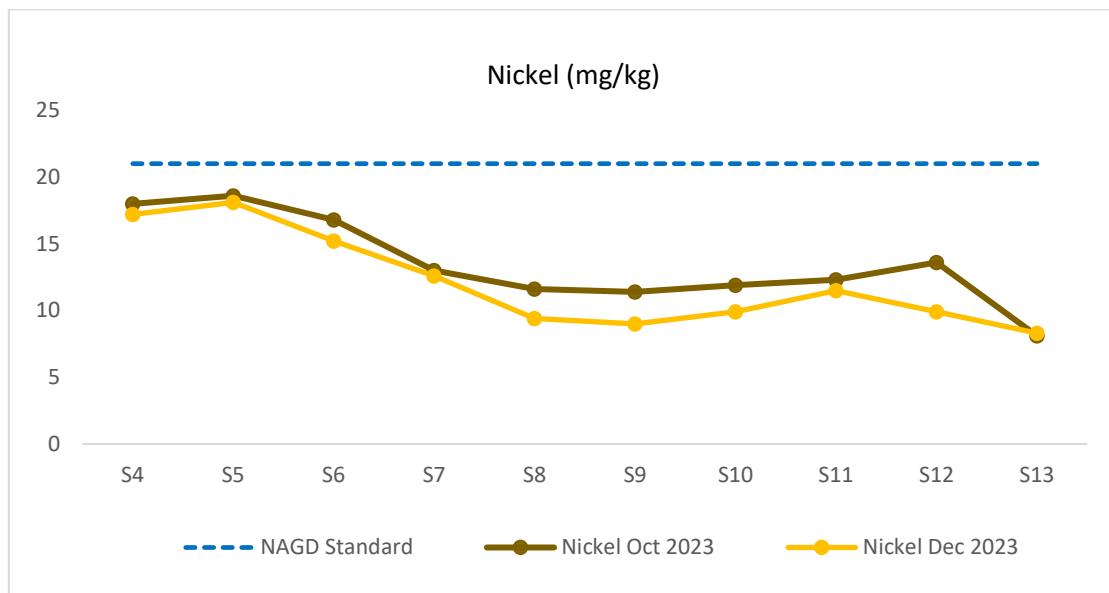


Figure 30 Comparison of nickel levels with standard requirements

If compared between the result of Nickel analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Nickel values are mostly not much different, which are still under the standard of NAGD.

8. Zinc

Zinc parameter at all sampling locations still meet the standards (ISQG, NAGD, and PEL), with values ranging between 51-80 mg/kg.

The presence of zinc metal (Zn) in seawater originates from the use of chemical fertilizers containing Cu and Zn metals, household waste disposal containing Zn metal such as corrosion of water pipes, and consumer products (for example, detergent formulas).

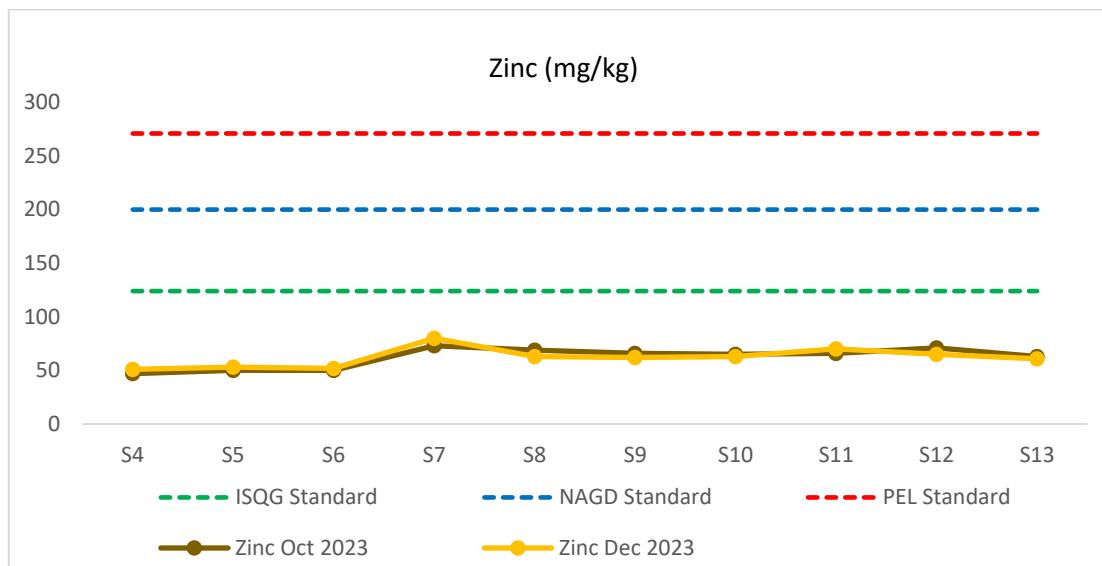


Figure 31 Comparison of zinc levels with standard requirements

If compared between the result of Zinc analysis in October 2023 (resampling sediment for baseline survey) and December 2023, the level of Zinc values are mostly not much different, which are still under the standard of ISQG.

Overall, in this period of survey, the level of heavy metal parameters could be caused by activities upstream of the river that enters Patimban waters, or other causes.



Figure 32 Documentation for Sediment Sampling

Table 20. Sediment survey results

No	Parameter	Unit	Standards			Locations									
			ISQG	NAGD	PEL	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13
	Sampling Date	-	-	-	-	Dec 13, 2023	Dec 13, 2023	Dec 13, 2023	Dec 14, 2023	Dec 14, 2023	Dec 14, 2023	Dec 13, 2023	Dec 13, 2023	Dec 13, 2023	Dec 13, 2023
	Depth	m	-	-	-	± 28	± 30	± 30	± 1,8	± 1,1	± 3,5	± 12	± 5,5	± 5,1	± 2
Physical Parameters															
1	Appearance*	-	-	-	-	Sludge									
2	Odor*	-	-	-	-	Odorless									
3	Colour*	-	-	-	-	Brown									
4	Specific Gravity*	-	-	-	-	2,66	2,63	2,56	2,61	2,71	2,54	2,56	2,66	2,7	2,7
5	Volatile*	g/cc	-	-	-	6,15	6,01	5,69	5,35	5,71	6,95	5,74	5,96	6,51	5,83
7	Ash Content	%				52,8	46,5	48,3	35,2	39,7	37,6	32,3	31,5	42,7	47,7
6	Total Organic Carbon *	%				0,65	0,75	0,71	1,31	1,05	1,36	1,31	1,26	1,27	1,03
8	Density					2,584	2,673	2,655	2,491	2,458	2,452	2,403	2,358	2,365	2,548
9	Loss on Ignition	%	-	-	-	11,61	11,98	12,1	8,02	9,31	11,28	11,01	10,26	8,54	4,16
10	Moisture Content	%				53,2	48,4	54,4	58,6	62,1	66	68,3	66,5	58	38,7
11	Particle size														
	a. Gravel	%	-	-	-	1,22	0	0	0	0	0,08	0	0	0	0,03
	b. Sand	%	-	-	-	53,66	49,35	48,59	0,4	3,63	0,39	1,25	0,4	0,1	5,37
	c. Material finer than no. 200 sieve	%	-	-	-	45,12	50,65	51,41	99,6	96,37	99,61	98,67	99,6	99,9	94,6
	d. Silt	%	-	-	-	31,71	38,09	38,68	52,66	38,34	54,89	49,47	55,23	41,02	62,81
	e. Clay	%				13,41	1,56	12,73	46,94	58,03	44,71	49,2	44,37	58,88	31,79
12	Arsenic (As)	mg/kg	7,24	20	41,6	14,0	15,0	9,5	9,2	12,0	9,4	10,0	8,4	8,3	14,0
13	Cadmium (Cd)	mg/kg	0,7	1,5	4,2	< 0,02	0,03	< 0,02	0,07	0,05	0,08	0,15	0,12	0,18	0,04
14	Chromium (Cr)	mg/kg	52,3	80	160	22,3	23,5	21,6	13,0	10,6	11,0	12,7	12,8	10,7	10,8
15	Copper (Cu)	mg/kg	18,7	65	108	5,6	5,0	4,9	17,9	12,0	11,1	12,2	15,5	13,0	5,8
16	Lead (Pb)	mg/kg	30,2	50	112	15,2	15,9	14,4	14,9	13,0	12,5	13,3	12,7	12,1	12,0
17	Mercury (Hg)	mg/kg	0,13	0,15	0,7	0,04	0,46	0,13	0,14	0,08	0,35	< 0,01	0,03	0,04	0,03
19	Nickel (Ni)	mg/kg	-	21	-	17,2	18,1	15,2	12,6	9,4	9,0	9,9	11,5	9,9	8,3
18	Zinc (Zn)	mg/kg	124	200	271	51	53	52	80	63	62	63	70	65	61

 Exceeded the ISQG standard
 Exceeded the NAGD standard
 Exceeded the PEL standard

Source: Primary Data, 2023.

Note: *) Data according to Baseline survey Report Contractor Package 6

2.8 Fish Catch

Fish catch is influenced by a myriad of factors that determine the success and sustainability of fishing practices. One of the most critical factors is the state of fish populations and their natural habitats. Overfishing and habitat destruction can significantly impact fish catch, leading to declining yields and potentially endangering species. Additionally, environmental variables such as weather conditions, ocean currents, and temperature play a crucial role in determining the availability and behavior of fish and affecting catch rates.

Since construction phase I-2 has just started, Contractor Package has tried to collect fish catch information. Fish catch survey monitoring held since May until phase I-2 finished the construction period and all information was collected came from TPI and middlemen.

As for phase I-2, CP6 has collected information from 3 TPI which consist of Genteng, Galian and Terungtum.

The fishing ground area for DKP Subang consists of 8 fishing ground waters as shown in the figure below.



Figure 33 Patimban Fishing Ground Map

Source: Environmental Monthly Report in Transition Period no.9,10 and 11, October 2022

The outcomes of monthly fish catch in the Patimban Sea could be seen in the below figures.

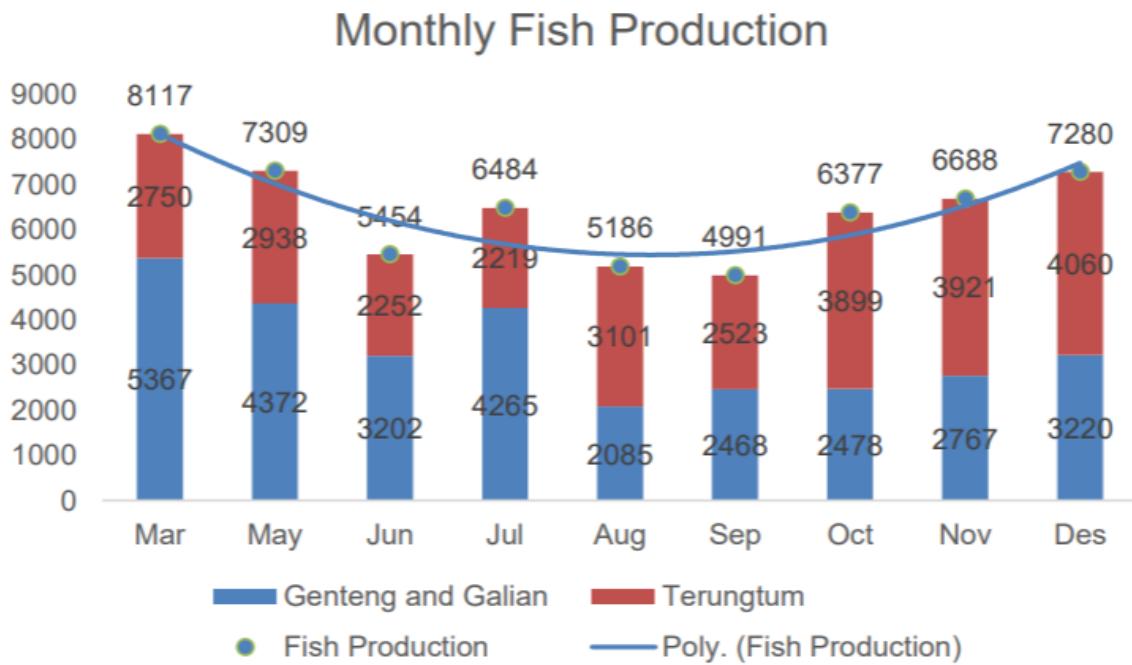


Figure 34 Fish production Monthly Result

Source: Environmental Monthly Monitoring Report of Package 6 Contractor, May 2024

The figures above reveal that the highest yield, recorded in March 2023 (baseline), reached 8117 kg/day, while the lowest yield was recorded in September, totaling 4991 kg/day.

The yield showed a gradual decrease until September 2023, and then increased then until December 2023.

Notably, during the period from March to June, there were no construction activities at sea, yet a slight decrease in fish catch was observed. According to interviews conducted with fishermen, this decline in catch is attributed to natural environmental factors.

III. Details on Social Environment

3.1. Monitoring of LARAP

Table 21. Progress of Compensation Payment and Land Vacation

1. Access road construction

Village Items	Patimban	Gempol	Kalentambo	Kotasari	Pusakajaya	Pusakaratu	Total
(1) Payment of Compensation (unit: household)							
Total PAHs	0	101	28	20	7	38	194
Progress in the period	0	0	0	0	0	0	0
Accumulated total*	0	101	28	16	6	38	189
Remaining PAHs	0	0	0	4	1	0	5

Village Items	Patimban	Gempol	Kalentambo	Kotasari	Pusakajaya	Pusakaratu	Total
Percentage of completion		100,00	100,00	80,00	85,71	100,00	97,42
(2) Land Vacation (unit: plot)							
Total Plots	0	74	24	36	9	26	169
Progress in the period	0	0	0	0	1	1	1
Accumulated total*	0	74	24	32	8	26	164
Remaining PAHs	0	0	0	4	1	0	5
Percentage of completion	0	100,00	100,00	88,89	88,89	100,00	97,04

Note: "Accumulated total*" show the accumulated total since the land acquisition and relocation started

Source: National Land Board, 2018

2. Backup area

Village Items	Patimban	Gempol	Kalentambo	Kotasari	Pusakajaya	Pusakaratu	Total
(1) Payment of Compensation (unit: household)							
Total PAHs	538	0	0	0	0	0	538
Progress in the period	1	0	0	0	0	0	1
Accumulated total*	537	0	0	0	0	0	537
Remaining PAHs	1	0	0	0	0	0	1
Percentage of completion	99,81	0	0	0	0	0	99,81
(2) Land Vacation (unit: plot)							
Total Plots	462	0	0	0	0	0	462
Progress in the period	1	0	0	0	0	0	1
Accumulated total*	461	0	0	0	0	0	461
Remaining PAHs	1	0	0	0	0	0	2
Percentage of completion	99,78	0	0	0	0	0	99,78

Note: "Accumulated total*" shows the accumulated total since the land acquisition and relocation started

Source: National Land Board, 2018

Table 22. Progress of the Compensation

Village Items \	Patimban	Gempol	Kalentambo	Kotasari	Pusakajaya	Pusakaratu	Total
(1) PAHs who need to be resettled as residents (unit: household)							
Total PAHs	0	0	0	0	0	0	0
Progress in the period	0	0	0	0	0	0	0
Accumulated total*	0	0	0	0	0	0	0
Remaining PAHs	0	0	0	0	0	0	0
Percentage of completion	0	0	0	0	0	0	0
(2) PAHs who do not need relocation due to land acquisition and/or relocation of non-resident structure (unit: household)							
Total PAHs	538	101	28	20	7	38	732
Progress in the period	1	0	0	0	0	0	1
Accumulated total*	537	101	28	16	6	38	726
Remaining PAHs	1	0	0	4	1	0	6
Percentage of completion	99,81%	100,00%	100,00%	80,00%	85,71%	100,00%	99,18%

Note: "Accumulated total*" shows the accumulated total since the land acquisition and relocation started

Source: National Land Board, 2018

Table 23. Record of Land Acquisition Funds

Items			Amount (Rp)	Financial source
Replace ment Cost	Physical replacement cost	Replacement cost of Landowner and wage earner	799.775.473.415	National Asset Management Agency (Lembaga Management Aset Negara: LMAN)
	Non-physical replacement cost	Livelihood Restoration Program	12.666.742.562	DGST
Subtotal			812.442.215.977	-
LARAP administrative and external monitoring cost			4.292.080.000	DGST
Ground total			816.734.295.977	-

Source: DGST, 2023

**Table 24. People Affected Project of Livelihood Restoration Program (LRP) Implementation
(Period of March 2019 – December 2023)**

Program name	Number of participants					
	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Basic Safety Training	359	18,2	0	0	359	18,2
TKBM (Stevedoring and Workforce)	149	7,5	1	0,1	150	7,6
Forklift Operational Training	410	20,8	0	0	410	20,8
Assembling and Installation of Small Rampus Net	442	22,4	0	0	442	22,4
Security Training	46	2,3	0	0	46	2,3
Cleaning Service Training	42	2,1	20	1,0	62	3,1
Welding Training	77	3,9	0	0	77	3,9

Program name	Number of participants					
	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Culinary entrepreneurship	95	4,8	102	5,2	197	10,0
Vulnerable Training	62	3,1	6	0,3	68	3,4
Urban Farming Training	25	1,3	0	0,0	25	1,3
Livestock Products Training	24	1,2	10	0,5	34	1,7
Food court Business Development	47	2,4	17	0,9	64	3,2
Catfish Cultivation	41	2,1	0	0,0	41	2,1
Total Participants	1819	92,1	156	7,9	1975	100

Source: Livelihood Restoration Program Report, 2023

Table 25. Records of Funds and Disbursement for Livelihood Restoration Program (LRP)

Allocated funds			Record of disbursement		
Amount (IDR.)	Allocated organization	Purpose of use	Date	Amount (IDR.)	Disbursement for
12.666.742.562	DGST to Consultant Pkg-8	LRP Implementation	Oct-23	-	Implementation Program
				-	Experts
				-	Non-personnel cost
			Nov-23	-	Implementation Program
				-	Experts
				-	Non-personnel
			Dec-23	-	Implementation Program
				-	Experts
				-	Non-personnel cost
			Total	-	-

Source: Livelihood Restoration Program Report, 2023

Table 26. Comparison of The Income and Living Standard Before and After the Land Acquisition / Project Implementation

Sample households		Income (Rp.)			Change of living standard
Type of PAPs	Number of sample households	Before	After		
Owner (certificate)	55	Min:	Min: < 1.000.000		
		Max:	Max: > 3.000.000		
		Ave :	Ave : 2.045.455		
		(Date:)	(Date: September 2022)		
Owner (non certificate)	89	Min:	Min: < 1.000.000		
		Max:	Max: > 3.000.000		
		Ave :	Ave : 2.028.090		
		(Date:)	(Date: September 2022)		
Tenant	57	Min:	Min: < 1.000.000		
		Max:	Max: > 3.000.000		
		Ave :	Ave : 2.482.456		
		(Date:)	(Date: September 2022)		
Wage Earner	314	Min:	Min: < 1.000.000		
		Max:	Max: > 3.000.000		
		Ave :	Ave : 1.921.975		

Sample households		Income (Rp.)		
Type of PAPs	Number of sample households	Before	After	Change of living standard
		(Date:)	(Date: September 2022)	
Fisherman	500	Min:	Min: < 1.000.000	
		Max:	Max: > 3.000.000	
		Ave :	Ave : 1.711.000	
		(Date:)	(Date: September 2022)	

Source: Based on Survey in Final Report, External Monitoring, 2023

3.2. Number of Local Workers

Table 27. Number of Local workers Contractor of Package 5 (TWWHA)

No	Location (Village)	Monitoring Period			Total*	
		2023				
		Oct	Nov	Dec		
1	Patimban	92	96	103	473	
2	Gempol	5	6	6	34	
3	Kalentambo	5	9	9	37	
4	Kotasari	-	5	1	6	
5	Pusakaratu	8	10	10	64	
6	Pusakajaya	11	11	16	69	
TOTAL + Other area**		121	137	145	683	

*since constructional started

** other areas outside the affected village within the same sub-district (Pusakanagara and Pusakajaya sub-district)

Source: Contractor Environmental Monitoring Report, 2023

Table 28. Number of Local workers Contractor of Package 6 (PTRPWJ)

No	Location (Village)	Monitoring Period			Total*	
		2023				
		Oct	Nov	Dec		
1	Patimban	79	77	83	513	
2	Gempol	8	8	12	51	
3	Kalentambo	24	24	24	166	
4	Kotasari	5	5	7	39	
5	Pusakaratu	11	11	11	82	
6	Pusakajaya	6	6	6	51	
TOTAL + Other area**		133	131	143	938	

*since constructional started

** other areas outside the affected village within the same sub-district (Pusakanagara sub-district)

Source: Contractor Environmental Monitoring Report, 2023

Table 29. Number of Local workers PT PPI

No	Location (Village)	Monitoring Period			Total*	
		2023				
		Jul	Aug	Sep		
1	Patimban	6	2	3	70	
2	Gempol	-	-	-	-	
3	Kalentambo	1	1	1	24	

No	Location (Village)	Monitoring Period			Total*	
		2023				
		Jul	Aug	Sep		
4	Kotasari	-	-	-	-	
5	Pusakaratu	4	3	4	64	
6	Pusakajaya	3	1	2	38	
TOTAL + Other area**		30	18	21	196	

*since operational started

** other areas outside the affected village within the same sub-district (Pusakanagara and Pusakajaya sub-district)

Source: Operator Environmental Monitoring Report, 2023

Table 30. Number of Local workers PT PICT

No	Location (Village)	Monitoring Period			Total*	
		2023				
		Jul	Aug	Sep		
1	Patimban	10	10	10	190	
2	Gempol	-	-	-	2	
3	Kalentambo	6	6	6	111	
4	Kotasari	4	4	4	76	
5	Pusakaratu	3	3	3	57	
6	Pusakajaya	5	5	5	95	
TOTAL + Other area**		28	28	28	531	

*since operational started

** other areas outside the affected village within the same sub-district (Pusakanagara and Pusakajaya sub-district)

Source: Operator Environmental Monitoring Report, 2023

3.3. Accident, Public Unrest, and Grievance Redress

Table 31. Land Traffic Condition and Accident Number

No	Sampling Location	Monitoring Period						Total	
		Oct		Nov		Dec			
		TJ	AN	TJ	AN	TJ	AN	TJ	AN
1	Pantura road	0	0	0	0	0	0	0	0
2	Patimban seaport access road	0	0	0	0	0	0	0	0
3	Crossing of Pantura road	0	0	0	0	0	0	0	0
4	Crossing of Patimban seaport access road	0	0	0	0	0	0	0	0

Note:

TJ : Traffic Jam AN : Accident Number (0): Zero accident / No traffic jam

Source: Contractor Environmental Monitoring Report, 2023

Table 32. Sea Traffic Monitoring

No	Type of Ship	Monitoring period (Number of the ship)			Total*
		Oct	Nov	Dec	
1	Piling barge	0	2	3	47
2	Anchor boat	0	0	0	90
3	CDM Vessel	3	4	5	80
4	Semi-submersible vessel	0	0	0	4
5	Pneumatic conveying barge	0	0	0	9

No	Type of Ship	Monitoring period (Number of the ship)			Total*
		Oct	Nov	Dec	
6	Cement supply vessel	0	2	0	38
7	Improved soil placing barge	0	0	0	9
8	Cement transportation vessel	2	0	0	28
9	Cement feeder carrier	2	4	1	80
10	Grab dredger	0	0	1	48
11	Hopper barge	0	0	0	112
12	SP Hopper Barge	0	0	2	21
13	Flat barge	0	1	1	114
14	Crane barge	1	3	2	192
15	Tug boat	1	5	4	254
16	Crew boat	0	0	0	96
17	Workboat	0	4	1	85
18	Excavator Barge	0	0	0	10
19	Fracturing Barge	0	0	0	19
20	Stone Barge	0	0	0	3
21	CPM	0	0	4	14
22	Multi-Purpose Vessel	0	1	6	62
23	Placing Barge	0	0	0	13
24	Rescue boat	0	0	0	25
25	SPOB	1	0	0	50
26	Bunker Vessel	0	0	0	9
27	Multi Cat	0	0	0	5
28	Passenger Boat	5	15	10	124
29	Anchor Barge	2	1	1	15
30	Dredger	4	5	8	55
31	Patrol Boat	0	1	1	39
32	LCT Vessel	0	3	3	46
33	Sand fill Vessel	0	0	0	8
34	Pneumatic Pumping Barge	0	0	0	4
35	Trailing Suction Hopper Dredger	0	0	0	5
36	Wood boat	0	0	0	22
37	Car Carrier	0	0	0	50
38	Fishing boat	0	5	0	125
39	Water supply	0	0	0	1
40	Local car and cargo carrier vessel	0	0	0	49
41	Export car carrier vessel	0	0	0	25
42	Pusher Boat	2	2	1	9
43	Survey Boat	0	1	2	4
Total		23	57	58	2.098

*Since construction started

Source: Contractor Environmental Monitoring Report, 2023

Table 33. Sea Traffic Condition and Accident Number

No	Location	Monitoring period						Total	
		Oct		Nov		Dec			
		STC	AN	STC	AN	STC	AN	STC	AN
1	Patimban Beach	Smooth	0	Smooth	0	Smooth	0	Smooth	0

Note:

STC : Sea traffic condition AN : Accident Number

Source: Contractor Environmental Monitoring Report, 2023

Table 34. Public Unrest, Protest, and Demonstration

No	Location	Monitoring Period									Total		
		Oct			Nov			Dec					
		PUN	PRO	DEM	PUN	PRO	DEM	PUN	PRO	DEM	PUN	PRO	DEM
1	Around Patimban port development project	0	0	0	0	0	0	0	0	0	0	0	0

Note:

PUN : Pucblie Unrest PRO : Protest DEM : Demonstration

Source: Contractor Environmental Monitoring Report, 2023

Table 35. Record of Grievance Redress Related Environmental and Social Issues

Grievance No.	1
(1) Date of grievance received	04 November 2019
(2) Complaint	Patimban Village due to the TKBM Cooperative, training programs, and local enterpriser
(3) Contents of grievance	<p>a) Issue the recommendation of the creation of TKBM Patimban Sejahtera Cooperative.</p> <p>b) Evaluate educational and training programs for affected people to be prioritized employment in port.</p> <p>b) Empower the local (Pusakanagara) enterprise to support the development and operational Patimban Port.</p>
(4) Way of collecting grievance	The Harbormaster and Port Authority Office (KSOP) Class II Patimban, and related parties directly arranged a meeting with the demonstrators and/or protesters of complaints to identify their demands and to seek solutions at the same date of the demonstration or protest.
(5) Solution/unresolved issues	<p>a) Regarding the TKBM Patimban Sejahtera cooperative recommendation, Harbormaster and Port Authority Office (KSOP) Class II Patimban explained that the recommendation to TKBM Patimban Sejahtera cannot be issued since the port status is still in the development stage, and the recommendation shall be released after the operator who operates the Patimban Port is selected. Also, to calm the situation, KSOP Class II Patimban</p>

Grievance No.	1
	<p>guaranteed that it would not issue any TKBM recommendation within the construction period.</p> <p>b) The Livelihood Restoration Program (LRP) team since 2018 has already assessed and built the training program based on peoples affected requests. Also, the programs were prepared under the supervision of related government agencies such as Manpower agency, Cooperative agency, and Fishery agency. Then, the established various programs were chosen by the participants themselves.</p> <p>In early 2019, some of the participants wanted to change the training program that they had chosen, and there was another program proposal from the communities. Considering on the situation, the LRP team conducted further assessment and finalized the program compositions, and then also started the implementation. The LRP team will make additional adjustments on the program if necessary, depending on the situation</p> <p>c) Regarding the involvement of local enterprises for Patimban Port development, DGST and the Consultant encouraged the contractors to involve local enterprises as long as their capability meets the requirement. Until March 2020, there had been 47 agreements with local enterprises to support contractors' needs, such as; catering, general supplier, office stationery, water supply for the vessel, waste management, transportation, and bamboo supplier.</p>
(6) Date of grievance resolved	TKBM Patimban Sejahtera Cooperative's recommendation is been waited until the port is ready to operate, while the other demands have been resolved on 4 November 2020.
(7) Remarks	None
Grievance No.	2
(1) Date of grievance received	16 June 2021
(2) Complaint	Fishermen from Tanjung Pura, Indramayu.
(3) Contents of grievance	<p>a) Fresh money compensation</p> <p>b) Fuel donation</p> <p>c) CSR implementation not transparent</p>
(4) Way of collecting grievance	The Harbormaster and Port Authority Office (KSOP) Class II Patimban and related parties directly arranged a meeting with the demonstrators and/or protesters of complaints to identify their demands and find solutions on the same date of the demonstration or protest.
(5) Solution/unresolved issues	<p>a) Fresh money compensation had no legal basis that allow compensation to be provided by cash.</p> <p>b) The fishermen themselves rejected the fuel</p>

Grievance No.	1
	<p>donation. Otherwise, the fishermen requested compensation in cash.</p> <p>c) The CSR implementation has been carried out by contractors, such as repairing the local road, Mosque repairs, a donation to the orphans. DGST have not yet implemented CSR since the activity is in the construction phase, but DGST are open to any opportunity proposed by fishermen.</p> <p>d) The fishermen's demand is not related to Patimban port construction. Nevertheless, DGST will facilitate the fishermen to the Fishery agency in order to convey what fishermen proposed related to the fishermen request such as fishing gear supports.</p>
(6) Date of grievance resolved	18 June 2021
(7) Remarks	None

Source: Consultant Environmental Monitoring Report, 2020

Table 36. Form for Record of Grievance Redress Related Land Acquisition and Resettlement

Grievance No.	1
(1) Date of grievance received	03 October 2018
(2) Complaint	Nearest community (house) regarding work pile activity
(3) Contents of grievance	Cracked house due to work pile construction
(4) Way of collecting grievance	Meeting with the stakeholders (local government, community representative, Ministry of Public Works representatives, and contractors) to mitigate and find the solution.
(5) Solution/unresolved issues	<p>a) Meeting with the stakeholders (local government, community representative, Ministry of Public Works representatives and contractors) to mitigate and find the solution</p> <p>b) Contractors' identification-related to the house condition impacted by the work pile activity</p> <p>c) House repairment based on the contractors' identification results</p> <p>d) Until June 2020, the total number of houses that has been repaired was 94 houses located; 45 houses in Ciawitali hamlet – Pusakaratu Village, 37 houses in Gempol Village, and 12 houses in Kotasari village.</p>
(6) Date of grievance resolved	The house repairment is resolved October 2020.
(7) Remarks	None

Source: Consultant Environmental Monitoring Report, 2023

Table 37. Implementation Problems and Solutions (if any): No case reported (therefore, below form remained in blank)

Record of problems		Record of solutions	
Date	Problems	Date	Solutions

Source: Consultant Environmental Monitoring Report, 2023

Figure 35. Complaints Form

Lampiran-1		
Nomor Seri (<i>Penggunaan Resmi</i>): 		
Formulir Pengumpulan Keluhan Proyek Pembangunan Pelabuhan Patimban		
	KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN Jalan Raya Utama Pelabuhan Patimban, Subang, Jawa Barat - 41259 FAX: 0260 522709 Email: ksop-patimban@dephub.go.id	
Informasi Pemohon		
Nama:	KTP:	
Desa:	HP:	
Latar belakang dan masalah		
Persoalan: <input type="checkbox"/> Aset yang Terkena Dampak <input type="checkbox"/> Kompensasi <input type="checkbox"/> Program Pemulihan Mata Pencaharian <input type="checkbox"/> Pekerjaan Konstruksi <input type="checkbox"/> Lain-lain (_____)		
Permintaan/Saran/Pertanyaan		
Tanggal Pengiriman: <hr/> Nama Pemohon: <hr/> Tandatangan: <hr/>	Saksi*: <hr/> Tandatangan: <hr/>	Tanggal Pengakuan: <hr/> Nama Penerima: <hr/> Tandatangan: <hr/>

* Camat atau Kepala Desa sebagai saksi

	Formulir Pelacakan Pengaduan Proyek Pembangunan Pelabuhan Patimban	Nomor Seri:
---	--	-------------

Informasi Keluhan

Nama Pengadu:	Desa:
Ringkasan Pengaduan:	

Catatan Penanganan Pengaduan

Hari	Tindakan yang diambil untuk menyelesaikan keluhan (investigasi dll)	Hasil/tindakan lebih lanjut yang harus dilakukan	Orang yang bertanggung-jawab
	Menerima Keluhan melalui _____		

Solusi akhir

Tanggal	Solusi	Laporan Keluhan	Publikasi dan Solusi	Orang yang bertanggung-jawab
		Tanggal Laporan: _____ Metode: <input type="checkbox"/> Bicara langsung <input type="checkbox"/> Melalui kepala desa / camat <input type="checkbox"/> Lain-lain (_____)	Tanggal Publikasi: _____ Metode: <input type="checkbox"/> Papan Desa <input type="checkbox"/> Others (_____)	

Nomor Seri:

<p style="text-align: center;">Hasil Publikasi Penanganan Keluhan untuk Proyek Pembangunan Pelabuhan Patimban</p>	
	<p>KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN Jalan Raya Utama Pelabuhan Patimban, Subang, Jawa Barat - 41259 FAX: 0260 522709 Email: ksop-patimban@dephub.go.id</p>

Informasi Pemohon

Nama:	Desa:
Tanggal Pengajuan:	

Ringkasan Keluhan

Respon/Solusi/Hasil Investigasi

Tanggal Publikasi:

Nama Orang yang Bertanggung-Jawab:

Tandatangan:

Source: Directorate General of Sea Transportation, 2023

Environmental and Social Consideration Quarterly Progress Report No.20

Period of October – December 2023



APPENDICES



**Directorate General of Sea Transportation
Ministry of Transportation
Republic of Indonesia**

Environmental and Social Consideration Quarterly Progress Report No.20

Period of October – December 2023

Appendix 1.

AMDAL Approval Letter



**MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA**

**KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA**
NOMOR SK 136/Menlhk/Setjen/PLA 4/2/2017

TENTANG

IZIN LINGKUNGAN

KEGIATAN PEMBANGUNAN PELABUHAN PATIMBAN DI DESA PATIMBAN,
DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU,
KECAMATAN PUSAKANAGARA DAN DESA PUSAKAJAYA, KECAMATAN
PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT
KEPADА DIREKTORAT KЕPELABUHANAN, DIREKTORAT JENDERAL
PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA,

Menimbang

- a bahwa berdasarkan ketentuan Pasal 2 Peraturan Pemerintah Nomor 27 Tahun 2012 tentang Izin Lingkungan, setiap Usaha dan /atau Kegiatan yang wajib memiliki Amdal atau UKL-UPL wajib memiliki Izin Lingkungan,
- b bahwa Direktur Jenderal Perhubungan Laut atas nama Menteri Perhubungan melalui surat Nomor AI 003/1/24 PHB 2017 tanggal 01 Februari 2017, mengajukan Permohonan Izin Lingkungan dan Penilaian Dokumen ANDAL dan RKL RPL Rencana Pembangunan Pelabuhan Patumban kepada Menteri Lingkungan Hidup dan Kehutanan,
- c bahwa berdasarkan permohonan sebagaimana dimaksud dalam huruf b, telah diterbitkan Keputusan Menteri Lingkungan Hidup dan Kehutanan Nomor SK 135/Menlhk/Setjen/PLA 4/2/2017 tanggal 28 Februari 2017 tentang Kelayakan Lingkungan Hidup Rencana Kegiatan Pembangunan Pelabuhan Patumban di Desa Patumban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat kepada Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan,
- d bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a sampai dengan huruf c, perlu menetapkan Keputusan Menteri Lingkungan Hidup dan Kehutanan tentang Izin Lingkungan Kegiatan Pembangunan Pelabuhan Patumban di Desa Patumban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat kepada Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan,

- Mengingat
- 1 Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup,
 - 2 Peraturan Pemerintah Nomor 27 Tahun 2012 tentang Izin Lingkungan,
 - 3 Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara,
 - 4 Peraturan Presiden Nomor 16 Tahun 2015 tentang Kementerian Lingkungan Hidup dan Kehutanan,
 - 5 Peraturan Presiden Nomor 47 Tahun 2016 tentang Penetapan Pelabuhan Patimban di Kabupaten Subang Provinsi Jawa Barat Sebagai Proyek Strategis Nasional,
 - 6 Peraturan Menteri Negara Lingkungan Hidup Nomor 05 Tahun 2012 tentang Jenis Rencana Usaha dan/atau Kegiatan yang Wajib Memiliki Analisis Mengenai Dampak Lingkungan Hidup,
 - 7 Peraturan Menteri Lingkungan Hidup Nomor 08 Tahun 2013 tentang Tata Laksana Penilaian dan Pemeriksaan Dokumen Lingkungan Hidup Serta Penerbitan Izin Lingkungan,
 - 8 Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor P 18/MenLHK-II/2015 tentang Organisasi dan Tata Kerja Kementerian Lingkungan Hidup dan Kehutanan,
- Memperhatikan
- 1 Keputusan Menteri Perhubungan Nomor KP 901 Tahun 2016, tentang Rencana Induk Pelabuhan Nasional, Pelabuhan Patimban di Kabupaten Subang ditetapkan sebagai Pelabuhan Utama,
 - 2 Keputusan Menteri Perhubungan Nomor KP 87 Tahun 2017, tanggal 17 Januari 2017 tentang Rencana Induk Pelabuhan Patimban, Provinsi Jawa Barat,
 - 3 Surat Gubernur Jawa Barat Nomor 550/5917/Dishub, tanggal 16 Desember 2016 tentang Rekomendasi untuk Penerbitan Penetapan Lokasi Pelabuhan Patimban di Daerah Kabupaten Subang dan Rekomendasi Kesesuaian Tata Ruang untuk Penetapan RIP Patimban,
 - 4 Surat Bupati Subang, nomor 551 43/1688/Bapp, tanggal 25 November 2016, perihal Rekomendasi Kesesuaian Tata Ruang Penetapan Rencana Induk Pelabuhan (RIP) Patimban,
 - 5 Surat Direktur Jenderal Tata Ruang, Kementerian Agraria dan Tata Ruang / Badan Pertanahan Nasional Nomor 40/200/1/2017, tanggal 13 Januari 2017, perihal Rekomendasi Kesesuaian Tata Ruang Rencana Pembangunan Pelabuhan Patimban di Kabupaten Subang, Jawa Barat,
 - 6 Risalah Pengolahan Data (RPD) proses penelaahan dan penilaian dokumen AMDAL dan penerbitan Izin Lingkungan Rencana Kegiatan Pembangunan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan, Nomor RPD-11/PDLUK-2/2017 tanggal 28 Februari 2017,

MEMUTUSKAN

Menetapkan

KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN TENTANG IZIN LINGKUNGAN KEGIATAN PEMBANGUNAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT KEPADA DIREKTORAT KEPELABUHANAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

KESATU

Memberikan izin lingkungan kepada

- | | |
|---|---|
| 1 Nama Usaha dan/
atau kegiatan | Direktorat Kepelabuhanan,
Direktorat Jenderal Perhubungan
Laut, Kementerian Perhubungan
Pembangunan Pelabuhan |
| 2 Jenis Usaha
dan/atau Kegiatan | Mauritz H M Sibarani |
| 3 Penanggung Jawab
Usaha dan/ atau
kegiatan | |
| 4 Jabatan | Direktur Kepelabuhanan |
| 5 Alamat Kantor | JL Medan Merdeka Barat No 8,
Jakarta 10110 |
| 6 Telephone/Fax | 021-3811308 / 021-3811786 |
| 7 Lokasi Usaha dan/
atau kegiatan | Pelabuhan Patimban di Desa
Patimban, Desa Kalentambo, Desa
Gempol, Desa Kotasari, Desa
Pusakaratu, Kecamatan
Pusakanagara dan Desa
Pusakajaya, Kecamatan
Pusakajaya, Kabupaten Subang,
Provinsi Jawa Barat |

KEDUA

Ruang lingkup Kegiatan dalam izin lingkungan ini meliputi

- 1 Kegiatan Mobilisasi alat berat dan material dengan menggunakan jalur darat dan jalur laut,
- 2 Pembangunan Area Terminal dengan luas kurang lebih 178 Ha, yang terdiri dari
 - a Pembangunan Tahap I Fase 1, dan
 - b Pembangunan Tahap I Fase 2,
- 3 Kebutuhan lahan untuk pembangunan Tahap I Fase 1 sampai Tahap I Fase 2, total pembebasan lahan untuk area terminal dan *back-up area* sebesar kurang lebih 356,23 Ha dan jalan akses 32,8 Ha,
- 4 Pembangunan *back up area* dengan luas kurang lebih 10 Ha, dengan peruntukan
 - a 3 Ha akan digunakan untuk pembangunan *utility area*,
 - b 2 Ha untuk *outer road*,
 - c 5 Ha untuk pembangunan area publik
- 5 Pembangunan Jalan Akses, yaitu
 - a Jalan akses pelabuhan sepanjang kurang lebih 8,1 km dengan lebar 20 meter, yang terdiri dari
 - 1) Jalan akses pelabuhan sepanjang kurang lebih 5000 meter x 20 meter,

- 2) Jalan lingkar dalam pelabuhan sepanjang kurang lebih 3100 meter x 20 meter,
- b) Jembatan penghubung pelabuhan kurang lebih 1000 meter x 20 meter,
- c) Ekstensi dermaga eksisting kurang lebih 350 meter x 8 meter,
- 6) Pembangunan Area Terminal Patimban, terdiri dari kegiatan pembangunan beberapa jenis terminal serta pembangunan sarana pendukung seperti
 - a) Terminal kontainer seluas 80 Ha,
 - b) Terminal kendaraan seluas 25 Ha,
 - c) Terminal kapal roro seluas 5 Ha,
 - d) Terminal kapal servis seluas 2 Ha,
 - e) Area pendukung terminal yang terdiri dari (administrasi/kantor pelabuhan seluas 6 Ha utilitas seluas 17 Ha area inspeksi seluas 3 Ha dan area tunggu truk seluas 11 Ha dan area tunggu truk dan arca penunjang lainnya),
 - f) Penyediaan area rel kereta/bongkar muat kereta 11 Ha dan buffer zone seluas 7 Ha,
 - g) Area Fasilitas Pengelolaan limbah/*Receiving Facility* (RF) seluas 2 Ha,
 - h) Jalan (*Inner road*) dengan luasan 9 Ha,
 - i) *Breakwater* dengan panjang total 2 338 m,
 - j) *Revetment* dengan panjang total 1 736 m,
 - k) *Seawall* dengan panjang total 4 680 m,
 - l) *Berth* /tambatan yang terdiri dari
 - 1) *Berth* 1 untuk kontainer dengan ukuran 840 m x 35 m,
 - 2) *Berth* 2 untuk kontainer dengan ukuran 840 m x 35 m,
 - 3) *Berth* 3 untuk kontainer dengan ukuran 480 m x 35 m,
 - 4) *Berth* 7 untuk kendaraan dengan ukuran 690 m x 35 m,
 - 5) *Berth* 8 untuk kapal service dengan ukuran 330 m x 50 m,
 - 6) *Berth* Ro-Ro dengan ukuran 170 m x 50 m,
 - m) Rencana jalur pelayaran,
 - n) *Navigation aids*, dan
 - o) Utilitas penanganan kontainer,
- 7) Kegiatan reklamasi dan pembangunan fasilitas laut untuk pembangunan terminal (bagian laut) dengan total kebutuhan material reklamasi kurang lebih 10 300 000 m³, dengan rincian sebagai berikut

Tahap	Penggunaan kembali tanah keruk dengan campuran semen (m ³)	Pembelian pasir (m ³)	Total (m ³)
Tahap 1 Fase 1	2 300 000	1 400 000	3 700 000
Tahap 1 Fase 2	-	6 600 000	6 600 000
Total	2 300 000	8 000 000	10 300 000

- 8 Kegiatan pengerukan dan pembuangan material pengerukan ke lepas pantai yang berjarak kurang lebih 15 km dari lokasi pelabuhan dengan kedalaman perairan kurang lebih 23 meter, dengan volume sebagai berikut

Tahap	Volume Pengerukan	Penggunaan Kembali tanah Keruk untuk pencampuran semen (m ³)	Pembuangan Lepas Pantai (m ³)
Tahap I Fase 1	4 850 000	2 300 000	2 550 000
Tahap I Fase 2	21 200 000	-	21 200 000
Total	26 050 000	2 300 000	23 750 000

- 9 Kegiatan operasional fasilitas laut, meliputi
- a Aktivitas *Calling Vessel* (kapal),
 - b Aktivitas bongkar dan muat kapal,
 - c Aktivitas penyimpanan kargo dan transportasi,
 - d Aktivitas pengelolaan limbah B3 dan non B3,
 - e Suplai air dan fasilitas penunjang,
 - f Pengolahan air limbah/ Instalasi Pengolahan Air Limbah (IPAL), dan
 - g Suplai tenaga listrik,
- 10 Kegiatan operasional fasilitas darat, meliputi
- a aktivitas area publik,
 - b pengelolaan limbah domestik,
 - c suplai air, dan
 - d utilitas listrik,
- 11 Kegiatan Pemeliharaan kolam putar (*Basin*) dan alur pelayaran, dengan metode *dredging*, dengan volume sebagai berikut

Area	Ketinggian endapan (cm/tahun)	Pemeliharaan pada ketinggian endapan 50 cm (tahun)	Volume endapan (m ³ /tahun)	Volume kerukan (m ³)
Alur pelayaran	11,5	4,3	186 693	811 709
Anchorage Basin	3,5	14,3	84 329	1 204 700
Inner Basin Channel	13	3,8	12 644	48 631

- 12 Kegiatan operasional jalan akses

KETIGA

Dalam melaksanakan kegiatan sebagaimana dimaksud pada AMAR KEDUA, penanggung jawab usaha dan/atau kegiatan wajib

- 1 melakukan pengelolaan dan pemantauan dampak lingkungan hidup sebagaimana tercantum dalam Lampiran I dan II Keputusan Menteri ini,
- 2 Melakukan koordinasi dengan instansi pusat maupun daerah, berkaitan dengan pelaksanaan kegiatan ini,
- 3 melakukan sosialisasi kegiatan kepada pemerintah daerah, tokoh masyarakat, serta masyarakat (nelayan, petambak, petani dan masyarakat yang bermukim di sekitar lokasi rencana kegiatan) yang terkena dampak dari aktivitas kegiatan tahap pra konstruksi, konstruksi, dan operasi termasuk melakukan sosialisasi/ pengumuman pada saat terbitnya izin lingkungan kegiatan ini,
- 4 mengupayakan aplikasi *reduce, reuse, and recycle* (3R) terhadap limbah-limbah yang dihasilkan,
- 5 melaksanakan ketentuan pelaksanaan kegiatan sesuai dengan *Standar Operating Procedure* (SOP),
- 6 melakukan perbaikan secara terus-menerus terhadap kehandalan teknologi yang digunakan dalam rangka meminimalisasi dampak yang diakibatkan dari rencana kegiatan ini,
- 7 merumuskan program CSR dan CD kepada masyarakat terdampak (nelayan, petambak, petani dan masyarakat yang bermukim di sekitar lokasi rencana kegiatan) yang disesuaikan dengan kebutuhan masyarakat dan dalam pelaksanaannya dikoordinasikan dengan pemerintah daerah setempat,
- 8 mendokumentasikan seluruh kegiatan pengelolaan dan pemantauan lingkungan hidup yang dilakukan, serta kegiatan lainnya terkait dengan kegiatan-kegiatan tersebut,
- 9 menyusun laporan pelaksanaan kewajiban sebagaimana dimaksud pada angka 1 (satu) sampai dengan angka 8 (delapan), paling sedikit 1 (satu) kali setiap 6 (enam) bulan selama kegiatan konstruksi dan operasional berlangsung dan menyampaikan kepada
 - a Menteri Lingkungan Hidup dan Kehutanan melalui
 - 1) Direktur Jenderal Planologi Kehutanan dan Tata Lingkungan,
 - 2) Direktur Jenderal Penegakan Hukum Lingkungan dan Kehutanan,
 - b Gubernur Jawa Barat melalui Kepala Dinas Lingkungan Hidup Provinsi Jawa Barat,
 - c Bupati Subang melalui Kepala Dinas Lingkungan Hidup Kabupaten Subang,dengan tembusan kepada kepala instansi yang membidangi selain huruf a sampai dengan huruf c diatas, sebagaimana tercantum dalam kolom institusi pengelolaan lingkungan hidup atau institusi pemantauan lingkungan hidup

KEEMPAT

Penanggung jawab usaha dan/atau kegiatan dalam melaksanakan kegiatan sebagaimana dimaksud dalam AMAR KEDUA, wajib

- 1 memiliki izin usaha dan/atau izin lainnya yang terkait dengan kegiatannya,
- 2 memiliki izin perlindungan dan pengelolaan lingkungan hidup (PPLH) untuk tahapan konstruksi dan operasi, berupa
 - a Izin penyimpanan sementara limbah bahan berbahaya dan beracun, dan

- 1 melakukan pengelolaan dan pemantauan dampak lingkungan hidup sebagaimana tercantum dalam Lampiran I dan II Keputusan Menteri ini,
- 2 Melakukan koordinasi dengan instansi pusat maupun daerah, berkaitan dengan pelaksanaan kegiatan ini,
- 3 melakukan sosialisasi kegiatan kepada pemerintah daerah, tokoh masyarakat, serta masyarakat (nelayan, petambak, petani dan masyarakat yang bermukim di sekitar lokasi rencana kegiatan) yang terkena dampak dari aktivitas kegiatan tahap pra konstruksi, konstruksi dan operasi termasuk melakukan sosialisasi/ pengumuman pada saat terbitnya izin lingkungan kegiatan ini,
- 4 mengupayakan aplikasi *reduce, reuse, and recycle* (3R) terhadap limbah-limbah yang dihasilkan,
- 5 melaksanakan ketentuan pelaksanaan kegiatan sesuai dengan *Standar Operating Procedure* (SOP),
- 6 melakukan perbaikan secara terus-menerus terhadap kehandalan teknologi yang digunakan dalam rangka meminimalisasi dampak yang diakibatkan dari rencana kegiatan ini,
- 7 mempromosikan program CSR dan CI kepada masyarakat terdampak (nelayan, petambak, petani dan masyarakat yang bermukim di sekitar lokasi rencana kegiatan) yang disesuaikan dengan kebutuhan masyarakat dan dalam pelaksanaannya dikordinasikan dengan pemerintah daerah setempat,
- 8 mendokumentasikan seluruh kegiatan pengelolaan dan pemantauan lingkungan hidup yang dilakukan, serta kegiatan lainnya terkait dengan kegiatan-kegiatan tersebut,
- 9 menyusun laporan pelaksanaan kewajiban sebagaimana dimaksud pada angka 1 (satu) sampai dengan angka 8 (delapan), paling sedikit 1 (satu) kali setiap 6 (enam) bulan selama kegiatan konstruksi dan operasional berlangsung dan menyampaikan kepada
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 - 2) Direktur Jenderal Penegakan Hukum Lingkungan dan Kehutanan,
 - b Gubernur Jawa Barat melalui Kepala Dinas Lingkungan Hidup Provinsi Jawa Barat,
 - c Bupati Subang melalui Kepala Dinas Lingkungan Hidup Kabupaten Subang,dengan tembusan kepada kepala instansi yang membidangi selain huruf a sampai dengan huruf c diatas, sebagaimana tercantum dalam kolom institusi pengelolaan lingkungan hidup atau institusi pemantauan lingkungan hidup

KEEMPAT

Penanggung jawab usaha dan/atau kegiatan dalam melaksanakan kegiatan sebagaimana dimaksud dalam AMAR KEDUA, wajib

- 1 memiliki izin usaha dan/atau izin lainnya yang terkait dengan kegiatannya,
- 2 memiliki perlindungan dan pengelolaan lingkungan hidup (PPLH) untuk tahapan konstruksi dan operasi, berupa
 - a Izin penyimpanan sementara limbah bahan berbahaya dan beracun, dan

b Izin pembuangan limbah cair ke laut

- KELIMA Apabila dalam pelaksanaan usaha dan/atau kegiatan timbul dampak lingkungan hidup di luar dampak yang wajib dikelola sebagaimana dimaksud dalam Lampiran I dan Lampiran II Keputusan Menteri ini, penanggung jawab usaha dan/atau kegiatan wajib melaporkan kepada instansi sebagaimana dimaksud dalam AMAR KETIGA angka 9 (sembilan) paling lama 30 (tiga puluh) hari kerja sejak diketahuinya timbulan dampak lingkungan hidup di luar dampak penting yang wajib dikelola
- KEENAM Dalam pelaksanaan Keputusan Menteri ini, Menteri menugaskan Pejabat Pengawas Lingkungan Hidup (PPLH) untuk melakukan pengawasan
- KETUJUH Pengawasan sebagaimana dimaksud dalam Amar KEENAM dilaksanakan sesuai dengan peraturan perundang undangan paling sedikit 2 (dua) kali dalam 1 (satu) tahun
- KEDELAPAN Penanggung jawab usaha dan/atau kegiatan wajib mengajukan permohonan perubahan Izin Lingkungan apabila terjadi perubahan atas rencana usaha dan/atau kegiatannya dan/atau oleh sebab lain sesuai dengan kriteria perubahan yang tercantum dalam Pasal 50 Peraturan Pemerintah Nomor 27 Tahun 2012 tentang Izin Lingkungan
- KESEMBILAN Keputusan Menteri ini berlaku pada tanggal ditetapkan, dan berakhir bersamaan dengan berakhirnya izin usaha dan/atau kegiatan

Ditetapkan di Jakarta
pada tanggal 28 Februari 2017

MENTERI LINGKUNGAN HIDUP DAN
KEHUTANAN REPUBLIK INDONESIA

ttd

SITI NURBAYA

Salinan sesuai dengan aslinya
KEPALA BIRO HUKUM,

Tembusan:

- 1 Menteri Koordinator Bidang Perkonomian,
- 2 Menteri Koordinator Bidang Kemaritiman,
- 3 Menteri Perhubungan,
- 4 Sekretaris Jenderal Kementerian Lingkungan Hidup dan Kehutanan,
- 5 Direktur Jenderal Planologi Kehutanan dan Tata Lingkungan Kementerian Lingkungan Hidup dan Kehutanan,
- 6 Direktur Jenderal Penegakan Hukum Lingkungan Hidup dan Kehutanan,
- 7 Gubernur Jawa Barat,
- 8 Bupati Subang,
- 9 Kepala Dinas Lingkungan Hidup Provinsi Jawa Barat,
- 10 Kepala Dinas Lingkungan Hidup Kabupaten Subang,
- 11 Kepala Pusat Pengendalian Pembangunan Ekoregion Jawa, Kementerian Lingkungan Hidup dan Kehutanan



LAMPIRAN I

KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA
NOMOR SK 136/Menlhk/Setjen/PLA 4/2/2017

TENTANG

IZIN LINGKUNGAN KEGIATAN PEMBANGUNAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA, DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT KEPADA DIREKTORAT KEPELABUHANAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

A Matriks Rencana Pengelolaan Lingkungan Hidup

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
	Pelaksana	Pengawas	Pelaporan						
Dampak Penting Yang Dikelola (Hasil Arahan Pengelolaan pada ANDAL)									
TAHAP PRAKONSTRUKSI									
1	Pembebasan Lahan								
1A	Hilangnya Produktivitas Lahan	Pembebasan Lahan	Tingkat produktivitas lahan yang relatif sama di sekitar Pelabuhan Patimban	<ul style="list-style-type: none"> a Melakukan koordinasi dengan instansi di sektor perikanan dan pertanian baik di tingkat kabupaten dan provinsi dalam upaya intensifikasi produktivitas lahan b Mengganti lahan yang dibebaskan sesuai dengan kesepakatan peraturan yang berlaku dan rekomendasi instansi terkait 	Kecamatan Pusakanagara	Setelah pembebasan lahan	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Pertanian Tanaman Pangan Kabupaten Subang d Dinas Kelautan dan Perikanan Kabupaten Subang e Badan Pertanahan Nasional kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
1B	Kehilangan mata pencarian dan Pendapatan	Pembebasan Lahan	Pulihnya mata pencarian warga terkena dampak	<ul style="list-style-type: none"> a Mencantumkan dalam klausul kontrak dengan kontraktor pelaksana untuk memprioritaskan tenaga kerja lokal dari penduduk yang terkena dampak sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan b Berkoordinasi dengan instansi terkait dalam melaksanakan Program Pemulihan Mata Pencaharian untuk masyarakat yang terkena dampak, sebagaimana tertuang di dalam dokumen LARAP diantaranya <ul style="list-style-type: none"> 1)Mengadakan program pelatihan 2)Mengadakan program bantuan modal usaha 3)Mengadakan program kegiatan usaha baru 4)Mengadakan program bantuan pemasaran 5)Mengadakan program bantuan peralatan 	<ul style="list-style-type: none"> Masyarakat sekitar proyek Kecamatan Pusakanagara <ul style="list-style-type: none"> 1) Desa Patumban 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Pusakaratu Kecamatan Pusakajaya Desa Pusakajaya 	<ul style="list-style-type: none"> Selama tahap prakonstruksi sampai konstruksi berlangsung 	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
1C	Keresahan masyarakat	Pembebasan Lahan	Berkurangnya persepsi negatif dan meningkatnya persepsi positif masyarakat terhadap rencana kegiatan	<ul style="list-style-type: none"> a Mekanisme Pengadaan Lahan mengacu pada Undang undang No 2 Tahun 2012 tentang Pengadaan Tanah Bagi Kepentingan Umum dan Peraturan Presiden RI No 71 Tahun 2012 tentang penyelenggaraan Pengadaan Tanah Bagi Pembangunan Kepentingan Umum b Berkoordinasi dengan instansi terkait dalam melaksanakan Program Pemulihan Mata Pencaharian untuk masyarakat terkena dampak. c Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patumban 	<ul style="list-style-type: none"> Masyarakat sekitar proyek Kecamatan Pusakanagara <ul style="list-style-type: none"> 1) Desa Patumban 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Pusakaratu Kecamatan Pusakajaya Desa Pusakajaya 	<ul style="list-style-type: none"> Selama tahap prakonstruksi sampai konstruksi berlangsung 	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Badan Pertanahan Nasional Kabupaten Subang d Kecamatan Pusakanagara e Kecamatan Pusakajaya 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
				d Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan e Mengganti lahan yang dibebaskan sesuai dengan kesepakatan, peraturan yang berlaku dan rekomendasi instansi terkait					
TAHAP KONSTRUKSI									
2	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp								
2A	Terbukanya kesempatan kerja dan berusaha	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp	Masyarakat terkena dampak/lokal yang terserap sebagai tenaga kerja > 20%	a Mencantumkan dalam klausul kontrak dengan kontraktor pelaksana untuk memprioritaskan tenaga kerja lokal dari penduduk yang terkena dampak sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan dan penyertaan jaminan sosial tenaga kerja, serta pembayaran sesuai UMK b Berkoordinasi dengan instansi terkait dalam melaksanakan Program Pemulihan Mata Pencaharian untuk masyarakat yang terkena dampak, sebagaimana tertuang di dalam dokumen LARAP, diantaranya 1)Mengadakan program pelatihan 2)Mengadakan program bantuan modal usaha 3)Mengadakan program kegiatan usaha baru 4)Mengadakan program bantuan pemasaran 5)Mengadakan program bantuan peralatan c Berkoordinasi dengan Kecamatan Pusakanagara dan Pusakajaya mengenai adanya informasi lowongan kerja	Masyarakat sekitar proyek Kecamatan Pusakanagara 1) Desa Patimban 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Pusakaratu Kecamatan Pusakajaya Desa Pusakajaya	Selama tahap konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang d Kecamatan Pusakanagara e Kecamatan Pusakajaya	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3	Mobilisasi Alat Berat dan Material								
3A	Gangguan lalu lintas darat	Mobilisasi Alat Berat dan Material	Tidak terjadinya kemacetan lalu lintas akibat mobilisasi alat berat dan material	a Berkoordinasi dengan instansi perhubungan untuk pemasangan rambu lalu lintas di sekitar lokasi pembangunan Pelabuhan Patimban	Jalan Pantura Jalan Akses Pelabuhan Patimban	Selama kegiatan mobilisasi alat berat dan	Direktorat Jenderal Perhubungan Laut,	a Kementerian Lingkungan Hidup dan Kehutanan	a Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
				<ul style="list-style-type: none"> b sesuai dengan PM 13 Tahun 2014 tentang Rambu Lalu Lintas c Berkoordinasi dengan instansi kepolisian untuk pengaturan lalu lintas di sekitar lokasi pembangunan Pelabuhan Patimban d Pemasangan rambu-rambu peringatan konstruksi pada akses masuk dan keluar lokasi pembangunan Pelabuhan Patimban e Pengaturan jadwal mobilisasi alat berat dan material tidak dilakukan pada jam padat kendaraan f Penempatan petugas untuk mengatur lalu lintas pada akses masuk dan keluar lokasi pembangunan Pelabuhan Patimban ANDALLALIN 	Simpang jalan Pantura dan jalan akses Pelabuhan Patimban	material berlangsung	Kementerian Perhubungan RI	<ul style="list-style-type: none"> b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Perhubungan Kabupaten Subang 	<ul style="list-style-type: none"> b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3B	Penurunan kualitas udara (TSP dan Gas Buang)	Mobilisasi peralatan dan material	Konsentrasi SO2 CO NO2 dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	<ul style="list-style-type: none"> a Mobilisasi Alat Berat dan Material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relatif sepi dan jauh dari pemukiman (jalan tanah merah) b Menutup bak kendaraan pengangkut material dengan terpal, sehingga tidak terjadi cecutan bahan material c Pengangkutan material ke lokasi dengan menggunakan kendaraan yang masih laik operasi dan lulus uji KIR d Melakukan pembangunan tempat pencucian untuk pembersihan roda kendaraan pengangkut sebelum keluar lokasi tapak proyek e Apabila terdapat cecutan material di jalan yang dilewati dari mobilisasi material konstruksi akan segera dilakukan pembersihan f Melakukan penyiraman jalan secara periodik 	Lokasi pembangunan Pelabuhan Patimban Jalan Pantura Jalan Akses Pelabuhan Patimban, Simpang jalan Pantura dan jalan akses Pelabuhan Patimban	Selama kegiatan mobilisasi alat berat dan material berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3C	Gangguan lalu lintas laut	Mobilisasi Alat Berat dan Material	Tidak terjadinya tubrukan kapal di perairan Patimban	<ul style="list-style-type: none"> a Berkoordinasi dengan UPP Pamanukan terkait rute pengangkutan material di laut 	Rute pengangkutan material di Perairan Patimban	Selama kegiatan mobilisasi alat berat dan material	Direktorat Jenderal Perhubungan Laut,	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
				<ul style="list-style-type: none"> b Berkoordinasi dengan Distrik Navigasi Tanjung Priok terkait alur pelayaran pengangkutan material di laut c Mensosialisasikan rute pengangkutan material dengan nelayan d Pengaturan waktu pengangkutan material e Kontraktor pelaksana membuka komunikasi dengan kapal-kapal sekitar rute pengangkutan material 		berlangsung	Kementerian Perhubungan RI	<ul style="list-style-type: none"> b Dinas Lingkungan Hidup (DLH) Kabupaten Subang Provinsi Jawa Barat c UPP Pamanukan d Distrik Navigasi Tanjung Priok 	<ul style="list-style-type: none"> b Dinas Lingkungan Hidup (DLH) Kabupaten Subang Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3D	Keresahan masyarakat	Mobilisasi Alat Berat dan Material	Tidak adanya keresahan masyarakat	<ul style="list-style-type: none"> a Melakukan sosialisasi rute pengangkutan mobilisasi alat berat dan material di darat kepada masyarakat sekitar b Melakukan sosialisasi rute pengangkutan mobilisasi alat berat dan material di perairan kepada nelayan c Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban d Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan 	<ul style="list-style-type: none"> a Pemukiman sekitar akses jalan mobilisasi alat berat dan material di wilayah studi b Pemukiman nelayan sekitar perairan Patimban 	Selama kegiatan mobilisasi alat berat dan material berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
4	Reklamasi dan Pembangunan Fasilitas Laut								
4A	Penurunan kualitas air laut	Reklamasi dan pembangunan fasilitas laut	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut Lampiran I (80 mg/L)	<ul style="list-style-type: none"> a Kegiatan reklamasi dilakukan pada area perairan yang telah dibatasi sea wall b Mengurangi volume buangan sebanyak mungkin dengan memanfaatkannya menggunakan teknologi terbaru seperti <i>Cement Pipe Mixing</i> 	Lokasi reklamasi dan pembangunan fasilitas laut	Selama reklamasi dan pembangunan fasilitas laut berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

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							Pelaksana	Pengawas	Pelaporan
4B	Perubahan fishing ground	Reklamasi dan pembangunan fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/pendapatan dari nelayan	<ul style="list-style-type: none"> a Melakukan komunikasi dan sosialisasi dengan kelompok nelayan mengenai kegiatan reklamasi dan pembangunan fasilitas laut b Membuat rumpon dasar sesuai peraturan Menteri Kelautan dan Perikanan RI No 26/Permen-KP/2014 di sekitar perairan Patimban di luar DLKP dan DLKR Pelabuhan Patimban 	<ul style="list-style-type: none"> a Nelayan di sekitar rencana lokasi pelabuhan, khususnya TPI Kaligenteng, TPI Trumtum dan TPI Tanjung Pura b Rumpon di sekitar perairan Patimban di luar DLKP dan DLKR Pelabuhan Patimban 	Selama reklamasi dan pembangunan fasilitas laut berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Kelautan dan Perikanan Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
4C	Keresahan masyarakat	Reklamasi dan pembangunan fasilitas laut	Tidak ada kereresahan masyarakat	<ul style="list-style-type: none"> a Melakukan sosialisasi kepada nelayan mengenai rencana penempatan rumpon sesuai peraturan Menteri Kelautan dan Perikanan RI No 26/Permen-KP/2014 di sekitar perairan Patimban di luar DLKP dan DLKR Pelabuhan Patimban b Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon kereresahan masyarakat terhadap pembangunan Pelabuhan Patimban c Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan 	Pemukiman nelayan sekitar perairan Patimban	Selama reklamasi dan pembangunan fasilitas laut berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
5	<u>Pengerukan dan Pembuangan</u>								
5A	Penurunan kualitas air laut (TSS)	Pengerukan dan Pembuangan	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut Lampiran I (80 mg/L)	<ul style="list-style-type: none"> a Melakukan pembangunan seawall di tahap awal b Memasang silt protector di sekeliling pekerjaan pengerukan dengan grab dredging c Membuang material buangan tidak pada satu titik namun menyebar di area dumping d Menggunakan peralatan untuk pengerukan dan pembuangan yang laik operasi 	Lokasi pengerukan dan pembuangan	Selama kegiatan pengerukan dan pembuangan berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan

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							Pelaksana	Pengawas	Pelaporan
6	Pembangunan Fasilitas Darat								Hidup (DLH) Kabupaten Subang
6A	Peningkatan laju air larian (<i>run-off</i>)	Pembangunan fasilitas darat	Tidak terjadi genangan	<ul style="list-style-type: none"> a Membuat drainase yang dapat menampung air <i>runoff</i> b Optimalisasi RTH pada lahan yang belum digunakan c Koordinasi dengan Dinas Bina Marga dan Pengairan Kabupaten Subang, terkait dengan pembuatan drainase pelabuhan 	Area pembangunan fasilitas darat	Selama pembangunan fasilitas darat berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Bina Marga dan Pengairan Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
6B	Keresahan masyarakat	Pembangunan fasilitas darat	Tidak terjadi keresahan masyarakat	<ul style="list-style-type: none"> a Membuat jalur irigasi baru untuk mengganti saluran irigasi yang terputus akibat pembangunan fasilitas darat pelabuhan b Membuat <i>underpass/fly over</i> atau pemindahan jalan pada jalan akses penduduk yang berpotongan dengan jalan akses Pelabuhan Patimban c Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban d Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan 	Masyarakat sekitar area pembangunan Pelabuhan	Selama kegiatan konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
TAHAP OPERASIONAL									
8	Pengadaan Tenaga Kerja								
8A	Terbukanya kesempatan kerja dan berusaha	Pengadaan tenaga kerja operasional	Masyarakat terkena dampak/lokal yang terserap sebagai tenaga kerja > 30%	<ul style="list-style-type: none"> a Mewajibkan BUP (Badan Usaha Pelabuhan) untuk memprioritaskan tenaga kerja lokal sesuai dengan kebutuhan tingkat pendidikan dan 	Masyarakat sekitar proyek	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan

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							Pelaksana	Pengawas	Pelaporan
				<p>b kualifikasi yang dibutuhikan, dan penyertaan jaminan sosial tenaga kerja serta pembayaran sesuai UMK</p> <p>b Memberikan kesempatan berusaha kepada penduduk sekitar pada areal ±5 hektar yang telah disediakan di dalam area fasilitas darat pelabuhan</p> <p>c Berkoordinasi dengan Kecamatan Pusakanagara dan Pusakajaya mengenai adanya informasi lowongan kerja</p>	<p>Kecamatan Pusakanagara</p> <ol style="list-style-type: none"> 1) Desa Patumban 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Pusakaratu <p>Kecamatan Pusakajaya</p> <ol style="list-style-type: none"> 1) Desa Pusakajaya 		Kementerian Perhubungan RI	<p>b Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p> <p>c Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>	<p>b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat</p> <p>c Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>
9	Operasional Fasilitas Laut								
9A	Sedimentasi	Operasional fasilitas laut	Kedalaman perairan sesuai dengan rencana	<p>a Melakukan <i>maintenance dredging</i> untuk mempertahankan kedalaman di kolam pelabuhan (-14 meter) dan di alur pelabuhan (-14 meter)</p> <p>b Menempatkan material hasil pengeringan ke lokasi <i>dumping area</i> yang telah direncanakan</p>	<p>a Kolam Pelabuhan</p> <p>b Alur Pelabuhan</p> <p>c Dumping Area</p>	<p>Dilakukan selama kegiatan operasional berlangsung (5-10 tahun sekali)</p>	<p>Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat</p> <p>c Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>
9B	Perubahan garis pantai	Operasional fasilitas laut	Perubahan garis pantai tidak mengakibatkan kerusakan infrastruktur atau lahan eksisting	Membangun dan memelihara <i>revetments</i> di areal garis pantai yang terabrsi	Sepanjang garis pantai di <i>back up area</i>	<p>Dilakukan selama kegiatan operasional berlangsung</p>	<p>Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat</p> <p>c Dinas Lingkungan Hidup (DLH) Kabupaten Subang</p>
9C	Perubahan <i>fishing ground</i>	Operasional fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/	<p>a Memelihara rumpon dasar sesuai peraturan Menteri Kelautan dan Perikanan RI No 26/Permen KP/2014 di sekitar perairan</p>	<p>a Di sekitar perairan Patumban di luar DLKP dan DLKR</p>	<p>Dilakukan selama kegiatan operasional berlangsung</p>	<p>Direktorat Jenderal Perhubungan Laut</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p>	<p>a Kementerian Lingkungan Hidup dan Kehutanan</p>

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							Pelaksana	Pengawas	Pelaporan
			pendapatan dari nelayan	b Patimban di luar DLKP dan DLKR Pelabuhan Patimban b Mewajibkan BUP untuk melaksanakan CSR kepada kelompok Nelayan di sekitar perairan Patimban yang meliputi TPI Kali Genteng, Truntum and Tanjung Pura	Pelabuhan Patimban b TPI Kali Genteng Truntum and Tanjung Pura		Kementerian Perhubungan RI	b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Kelautan dan Perikanan Kabupaten Subang	b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
9D	Keresahan masyarakat	Operasional fasilitas laut	Tidak ada keresahan masyarakat	Melakukan sosialisasi alur pelayaran kapal dari dan menuju Pelabuhan Patimban kepada nelayan	Pemukiman nelayan sekitar perairan Patimban	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
12	Operasional Jalan Akses								
12A	Gangguan lalu lintas darat	Operasional Jalan Akses	Tidak terjadinya kemacetan lalu lintas akibat operasional jalan akses pelabuhan	a Mengoptimalkan areal tunggu truk b Memperluas persimpangan antara Jalan Pantura dengan jalan akses pelabuhan sesuai dengan kriteria c Penempatan petugas untuk mengatur lalu lintas pada akses masuk dan keluar kawasan Pelabuhan Patimban d Melaksanakan rekomendasi ANDAL LALIN	Persimpangan antara jalan Pantura dengan jalan akses Jalan Pantura dan Jalan akses pelabuhan	Dilakukan selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Perhubungan Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
12B	Peningkatan kebisingan	Operasional Jalan Akses	Tingkat Kebisingan dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku	a Optimalisasi damija untuk penghijauan b Pengaturan kecepatan kendaraan c Menggunakan kendaraan yang laik operasi	Pemukiman di simpang Jalan Pantura dan Jalan Akses Pelabuhan, Pemukiman di	Dilakukan selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian	a Kementerian Lingkungan Hidup dan Kehutanan b	a Kementerian Lingkungan Hidup dan Kehutanan b

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							Pelaksana	Pengawas	Pelaporan
			Tingkat Kebisingan		Jalan akses pelabuhan, Akses keluar masuk Pelabuhan Patimban		Perhubungan RI	b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	c Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat d Dinas Lingkungan Hidup (DLH) Kabupaten Subang
12C	Keresahan masyarakat	Operasional Jalan Akses	Tidak adanya kerohanian masyarakat	a Memelihara <i>underpass/fly over</i> pada jalan akses penduduk yang berpotongan dengan jalan akses Pelabuhan Patimban b Optimalisasi pengaturan lalu lintas di simpang Jalan Pantura dan Jalan Akses Pelabuhan	a Jalan akses penduduk yang berpotongan dengan jalan akses pelabuhan b Pemukiman di simpang Jalan Pantura dan Jalan Akses Pelabuhan	Dilakukan selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
Dampak Lingkungan Lainnya yang Dikelola									
TAHAP KONSTRUKSI									
2	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp								
2A	Penurunan kualitas air laut	Pengadaan tenaga kerja dan pengeoperasian basecamp	Kualitas air laut tidak tercemar oleh limbah domestik pekerja	Membuat toilet <i>portable</i> dan fasilitas pengolah air limbah seperti septictank dan pemeliharaan secukupnya	Di lokasi pembangunan dan base camp	Membuat toilet <i>portable</i> satu kali di kegiatan konstruksi dan pemeliharaan dilakukan selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

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							Pelaksana	Pengawas	Pelaporan
2B	Timbulnya Penyakit Menular	Pengadaan tenaga kerja dan pengeoperasian basecamp	Tidak meningkatnya jumlah pasien dan penyakit infeksi karena adanya tenaga kerja konstruksi	<ul style="list-style-type: none"> a Berkoordinasi dengan instansi dan LSM terkait dalam membuat dan mengadakan Program Pencegahan HIV/AIDS termasuk diantaranya melakukan sosialisasi pencegahan penyakit menular seksual b Berkoordinasi dengan instansi terkait dalam mengadakan pengobatan untuk pasien yang menderita IMS, GO dan Sifilis dengan metode Inject dan Oral di Puskesmas Pusakanagara, Pemeriksaan rutin (setiap 3bulan sekali) melalui metode VCT c Bekerjasama dengan Organisasi Warga Peduli AIDS (WPA) yang ada di tingkat desa untuk melakukan berbagai kegiatan positif dengan ODHA, salah satunya Kegiatan Gathering Saat ini Organisasi WPA di tingkat desa baru ada di Desa Patimban dan Desa Kotasari sedangkan WPA tingkat kecamatan belum terbentuk d Membangun fasilitas kebersihan, Tempat pengumpulan sampah sementara (TPS), dan fasilitas pengolahan 	Lokasi sekitar rencana pembangunan khususnya Kecamatan Pusakanagara dan Kecamatan Pusakajaya	Sebelum dan Selama tahap konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Kesehatan Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3	Mobilisasi Alat Berat dan Material								
3A	Peningkatan kebisingan	Mobilisasi Berat Alat dan Material	Intensitas kebisingan sesuai dengan Keputusan Menteri Lingkungan Hidup No Kep 48/MENLH/II/1996	<ul style="list-style-type: none"> a Mobilisasi Alat Berat dan Material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relatif sepi dan jauh dari pemukiman (jalan tanah merah) b Mobilisasi Alat Berat dan Material tidak dilakukan secara konvoi / beriringan c Pengaturan kecepatan kendaraan d Menggunakan kendaraan pengangkut yang laik operasi 	<ul style="list-style-type: none"> a Lokasi pembangunan Pelabuhan Patimban b Jalan Pantura Jalan Akses Pelabuhan Patimban c Simpang jalan Pantura dan jalan akses Pelabuhan Patimban 	Selama kegiatan mobilisasi alat berat dan material berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
3B	Kerusakan jalan	Mobilisasi Berat Alat dan Material	Kerusakan jalan dapat diminimalkan	a Memilih jalur laut yang seefisien mungkin untuk pengangkutan peralatan dan material yang melebihi	Jalan akses pelabuhan dan Jalan Pantura	Selama kegiatan mobilisasi peralatan dan	Direktorat Jenderal Perhubungan	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan

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							Pelaksana	Pengawas	Pelaporan
				<ul style="list-style-type: none"> b kapasitas jalan b Tonase angkutan material untuk konstruksi disesuaikan dengan kelas jalan dan kemampuan angkutan yang diijinkan c Penggunaan alat berat harus sesuai dengan peraturan Keputusan Dirjen Hubdar tentang Pedoman Teknis Penyelenggaraan Angkutan Berat di Jalan d Melaksanakan perbaikan jalan jika ada kerusakan yang disebabkan oleh kegiatan proyek e Kendaraan menggunakan terpal f Bekerjasama dengan Dinas Bina Marga dan Perairan Kabupaten Subang dalam upaya pengelolaan (memperbaiki) bila ada kerusakan jalan 	Pusakanagara	material berlangsung	Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> b Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
6	Pembangunan Fasilitas Darat								
6A	Penurunan kualitas udara (TSP dan Gas Buang)	Pembangunan Fasilitas Darat	Konsentrasi SO ₂ CO NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	<ul style="list-style-type: none"> a Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b Menggunakan penutup pada bak truk yang membawa material konstruksi jika dibutuhkan c Membuat pagar pembatas berbahan seng dengan tinggi minimal 2,5 meter (jika dibutuhkan) 	Lokasi rencana pembangunan	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
6B	Peningkatan kebisingan	Pembangunan Fasilitas Darat	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b Menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari seperti melakukan pemancangan 	Lokasi rencana pembangunan	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
									Kabupaten Subang
6C	Penurunan kualitas air laut	Pembangunan Fasilitas Darat	Kualitas air laut tidak menurun secara drastis dikarenakan aktivitas proyek	Mengurangi atau mengatur volume buangan yang dikeluarkan oleh bekas lokasi tambak ikan saat proses pengurusan lokasi tambak tersebut	Lokasi rencana pembangunan	Selama masa konstruksi	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
6D	Gangguan fauna terestrial (Burung)	Pembangunan Fasilitas Darat	Adanya habitat bagi tempat hidup fauna terestrial	a Membuat habitat baru (seperti menanam mangrove/bakau) untuk fauna terestrial dan memelihara fasilitas tersebut b Pekerja dilarang mengganggu fauna terestrial di sekitar lokasi kegiatan	Lokasi rencana pembangunan fasilitas darat	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
6E	Gangguan Flora terestrial	Pembangunan Fasilitas Darat	Adanya habitat bagi tempat hidup flora terestrial	a Membuat habitat baru (seperti menanam mangrove/bakau) untuk flora terestrial dan memelihara fasilitas tersebut b Pekerja dilarang mengganggu flora darat di sekitar lokasi kegiatan	Lokasi rencana pembangunan fasilitas darat	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

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	Pelaksana	Pengawas	Pelaporan						
7	Pembangunan Jalan Akses								
7A	Penurunan Kualitas udara (TSP dan Gas Buang)	Pembangunan Jalan Akses	Konsentrasi SO ₂ , CO NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	<ul style="list-style-type: none"> a Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik (layak) b Menggunakan penutup pada bak truk yang membawa material konstruksi jika dibutuhkan c Membuat pagar pembatas berbahan seng dengan tinggi minimal 2,5 meter (jika dibutuhkan) 	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
7B	Peningkatan kebisingan	Pembangunan Jalan Akses	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b Menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari 	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
7C	Penurunan kualitas air permukaan	Pembangunan jalan akses	Kualitas air permukaan tetap dibawah baku mutu lingkungan berdasarkan PP No 82 Tahun 2001 tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air	Melaksanakan pencegahan untuk mengurangi kekeruhan air ke badan air penerima seperti membuat saluran drainase atau kolam retensi darurat selama proses konstruksi berlangsung	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
7D	Peningkatan laju air larian	Pembangunan jalan akses	Tidak terjadi limpasan yang berlebih	Membuat saluran drainase atau kolam retensi darurat selama proses konstruksi berlangsung	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan

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	Pelaksana	Pengawas	Pelaporan						
							Laut, Kementerian Perhubungan RI	b Kehutanan Dinas Lingkungan Hidup (DLH) Kabupaten Subang	b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
7E	Keresahan masyarakat	Pembangunan jalan akses	Tidak adanya keresahan masyarakat	a Memasang jembatan penyebrangan orang untuk dapat menyeberang ke jalan akses b Memasang pagar di sepanjang jalan akses untuk mengamankan keselamatan dan untuk mencegah kecelakaan warga atau hewan c Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan pelabuhan Patimban	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
TAHAP OPERASIONAL									
8	Pengadaan Tenaga Kerja								
8A	Timbulnya penyakit menular	Pengadaan tenaga kerja	Tidak meningkatnya jumlah penderita penyakit menular	a Berkoordinasi dengan instansi dan LSM terkait dalam membuat dan mengadakan Program Pencegahan HIV/AIDS termasuk diantaranya melakukan sosialisasi pencegahan penyakit menular seksual b Berkoordinasi dengan instansi terkait dalam mengadakan pengobatan untuk pasien yang menderita IMS GO dan Sifilis dengan metode Inject dan Oral di Puskesmas Pusakanagara Pemeriksaan rutin (setiap 3bulan sekali) melalui metode VCT c Bekerjasama dengan Organisasi Warga Peduli AIDS (WPA) yang ada di tingkat desa untuk melakukan berbagai kegiatan positif dengan	Lokasi sekitar pembangunan khususnya Kecamatan Pusakanagara dan Kecamatan Pusakajaya	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

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							Pelaksana	Pengawas	Pelaporan
				d ODHA salah satunya kegiatan Gathering Saat ini Organisasi WPA di tingkat desa baru ada di Desa Patumban dan Desa Kotasari sedangkan WPA tingkat kecamatan belum terbentuk d Membangun fasilitas kebersihan Tempat pengumpulan sampah sementara (TPS), dan fasilitas pengolahan					
9	Operasional Fasilitas Laut								
9A	Penurunan kualitas udara (TSP dan Gas Buang)	Operasional fasilitas laut	Kualitas udara tetap dibawah baku mutu lingkungan berdasarkan Peraturan Pemerintah Nomor 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	Melakukan penanaman dan pemeliharaan tanaman keras untuk dapat menyerap polutan di sekitar area pelabuhan	Lokasi pelabuhan	Penanaman dilakukan satu kali saat kegiatan operasional dimulai dan dilakukan pemeliharaan dan peremajaan seperlunya	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
9B	Penurunan kualitas air laut	Operasional fasilitas laut	a Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut b Permen LH No 5 Tahun 2014 tentang baku mutu air limbah	a Melakukan pengelolaan terhadap limbah dari kapal yang singgah dan tidak langsung dibuang ke laut termasuk kerjasama dengan pihak ketiga berizin untuk penanganan limbahnya b Melakukan pemeliharaan fasilitas IPAL yang telah dibangun agar tetap berfungsi optimal	a Reception facility b IPAL	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
9C	Gangguan lalu lintas laut	Operasional fasilitas laut	Tidak terganggunya kapal nelayan dan kapal yang melewati alur pelayaran	a Membangun rencana pengendalian keamanan tetapi tidak terbatas pada memasang rambu lalu lintas laut navigasi aturan keselamatan pelatihan keselamatan kerja dan kemungkinan tumpahan minyak	a Area alur pelayaran b Jalur pipa PT Pertamina	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH)	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH)

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							Pelaksana	Pengawas	Pelaporan
				b Merencanakan langkah-langkah yang diperlukan sehubungan dengan adanya jalur pipa Pertamina yang berada pada alur pelayaran			Kabupaten Subang	Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	
9D	Timbulan Limbah	Operasional fasilitas laut	Tidak terjadi cemaran limbah ke laut	a Menampung dan menerima limbah yang dihasilkan dari kapal pada <i>reception facility</i> untuk kemudian diserahkan pada pihak ketiga berizin b Limbah B3 berupa lampu TL tinta cartridge dan limbah B3 lainnya disimpan pada TPS Limbah B3 untuk kemudian diserahkan pada pihak ketiga berizin c Limbah domestik yang dihasilkan dari aktivitas fasilitas laut dikumpulkan di tempat penampungan sementara yang selanjutnya akan bekerjasama dengan pihak dinas kebersihan setempat	a Reception facility (RF) b Kantor pengelola pelabuhan / TPS B3 c TPS domestik	a RF dibangun satu kali saat konstruksi dan pemeliharaan dilakukan setiap hari b Penyimpanan maksimum ≤ 90 hari c Pengangkutan dilakukan minimal 2 hari sekali	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
10	Operasional Fasilitas Darat								
10A	Peningkatan laju air larian (<i>run off</i>)	Operasional fasilitas darat	Tidak terjadi genangan	a Memelihara drainase yang dapat menampung air <i>runoff</i> b Merawat RTH pada lahan yang belum digunakan	a Drainase Pelabuhan b RTH Pelabuhan	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
10B	Penurunan kualitas air laut	Operasional fasilitas darat	Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu	Melakukan pemeliharaan fasilitas IPAL yang telah dibangun agar tetap berfungsi optimal selanjutnya dapat dibuang ke laut	IPAL di <i>back up area</i>	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian	a Kementerian Lingkungan Hidup dan Kehutanan	a Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
			Air Laut				Perhubungan RI	b Dinas Lingkungan Hidup (DLH) Kabupaten Subang c Dinas Lingkungan Hidup (DLH) Kabupaten Subang	b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
10C	Gangguan fauna terestrial (Burung)	Operasional fasilitas darat	Adanya habitat hidup untuk fauna terestrial	a Memelihara tanaman dan mangrove/bakau untuk fauna terestrial b Pekerja dilarang mengganggu fauna terestrial di sekitar lokasi kegiatan	Back up area	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
11	Pemeliharaan Kolam dan Alur Pelayaran								
11A	Penurunan kualitas air laut (TSS)	Pemeliharaan Kolam dan Alur Pelayaran	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut Lampiran I (80 mg/L)	a Membuang material buangan tidak pada satu titik namun menyebar di area dumping b Menggunakan peralatan untuk pengeringan dan pembuangan yang laik operasi	a Dumping area b Lokasi pemeliharaan kolam dan alur pelayaran	Dilakukan selama kegiatan operasional berlangsung (5-10 tahun sekali)	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

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							Pelaksana	Pengawas	Pelaporan
12	Operasional Jalan Akses								
12A	Penurunan kualitas udara (TSP dan Gas Buang)	Operasional jalan akses	Kualitas udara tidak mengalami penurunan dengan adanya operasional	a Memelihara kondisi kendaraan agar dalam kondisi laik operasi b Melakukan penanaman pohon di sepanjang area hijau jalan	Lokasi sekitar jalan akses	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
12B	Peningkatan laju air larian (<i>run off</i>)	Operasional jalan akses	Tidak terjadinya air limpasan yang berlebih	a Memperkuat kondisi drainase eksisting (jika diperlukan) b Melakukan pemeliharaan drainase	Lokasi sekitar jalan akses	Selama kegiatan operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang
12C	Aleh fungsi lahan	Operasional jalan akses	Timbulnya permukiman dan berbagai fasilitas umum serta sarana perekonomian di sekitar lokasi jalan akses	a Membuat pagar pembatas di sepanjang jalan akses yang dibangun, namun tetap menyediakan akses underpass/overpass, box curvert atau jembatan untuk akses penduduk b Membangun sesuai dengan peruntukan yang diatur RTRW Kabupaten Subang c Direktorat Jenderal Perhubungan Laut memberikan rekomendasi kebijakan terkait tata guna lahan kepada Pemda untuk menata kawasan tersebut	Sepanjang jalan akses	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Pelaporan
12D	Kerusakan jalan	Operasional jalan akses	Kerusakan jalan dapat diminimalkan	Berkordinasi dengan instansi terkait dalam melakukan peningkatan dan perbaikan jalan yang terhubung dengan jalan akses pelabuhan	Jalan akses dan sekitarnya	Selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan RI	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat c Dinas Lingkungan Hidup (DLH) Kabupaten Subang

B Matriks Rencana Pemantauan Lingkungan Hidup

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
Dampak Penting yang Dikelola (Hasil Arahuan Pengelolaan pada ANDAL)									
TAHAP PRAKONSTRUKSI									
1 Pengadaan lahan									
1A	Hilangnya Produktivitas Lahan	Tingkat produktivitas lahan yang relatif sama di sekitar Pelabuhan Patumban	Pembebasan lahan	a Informasi dan data yang perlu digali lebih dalam akan dilakukan wawancara mendalam dengan informan kunci seperti dengan tokoh masyarakat b Melakukan survey/pemantauan terhadap lahan pengganti yang direkomendasikan	Kecamatan Pusakanagara	Dilakukan setahun 2 kali selama minimal 2 tahun (4 kali pemantauan)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
1B	Kehilangan pencahaian mata dan pendapatan	Pulihnya mata pencahaian warga terkena dampak	Pembebasan Lahan	a Mengevaluasi jumlah tenaga kerja yang bersumber dari penduduk local yang terkena dampak pembebasan lahan b Mengevaluasi Program Pemulihan Mata Pencaharian (LRP) dan menjelaskan LRP secara jelas dan transparan c Informasi dan data yang perlu digali lebih dalam akan dilakukan wawancara mendalam dengan informan kunci seperti dengan tokoh masyarakat d Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasarkan pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu	Kecamatan Pusakanagara 1) Desa Pusakaratu 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Patumban Kecamatan Pusakajaya Desa Pusakajaya	Minimal 1 bulan setelah kegiatan pengelolan dilakukan	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
1C	Keresahan masyarakat	Berkurangnya persepsi negatif dan meningkatnya persepsi positif masyarakat terhadap	Pembebasan lahan	a Membuat berita acara setiap pertemuan dan mengevaluasi kegiatan pelaksanaan pembebasan lahan b Survei dan wawancara terhadap masyarakat yang terkena dampak terkait implementasi program	Kecamatan Pusakanagara 1) Desa Pusakaratu 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Patumban	Minimal 1 bulan setelah kegiatan pengelolan dilakukan	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
	rencana kegiatan			c pemulihan mata pencarian c Memantau gejolak resistensi dan konflik pada tahap pembebasan lahan	Kecamatan Pusakajaya Desa Pusakajaya			Kabupaten Subang	Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
TAHAP KONSTRUKSI									
2	Pengadaan Tenaga Kerja dan Pengoperasian Base camp								
2A	Terbukanya kesempatan kerja dan berusaha	Masyarakat terkena dampak/lokal yang terserap sebagai tenaga kerja > 20%	Penerimaan tenaga kerja	a Mengidentifikasi jumlah tenaga kerja lokal yang dipekerjakan b Mengidentifikasi jumlah dan jenis peluang usaha yang berkembang di sekitar lokasi kegiatan c Mengevaluasi implementasi Program Pemulihan Mata Pencarian untuk masyarakat yang terkena dampak d Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat e Memantau rekrutmen tenaga kerja lokal sesuai kualifikasi f Memantau proses pelepasan tenaga kerja keseluruhan berjalan aman khususnya tahap konstruksi	Masyarakat sekitar proyek Kecamatan Pusakanagara 1) Desa Pusakaratu 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Patimban Kecamatan Pusakajaya Desa Pusakajaya	Sebulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang
3	Mobilisasi Alat Berat dan Material								
3A	Penurunan kualitas udara (TSP dan Gas Buang)	Tidak terjadinya kemacetan lalu lintas akibat mobilisasi alat berat dan material	Mobilisasi peralatan dan material	Melakukan analisa laboratorium kualitas udara kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 41 tahun 1999 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	a Lokasi pembangunan Pelabuhan Patimba b Jalan Pantura c Jalan Akses Pelabuhan Patimban d Sumpang jalan Pantura dan jalan akses Pelabuhan Patimban	Setahun 2 kali (musim kemarau dan musim hujan)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
3B	Gangguan lalu lintas darat	Intensitas kebisingan sesuai dengan Keputusan Menteri Lingkungan Hidup No Kep 48/MENLH/II/1996	Kegiatan mobilisasi peralatan dan material	a Memantau kondisi arus lalu lintas b Mengidentifikasi jumlah kecelakaan yang terjadi	a Jalan Pantura b Jalan Akses Pelabuhan Patimban c Simpang jalan Pantura dan jalan akses Pelabuhan Patimban	Satu bulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Perhubungan Kabupaten Subang	a Kemcnterian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
3C	Gangguan lalu lintas laut	Tidak terjadinya tubrukan kapal di perairan Patimban	Kegiatan mobilisasi peralatan dan material	a Memantau kondisi lalu lintas laut b Mengidentifikasi jumlah kecelakaan yang terjadi	Pantai Patimban	Satu bulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	a ementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
3D	Keresahan masyarakat	Tidak adanya keresahan masyarakat	Mobilisasi Alat Berat dan Material	a Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan sosialisasi mobilisasi alat berat dan material dengan wawancara b Pengukuran jumlah peristiwa protes dan unjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan pemerintah desa atau perwakilan pemrakarsa (data sekunder) c Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat	Lokasi pembangunan	Satu bulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
				d Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasarkan kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu					
4	Reklamasi dan Pembangunan Fasilitas Laut								
4A	Penurunan kualitas air laut (TSS)	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut Lampiran I (80 mg/L)	Kegiatan reklamasi dan pembangunan fasilitas laut	Melakukan analisa laboratorium kualitas air laut dengan parameter TSS dan kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	10 titik lokasi	a Untuk parameter kualitas air lengkap dilakukan 6 bulan dengan 2 titik (permukaan dan dasar) b Khusus untuk pengambilan sampel TSS dilakukan seminggu sekali sebanyak 10 titik selama kegiatan pengeringan dan pembuangan, serta 3 titik setiap hari	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
4B	Perubahan <i>fishing ground</i>	Tidak terjadi gangguan terhadap biota laut (nekton dan benthos)	Kegiatan reklamasi dan pembangunan fasilitas laut	a Memberikan data dari jumlah pengaduan di meja konsultasi Analisis berdasarkan survei konsultan b Memonitoring produksi perikanan dan kondisinya melalui interview dengan nelayan	a TPI Kali Genteng, Trumtum dan Tanjung Pura b Lokasi sekitar pemasangan rumpon TPI Kaligenteng, Tanjungpura dan Trumtum	Dilaksanakan 1 (satu) bulan sekali selama tahap konstruksi	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Kelautan dan Perikanan Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup				
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan		
4C	Keresahan masyarakat	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/pendapatan dari nelayan	Kegiatan reklamasi dan pembangunan fasilitas laut	<ul style="list-style-type: none"> a Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan reklamasi b Pengukuran dilakukan dengan wawancara menggunakan kuestioner (data primer) c Pengukuran jumlah peristiwa protes dan unjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder) d Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat e Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu 	Lokasi pembangunan	Satu bulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang 		
5	Pengerukan dan Pembuangan			<ul style="list-style-type: none"> Penurunan kualitas air laut (TSS) 	<ul style="list-style-type: none"> Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut Lampiran I (80 mg/L) 	<ul style="list-style-type: none"> Pengerukan dan Pembuangan 	<ul style="list-style-type: none"> Melakukan pengukuran TSS kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis 	<ul style="list-style-type: none"> 10 titik lokasi 	<ul style="list-style-type: none"> a Untuk parameter kualitas air lengkap dilakukan 6 bulan dengan 2 titik (permukaan dan dasar) b Khusus untuk pengambilan sampel TSS dilakukan seminggu sekali sebanyak 10 titik selama kegiatan pengeringan dan 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
						pembuangan, serta 3 titik setiap hari			
6	Pembangunan Fasilitas Darat								
6A	Peningkatan laju air larian (<i>run-off</i>)	Tidak terjadi genangan	Pembangunan fasilitas darat	Pemantauan secara langsung terhadap keberadaan dan fungsi saluran drainase dan RTH	Lokasi proyek	Dilakukan 2 kali pada musim hujan saat terjadi hujan deras selama kegiatan berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
6B	Keresahan masyarakat	Tidak terjadi keresahan masyarakat	Pembangunan fasilitas darat	a Peninjauan jalur irigasi baru pengganti saluran irigasi yang terputus b Peninjauan terhadap underpass/fly over pada jalan akses peduduk yang berpotongan dengan jalan akses Pelabuhan Patimban c Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan pembangunan fasilitas darat d Pengukuran dilakukan dengan wawancara menggunakan kuestioner (data primer) e Pengukuran jumlah peristiwa protes dan unjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder) f Informasi dan data yang perlu digali lebih dalam akan dilakukan wawancara mendalam dengan informan kunci seperti dengan tokoh masyarakat	Kantor operasional fasum fasos dan utilitas	Satu tahun sekali selama operasional berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
				g Jumlah sample ditentukan dengan cara purposive sampling yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu					
TAHAP OPERASIONAL									
8	Pengadaan Tenaga Kerja								
8A	Terbukanya kesempatan kerja dan berusaha	Masyarakat terkena dampak/lokal yang terserap sebagai tenaga kerja > 30%)	Kegiatan pengadaan tenaga kerja operasional	a Mengidentifikasi jumlah tenaga kerja lokal yang dipekerjakan b Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat c Jumlah sample ditentukan dengan cara purposive sampling yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu	Area pelabuhan dan <i>back up area</i>	Satu tahun sekali selama kegiatan operasional	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9	Operasional Fasilitas Laut								
9A	Sedimentasi	Kedalaman perairan sesuai dengan rencana	Kegiatan operasional fasilitas laut	a Pemantauan terhadap kualitas sedimen material pengeringan sebelum dilakukan pembuangan b Survei batimetri di lokasi pembuangan	a Area pengeringan (3 titik) dan area pembuangan (3 titik) b Area pembuangan	a Sebelum pembuangan (1 kali) b Sebelum dan setelah kegiatan pembuangan dilakukan	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9B	Perubahan garis pantai	Perubahan garis pantai tidak mengakibatkan kerusakan infrastruktur atau lahan eksisting	Kegiatan operasional fasilitas laut	a Melakukan tracking garis pantai sepanjang 5 km kearah timur dan barat dari Pelabuhan Patimban waktu yang dipilih pada saat tracking adalah pada saat pasang tertinggi pada saat pemantauan b Melakukan pengukuran batimetri secara berkala pada area alur	Garis pantai sisi utara	Satu tahun sekali	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa

No	Dampak Lingkungan Yang Dipantau		Sumber Dampak	Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter		Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
				pelayaran kapal laut dan kapal perikanan untuk mengetahui ketebalan sedimen selama operasional				Subang	c Barat Dinas Lingkungan Hidup Kabupaten Subang
9C	Perubahan <i>fishing ground</i>	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/pendapatan dari nelayan	Kegiatan operasional fasilitas laut	a Observasi lapangan dan wawancara terhadap Nelayan TPI Kali Genteng, Trumtum dan Tanjung Pura mengenai produktivitas pada lokasi pemasangan rumpon dan dianalisis secara deskriptif b Observasi lapangan, wawancara terhadap Nelayan TPI Kali Genteng, Trumtum dan Tanjung Pura dan dianalisis secara deskriptif mengenai implementasi CSR	a TPI Kali Genteng, Trumtum dan Tanjung Pura b Administrasi umum Pelabuhan Patimban di Kementerian Perhubungan dan TPI Kali Genteng, Trumtum dan Tanjung Pura	Dilaksanakan 6 (enam) bulan sekali selama tahap Operasi	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Kelautan dan Perikanan Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9D	Keresahan masyarakat	Tidak ada keresahan masyarakat	Kegiatan operasional fasilitas laut	a Memberi laporan tentang jumlah pengaduan b Memantau produksi dan kondisi nelayan	Lokasi pelabuhan TPI Kali Genteng Trumtum dan Tanjung Pura	Satu tahun sekali	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
12	Operasional Jalan Akses								
12A	Peningkatan kebisingan	Tidak terjadinya kemacetan lalu lintas akibat operasional jalan akses pelabuhan	Kegiatan lalu lintas di jalan akses	Melakukan analisa laboratorium kebisingan kemudian hasilnya dibandingkan dengan baku mutu kebisingan Kepmen LH No 48 tahun 1996 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan	3 titik di sekitar lokasi proyek	Dilakukan setahun 2 kali (musim kemarau dan musim hujan)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
				tingkat kritis					c Dinas Lingkungan Hidup Kabupaten Subang
12B	Gangguan lalu lintas darat	Tingkat Kebisingan di bawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Kegiatan lalu lintas di jalan akses	a Pemantauan secara langsung terhadap arus lalu lintas b Memberikan informasi jumlah kecelakaan	Jalan Pantura dan jalan akses	1 x dalam 6 bulan Dapat dilakukan pada awal tahun (bulan ke 1 atau 1) dan pertengahan tahun bulan ke 7 atau ke 8)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Perhubungan Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
12C	Keresahan masyarakat	Tidak adanya keresahan masyarakat	Kegiatan lalu lintas di jalan akses	a Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan operasional jalan akses b Pengukuran dilakukan dengan wawancara menggunakan kuestioner (data primer) c Pengukuran jumlah peristiwa protes dan unjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder) d Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci seperti dengan tokoh masyarakat e Jumlah sample ditentukan dengan cara purposive sampling yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu	Jalan akses	Satu tahun sekali	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
Dampak Lingkungan Lainnya yang Dikelola									
TAHAP KONSTRUKSI									
2	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp								
2A	Penurunan kualitas air laut (peningkatan TSS)	Kualitas air laut tidak tercemar	Air limbah dari lokasi konstruksi dan basecamp	Konfirmasi dan perawatan terhadap kondisi fasilitas kebersihan, fasilitas pengelolaan air limbah	Lokasi kontruksi dan basecamp	Selama tahap konstruksi berlangsung (setiap 2 bulan sekali)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
2B	Timbulnya Penyakit Menular	Tidak meningkatnya jumlah pasien dan penyakit infeksi karena adanya tenaga kerja konstruksi	Adanya tenaga kerja konstruksi dan pengoperasian Basecamp	a Pengumpulan data sekunder tentang pelaksanaan program pencegahan HIV / AIDS yang telah dilaksanakan b Mengidentifikasi jumlah penderita dan membandingkan dengan data sebelum ada kegiatan konstruksi	Lokasi sekitar proyek	Selama tahap konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
3	Mobilisasi Alat Berat dan Material								
3A	Kerusakan jalan	Kerusakan jalan dapat diminimalkan	Mobilisasi peralatan dan material	Memantau secara langsung terhadap kondisi jalan Analisis berdasarkan survey konsultan	Jalan Akses Pelabuhan dan Jalan Pantura Pusakanagara	Satu bulan sekali selama konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut / Direktorat Jenderal Bina Marga dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
3B	Peningkatan kebisingan	Konsentrasi SO ₂ CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	Mobilisasi peralatan dan material	Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 48 tahun 1996 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	Lokasi Pembangunan Pelabuhan Patimban Jalan Pantura Jalan Akses Pelabuhan Patimban dan Simpang jalan Pantura dan jalan akses Pelabuhan Patimban	Setahun 2 kali (musim kemarau dan musim hujan)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
6	Pembangunan Fasilitas Darat								
6A	Penurunan kualitas udara (TSP dan Gas Buang)	Konsentrasi SO ₂ CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	Pembangunan fasilitas darat	Melakukan analisa laboratorium kualitas udara, kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 41 tahun 1999 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selama tahap konstruksi berlangsung (musim hujan dan musim kemarau)	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
6B	Peningkatan kebisingan	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Pembangunan fasilitas darat	Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 48 tahun 1996 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selama tahap konstruksi berlangsung (musim hujan dan musim kemarau)	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang c Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
6C	Penurunan Kualitas air laut	Kualitas air laut tidak menurun secara rastic dikarenakan aktivitas proyek	Konstruksi fasilitas darat	Melakukan sampling air laut dan hasilnya di bandingkan dengan Kepmen LH No 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	10 Lokasi di laut	4 kali setahun dengan 2 permukaan (permukaan atas dan bawah)	Direktorat Jenderal Perhubungan Laut dan kontraktor	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
6D	Gangguan fauna terrestrial (Burung)	Adanya habitat baru	Pembangunan fasilitas darat	a Memberikan laporan tentang habitat baru b Pemantauan secara langsung di lapangan	Di sekitar lokasi proyek pelabuhan	Sebelum pembangunan dan setelah penyelesaian	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
6E	Gangguan Flora terrestrial	Adanya habitat baru	Pembangunan fasilitas darat	Memberikan laporan tentang keberadaan dan fungsi habitat baru	Di sekitar lokasi proyek pelabuhan	Sebelum pembangunan dan setelah penyelesaian	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
7	Pembangunan Jalan Akses								
7A	Penurunan Kualitas udara (TSP dan Gas Buang)	Konsentrasi SO ₂ , CO NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	Kegiatan pembangunan jalan akses	Melakukan analisa laboratorium kualitas udara kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 41 tahun 1999 Selanjutnya hasil pemantauan dibuat rata rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selama tahap konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
7B	Peningkatan kebisingan	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Kegiatan pembangunan jalan akses	Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No 48 tahun 1996	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selama tahap konstruksi berlangsung	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
7C	Penurunan kualitas air permukaan	Kualitas air permukaan tetap dibawah baku mutu lingkungan berdasarkan PP No 82 Tahun 2001 tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air	Pembangunan jalan akses	Monitoring TSS menggunakan turbidity meter	3 titik sepanjang pembangunan lokasi jalan akses	Setiap minggu	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup			
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan	
7D	Peningkatan laju air larian	Tidak terjadi limpasan yang berlebih	Pembangunan jalan akses	Pemantauan secara langsung di lapangan	Lokasi pembangunan	Dilakukan 2 kali pada musim hujan saat terjadi hujan deras selama kegiatan berlangsung	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang	
7E	Keresahan masyarakat	Tidak adanya keresahan masyarakat	Pembangunan jalan akses	<ul style="list-style-type: none"> a Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan operasional jalan akses b Pengukuran dilakukan dengan wawancara menggunakan kuesioner (data primer) c Pengukuran jumlah peristiwa protes dan unjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder) d Informasi dan data yang perlu digali lebih dalam akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat e Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasarkan pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu 	Di sekitar lokasi proyek pelabuhan	Sebelum pembangunan dan setelah penyelesaian	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang	
TAHAP OPERASIONAL										
8	Pengadaan Tenaga Kerja									
8A	Timbulnya penyakit menular	Adaya tenaga kerja operasional	Adanya tenaga kerja operasional	<ul style="list-style-type: none"> a Memberikan laporan tentang pelaksanaan program pencegahan HIV / AIDS b Memberikan laporan dan pemeliharaan fasilitas sanitasi 					a Kementerian Lingkungan Hidup dan Kehutanan	a Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
				fasilitas pengolahan air limbah dan tempat sampah c Mengidentifikasi jumlah penderita dan membandingkan dengan data sebelum ada kegiatan konstruksi			Pelabuhan Operator Terminal dan Pengembang fasilitas <i>back up area</i> , Pemda Kabupaten Subang	b Dinas Lingkungan Hidup Kabupaten Subang	b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9	Operasional Fasilitas Laut								
9A	Penurunan kualitas udara (TSP dan Gas Buang)	Kualitas udara tetap dibawah baku mutu lingkungan berdasarkan Peraturan Pemerintah Nomor 41 Tahun 1999 tentang Pengendalian Pencemaran Udara	Mobilisasi kapal	Pemantauan secara langsung dilapangan	Area pelabuhan	Dilakukan setahun 2 kali (musim kering dan hujan)	Otoritas Pelabuhan dan/atau Operator Terminal	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9B	Penurunan kualitas air laut	a Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut, b Permen LH No 5 Tahun 2014 tentang baku mutu air limbah	Operasional fasilitas darat	a Melakukan sampling effluent IPAL dramase, oil separator b Melakukan sampling kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	titik 0 titik lokasi	a Dilakukan setahun 2 kali Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar) b Khusus untuk pengambilan sampel TSS dilakukan setiap hari selama kegiatan reklamasi yang	Otoritas Pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
						menyebabkan kekeruhan			
9C	Gangguan lalu lintas laut	Tidak terganggunya kapal nelayan dan kapal PT Pertamina serta jalur pipa milik PT Pertamina	Mobilisasi kapal	Pemantauan secara langsung	Lokasi pelabuhan	Setiap hari	Otoritas Pelabuhan dan/atau Operator Terminal	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
9D	Timbulan Limbah	Tidak terjadi cemaran limbah ke laut	Operasional fasilitas laut	Memantau keberadaan dan fungsi RF, TPS B3 dan TPS domestik	RF TPS B3 TPS domestik	a Pemeliharaan RF dilakukan setiap hari b Penyimpanan maksimal ≤ 90 hari c Pengangkutan dilakukan minimal 2 hari sekali	Otoritas Pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
10	Operasional Fasilitas Darat								
10A	Gangguan fauna terrestrial (Burung)	Adanya fasilitas baru	Adanya fasilitas darat	Melakukan pemantauan langsung terhadap habitat baru	Habitat baru	Satu tahun sekali	Otoritas Pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
10B	Peningkatan laju air larian (<i>run off</i>)	Tidak terjadinya genangan	Adanya operasional fasilitas darat	Pemantauan secara langsung kondisi drainase	Sepanjang jalan akses	Dilakukan 2 kali pada musim hujan saat terjadi hujan deras, selama kegiatan berlangsung	Otoritas pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
10C	Penurunan kualitas air laut	Kualitas air laut tidak memburuk	Operasional fasilitas darat	Melakukan analisa laboratorium kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	10 titik lokasi	a Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar) b Khusus untuk pengambilan sampel TSS dilakukan setiap hari selama kegiatan reklamasi yang menyebabkan kekeruhan	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
11	Pemeliharaan Kolam dan Alur Pelayaran								
11A	Penurunan Kualitas air laut	Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut	Pemeliharaan kolam dan alur pelayaran	Melakukan sampling kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no 51 tahun 2004 Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan perubahan kualitas lingkungan dan tingkat kritis	10 titik lokasi	a Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar)	Direktorat Jenderal Perhubungan Laut	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
						b khusus untuk pengambilan sampel TSS dilakukan seminggu sekali selama kegiatan reklamasi yang menyebabkan kekeruhan			Kabupaten Subang
12	Operasional Jalan Akses								
12A	Penurunan kualitas udara (TSP dan Gas Buang)	Kualitas udara tidak mengalami penurunan dengan adanya operasional	Kegiatan lalu lintas di jalan akses	Monitoring secara langsung	Sepanjang jalan akses	Satu tahun 2 kali (musim kemarau dan musim hujan)	Direktorat Jenderal Perhubungan Laut dan Konsultan Supervisi	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
12B	Peningkatan laju air larian (<i>run off</i>)	Tidak terdapat genangan	Adanya jalan akses	Pemantauan secara langsung kondisi drainase	Sepanjang jalan akses	Dilakukan 2 kali pada musim hujan saat terjadi hujan deras selama kegiatan berlangsung	Otoritas pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
12C	Aleh fungsi lahan	Timbulnya permukiman dan berbagai fasilitas umum	Adanya jalan akses	a Pemantauan secara langsung terhadap perubahan fungsi lahan yang sesuai dengan dengan aturan RTRW Kabupaten Subang	Sepanjang jalan akses	Selama operasional berlangsung (musim kemarau)	Otoritas Pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan	a Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan Yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak yang Timbul	Indikator / Parameter	Sumber Dampak	Metode Pengumpulan & Analisis Data	Lokasi Pantau	Waktu & Frekuensi	Pelaksana	Pengawas	Pelaporan
		serta sarana perekonomian di sekitar lokasi jalan akses		b Pemantauan dan memelihara tanaman pohon yang telah di tanam (taman dan pelindung jalan)		dan musim hujan)		b Dinas Lingkungan Hidup Kabupaten Subang	b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang
12D	Kerusakan jalan	Kerusakan jalan dapat diminimalkan	Lalu lintas di jalan akses	Pemantauan secara langsung terhadap kerusakan jalan	Jalan Pantura	Setahun 2 kali (3 tahun)	Otoritas pelabuhan	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Kabupaten Subang	a Kementerian Lingkungan Hidup dan Kehutanan b Dinas Lingkungan Hidup Provinsi Jawa Barat c Dinas Lingkungan Hidup Kabupaten Subang



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SITI NURBAYA

LAMPIRAN II

KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN

REPUBLIK INDONESIA

NOMOR SK 136/Menlhk/Setjen/PLA 4/2/2017

TENTANG

IZIN LINGKUNGAN KEGIATAN PEMBANGUNAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT KEPADA DIREKTORAT KEPELABUHANAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

Rangkaian Kegiatan Rencana Kegiatan Pembangunan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan, akan berdampak terhadap lingkungan di lokasi kegiatan dan sekitarnya, untuk itu diperlukan upaya pengelolaan lingkungan terhadap dampak penting dan dampak lainnya melalui beberapa pendekatan pengelolaan lingkungan hidup yang berkesinambungan dan terencana Pengelolaan lingkungan hidup akan dilakukan melalui pendekatan teknologi, pendekatan sosial ekonomi dan pendekatan institusi

1 Pendekatan Teknologi

Pendekatan teknologi dilakukan dengan menerapkan teknologi yang ekonomis, tepat guna dan berhasil guna sesuai dengan karakteristik dampak yang timbul dalam upaya meminimalkan dampak negatif Secara ringkas upaya pendekatan teknologi terhadap dampak-dampak penting adalah sebagai berikut

- a Pengaturan/penjadwalan alat-alat berat yang akan digunakan sehingga tidak semua alat berat digunakan secara bersamaan untuk mengurangi debu dan gas buang serta mengurangi kebisingan
- b Melakukan pengelolaan terhadap limbah/ceciran dari kapal yang singgah dan tidak langsung dibuang ke laut untuk mengurangi penurunan kualitas air laut
- c Membangun IPAL (Instalasi Pengolahan Air Limbah) untuk pengelolaan air limbah domestik
- d Penempatan satpam dan pemasangan rambu-rambu untuk mengatur lalu lintas
- e Memilih jalur laut untuk pengangkutan peralatan dan material yang melebihi kapasitas jalan untuk mengurangi kerusakan jalan

2 Pendekatan Sosial Ekonomi

Pendekatan sosial ekonomi adalah langkah-langkah yang akan ditempuh oleh Direktorat Jenderal Perhubungan Laut untuk mengelola dampak terhadap lingkungan melalui tindakan yang berdasarkan atas interaksi sosial dan bantuan peran pemerintah yang meliputi

- a Memprioritaskan penggunaan tenaga kerja non terampil dari desa-desa setempat berkoordinasi dengan pemerintah desa
- b Mengembangkan Program Pemulihan Mata Pencaharian (LRP) dan menjelaskan LRP secara jelas dan transparan untuk mengurangi keresahan masyarakat

- c Mendokumentasikan proses (pengumuman, daftar tenaga kerja yang diterima) penerimaan tenaga kerja lokal
- 3 Pendekatan Institusi
- Pendekatan institusi adalah mekanisme kelembagaan yang akan ditempuh oleh Direktorat Jenderal Perhubungan Laut dalam upaya menanggulangi dampak terhadap lingkungan meliputi
- a Berkoordinasi dengan Dinas Lingkungan Hidup (DLH) Kabupaten Subang
 - b Berkoordinasi dengan Badan Lingkungan Hidup (BLH) Kabupaten Indramayu
 - c Berkoordinasi dengan Badan Lingkungan Hidup (BLH) Kabupaten Purwakarta
 - d Berkoordinasi dengan Dinas Lingkungan Hidup (DLH) Provinsi Jawa Barat
 - e Berkoordinasi dengan Dinas Perhubungan Kabupaten Subang
 - f Berkoordinasi dengan Direktorat Jenderal Bina Marga, Kementerian Pekerjaan Umum dan Perumahan Rakyat
 - g Berkoordinasi dengan PT PERTAMINA
 - h Meningkatkan program kehumasan terkait dengan upaya perlindungan dan pengelolaan lingkungan yang dilakukan serta menampung aspirasi masyarakat



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**MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA**

**KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA
NOMOR SK.120/MENLHK/SETJEN/PLA.4/2/2022**

TENTANG

KELAYAKAN LINGKUNGAN HIDUP KEGIATAN PENGEMBANGAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA, DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT OLEH KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA,

- Menimbang : a. bahwa berdasarkan ketentuan:
- a.1 Peraturan Pemerintah Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup, ditetapkan:
- 1) Pasal 3:
- (1) Persetujuan Lingkungan wajib dimiliki oleh setiap Usaha dan/atau Kegiatan yang memiliki Dampak Penting atau tidak penting terhadap lingkungan;
- (2) Persetujuan Lingkungan diberikan kepada Pelaku Usaha atau Instansi Pemerintah;
- (3) Persetujuan Lingkungan menjadi prasyarat penerbitan Perizinan Berusaha atau Persetujuan Pemerintah;
- (4) Persetujuan Lingkungan dilakukan melalui a. penyusunan Amdal dan uji kelayakan Amdal; atau b. penyusunan Formulir UKL-UPL dan pemeriksaan Formulir UKL-UPL;
- 2) Pasal 49 ayat (3): Surat Keputusan Kelayakan Lingkungan Hidup merupakan a. bentuk Persetujuan Lingkungan Hidup; dan b. prasyarat penerbitan Perizinan Berusaha atau Persetujuan Pemerintah;
- 3) Pasal 89 ayat (1): Penanggungjawab Usaha dan/atau Kegiatan wajib melakukan perubahan Persetujuan Lingkungan

- apabila Usaha dan/atau Kegiatannya yang telah memperoleh surat Keputusan Kelayakan Lingkungan Hidup atau persetujuan Pernyataan Kesanggupan Pengelolaan Lingkungan Hidup direncanakan untuk dilakukan perubahan;
- 4) Pasal 90 ayat (1): Perubahan Persetujuan Lingkungan dilakukan melalui:
- a. perubahan Persetujuan Lingkungan dengan kewajiban menyusun dokumen lingkungan hidup baru; atau b. perubahan Persetujuan Lingkungan tanpa disertai kewajiban menyusun dokumen Lingkungan Hidup baru;
- 5) Pasal 527 huruf b: Penilaian Amdal atau Pemeriksaan Formulir UKL-UPL dan pengajuan Izin Perlindungan dan Pengelolaan Lingkungan Hidup yang sedang dalam proses, dilanjutkan sampai dengan terbitnya Persetujuan Lingkungan;
- a.2. Pasal 3 ayat (1) Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 4 Tahun 2021 tentang Daftar Usaha dan/atau Kegiatan yang Wajib Memiliki Analisis Mengenai Dampak Lingkungan Hidup, Upaya Pengelolaan Lingkungan Hidup dan Upaya Pemantauan Lingkungan Hidup atau Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup, Setiap rencana Usaha dan/atau Kegiatan yang memiliki Dampak Penting terhadap lingkungan hidup wajib memiliki Amdal;
- b. bahwa rencana Kegiatan Pengembangan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan adalah kegiatan yang wajib memiliki Analisis Mengenai Dampak Lingkungan Hidup (AMDAL);
- c. bahwa kegiatan Pelabuhan Patimban di Kabupaten Subang, Provinsi Jawa Barat oleh Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan telah memiliki dokumen lingkungan berdasarkan Keputusan Menteri Lingkungan Hidup dan Kehutanan Nomor SK.136/Menlhk/Setjen/PLA.4/2/2017 tanggal 28 Februari 2017 tentang Izin Lingkungan Kegiatan Pembangunan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kecamatan

- Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat;
- d. bahwa Kepala Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan sesuai surat Nomor:
 - 1) PT.002/1/VII/KSOP-PMB/2020 tanggal 17 Juli 2020, mengajukan Permohonan Perubahan Izin Lingkungan Pelabuhan Patimban;
 - 2) PT.002/1/XI/KSOP-PMB/2021 tanggal 22 November 2021, mengajukan Perubahan Persetujuan Lingkungan karena Perubahan Penanggung Jawab Kegiatan Addendum ANDAL, RKL-RPL Pelabuhan Patimban;
 - e. bahwa terhadap permohonan sebagaimana dimaksud dalam huruf d:
 - 1) berdasarkan Berita Acara Validasi Permohonan Layanan Pelayanan Terpadu Satu Pintu sesuai Nomor Registrasi R202006220022 tanggal 30 Juli 2020 dan R202108250011 tanggal 15 Desember 2021, dinyatakan lengkap secara administrasi;
 - 2) diperlukan Adendum Analisis Dampak Lingkungan Hidup (ANDAL), Rencana Pengelolaan Lingkungan Hidup (RKL) dan Rencana Pemantauan Lingkungan Hidup (RPL) yang telah dilakukan pembahasan dalam rapat Tim Teknis dan Komisi Penilai AMDAL Pusat, yaitu:
 - a) rapat Tim Teknis Komisi Penilai AMDAL Pusat Pembahasan Adendum Andal, RKL-RPL sesuai Berita Acara Nomor 146/BA/DIT.PDLUK/LHK/2020 tanggal 5 Oktober 2020;
 - b) rapat Komisi Penilai AMDAL Pusat sesuai Berita Acara Nomor 147/BA/DIT.PDLUK/LHK/2020 tanggal 8 Oktober 2020;
 - f. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a sampai dengan huruf e, perlu menetapkan Keputusan Menteri Lingkungan Hidup dan Kehutanan tentang Kelayakan Lingkungan Hidup Kegiatan Pengembangan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan;

Mengingat

- : 1. Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup sebagaimana telah diubah dengan Undang-Undang Nomor 11 Tahun 2020 tentang Cipta Kerja;

2. Peraturan Pemerintah Nomor 5 Tahun 2021 tentang Penyelenggaraan Perizinan Berusaha Berbasis Resiko;
3. Peraturan Pemerintah Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup;
4. Peraturan Presiden Nomor 68 Tahun 2019 tentang Organisasi Kementerian Negara sebagaimana telah diubah dengan Peraturan Presiden Nomor 32 Tahun 2021;
5. Peraturan Presiden Nomor 92 Tahun 2020 tentang Kementerian Lingkungan Hidup dan Kehutanan;
6. Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 4 Tahun 2021 tentang Daftar Usaha dan/atau Kegiatan yang Wajib Memiliki AMDAL, UKL-UPL atau SPPL;
7. Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 15 Tahun 2021 tentang Organisasi dan Tata Kerja Kementerian Lingkungan Hidup dan Kehutanan;

Memperhatikan

- : Risalah Pengolahan Data Proses Penelaahan Penerbitan Kelayakan Lingkungan Hidup Kegiatan Pengembangan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan Nomor RPD.8/PDLUK-2/1/2022 tanggal 12 Januari 2022;

MEMUTUSKAN:

Menetapkan

- : KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN TENTANG KELAYAKAN LINGKUNGAN HIDUP KEGIATAN PENGEMBANGAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA, DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT OLEH KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN.

KESATU

- : Rencana Kegiatan Pengembangan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat oleh Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban, Direktorat Jenderal Perhubungan

Laut, Kementerian Perhubungan layak ditinjau dari aspek lingkungan hidup.

KEDUA

- : Penanggung jawab Usaha dan/atau Kegiatan ini adalah:
1. Nama Usaha dan/ atau kegiatan : Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban
 2. Jenis Usaha dan/ atau Kegiatan : Kepelabuhanan
 3. Penanggung Jawab : Heri Purwanto
Usaha dan/ atau
Kegiatan
 4. Jabatan : Kepala Kantor
 5. Alamat Kantor/ Kegiatan : Jl. Raya Utama Pelabuhan Patimban, Subang, Jawa Barat, 41255
Telp./Fax. (0260)
522709/(021) 22345809
 6. Lokasi Usaha dan/ atau Kegiatan : Desa Patimban,
Desa Kalentambo,
Desa Gempol, Desa Kotasari,
Desa Pusakaratu,
Kecamatan Pusakanagara,
dan Desa Pusakajaya,
Kecamatan Pusakajaya,
Kabupaten Subang,
Provinsi Jawa Barat

KETIGA

- : Ruang lingkup rencana kegiatan sebagaimana dimaksud dalam Amar KESATU, meliputi:
- A. Kegiatan Eksisting
1. Pembangunan area terminal dengan luas kurang lebih 178 Ha dengan koordinat lokasi $107^{\circ} 54' 2,928''$ E $6^{\circ} 13' 52,919''$ S dan $107^{\circ} 54' 34,588''$ E $6^{\circ} 12' 39,525''$ S, yang terdiri dari:
 - a. Pembangunan Tahap 1 Fase 1; dan
 - b. Pembangunan Tahap 1 Fase 2
 2. Kebutuhan lahan untuk pembangunan Tahap 1 Fase 1 sampai Tahap 1 Fase 2, total pembebasan lahan untuk area terminal dan back-up area sebesar kurang lebih 356,23 Ha dan jalan akses 32,8 Ha dengan koordinat lokasi $107^{\circ} 51' 49,495''$ E $6^{\circ} 16' 52,376''$ S, $107^{\circ} 52' 26,832''$ E $6^{\circ} 14' 24,058''$ S, $107^{\circ} 54' 44,537''$ E $6^{\circ} 14' 54,304''$ S, dan $107^{\circ} 53' 35,907''$ E $6^{\circ} 14' 2,626''$ S.
 3. Pembangunan back up area dengan luas kurang lebih 8 (delapan) Ha, dengan peruntukan:
 - a. 3 (tiga) Ha akan digunakan untuk pembangunan *utility area*;
 - b. 5 (lima) Ha untuk pembangunan area publik.

4. Kegiatan reklamasi dan pembangunan fasilitas laut untuk pembangunan terminal (bagian laut) Tahap 1 Fase 2 dengan total kebutuhan material reklamasi kurang lebih 6.600.000 m³.
5. Kegiatan pengeringan dan pembuangan material pengeringan untuk Tahap 1 Fase 2 ke lepas pantai yang berjarak kurang lebih 15 km dari lokasi pelabuhan dengan kedalaman perairan kurang lebih 23 meter, dengan volume sebesar 21.200.000 m³.
6. Kegiatan operasional fasilitas laut, meliputi:
 - a. aktivitas *calling vessel* (kapal);
 - b. aktivitas bongkar dan muat kapal;
 - c. aktivitas penyimpanan kargo dan transportasi;
 - d. aktivitas pengelolaan limbah B3 dan non B3;
 - e. suplai air dan fasilitas penunjang;
 - f. pengolahan air limbah/Instalasi Pengolahan Air Limbah (IPAL);
 - g. suplai tenaga listrik.
7. Kegiatan operasional fasilitas darat, meliputi:
 - a. aktivitas area publik;
 - b. pengelolaan limbah domestik;
 - c. suplai air;
 - d. utilitas listrik.
8. Kegiatan pemeliharaan kolam putar (*basin*) dan alur pelayaran, dengan metode *dredging*, dengan volume sebagai berikut:

Area	Ketinggian Endapan (cm/tahun)	Pemeliharaan pada Ketinggian Endapan 50 cm (tahun)	Volume Endapan (m ³ / tahun)	Volume Kerukan (m ³)
Alur Pelayaran	11,5	4,3	186.693	811.709
Anchorage Basin	3,5	14,3	84.329	1.204.700
Inner Basin Channel	13	3,8	12.644	48.631

9. Kegiatan operasional jalan akses.

B. Kegiatan Pengembangan

1. Pengembangan Tahap 1 Fase 1 yang meliputi:
 - a. Pendetilan Area Daratan (*Back Up Area*) pada Area Publik terdiri dari:
 - 1) Gedung mess seluas 1,65 ha;
 - 2) Foodcourt seluas 0,20 ha;
 - b. Pendetilan Area Daratan (*Back Up Area*) pada Area Utilitas terdiri dari:
 - 1) Pos jaga seluas 0,0025 ha;
 - 2) Lapangan parkir seluas 0,40 ha;
 - 3) Tempat Pengolahan Sampah Terpadu (TPST) seluas 1 ha;
 - 4) Gate seluas 0,28 ha;

- 5) Drainase dengan panjang sebesar 30.900 m;
- 6) Jalan lingkungan dengan panjang sebesar 24 km.
2. Pembangunan dan pengoperasian pada Area Perairan, yaitu Jembatan Akses Pelabuhan (Jembatan Penghubung Pelabuhan) seluas (20 x 980) m².

KEEMPAT

- : Berdasarkan hasil prakiraan dampak dari aspek fisik-kimia, dan sosial-ekonomi pada tahap konstruksi akibat rencana kegiatan sebagaimana dimaksud dalam Amar KETIGA, diperoleh dampak penting yang ditimbulkan meliputi:
1. Terbukanya kesempatan kerja dan berusaha dari kegiatan pengadaan tenaga kerja dan pengoperasian *basecamp*.
 2. Penurunan kualitas udara (TSP dan gas buang) dari kegiatan mobilisasi alat berat dan material.
 3. Peningkatan kebisingan dari kegiatan mobilisasi alat berat dan material.
 4. Gangguan lalu lintas darat dari kegiatan mobilisasi alat berat dan material.
 5. Keresahan masyarakat dari kegiatan mobilisasi alat berat dan material.
 6. Peningkatan intensitas kebisingan dari kegiatan pembangunan fasilitas darat.
 7. Peningkatan intensitas kebisingan dari kegiatan pembangunan jalan akses.

KELIMA

- : Untuk menanggulangi dampak penting sebagaimana dimaksud dalam Amar KEEMPAT, Penanggung Jawab Usaha dan/atau Kegiatan wajib melakukan pengelolaan, berupa:
1. Terbukanya kesempatan kerja dan berusaha dari kegiatan pengadaan tenaga kerja dan pengoperasian *basecamp* dengan cara:
 - a. membuat papan pengumuman lowongan pekerjaan secara terbuka melalui media cetak dan elektronik;
 - b. mencantumkan dalam klausul kontrak dengan kontraktor pelaksana untuk memprioritaskan tenaga kerja lokal dari penduduk yang terkena dampak sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan, dan penyertaan jaminan sosial tenaga kerja, serta pembayaran sesuai UMK;
 - c. berkoordinasi dengan instansi terkait dalam melaksanakan Program Pemulihan Mata Pencaharian untuk masyarakat yang terkena dampak, sebagaimana tertuang di dalam dokumen LARAP, diantaranya mengadakan program pelatihan, mengadakan program bantuan modal usaha, mengadakan program kegiatan usaha baru, mengadakan program

- bantuan pemasaran, mengadakan program bantuan peralatan;
- d. berkoordinasi dengan Kecamatan Pusakanagara dan Pusakajaya mengenai adanya informasi lowongan kerja.
 2. Penurunan kualitas udara (TSP dan gas buang) dari kegiatan mobilisasi alat berat dan material dengan cara:
 - a. mobilisasi alat berat dan material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relatif sepi dan jauh dari pemukiman (jalan tanah merah);
 - b. menutup bak kendaraan pengangkut material dengan terpal, sehingga tidak terjadi ceceran bahan material;
 - c. pengangkutan material ke lokasi dengan menggunakan kendaraan yang masih laik operasi dan lulus uji KIR;
 - d. melakukan pembangunan tempat pencucian untuk pembersihan roda kendaraan pengangkut sebelum keluar lokasi tapak proyek;
 - e. apabila terdapat ceceran material di jalan yang dilewati dari mobilisasi material konstruksi akan segera dilakukan pembersihan;
 - f. melakukan penyiraman jalan secara periodic;
 - g. memberikan informasi kepada warga yang tinggal di dekat mobilisasi alat berat dan material melalui aparat kecamatan setempat;
 - h. melakukan koordinasi dengan aparat Kecamatan Pusakanagara dan Pusakajaya.
 3. Peningkatan kebisingan dari kegiatan mobilisasi alat berat dan material dengan cara:
 - a. mobilisasi alat berat dan material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relatif sepi dan jauh dari pemukiman (jalan tanah merah);
 - b. mobilisasi alat berat dan material tidak dilakukan secara beriringan;
 - c. pengaturan kecepatan kendaraan menggunakan kendaraan pengangkut yang laik operasi;
 - d. memberikan informasi kepada warga yang tinggal di dekat mobilisasi alat berat dan material melalui aparat kecamatan setempat;
 - e. melakukan koordinasi dengan aparat Kecamatan Pusakanagara dan Pusakajaya.
 4. Gangguan lalu lintas darat dari kegiatan mobilisasi alat berat dan material dengan cara:
 - a. menggunakan mobil barang yang memenuhi persyaratan teknis dan laik jalan;
 - b. menggunakan mobil barang sesuai kelas jalan yang dilalui;
 - c. menggunakan mobil barang sesuai daya angkut yang ditetapkan;

- d. menggunakan mobil barang angkutan alat berat yang memiliki izin penyelenggaraan angkutan alat berat dari Kementerian Perhubungan;
 - e. tata cara pengangkutan alat berat dan material berdasarkan ketentuan perundang – undangan (UU Nomor 22 Tahun 2009, PP Nomor 74 Tahun 2014, Peraturan Menteri Perhubungan Nomor PM 60 Tahun 2019, Surat Keputusan Direktur Jenderal Perhubungan Darat Nomor SK. 726/AJ.307/DRJD/2004);
 - f. melakukan manajemen rekayasa lalu lintas di area pelabuhan untuk pengaturan mobilisasi alat berat dan material;
 - g. melakukan analisis dampak lalu lintas;
 - h. membuat jam operasional mobilisasi alat berat dan material pada jam tidak sibuk;
 - i. melakukan *traffic counting* untuk mengetahui *level of service* di jalan utama Pelabuhan;
 - j. memberikan penyuluhan kepada pengemudi tentang etika berlalulintas;
 - k. sebelum kegiatan mobilisasi alat berat dan material dimulai, pemrakarsa menginformasikan dan berkoordinasi dengan tokoh masyarakat;
 - l. melakukan koordinasi dengan Dinas Perhubungan Kabupaten Subang, Dinas Perhubungan Provinsi Jawa Barat, dan Kepolisian Resort Subang terkait dengan mobilisasi alat berat dan material serta pengaturan lalu lintas di area pembangunan Pelabuhan;
 - m. melakukan koordinasi dengan Dinas PU Kabupaten Subang, Dinas PU Provinsi Jawa Barat serta Kementerian PUPR sesuai status jalan terkait pengecekan lintasan dan pemetaan jalan serta jembatan yang dilalui.
5. Keresahan masyarakat dari kegiatan mobilisasi alat berat dan material dengan cara:
 - a. membuat pusat pengaduan/tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban;
 - b. membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan;
 - c. melakukan sosialisasi *rute* pengangkutan mobilisasi alat berat dan material kepada masyarakat sekitar;
 - d. melakukan koordinasi dengan aparat Kecamatan Pusakanagara dan Pusakajaya.
 6. Peningkatan intensitas kebisingan dari kegiatan pembangunan fasilitas darat dengan cara:
 - a. mesin dengan intensitas kebisingan tinggi jauhkan dari area yang terdapat banyak pekerja disana;

- b. membangun pagar keliling dengan tinggi minimal 2 (dua) meter pada batas proyek;
 - c. menyediakan APD berupa *earplug/earmuff* bagi setiap tenaga kerja yang terlibat;
 - d. menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari, seperti melakukan pemancangan;
 - e. memberikan informasi kepada warga yang tinggal di dekat pembangunan fasilitas darat melalui aparat kecamatan setempat;
 - f. melakukan koordinasi dengan aparat Kecamatan Pusakanagara.
7. Peningkatan intensitas kebisingan dari kegiatan pembangunan jalan akses dengan cara:
- a. mesin dengan intensitas kebisingan tinggi jauhkan dari area yang terdapat banyak pekerja disana;
 - b. membangun pagar keliling dengan tinggi minimal 2 (dua) meter pada batas proyek;
 - c. menyediakan APD berupa *earplug/earmuff* bagi setiap tenaga kerja yang terlibat;
 - d. menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari, seperti melakukan pemancangan;
 - e. memberikan informasi kepada warga yang tinggal di dekat pembangunan fasilitas darat melalui aparat kecamatan setempat;
 - f. melakukan koordinasi dengan aparat Kecamatan Pusakanagara.

KEENAM : Penanggung Jawab Usaha dan/atau Kegiatan wajib memiliki Persetujuan Teknis.

KETUJUH : Penanggung Jawab Usaha dan/atau Kegiatan wajib memenuhi komitmen Persetujuan Teknis sebelum operasi terkait dengan lingkup Persetujuan Teknis.

KEDELAPAN : Dalam melaksanakan kegiatan sebagaimana dimaksud dalam Amar KETIGA, Penanggung Jawab Usaha dan/atau Kegiatan wajib:

1. Penanggungjawab kegiatan wajib memiliki Persetujuan Teknis dan selanjutnya dalam hal telah diterbitkan Persetujuan Teknis, Penanggungjawab kegiatan mengajukan perubahan Persetujuan Lingkungan Hidup;
2. melakukan pengelolaan dan pemantauan dampak lingkungan hidup sebagaimana tercantum dalam Lampiran I dan Lampiran II Keputusan ini;
3. mematuhi ketentuan peraturan perundang-undangan di bidang Perlindungan dan Pengelolaan Lingkungan Hidup;
4. melakukan koordinasi dengan instansi pusat maupun daerah, berkaitan dengan pelaksanaan kegiatan ini;
5. mengupayakan aplikasi *Reduce, Reuse* dan *Recycle* (3R) terhadap limbah-limbah yang dihasilkan;

6. melakukan pengelolaan limbah non B3 sesuai rincian pengelolaan yang termuat dalam dokumen RKL-RPL;
7. melaksanakan ketentuan pelaksanaan kegiatan sesuai dengan *Standard Operating Procedure* (SOP);
8. melakukan perbaikan secara terus-menerus terhadap kehandalan teknologi yang digunakan dalam rangka meminimalisasi dampak yang diakibatkan dari rencana kegiatan ini;
9. melakukan sosialisasi kegiatan kepada pemerintah daerah, tokoh masyarakat, dan masyarakat setempat sebelum kegiatan pengembangan dilakukan;
10. mendokumentasikan seluruh kegiatan pengelolaan lingkungan yang dilakukan terkait dengan kegiatan tersebut;
11. memenuhi kewajiban pada Persetujuan Teknis pasca verifikasi pemenuhan baku mutu Lingkungan Hidup, Pengelolaan Limbah B3, dan/atau analisis mengenai dampak lalu lintas;
12. menyiapkan dana penjaminan untuk pemulihran fungsi Lingkungan Hidup sesuai dengan ketentuan peraturan perundang-undangan;
13. melakukan audit lingkungan pada tahapan pasca operasi untuk memastikan kewajiban telah dilaksanakan dalam rangka pengakhiran kewajiban pengelolaan dan pemantauan lingkungan hidup dan/atau kewajiban lain yang ditetapkan oleh Menteri, Gubernur, Bupati/Walikota sesuai dengan kewenangannya berdasarkan kepentingan perlindungan dan pengelolaan lingkungan hidup;
14. menyusun laporan pelaksanaan kewajiban sebagaimana dimaksud pada angka 2 sampai dengan angka 10, paling sedikit 1 (satu) kali setiap 6 (enam) bulan selama Kegiatan Pengembangan Pelabuhan Patimban di Kabupaten Subang, Provinsi Jawa Barat oleh Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan berlangsung dan menyampaikan kepada:
 - a. Menteri Lingkungan Hidup dan Kehutanan melalui Direktorat Jenderal Penegakan Hukum Lingkungan Hidup dan Kehutanan;
 - b. Gubernur Jawa Barat melalui Kepala Dinas Lingkungan Hidup Provinsi Jawa Barat;
 - c. Bupati Subang melalui Kepala Dinas Lingkungan Hidup Kabupaten Subang;dengan tembusan kepada kepala instansi yang membidangi selain huruf a sampai huruf c di atas, sebagaimana tercantum dalam kolom institusi pengelolaan lingkungan hidup atau institusi pemantauan lingkungan hidup.

- KESEMBILAN : Apabila dalam pelaksanaan usaha dan/atau kegiatan timbul dampak lingkungan hidup di luar dari dampak yang dikelola sebagaimana dimaksud dalam Lampiran Keputusan Menteri ini, penanggung jawab usaha dan/atau kegiatan wajib melaporkan kepada instansi sebagaimana dimaksud dalam Amar KEDELAPAN angka 15 (lima belas) paling lama 30 (tiga puluh) hari kerja sejak diketahuinya timbulan dampak lingkungan hidup di luar dampak yang wajib dikelola.
- KESEPULUH : Dalam pelaksanaan Keputusan ini, Menteri menugaskan Pejabat Pengawas Lingkungan Hidup (PPLH) untuk melakukan pengawasan.
- KESEBELAS : Pengawasan sebagaimana dimaksud dalam Amar KESEPULUH dilaksanakan sesuai dengan peraturan perundang-undangan paling sedikit 2 (dua) kali dalam 1 (satu) tahun.
- KEDUA BELAS : Dalam hal berdasarkan hasil pengawasan sebagaimana dimaksud dalam Amar KESEPULUH ditemukan pelanggaran, Penanggung jawab Usaha dan/atau Kegiatan dikenakan sanksi sesuai ketentuan peraturan perundang-undangan.
- KETIGA BELAS : Penanggung Jawab Usaha dan/atau Kegiatan wajib mengajukan permohonan perubahan Persetujuan Lingkungan apabila terjadi perubahan atas rencana usaha dan/atau kegiatannya dan/atau oleh sebab lain sesuai dengan kriteria perubahan yang tercantum dalam Pasal 89 Peraturan Pemerintah Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup.
- KEEMPAT BELAS : Keputusan Kelayakan Lingkungan Hidup ini merupakan Persetujuan Lingkungan dan prasyarat penerbitan Perizinan Berusaha atau Persetujuan Pemerintah.
- KELIMA BELAS : Dengan ditetapkannya Keputusan ini, maka Keputusan Menteri Lingkungan Hidup dan Kehutanan Nomor SK.136/Menlhk/Setjen/PLA.4/2/2017 tanggal 28 Februari 2017 tentang Izin Lingkungan Kegiatan Pembangunan Pelabuhan Patimban di Desa Patimban, Desa Kalentambo, Desa Gempol, Desa Kotasari, Desa Pusakaratu, Kecamatan Pusakanagara, dan Desa Pusakajaya, Kecamatan Pusakajaya, Kabupaten Subang, Provinsi Jawa Barat kepada Direktorat Kepelabuhanan, Direktorat Jenderal Perhubungan Laut, Kementerian Perhubungan, dinyatakan tetap berlaku sepanjang tidak diubah dengan Keputusan ini dan Keputusan Kelayakan Lingkungan Hidup ini merupakan bagian yang tidak terpisahkan dari izin-izin sebelumnya.

KEENAM BELAS

: Keputusan ini mulai berlaku pada tanggal ditetapkan dan berakhir bersamaan dengan berakhirnya Perizinan Berusaha atau Persetujuan Pemerintah.

Ditetapkan di Jakarta
pada tanggal 10 Februari 2022

Salinan sesuai dengan aslinya
KEPALA BIRO HUKUM,

MENTERI LINGKUNGAN HIDUP DAN
KEHUTANAN REPUBLIK INDONESIA,



ttd.

SITI NURBAYA

Salinan Keputusan ini disampaikan Kepada Yth:

1. Sekretaris Jenderal Kementerian Lingkungan Hidup dan Kehutanan;
2. Direktur Jenderal Planologi Kehutanan dan Tata Lingkungan;
3. Direktur Jenderal Penegakan Hukum Lingkungan Hidup dan Kehutanan;
4. Gubernur Jawa Barat;
5. Bupati Subang;
6. Kepala Dinas Lingkungan Hidup Provinsi Jawa Barat;
7. Kepala Dinas Lingkungan Hidup Kabupaten Subang;
8. Kepala Pusat Pengendalian Pembangunan Ekoregion Jawa, Kementerian Lingkungan Hidup dan Kehutanan;
9. Kepala Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban.

LAMPIRAN I
 KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA
 NOMOR SK.120/MENLHK/SETJEN/PLA.4/2/2022

TENTANG
 KELAYAKAN LINGKUNGAN HIDUP KEGIATAN PENGEMBANGAN PELABUHAN PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, DAN DESA PUSAKANAGARA, KABUPATEN SUBANG, PROVINSI JAWA BARAT OLEH KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

A. Rencana Pengelolaan Lingkungan Hidup (RKL)

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup					
				Pelaksana	Pengawas		Penerima Laporan					
DAMPAK PENTING YANG DIKELOLA												
A. Tahap Konstruksi												
1	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp											
1A	Terbuinya kesempatan kerja dan berusaha	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp	Masyarakat terkena dampak/lokal yang terserap sebagai tenaga kerja >37%	a. Membuat papan pengumuman lowongan pekerjaan secara terbuka melalui media cetak dan elektronik b. Mencantumkan dalam klausul kontrak dengan kontraktor pelaksana untuk memprioritaskan tenaga kerja lokal dari penduduk yang terkena dampak sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan, dan penyetaraan jaminan sosial tenaga kerja, serta pembayaran sesuai UMK	Masyarakat sekitar proyek Kecamatan Pusakanagara: 1. Desa Patimban 2. Desa Gempol 3. Desa Kalentambo 4. Desa Kotasari 5. Desa Pusakaratu Kecamatan Pusakajaya: Desa Pusakajaya	Selama konstruksi berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang d. Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang e. Kecamatan Pusakanagara f. Kecamatan Pusakajaya				
				c. Berkoordinasi dengan instansi terkait dalam melaksanakan Program Pemuliharaan Mata Pemeliharaan untuk masyarakat yang terkena dampak, sebagaimana tertuang di dalam dokumen LARAP, diantaranya : - Mengadakan program pelatihan								

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Penerima Laporan	Pelaksana Pengawas
				<ul style="list-style-type: none"> - Mengadakan program bantuan modal usaha - Mengadakan program kegiatan usaha baru - Mengadakan program bantuan pemasaran - Mengadakan program bantuan peralatan <p>d. Berkordinasi dengan Kecamatan Pusakanagara dan Pusakajaya mengenai adanya informasi lowongan kerja</p>				
2	Mobilisasi Alat Berat dan Material			<p>2A Gangguan lalu lintas darat</p> <p>Mobilisasi Alat Berat Material</p> <p>Tidak kemacetan lalu lintas akibat mobilisasi alat berat dan material</p>	<ul style="list-style-type: none"> a. Menggunakan mobil barang yang memenuhi persyaratan teknis dan laik jalan. b. Menggunakan mobil barang sesuai kelas jalan yang dilalui. c. Menggunakan mobil barang sesuai daya angkut yang ditetapkan. d. Menggunakan mobil barang angkutan alat berat yang memiliki izin penyelenggaraan angkutan alat berat dari Kementerian Perhubungan. e. Tata cara pengangkutan alat berat dan material berdasarkan ketentuan perundang – undangan (UU Nomor 22 Tahun 2009, PP Nomor 74 Tahun 2014, Peraturan Menteri Perhubungan Nomor PM 60 Tahun 2019, Surat Keputusan Direktur Jenderal Perhubungan Darat Nomor SK. 726/ 	<ul style="list-style-type: none"> • Jalan Pantura • Jalan Akses Pelabuhan Patimban • Simpang Jalan Pantura dan Jalan Akses Pelabuhan Patimban 	<p>a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p> <p>d. Dinas Perhubungan Kabupaten Subang</p>	<p>a. Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p> <p>d. Dinas Perhubungan Kabupaten Subang</p>

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		Penerima Laporan
							Pelaksana	Pengawas	
				<p>f. Melakukan manajemen rekaya lalu lintas di area pelabuhan untuk pengaturan mobilisasi alat berat dan material.</p> <p>g. Melakukan analisis dampak lalu lintas.</p> <p>h. Membuat jam operasional mobilisasi alat berat dan material pada jarn tidak sibuk.</p> <p>i. Melakukan traffic counting untuk mengetahui level of service di jalan utama pelabuhan.</p> <p>j. Memberikan penyuluhan kepada pengemudi tentang etika berlalulintas</p> <p>k. Sebelum kegiatan mobilisasi alat berat dan material dimulai, pemrakarsa menginformasikan dan berkoordinasi dengan tokoh masyarakat</p> <p>l. Melakukan koordinasi dengan Dinas Perhubungan Kabupaten Subang, Dinas Perhubungan Provinsi Jawa Barat, dan Kepolisian Resort Subang terkait dengan mobilisasi alat berat dan material serta pengaturan lalu lintas di area pembangunan pelabuhan.</p> <p>m. Melakukan koordinasi dengan Dinas PU Kabupaten Subang, Dinas PU Provinsi Jawa Barat serta Kementerian PUPR sesuai status jalan terkait pengecikan lintasan dan pemetaan</p>					

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Penerima Pengawas	Pelaksana
2B	Penurunan kualitas udara (TSP dan Gas Buang)	Mobilisasi Berat Material	Alat dan Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup pada Lampiran VII	<p>a. Mobilisasi Alat Berat dan Material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relative sepi dan jauh dari pemukiman (jalan tanah merah)</p> <p>b. Menutup bak kendaraan pengangkut material dengan terpal, sehingga tidak terjadi ceceran bahan material</p> <p>c. Pengangkutan material ke lokasi dengan menggunakan kendaraan yang masih laik operasi dan lulus uji KIR</p> <p>d. Melakukan pembangunan tempat pencucian untuk pembersihan roda kendaraan pengangkut sebelum keluar lokasi tapak proyek</p> <p>e. Apabila terdapat ceceran material di jalan yang dilewati dari mobilisasi material konstruksi akan segera dilakukan pembersihan</p> <p>f. Melakukan penyiraman jalan secara periodik</p> <p>g. Memberikan informasi kepada warga yang tinggal di dekat mobilisasi alat berat dan material melalui aparat kecamatan setempat</p> <p>h. Melakukan koordinasi dengan aparat Kecamatan Pusakanagara dan Pusakajaya</p>	jalan serta jembatan yang dilalui.	<ul style="list-style-type: none"> • Lokasi pembangunan Pelabuhan Patimban • Jalan Pantura • Jalan Akses Pelabuhan Patimban • Simpang jalan Pantura dan jalan akses Pelabuhan Patimban 	<p>a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban</p> <p>b. Direktorat Perhubungan Laut</p> <p>c. Kementerian Perhubungan</p>	<p>a. Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p>

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Penerima Laporan
2C	Gangguan lintas laut	Ialu	Mobilisasi Alat Berat dan Material	Tidak terjadinya tubrukkan kapal di perairan Patimban	a. Berkoordinasi dengan Distrik Navigasi Tanjung Priok terkait alur pelayaran pengangkutan material di laut b. Mensosialisasikan rute pengangkutan material dengan nelayan c. Pengaturan waktu pengangkutan material d. Kontraktor pelaksana membuka komunikasi dengan kapal-kapal sekitar rute pengangkutan material	Rute pengangkutan material di Perairan Patimban	Selama kegiatan mobilisasi alat berat dan material berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan
2D	Keresahan masyarakat		Mobilisasi Alat Berat Material	Tidak adanya keresahan masyarakat	a. Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban b. Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan c. Melakukan sosialisasi rute pengangkutan mobilisasi alat berat dan material kepada masyarakat sekitar d. Melakukan koordinasi dengan aparat Kecamatan Pusakanagara dan PusakaJaya	• Pemukiman sekitar jalan akses mobilisasi alat berat dan material di wilayah studi • Pemukiman nelayan sekitar perairan Patimban	Selama kegiatan mobilisasi alat berat dan material berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan
2E	Peningkatan kebisingan		Mobilisasi Alat Berat dan Material	Intensitas kebisingan sesuai dengan Keputusan Menteri Lingkungan	a. Mobilisasi alat berat dan material menggunakan jalan akses konstruksi Pelabuhan Patimban yang relatif sepi dan	• Lokasi pembangunan Pelabuhan Patimban • Jalan Pantura • Jalan Akses	Selama kegiatan mobilisasi alat berat dan material berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Pengawas
				<ul style="list-style-type: none"> b. Mobilisasi alat berat dan material tidak dilakukan secara beriringan c. Pengaturan kecepatan kendaraan menggunakan kendaraan pengangkut yang laik operasi e. Memberikan informasi kepada warga yang tinggal di dekat mobilisasi alat berat dan material melalui aparat kecamatan setempat f. Melakukan koordinasi dengan aparat Kecamatan Pusakaagara dan Pusakaajiaya 	<ul style="list-style-type: none"> • Simpang jalan Pantura dan jalanakses Pelabuhan Patimban 	<ul style="list-style-type: none"> Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang 	Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang
3	Reklamasi dan Pembangunan Fasilitas Laut							
3A	Penurunan kualitas air laut(TSS)	Reklamasi dan pembangunan fasilitas laut	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelegaraan Perlindungan dan Pengelolaan Lingkungan Hidup pada Lampiran VII (80 mg/L)	<ul style="list-style-type: none"> a. Kegiatan reklamasi dilakukan pada area perairan yang telah dibatasi sea wall b. Mengurangi volume buangan sebanyak mungkin dengan memanfaatkannya menggunakan teknologi terbaru seperti Cement Pipe Mixing 	Lokasi reklamasi dan pembangunan fasilitas laut berlangsung	<ul style="list-style-type: none"> Selama reklamasi dan pembangunan fasilitas laut berlangsung 	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
3B	Perubahan <i>fishing ground</i>	Reklamasi dan pembangunan fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan / atau penurunan produksi/pendapatan dari nelayan	<ul style="list-style-type: none"> a. Melakukan komunikasi dan sosialisasi dengan kelompok nelayan mengenai kegiatan reklamasi dan pembangunan fasilitas laut b. Membuat rumpon dasar sesuai peraturan Menteri Kelautan dan 	<ul style="list-style-type: none"> • Nelayan di sekitarrencana lokasi pelabuhan, khususnya TPI Kaligenteng, TPI Trumtum dan TPI Tanjung Pura. • Rumpon di 	<ul style="list-style-type: none"> Selama reklamasi dan pembangunan fasilitas laut berlangsung 	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	
				Perikanan No. 26/Permen- KP/2014 di sekitar perairan Patimban di luar DLKP dan DLKRPelabuhan Patimban	sekitarperairan Patimban di luar DLKP dan DLKRPelabuhan Patimban	Perhubungan	Hidup Kabupaten Subang	Lingkungan Hidup Kabupaten Subang	
3C	Keresahan masyarakat	Reklamasi dan pembangunan fasilitas laut	Tidak ada keresahan masyarakat	a. Melakukan sosialisasi kepada nelayan mengenai rencana penempatan rumpon sesuai peraturan Menteri Kelautan dan Perikanan RI No. 26 /Permen-KP/2014 di sekitar perairan Patimban di luar DLKP dan DLKRPelabuhan Patimban b. Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban c. Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan.	Pemukiman nelayan sekitar perairan Patimban	Selama reklamasi dan pembangunan fasilitas laut berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
4	4. Penggerukan dan Pembuangan								
4A	Penurunan kualitas air laut(TSS)	Pengerukan dan Pembuangan	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup pada Lampiran VII (80 mg/L)	a. Melakukan pembangunan seawall di tahap awal. b. Memasang <i>silt protector</i> di sekeliling pekerjaan pengerkukan dengen grab dredging c. Membuang material buangan tidak pada satu titik namun menyebab diarea dumping d. Menggunakan	Lokasi penggerukan dan pembuangan	Selama kegiatan pengeringan dan pembuangan berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Penerima Laporan
				peralatan untuk pengeringan dan pembuangan yang laik operasi				
5	Pembangunan Fasilitas Darat	Pembangunan fasilitas darat	Tidak terjadi genangan	a. Membuat drainase yang dapat menampung air <i>runoff</i> b. Optimalisasi RTH pada lahan yang belum digunakan c. Koordinasi dengan Dinas Bina Marga dan Pengairan Kabupaten Subang, terkait dengan pembuatan drainase pelabuhan.	Area pembangunan fasilitas darat	Selama pembangunan fasilitas darat berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang Kabupaten Subang
5A	Peningkatan laju air larian (<i>run-off</i>)							
5B	Keresahan masyarakat	Pembangunan fasilitas darat	Tidak terjadi kereresahan masyarakat	a. Membuat jalur irigasi baru untuk menggantikan saluran irigasi yang terputus akibat pembangunan fasilitas darat pelabuhan. b. Membuat <i>underpass/fly over</i> atau pemindahan jalan pada jalan akses penduduk yang berpotongan dengan jalan akses Pelabuhan Patimban c. Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan Pelabuhan Patimban d. Membuat forum musyawarah masyarakat dengan Pemerintah Daerah untuk menyelesaikan masalah yang muncul pada saat pembangunan.	Masyarakat sekitar area pembangunan Pelabuhan	Selama kegiatan konstruksi berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan	
							Pelaksana	Pengawas
5C	Peningkatan kebisianan	Pembangunan Fasilitas Darat	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a. Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b. Menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari, seperti melakukn pemanangan. 	Lokasi rencana pembangunan jalan akses berlangsung	Selama konstruksi berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
6	Peningkatan Jalan Akses	Pembangunan Jalan Akses	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a. Mesin dengan intensitas kebisingan tinggi jauhkan dari area yang terdapat banyak pekerja disana b. Membangun pagar keliling dengan tinggi minimal 2 m pada batas proyek c. Menyediakan APD berupa earplug/earmuff bagi setiap tenaga kerja yang terlibat d. Menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari, seperti melakukn pemanangan. e. Memberikan informasi kepada warga yang tinggal di dekat pembangunan fasilitas darat melalui aparat kecamatan setempat f. Melakukan koordinasi dengan aparat Kecamatan Pussakanagara 	Lokasi rencana pembangunan jalan akses	Selama pembangunan jalan akses berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Pengawas
B. TAHAP OPERASIONAL								
7	Pengadaan Tenaga Kerja							
7A	Terbukanya kesempatan kerja dan berusaha	Pengadaan tenaga kerja operasional	Masyarakat terkena dampak/lokal yang terserap sebagai tenagakerja > 30%)	a. Mewajibkan BUP (Badan Usaha Pelabuhan) untuk memprioritaskan tenaga kerja lokal sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan, dan penyetaraan jaminan sosial tenaga kerja, serta pembayaran sesuai UMK Memberikan kesempatan berusaha kepada penduduk sekitar pada areal ±5 hektar yang telah disediakan di dalam area fasilitas darat pelabuhan b. Berkordinasi dengan Kecamatan Pusakanagara dan Pusakajaya mengenai adanya informasi lowongan kerja	Masyarakat sekitar proyek Kecamatan Pusakanagara: 1) Desa Patimban 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Pusakaratu Kecamatan Pusakajaya: 1) Desa Pusakajaya	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaraan dan Otoritas pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Direktorat Jenderal Perhubungan Laut d. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang d. Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang e. Kecamatan Pusakanagara f. Kecamatan Pusakajaya
8	Operasional Fasilitas Laut							
8A	Sedimentasi	Operasional fasilitas laut	Kedalaman perairan sesuai dengan rencana	a. Melakukan maintenance dredging untuk mempertahankan kedalaman di kolam pelabuhan (-14 meter) dan di alur pelabuhan (-14 meter) b. Menempatkan material hasil pengurukan ke lokasi dumping area yang telah direncanakan	• Kolam Pelabuhan • Alur Pelabuhan • Dumping Area	Dilakukan selama kegiatan operasional berlangsung (5-10 tahun sekali)	a. Kantor Kesyahbandaraan dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
8B	Perubahan garis pantai	Operasional fasilitas laut	Perubahan garis pantaitidak	Membangun dan memelihara	Sepanjang garis pantai di back-	Dilakukan selama	a. Kantor Kesyahbandaran	a. Kementerian Lingkungan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Penerima Laporan
			mengekibatkan kerusakan infrastruktur atau lahan eksisting	revenents di areal garis pantai yang terabrasi	uparea	kegiatan operasional berlangsung	dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	Hidup dan Kehutanan Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
8C	Perubahan fishing ground	Operasional fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/pendapatan dari nelayan	a. Memelihara rumpon dasar sesuai peraturan Menteri Kelautan dan Perikanan RI No. 26/Pmen-KP/2014 di sekitar perairan Patimban di luar DLKP dan DLKR Pelabuhan Patimban b. Mewajibkan BUP untuk melaksanakan CSR kepada kelompok Nelayan di sekitar perairan Patimban yang meliputi TPI Kali Genteng, Truntum and Tanjung Pura	Di sekitar perairan Patimban di luar DLKP dan DLKR Pelabuhan Patimban. TPI Kali Genteng, Truntum dan Tanjung Pura	Dilakukan selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
8D	Keresahan masyarakat	Operasional fasilitas laut	Tidak ada keresahan masyarakat	Melakukan sosialisasi alur pelayaran kapal dari dan menuju Pelabuhan Patimban kepada nelayan	Pemukiman nelayan sekitar perairan Patimban	Selama operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
9	Operasional Fasilitas Darat							
10	Pemeliharaan Kolam dan Alur Pelayaran							

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Penerima Laporan
1.1 Operasional Jalan Akses									
11A	Gangguan lalu lintas darat	Operasional Jalan Akses	Tidak terjadinya kemacetan lalu lintas akibat operasional jalan akses pelabuhan	<ul style="list-style-type: none"> a. Mengoptimalkan areal tungku truk b. Memperluas persimpangan antara Jalan Pantura dengan jalan akses pelabuhan c. Penempatan petugas untuk mengatur lau lantas pada akses masuk dan keluar kawasan Pelabuhan Patimban d. Metaksanakan rekomendasi ANDALAJN 	<ul style="list-style-type: none"> • Persimpangan n antara jalan Pantura dengan jalur akses • Jalan Pantura pelabuhan • Jalan akses pelabuhan 	Dilakukan selama kegiatan operasional berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
11B	Peningkatan kebisingan	Operasional Jalan Akses	Tingkat Kebisingan dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a. Optimalisasi damija untuk penghijauan b. Pengaturan kecepatan kendaraan c. Menggunakan kendaraan yang laik operasi 	<ul style="list-style-type: none"> • Pemukiman di simpang Jalan Pantura dan Jalan Akses Pelabuhan • Pemukiman di Jalan akses pelabuhan • Akses keluar masuk Pelabuhan Patimban 	Dilakukan selama kegiatan operasional berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
11C	Keresahan masyarakat	Operasional Jalan Akses	Tidak adanya keresahan masyarakat	<ul style="list-style-type: none"> a. Merawat underpass/ fly over padajalan b. Optimalisasi pengaturan lalu lintas di simpang Jalan Pantura dan Jalan Akses Pelabuhan 	<ul style="list-style-type: none"> • Pemukiman di simpang Jalan Pantura dan Jalan Akses Pelabuhan yang berpotongan dengan jalan akses Pelabuhan Patimban • Jalan akses penduduk yang berpotongan dengan jalan akses Pelabuhan Patimban • Penduduk yang berpotongan dengan jalan aksespelabuhan 	Dilakukan selama kegiatan operasional berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup							
							Pelaksana	Pengawas						
C. TAHAP KONSTRUKSI														
1 Pengadaan Tenaga Kerja dan Pengoperasian Basecamp														
1A	Penurunan kualitas air laut	Pengadaan tenaga kerja dan pengeoperasian basecamp	Kualitas air laut tidak tercemar oleh limbah domestik pekerja	Membuat toilet portable dan fasilitas pengolah air limbah seperti septic tank dan pemeliharaan secukupnya	Di lokasi pembangunan danbase camp	Membuat toilet portable kali di kegiatan konstruksi dan pemeliharaan dilakukan selama konstruksi berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang						
1B	Timbulnya Penyakit Menular	Pengadaan tenaga kerja dan pengeoperasian basecamp	Tidak meningkatnya jumlah pasien dan penyakit infeksi karena adanya tenaga kerja konstruksi	Lokasi sekitar rencana pembangunan, khususnya Kecamatan Pusakanagara dan Kecamatan Pusakajaya	a. Berkoordinasi dengan instansi dan LSM terkait dalam membuat program mengadakan Program Pencegahan HIV/AIDS, termasuk diantaranya melakukan sosialisasi pencegahan penyakit menular seksual. b. Berkoordinasi dengan instansi terkait dalam mengadakan pengobatan untuk pasien yang menderita IMS, GO dan Sifilis dengan metode Inject dan Oraldi Puskesmas Pusakanagara, Pemeriksaan rutin (setiap 3bulan sekali)	Sebelum dan Selama tahap konstruksi berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat Barat c. Dinas Lingkungan Hidup Kabupaten Subang d. Dinas Kesehatan Kabupaten Subang						

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Penerima Laporan
				Organisasi WPA di tingkat desa baru ada di Desa Patimban dan Desa Kotasari sedangkan WPA tingkat kecamatan belum terbentuk.					
2	Mobilisasi Alat Berat dan Material			a. Memilih jalur laut yang seefisienmungkin untuk pengangkutan peralatan dan material yang melebihi kapasitas jalan Tonase angkutan material untuk konstruksi disesuaikan dengan kelasjalan dan kemampuan angkutan yang diijinkan c. Penggunaan alat berat harus sesuai dengan peraturan Keputusan DirjenHubdar tentang Pedoman Teknis Penyelenggaraan Angkutan Berat di Jalan d. Melaksanakan perbaikan jalan jika ada kerusakan yang disebabkan oleh kegiatan proyek e. Kendaraan menggunakan terpal f. Bekerjasama dengan Dinas Bina Marga dan Perairan Kabupaten Subang dalam upaya pengelolaan (memperbaiki) bila ada kerusakanjalan	Jalan Gempol Prapatan dan Jalan Pantura PusakaNagara	Selama kegiatan mobilisasi peralatan dan material berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
2A	Kerusakan jalan	Mobilisasi Alat Berat dan Material	Kerusakan jalan dapat diminimalkan						

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Pengawas
3	Pembangunan Fasilitas Darat							
3A	Penurunan kualitas udara (TSP dan Gas Buang)	Pembangunan Fasilitas Darat	Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udarayang tercantum pada PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	a. Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b. Membuat pagar pembatas berbahan seng dengan tinggi minimal 2,5 meter (jika dibutuhkan) c. Memberikan informasi terkait waktu pelaksanaan pembangunan fasilitas darat d. Melakukan koordinasi dengan aparat Kecamatan Pusakanagara	Lokasi rencana pembangunan	Selama pembangunan fasilitas darat berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
3B	Penurunan kualitas air laut	Pembangunan Fasilitas Darat	Kualitas air laut tidak menurun secara drastis dikarenakan aktivitas proyek	Mengurangi atau mengatur volume buangan yang dikeluarkan oleh bekaslokasi tambak ikan saat proses pengurusan lokasi tambak tersebut.	Lokasi rencana pembangunan	Selama masa konstruksi	a. Kantor Kesyahbandara n dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
3C	Gangguan fauna terestrial (Burung)	Pembangunan Fasilitas Darat	Adanya habitat bagi tempat hidup fauna terestrial	a. Membuat habitat baru (seperti menanam mangrove /bakau) untuk fauna terestrial dan memelihara fasilitas tersebut b. Pekerja dilarang mengganggu fauna terestrial di sekitar lokasi kegiatan	Lokasi rencana pembangunan fasilitas darat	Selama konstruksi berlangsung	a. Kantor Kesyahbandara n dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan	
							Pelaksana	Pengawas
3D	Gangguan Flora terestrial	Pembangunan Fasilitas Darat	Adanya habitat bagi tempat hidup flora terestrial	<ul style="list-style-type: none"> a. Membuat habitat baru (seperti menanam mangrove/bakau) untuk flora terestrial dan memelihara fasilitas tersebut b. Pekerja dilarang mengganggu flora darat di sekitar lokasi kegiatan 	Lokasi rencana pembangunan fasilitas darat	Selama konstruksi berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
4	Pembangunan Jalan Akses							
4A	Penurunan Kualitas udara (TSP dan Gas Buang)	Pembangunan Jalan Akses	Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	<ul style="list-style-type: none"> a. Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik (layak) b. Menggunakan penutup pada baktruk yang membawa material konstruksi jika dibutuhkan c. Membuat pagar pembatas berbahan seng dengan tinggi minimal 2,5 meter (jika dibutuhkan) 	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
4B	Peningkatan kebisingan	Pembangunan Jalan Akses	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<ul style="list-style-type: none"> a. Melakukan perawatan truk dan peralatan agar tetap dalam kondisi baik b. Menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari. 	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
4C	Penurunan kualitas air permukaan	Pembangunan jalan akses	Kualitas air permukaan tetap dibawah baku mutu lingkungan berdasarkan PP No.	Melaksanakan pencegahan untuk mengurangi keruahan air ke badan air penerima seperti membuat saluran drainase atau kolam	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran Otoritas Pelabuhan Kelas II Patimban 	<ul style="list-style-type: none"> a. Kementerian Lingkungan Hidup dan Kehutanan Dinas b. Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan	
							Pelaksana	Pengawas
			22 Tahun 2021 tentang Penyelegaraan Perindungan dan Pengelolaan Lingkungan Hidup (Lampiran VI)	retensi darurat selama proses konstruksi berlangsung			b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
4D	Peningkatan laju air larian	Pembangunan jalan akses	Tidak terjadi limpasan yang berlebih	Membuat saluran drainase atau kolamretensi darurat selama proses konstruksi berlangsung	Lokasi pembangunan atau kolamretensi darurat selama proses konstruksi berlangsung	Selama konstruksi berlangsung	a. Kantor Kesrahabandara n dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
4E	Keresahan masyarakat	Pembangunan jalan akses	Tidak adanya keresahan masyarakat	a. Memasang jembatan penyebrangan orang untuk dapat menyeberang ke jalan akses b. Memasang pagar di sepanjang jalan akses untuk mengamankan keselamatan dan untuk mencegah kecelakaan warga atau hewan. c. Membuat pusat pengaduan / tim respon cepat untuk dapat mengakomodasi dan merespon keresahan masyarakat terhadap pembangunan pelabuhan Patimban	Lokasi pembangunan jalan akses	Selama konstruksi berlangsung	a. Kantor Kesrahabandara n dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan		
							Pelaksana	Pengawas	
D. TAHAP OPERASIONAL									
5	Pengadaan Tanaga Kerja								
5A	Timbulnya penyakit menular	Pengadaan tenaga kerja	Tidak meningkatnya jumlah penderita penyakit menular	<p>a. Berkoordinasi dengan instansi dan LSM terkait dalam membuat dan mengadakan Program Pencegahan HIV/AIDS, termasuk diantaranya melakukan sosialisasi pencegahan penyakit menular seksual.</p> <p>b. Berkoordinasi dengan instansi terkait dalam mengadakan pengobatan untuk pasien yang menderita IMS, GO dan Sifilis dengan metode Inject dan Oraldi Puskesmas Pusakanagara, Pemeriksaan rutin (setiap 3bulan sekali) melalui metode VCT.</p> <p>c. Bekerjasama dengan Organisasi Warga Peduli AIDS (WPA) yang adadi tingkat desa untuk melakukan berbagai kegiatan positif dengan ODHA, salah satunya Kegiatan Gathering. Saat ini Organisasi WPA di tingkat desa baru ada di Desa Patimban dan Desa Kotasari sedangkan WPA tingkat kecamatan belum terbentuk.</p> <p>d. Membangun fasilitas kebesihan, Tempat pengumpulan sampah sementara (IPS), dan fasilitas pengolahan</p>	<p>Lokasi sekitar pembangunan, khususnya Kecamatan Pusakanagara dan Kecamatan Pusakajaya</p> <p>a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban</p> <p>b. Direktorat Perhubungan Laut</p> <p>c. Kementerian Perhubungan</p> <p>a. Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p>	<p>a. Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p>	<p>a. Kementerian Lingkungan Hidup dan Kehutanan</p> <p>b. Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>c. Dinas Lingkungan Hidup Kabupaten Subang</p>		

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Penerima Laporan
6	Operasional Fasilitas Laut	Operasional fasilitas laut	Kualitas udara tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	Melakukan penanaman dan pemeliharaan tanaman keras untuk dapat menyerap polutan di sekitar area pelabuhan	Lokasi pelabuhan	Penanaman dilakukan satu kali saat kegiatan operasional dimulai dan dilakukan pemeliharaan dan peremajaan seperlunya	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
6A	Penurunan kualitas udara (TSP dan Gas Buang)	Operasional fasilitas laut	Kualitas udara tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	Melakukan penanaman dan pemeliharaan tanaman keras untuk dapat menyerap polutan di sekitar area pelabuhan	Lokasi pelabuhan	Penanaman dilakukan satu kali saat kegiatan operasional dimulai dan dilakukan pemeliharaan dan peremajaan seperlunya	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
6B	Penurunan kualitas air laut	Operasional fasilitas laut	a. Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH No 51 tahun 2004 tentang Baku Mutu Air Laut, b. Permen LH No. 5 Tahun 2014 tentang baku mutu air limbah	a. Melakukan pengelolaan terhadap limbah dari kapal yang singgah dan tidak langsung dibuang ke laut, termasuk kerjasama dengan pihak ketiga berizin untuk penanganan limbahnya. b. Melakukan pemeliharaan fasilitas IPAL yang telah dibangun agar tetap berfungsi optimal	Reception facility, Reception IPAL	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
6C	Gangguan lalu lintas laut	Operasional fasilitas laut	Tidak terganggu oleh kapal nelayan dan kapal yang melewati alur pelayaran	a. Membangun rencana pengendalian keamanan tetapi tidak terbatas padamemasang rambu lalu lintas laut, navigasi aruran keselamatan, pelatihan keselamatan kerja dan kemungkinan tumpahan minyak b. Merencanakan langkah-langkah yang diperlukan sehubungan dengan adanya jalur pipa Pertamina yang berada pada alur pelayaran	Area alur pelayaran Jalur pipa PT Pertamina	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
6D	Timbulan Limbah	Operasional fasilitas laut	Tidak terjadi cemaran limbah ke laut	a. Menampung dan menerima limbah yang dihasilkan dari kapal pada reception facility,	• Reception facility (RF) • Kantor pengelola Pelabuhan / TPS	• RF dibangun satu kali saat konstruksi	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas	a. Kementerian Lingkungan Hidup dan Kehutanan	a. Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan		
							Pelaksana	Pengawas	
				B3 • TPS domestik	pemeliharaan dilakukan setiap hari • Penyimpanan maksimal ≤ 90 hari • Pengangkutan dilakukan minimal 2 hari sekali	II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
7	Operasional Fasilitas Darat	Operasional fasilitas darat	Tidak terjadi genangan	a. Memelihara drainase yang dapat menampung air runoff b. Merawat RTH pada lahan yang belum digunakan	• Drainase Pelabuhan • RTH Pelabuhan	Selama operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
7A	Peningkatan laju air larian (<i>run-off</i>)								
7B	Penurunan kualitas air laut	Operasional fasilitas darat	Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelegaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VIII)	Melakukan pemeliharaan fasilitas IPAL yang telah dibangun agar tetap berfungsi optimal selanjutnya dapat dibuang ke laut	IPAL di back-up area	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup Penerima Laporan		
						Periode Pengelolaan Lingkungan Hidup	Pelaksana	Pengawas
7C	Gangguan fauna terestrial (Burung)	Operasional fasilitas darat	Adanya habitat hidup untuk fauna terestrial	a. Memelihara tanaman dan mangrove/bakau untuk fauna terestrial b. Pekerja dilarang mengganggu fauna terestrial di sekitar lokasi kegiatan	Back up area	Selama operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
8	Pemeliharaan Kolam dan Alur Pelayaran		Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VIII)	a. Membuang material buangan tidak pada satu titik namun menyebar di area dumping. b. Menggunakan peralatan untuk pengeringan dan pembuangan yang baik operasi	<ul style="list-style-type: none"> • Dumping area • Lokasi pemeliharaan kolam dan alur pelayaran 	Dilakukan selama kegiatan operasional berlangsung (5-10 tahun sekali)	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup Kabupaten Subang
9	Operasional Jalan Akses		Operasional jalan akses	Kualitas udara tidak mengalami penurunan dengan adanya operasional	Lokasi sekitar jalan akses	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat b. Dinas Lingkungan Hidup Kabupaten Subang c. Dinas Lingkungan Hidup
9A	Penurunan kualitas udara (TSP dan Gas Buang)			a. Memelihara kondisi kendaraan agar dalam kondisi laik operasi b. Melakukan penanaman pohon disepanjang area hijau jalan				

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup		
							Pelaksana	Pengawas	Penerima Laporan
9B	Peningkatan laju air larian (run-off)	Operasional jalan akses	Tidak terjadinya air limpasan yang berlebih	a. Memperkuat kondisi drainase eksisting jika diperlukan b. Melakukan pemeliharaan drainase	Lokasi sekitar jalan akses	Selama kegiatan operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang
9C	Alih fungsi lahan	Operasional jalan akses	Timbulnya permukiman dan berbagai fasilitas umum serta sarana perekonomian di sekitar lokasi jalan akses	a. Membuat pagar pembatas di sepanjang jalan akses yang dibangun, namun tetap menyediakan akses underpass/ overpass, box curvert atau jembatan untuk akses penduduk. b. Membangun sesuai dengan peruntukan yang diatur RTRW c. Direktorat Jenderal Perhubungan Laut	Sepanjang jalan akses	Selama operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan Hidup Kabupaten Subang
9D	Kerusakan jalan	Operasional jalan akses	Kerusakan jalan dapat diminimalkan	Berkordinasi dengan instansi terkait dalam melakukan peningkatan dan perbaikan jalan yang terhubung dengan jalan akses pelabuhan	Jalan akses dan sekitarnya	Selama operasional berlangsung	a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Dinas Lingkungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan	a. Kementerian Lingkungan Hidup dan Kehutanan b. Dinas Lingkungan

No	Dampak Lingkungan yang Dikelola	Sumber Dampak	Indikator Keberhasilan Pengelolaan Lingkungan Hidup	Bentuk Pengelolaan Lingkungan Hidup	Lokasi Pengelolaan Lingkungan Hidup	Periode Pengelolaan Lingkungan Hidup	Institusi Pengelolaan Lingkungan Hidup	
							Pelaksana	Pengawas
							b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan	Hidup Provinsi Jawa Barat c. Dinas Lingkungan Hidup Kabupaten Subang

A. Rencana Pemantauan Lingkungan Hidup (RPL)

No	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup		Institusi Pemantauan Lingkungan Hidup		Penerima Laporan		
					Lokasi Pantau	Frekuensi	Waktu dan	Pelaksana	Pengawas	Frekuenyi	
E. Tahap Kontruksi											
1.	Pengadaan Tenaga Kerja dan Pengoperasian Base Camp	Masyarakat terkena dampak /lokal yang terserap sebagai tenaga kerja > 37%			a. Mengidentifikasi jumlah tenaga kerja lokal yang dipekerjakan b. Mengidentifikasi jumlah dan jenis peluang usaha yang berkembang di sekitar lokasi kegiatan c. Mengevaluasi implementasi Program Pemuliharaan Mata Pencaharian untuk masyarakat yang terkena dampak d. Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat. e. Memantau rekrutmen tenagakerja lokal sesuai kualifikasi f. Memantau proses pelepasan tenaga kerja keseluruhan berjalan aman khususnya tahap konstruksi.	Masyarakat sekitar proyek. Kecamatan Pusakanagara 1) Desa Pusakanagara 2) Desa Gempol 3) Desa Kalentambo 4) Desa Kotasari 5) Desa Patimban Kecamatan Pusakajaya Desa Pusakajaya	sebulan selama berlangsung	se kali	Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang • Kecamatan Pusakanagara • Kecamatan Pusakajaya	Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang • Kecamatan Pusakanagara • Kecamatan Pusakajaya
2	Mobilitas Alat Berat dan Material				a. Lokasi pembangunan Pelabuhan Patimban. b. Jalan Pantura c. Jalan Akses Pelabuhan Patimban d. Simpang jalan Pantura dan jalan akses	selama mobilisasi alat dan bahan berlangsung	kegiatan	Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup	Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup	
2A	Penurunan kualitas udara (TSP dan Gas Buang)	Mobilisasi alat berat dan material	Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No. 22 Tahun 2021 tentang Penyelegaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	a. Analisa Laboratorium Kualitas Udara yang dibandingkan dengan PP No. 22 Tahun 2021 tentang Penyelegaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)							

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak						Pelaksana	Pengawas	Penerima Laporan
2B	Gangguan lalu lintas darat	Mobilisasi alat berat dan material	Tidak terjadinya gangguan lalu lintas (kemacetan dan kecelakaan) akibat mobilisasi alat berat dan material	<ul style="list-style-type: none"> b. Evaluasi Penerapan SOP dalam kegiatan Mobilisasi alat dan Bahan c. Evaluasi UJI KIR kendaraan Pengangkut d. Melakukan pemantauan traffic counting untuk mengetahui level of service di jalan utama pelabuhan e. Melakukan pemantauan rekomendasi hasil pesetujuan analisis dampak lalu lintas. 	<ul style="list-style-type: none"> a. Jalan Pantura b. Jalan Akses Pelabuhan Patimban Simpang Jalan Panturadan jalan akses Pelabuhan Patimban 	<ul style="list-style-type: none"> Selama mobilisasi alat berat dan berlangsung 	<ul style="list-style-type: none"> kegiatan mobilisasi alat berat material berlangsung 	<ul style="list-style-type: none"> • Kantor Kesrahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
2C	Gangguan lalu lintas laut	Mobilisasi alat berat dan material	Tidak terjadinya tubrukan kapal di perairan Patimban	<ul style="list-style-type: none"> a. Memantau kondisi lalu lintas laut b. Mengidentifikasi jumlah kecelakaan yang terjadi 	<ul style="list-style-type: none"> Pantai Patimban 	<ul style="list-style-type: none"> Satu bulan sekali selama berlangsung 	<ul style="list-style-type: none"> Kantor Kesrahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kantor Kesrahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Waktu dan Frekuensi	Pengawas	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak						Pelaksana	Penerima Laporan
2D	Keresahan Masyarakat	Mobilisasi alat berat dan material	Tidak adanya keresahan masyarakat	<p>a. Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan sosialisasi mobilisasi alat berat dan material dengan wawancara</p> <p>b. Pengukuran jumlah peristiwa protes danunjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder).</p> <p>c. Informasi dan data yang perlu digali lebih dalam, akandilakukan wawancaramendalam dengan informan kunci, seperti dengan tokoh masyarakat.</p> <p>d. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dandiambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu</p> <p>e. Pemantauan terhadap rute pengangkutan mobilisasi alat berat dan material di darat kepada masyarakat sekitar dan nelayan</p> <p>f. Pemantauan dan mengevaluasi kinerja pusat pengaduan / tim respon cepat</p>	<p>Pemukiman sekitar akses jalan mobilisasi alat berat dan material di wilayah studi</p> <p>Pemukiman nelayan sekitar perairan Patimban</p> <p>b. Pengukuran jumlah peristiwa protes danunjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder).</p> <p>c. Informasi dan data yang perlu digali lebih dalam, akandilakukan wawancaramendalam dengan informan kunci, seperti dengan tokoh masyarakat.</p> <p>d. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dandiambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu</p> <p>e. Pemantauan terhadap rute pengangkutan mobilisasi alat berat dan material di darat kepada masyarakat sekitar dan nelayan</p> <p>f. Pemantauan dan mengevaluasi kinerja pusat pengaduan / tim respon cepat</p>	<p>• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban</p> <p>• Direktorat Jenderal Perhubungan Laut</p> <p>• Kementerian Perhubungan</p> <p>• Kementerian Lingkungan Hidup Kabupaten Subang</p>	<p>• Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>• Dinas Lingkungan Hidup Kabupaten Subang</p>	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak					Pelaksana	Pengawas
2E	Peningkatan Kebisingan	Mobilisasi alat dan material	Intensitas kebisingan sesuai Keputusan Menteri Lingkungan Hidup No. Kep.48/MENLH/II/1996	a. Melakukan analisa laboratorium parameter kebisingan ke mudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No. 48 tahun 1996. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (datatrend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis. b. Evaluasi Penerapan SOP dalam kegiatan Mobilisasi alat dan Bahan c. Evaluasi UJI KIR kendaraan Pengangkut	Lokasi pembangunan Pelabuhan Patimban, Jalan Pantura, Jalan Akses Pelabuhan Patimban, Simpang jalan Pantura, dan jalan akses Pelabuhan Patimban	Selama kegiatan Mobilisasi Alat Berat dan Material berlangsung	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
3	Reklamasi dan Pembangunan Fasilitas Laut							
3A	Penurunan kualitas air laut (TSS)	Kegiatan reklamasi dan pembangunan fasilitas laut	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VIII)	10 titik lokasi	Melakukan analisa laboratorium kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut PP No. 22 Tahun 2021. Selanjutnya hasil pemantauan dibuat rata-rata dibandingkan dari ke (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis.waktu	<ul style="list-style-type: none"> a. Untuk parameter kualitas air lengkap dilakukan 6 bulan dengan 2 titik (permukaan dan dasar) b. Khusus untuk pengambilan sampel TSS dilakukan seminggu sekali sebanyak 10 titik selama kegiatan pengeringan dan pembuangan, serta 3 titik setiap hari 	<ul style="list-style-type: none"> a. Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban b. Direktorat Jenderal Perhubungan Laut c. Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
3B	Perubahan fishing ground	Kegiatan reklamasi dan pembangunan fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan/atau penurunan produksi/pendapatan dari nelayan	<ul style="list-style-type: none"> a. Memberikan data dari jumlah pengaduan di meja konsultasi Analisis berdasarkan survei konsultasi b. Memonitoring produksi perikanan dan 	Dilaksanakan 1 (satu) bulan sekali selama tahap konstruksi	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat 	

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak						Pelaksana	Pengawas	Penerima Laporan
3C	Keresahan masyarakat	Kegiatan reklamasi dan pembangunan fasilitas laut	Tidak ada kerohanian masyarakat	a. Pengukuran jumlah masyarakat merasa khawatir terhadap reklamasi b. Pengukuran dilakukan dengan wawancara menggunakan kuesioner (data primer). c. Pengukuran jumlah peristiwa protes danunjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah atau perwakilan pemrakarsa (data sekunder). d. Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan seperti dengan tokoh masyarakat. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu.	Laut • Kementerian Perhubungan	Laut • Kementerian Lingkungan Hidup dan Kehutanan II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan	Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	Dinas Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Kabupaten Subang	Dinas Lingkungan Hidup • Dinas Lingkungan Hidup Kabupaten Subang	Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Metode Pengumpulan dan Analisis Data		Bentuk Pemantauan Lingkungan Hidup		Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak	Indikator Parameter	Lokasi Pantau	Waktu dan Frekuensi	Pelaksana	Pengawas	Penerima Laporan
4	Pengerukan dan Pembuangan	Pengerukan dan pembuangan	Konsentrasi TSS di bawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	Melakukan pengukuran TSS kemudian hasilnya dibandingkan dengan baku mutu air laut PP No. 22 Tahun 2021. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis.	10 itik lokasi lengkap dilakukan 6 bulan dengan 2 titik (permukaan dan dasar)	a. Untuk parameter kualitas air pengambilan sampelTSS dilakukan seminggu sekali sebanyak 10 titik selama kegiatan pengeringan dan pembuangan, serta 3 titik setiap hari	a. Kantor Kesyahbandaran Pelabuhan Kelas II Patimban b. Direktorat Perhubungan Laut c. Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
5	Pembangunan Fasilitas Darat	Pembangunan fasilitas darat	Tidak terjadi genangan	Pemantauan secara langsung terhadap keberadaan dan fungsi saluran drainase dan RTH	Lokasi proyek	Dilakukan 2 kali pada musim hujan saat terjadinya hujan deras, selama kegiatan berlangsung	• Kantor Kesyahbandaran Pelabuhan Kelas II Patimban b. Direktorat Perhubungan Laut c. Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
5A	Peningkatan laju air larian (<i>run-off</i>)							
5B	Keresahan masyarakat	Pembangunan fasilitas darat	Tidak terjadi keressahan masyarakat	Kantor operasional fasum, fasos dan utilitas	a. Peninjauan jalur irigasi baru pengganti saluran irigasi yang terputus. b. Peninjauan terhadap <i>underpass/fly over</i> pada jalan akses peduduk yang berpotongan dengan jalan akses Pelabuhan Patimban c. Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan	Satu tahun sekali selama operasional berlangsung	• Kantor Kesyahbandaran Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Frekuensi	Pelaksana	Pengawas	Penerima Laporan
				<p>pembangunan fasilitas darat</p> <p>d. Pengukuran dengan wawancara menggunakan kuesioner (data primer).</p> <p>e. Pengukuran jumlah peristiwa protes danunjukrasa penduduk ke kantor perwakilan pemrakarsa diperoleh dari</p> <p>catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa (data sekunder).</p> <p>f. Informasi dan data yang perlu digali lebih dalam, akan dilakukan wawancara mendalam dengan informan kunci, seperti dengan tokoh masyarakat.</p> <p>g. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu</p>					<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup
5C	Peningkatan kebisingan	Pembangunan fasilitas darat	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	<p>Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No. 48 tahun 1996. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend)</p>	3 titik di sekitar lokasi kegiatan	Selama pembangunan fasilitas darat berlangsung	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup

No	Dampak Lingkungan yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Pelaksana	Pengawas	Penerima Laporan
6	Peningkatan kebisingan	Kegiatan pembangunan jalan akses	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No. 48 tahun 1996	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selamatah ap konstruksi berlangsung	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
6A	Peningkatan kebisingan	Kegiatan pembangunan jalan akses	Kebisingan tetap dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Melakukan analisa laboratorium parameter kebisingan kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No. 48 tahun 1996	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selamatah ap konstruksi berlangsung	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
7	F. Tahap Operasional			Pengadaan Tenaga Kerja			Institusi Pemantauan Lingkungan Hidup		
7A	Tertibkanya kesempatan kerja dan berusaha	Kegiatan pengadaan tenagakerja operasional	Masyarakat terkena dampak /lokal yang terserap sebagai tenaga kerja > 30%	a. Mengidentifikasi jumlah tenaga kerja lokal yang dipekerjakan b. Informasi dan data yang perlu digali lebih dalam, akan wawancaramendalam dengan informankunci, seperti dengan tokoh masyarakat. c. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dandiamobil dari komunitas yang Telah diketahui karakteristiknya terlebih dahulu.	Area pelabuhan dan back-up area	Satu tahun sekali selamakegiatan operasional	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Pelaksana	Pengawas	Penerima Laporan
8	Operasional Fasilitas Laut	Kegiatan operasional fasilitas laut	Kedalaman perairan sesuai dengan rencana	<ul style="list-style-type: none"> a. Pemantauan terhadap kualitas sedimen material penggerukan sebelum dilakukan pembuangan b. Survey batimetri di lokasi pembuangan 	<ul style="list-style-type: none"> a. Area pengeringan(3 titik) dan area pembuangan (3 titik) b. Area pembuangan 	<ul style="list-style-type: none"> a. Sebelum pembuangan(1 kali) b. Sebelum dan setelah kegiatan pembuangan dilakukan 	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
8A	Sedimentasi								
8B	Perubahan garis pantai	Kegiatan operasional fasilitas laut	Perubahan garis pantai tidak mengakibarkan kerusakan infrastruktur atau lahan eksisting	<ul style="list-style-type: none"> a. Melakukan tracking garis pantai sepanjang 5 km ke arah timur dan barat dari Pelabuhan Patimban, waktu yang dipilih pada saat tracking adalah pada saat pasang tertinggi pada saat pemantauan. b. Melakukan pengukuran batimetri secara berkala pada area alur pelayaran kapal laut dan kapal perikanan untuk mengetahui ketebalan sedimen selama operasional. 	Garis pantai sisi utara	Satu tahun sekali	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
8C	Perubahan fishing ground	Kegiatan operasional fasilitas laut	Tidak adanya laporan gangguan daerah penangkapan dan /atau penurunan produksi/pendapatan dari nelayan	<ul style="list-style-type: none"> a. Observasi lapangan dan wawancara terhadap Nelayan TPI Kali Genteng, Trumtum dan Tanjung Pura mengenai produktivitas pada lokasi pemasangan rumpon dan dianalisis secara deskriptif. b. Observasi lapangan, wawancara terhadap Nelayan TPI Kali 	<ul style="list-style-type: none"> a. TPI Kali Genteng, Trumtum dan Tanjung Pura 	Dilaksanakan 6 (enam) bulan sekali selama tahap Operasi	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Institusi Pemantauan Lingkungan Hidup				
	Jenis Dampak	Sumber Dampak			Lokasi Pantau	Waktu dan Frekuensi	Penerima Laporan		
8D	Keresahan masyarakat	Kegiatan operasional fasilitas laut	Tidak ada kererasahan masyarakat	Genting, Trumput dan Tanjung Pura dan dianalisis secara deskriptif mengenai implementasi CSR.	a. Memberi laporan tentang jumlah pengaduan b. Menantau produksi dan kondisi nelayan	Satu tahun sekali	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
9	Operasional Jalan Akses								
9A	Peningkatan kebisingan	Operasional jalan akses	Tingkat Kebisingan dibawah baku mutu lingkungan berdasarkan Kepmen LH Nomor 48 Tahun 1996 tentang Baku Tingkat Kebisingan	Melakukan analisa laboratorium kebisingan kemudian hasilnya dibandingkan dengan baku mutu kebisingan Kepmen LH No. 48 tahun 1996. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (datatrend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis.	3 titik di sekitar lokasi proyek	Dilakukan setahun 2 kali (musim kemarau dan musim hujan)	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
9B	Gangguan lalu lintas darat	Operasional jalan akses	Tidak terjadinya kemacetan lalu lintas akibat operasional jalan akses pelabuhan	a. Pemanfaatan secara langsung terhadap arus lalu lintas b. Memberikan informasi jumlah kecelakaan	Jalan Pantura dan jalan akses	1 x dalam 6 bulan. Dapat dilakukan pada awal tahun (bulan ke 1 atau 1) dan pertengahan tahun bulan ke 7 atau ke8)	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Kabupaten Subang • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup		
	Jenis Dampak	Sumber Dampak						Pelaksana	Pengawas	Penerima Laporan
9C	Keresahan masyarakat	Operasional jalan akses	Tidak adanya keresahan masyarakat	a. Pengukuran jumlah masyarakat yang merasakan kawatir terhadap kegiatan operasional jalan akses Pengukuran dilakukan dengan wawancara menggunakan perwakilan pemrakarsa(dapat diperoleh dari catatan dan keterangan pengurus lingkungan, pemerintah desa atau perwakilan pemrakarsa(data sekunder).	Satu tahun sekali	Jalan akses	Satu tahun sekali	<ul style="list-style-type: none"> Kantor Kesyahbandaran Pelabuhan Kelas II Patimban Direktorat Perhubungan Laut Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Kabupaten Subang
Dampak Lingkungan Lainnya yang Dikelola										
G. TAHAP KONSTRUKSI										
1.	Pengadaan Tenaga Kerja dan Pengoperasian Basecamp		1A	Penurunan Kualitas Air Laut	Pengadaan kerja pengoperasian basecamp	tenaga dan	Kualitas air laut tidak tercemar oleh limbah domestik pekerja	<ul style="list-style-type: none"> Konfirmasi perawatan kondisi kebersihan, 	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan

No	Dampak Lingkungan yang Dipantau		Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak				Pelaksana	Pengawas
1B	Timbulnya Penyakit Menular	Pengadaan tenaga kerja dan pengeoperasian basecamp	Tidak meningkatnya jumlah pasien dan penyakit infeksi karena adanya tenaga kerja konstruksi	Lokasi sekitar proyek	Selama tahap konstruksi berlangsung	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
2	Mobilisasi Alat Berat dan Material		Kerusakan alat dan material	Kerusakan jalan dapat diminimalkan	Jalan Gempol Prapatandan Jalan Pantura Pusakanagara	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
2A	Kerusakan Jalan			Memantau secara langsung terhadap kondisi jalan	Satu bulan sekali selama konstruksi berlangsung	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
3	Pembangunan Fasilitas Darat		Pembangunan fasilitas darat	3 titik di sekitar lokasi kegiatan	Selama pembangunan fasilitas darat berlangsung	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat
3A	Perburuan kualitas udara (TSP dan Gas Buang)		Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No. 22 Tahun 2021 tentang Penyetenggaraan	Melakukan analisa laboratorium kualitas udara, kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No.22 tahun 2021. Selanjutnya hasil pemantauan dibuat		<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat

No	Dampak Lingkungan yang Dipantau		Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak				Pelaksana	Pengawas
		Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis.		Laut • Kementerian Perhubungan	• Dinas Lingkungan Hidup Kabupaten Subang	• Dinas Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat
3B	Penurunan Kualitasair laut	Konstruksi fasilitas darat	Kualitas air laut tidak menurun secara drastis dikarenakan aktivitas proyek	Melakukan sampling air laut danhasilnya di bandingkan dengan PP No. 22 Tahun 2021 (Lampiran VIII). Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis.	10 Lokasi di laut • Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan	4 kali setahun dengan 2 permukaan (permukaanatas dan bawah)	• Kantor • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
3C	Gangguan fauna terrestrial (Burung)	Pembangunanfasilitas darat	Adanya habitat baru	a. Memberikan laporan tentang habitat baru b. Pemantauan secara langsung di lapangan	Di sekitar lokasi proyek pelabuhan	Sebelum pembangunan dan setelah penyelesaian	• Kantor • Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan
3D	Gangguan Flora terrestrial	Pembangunan fasilitas darat	Adanya habitat bagi tempat hidup flora terrestrial	Memberikan laporan tentang keberadaan dan fungsi habitat baru	Di sekitar lokasi proyek pelabuhan	Sebelum pembangunan dan setelah penyelesaian	• Kantor • Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan

No	Dampak Lingkungan yang Dipantau		Metode Pengumpulan dan Analisis Data	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak		Indikator Parameter	Pelaksana
4	Pembangunan Jalan Akses	Kegiatan pembangunan jalan akses		Lokasi Pantau	Waktu dan Frekuensi
4A	Penurunan Kualitasudara (TSP dan Gas Buang)	Konsentrasi SO ₂ , CO, NO ₂ dan TSP tidak melebihi baku mutu udara yang tercantum pada PP No. 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	Melakukan analisa laboratorium kualitas udara, kemudian hasilnya dibandingkan dengan baku mutu kualitas udara PP No.22 tahun 2021. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis	3 titik di sekitar lokasi kegiatan	Setahun 2 kali selamatahap konstruksi berlangsung
4B	Penurunan kualitasair permukaan	Pembangunan jalan akses	Monitoring TSS menggunakan turbidity meter	3 titik sepanjang pembangunan lokasi jalan akses	Setiap minggu
4C	Peningkatan laju airlarian	Pembangunan jalan akses	Tidak terjadi limpasan yang berlebih	Pemantauan secara langsung dilapangan	Dilakukan 2 kali pada musim hujan saat tejadi hujan deras, selama kegiatan berlangsung
					<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan
					<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup		Waktu dan Frekuensi	Pengawas	Institusi Pemantauan Lingkungan Hidup	Penyerina Laporan
	Jenis Dampak	Sumber Dampak			Lokasi Pantau	Pelaksana				
4D	Keresahan masyarakat	Pembangunan jalan akses	Tidak ada keresahan masyarakat	<p>a. Pengukuran jumlah masyarakat yang merasa khawatir terhadap kegiatan operasional jalan akses</p> <p>b. Pengukuran dilakukan dengan wawancara menggunakan kuesioner (data primer). dalam, akan dilakukan Pengukuran jumlah peristiwa protes dan unjukrasa</p> <p>pendiduk ke kantor perwakilan pemrakarsa diperoleh dari catatan dan keterangan pengurus lingkungan,pemerintah desa atau perwakilan pemrakarsa (data sekunder).</p> <p>c. Informasi dan data yang perlu digali lebih wawancaramendalam dengan informan kunci, seperti dengan tokoh masyarakat.</p> <p>d. Jumlah sample ditentukan dengan cara purposive sampling, yaitu penentuan sample berdasar pada kebutuhan penelitian dan diambil dari komunitas yang telah diketahui karakteristiknya terlebih dahulu.</p>	<p>Di sekitar lokasi proyek pelabuhan</p> <p>• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban</p> <p>• Direktorat Jenderal Perhubungan Laut</p> <p>• Kementerian Perhubungan</p>	<p>Sebelum pembangunan dan setelah penyelesaian</p> <p>• Dinas Lingkungan Hidup Provinsi Jawa Barat</p> <p>• Dinas Lingkungan Hidup Kabupaten Subang</p>	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak					Pelaksana	Pengawas
H. TAHAP OPERASIONAL								
5	Pengadaan Tenaga Kerja	Adaya tenaga kerja operasional	Tidak meningkatnya jumlah penderita penyakit menular		Sekitar lokasi kegiatan	Satu tahun sekali (selama 3 tahun)	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Dinas Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
5A	Timbulnya penyakit menular			a. Memberikan laporan tentang pelaksanaan program pencegahan HIV / AIDS b. Memberikan laporan dan pemeliharaan fasilitas sanitasi, fasilitas pengolahan air limbah dan tempat sampah c. Mengidentifikasi jumlah penderita dan membandingkan dengan data sebelum ada kegiatan				
6	Operasional Fasilitas Laut	Operasional fasilitas laut	Kualitas udara tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 tentang Penyelenggaraan Perijinan dan Pengelolaan Lingkungan Hidup (Lampiran VII)	Pemantauan secara langsung di lapangan	Area pelabuhan	Dilakukan setahun 2 kali (musim kering dan hujan)	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Dinas Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
6A	Penurunan kualitas udara (TSP dan Gas Buang)							
6B	Penurunan kualitas air laut	Operasional fasilitas laut	a. Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 (Lampiran VIII) b. Permen LH No. 5 Tahun 2014 tentang baku mutu air limbah	a. Melakukan sampling effluent IPAL, drainase, oil separator b. Melakukan sampling kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut Kepmen LH no. 51 tahun 2004. Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke	<ul style="list-style-type: none"> a. 1 titik b. 10 titik lokasi 	<ul style="list-style-type: none"> a. Dilakukan setahun 2 kali b. Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar) c. khusus untuk pengambilan sampel ISS 	<ul style="list-style-type: none"> Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban Dinas Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Bentuk Pemantauan Lingkungan Hidup	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak						Pelaksana	Pengawas
6C	Gangguan lau lantas laut	Operasional fasilitas laut	Tidak tergantungnya kapal nelayan dan kapal yang melewati alur pelayaran	Pemantauan secara langsung	Lokasi pelabuhan	Setiap hari	<ul style="list-style-type: none"> Kantor Kesyahbandaran Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
6D	Timbulan Limbah	Operasional fasilitas laut	Tidak terjadi cemaran limbah ke laut	Memantau keberadaan dan fungsi RF, TPS B3 dan TPS domestik	RF, TPS B3, TPS domestik	<ol style="list-style-type: none"> Pemeliharaan RF dilakukan setiap hari Penyimpanan maksimal ≤ 90 hari Pengangkutan dilakukan minimal 2 hari sekali 	<ul style="list-style-type: none"> Kantor Kesyahbandaran Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
7	Operasional Fasilitas Darat		Tidak terjadi limpasan yang berlebih	Pemantauan secara langsung kondisi drainase	Sepanjang jalan akses	Dilakukan 2 kali pada musim hujan saat tejadi hujan deras, selama kejadian berlangsung	<ul style="list-style-type: none"> Kantor Kesyahbandaran Pelabuhan Kelas II Patimban Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang 	<ul style="list-style-type: none"> Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat Dinas Lingkungan Hidup Kabupaten Subang
7A	Peningkatan laju arrianian (run-off)	Operasional fasilitas darat							

No	Dampak Lingkungan yang Dipantau		Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Institusi Pemantauan Lingkungan Hidup	
	Jenis Dampak	Sumber Dampak					Pelaksana	Pengawas
7B	Penurunan kualitasair laut	Operasional fasilitas darat	Kualitas air laut tetap dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 (Lampiran VIII)	Melakukan analisa laboratorium kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutu air laut PP No. 22 Tahun 2021 (Lampiran VIII). Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan tingkat kritis	10 titik lokasi	a. Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar) b. Khusus untuk pengambilan sampel TSS dilakukan setiap hari selama kegiatan reklamasi yang menyebabkan kekeruhan	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
7C	Gangguan fauna terrestrial (Burung)	Operasional fasilitas darat	Adanya habitat hidup untuk fauna terestrial	Melakukan pemantauan langsungterhadap habitat baru	Habitat baru	Satu tahun sekali	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
8 Pemeliharaan Kolam dan Alur Pelayaran							<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
8A	Penurunan kualitasair laut (TSS)	Pemeliharaan kolam dan alur pelayaran	Konsentrasi TSS dibawah baku mutu lingkungan berdasarkan PP No. 22 Tahun 2021 (Lampiran VII)	Melakukan samping kualitas air laut dan kemudian hasilnya dibandingkan dengan baku mutuair laut PP No. 22 Tahun 2021 (Lampiran VII). Selanjutnya hasil pemantauan dibuat rata-rata dan dibandingkan dari ke waktu (data trend) untuk melihat kecenderungan perubahan kualitas lingkungan dan	10 titik lokasi	Untuk parameter kualitas air lengkap dilakukan 4 kali dalam setahun dengan 2 titik (permukaan dan dasar) Khusus untuk pengambilan sampel TSS dilakukan seminggu sekali selama reklamasi yang menyebabkan kekeruhan	<ul style="list-style-type: none"> • Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Jenderal Perhubungan Laut • Kementerian Perhubungan 	<ul style="list-style-type: none"> • Kementerian Lingkungan Hidup dan Kehutanan Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

No	Dampak Lingkungan yang Dipantau		Bentuk Pemantauan Lingkungan Hidup		Institusi Pemantauan Lingkungan Hidup				
	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Pelaksana	Pengawas	Penerima Laporan
9 Operasional Jalan Akses									
9A	Penurunan kualitas udara (TSP dan Gas Buang)	Operasional jalan akses	Kualitas udara tidak mengalami perburuan akibat adanya operasional	Monitoring secara langsung	Along the access road	Satu tahun 2 kali (musim kemarau dan musim hujan)	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
9B	Peningkatan laju airlarian (run-off)	Operasional jalan akses	Tidak terjadinya air limpasan yang berlebih	Pemantauan secara langsung kondisi drainase	Sepanjang jalan akses	Dilakukan 2 kali pada musim hujan saat terjadinya hujan deras, selama kegiatan berlangsung	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
9C	Alih fungsi lahan	Operasional jalan akses	Timbulnya permukiman dan berbagai fasilitas umum serta sarana perekonomian di sekitar lokasi jalan akses	a. Pemantauan secara langsung terhadap perubahan fungsi lahan yang sesuai dengan dengan aturan RTRW b. Pemantauan dan memelihara tanaman pohon yang telah di tanam (taman dan pelindung jalan)	Sepanjang jalan akses	Selama operasional berlangsung (musim kemarau dan musim hujan)	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat Perhubungan Laut • Kementerian Perhubungan	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang
9D	Kerusakan jalan	Lalu lintas di jalan akses	Kerusakan jalan dapat diminimalkan	Jalan Pantura	Setahun 2 kali (3 tahun)	• Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas II Patimban • Direktorat	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas	• Kementerian Lingkungan Hidup dan Kehutanan • Dinas	

Dampak Lingkungan yang Dipantau			Bentuk Pemantauan Lingkungan Hidup			Institusi Pemantauan Lingkungan Hidup			
No	Jenis Dampak	Sumber Dampak	Indikator Parameter	Metode Pengumpulan dan Analisis Data	Lokasi Pantau	Waktu dan Frekuensi	Pelaksana	Pengawas	Penerima Laporan
							Jenderal Perhubungan Laut	Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang	Lingkungan Hidup Provinsi Jawa Barat • Dinas Lingkungan Hidup Kabupaten Subang

MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN REPUBLIK INDONESIA,

ttd.

SITI NURBAYA



Sertifikat sesuai dengan aslinya
Biro Hukum, BIRO HUKUM,

LAMPIRAN II

KEPUTUSAN MENTERI LINGKUNGAN HIDUP DAN KEHUTANAN
REPUBLIK INDONESIA

NOMOR SK.120/MENLHK/SETJEN/PLA.4/2/2022
TENTANG

KELAYAKAN LINGKUNGAN HIDUP KEGIATAN PENGEMBANGAN PELABUHAN PATIMBAN DI DESA PATIMBAN, DESA KALENTAMBO, DESA GEMPOL, DESA KOTASARI, DESA PUSAKARATU, KECAMATAN PUSAKANAGARA, DAN DESA PUSAKAJAYA, KECAMATAN PUSAKAJAYA, KABUPATEN SUBANG, PROVINSI JAWA BARAT OLEH KANTOR KESYAHBANDARAN DAN OTORITAS PELABUHAN KELAS II PATIMBAN, DIREKTORAT JENDERAL PERHUBUNGAN LAUT, KEMENTERIAN PERHUBUNGAN

PENDEKATAN PENGELOLAAN LINGKUNGAN HIDUP

A. Pendekatan Teknologi

1. Pada tahap konstruksi, pendekatan teknologi dalam mengurangi dampak penurunan kualitas udara dilakukan dengan cara menutup bak kendaraan pengangkut material dengan terpal sehingga tidak terjadi ceciran bahan material dan melakukan penyiraman jalan secara periodik.
2. Mobilisasi alat berat dan material, menggunakan kendaraan yang masih laik operasi dan lulus uji KIR serta sesuai dengan daya angkut dan kelas jalan yang dilalui.
3. Mencegah kebisingan dilakukan dengan cara para pekerja disediakan APD berupa earplug/earmuff dan menghindari kegiatan konstruksi yang menimbulkan kebisingan untuk dilakukan pada malam hari seperti kegiatan pemancangan.

B. Pendekatan Sosial dan Ekonomi

1. Mencantumkan dalam klausul kontrak dengan kontraktor pelaksana untuk memprioritaskan tenaga kerja lokal dari penduduk yang terkena dampak sesuai dengan kebutuhan, tingkat pendidikan dan kualifikasi yang dibutuhkan, dan penyertaan jaminan sosial tenaga kerja, serta pembayaran sesuai UMK.
2. Memberikan informasi kepada warga yang tinggal di dekat mobilisasi alat berat dan material melalui aparat kecamatan setempat.
3. Memberikan penyuluhan kepada pengemudi tentang etika berlalulintas.
4. Memberikan informasi terkait waktu pelaksanaan pembangunan fasilitas darat.
5. Membentuk Forum Komunikasi Masyarakat.

C. Pendekatan Institusi

Pendekatan kelembagaan yang dilaksanakan bertujuan untuk membentuk institusi/wadah yang melibatkan berbagai pihak yang berkepentingan yang di dalamnya duduk wakil-wakil dari pemrakarsa, kecamatan/kelurahan (tokoh formal), dan masyarakat. Institusi wadah ini dapat dimanfaatkan untuk menyusun, merencanakan dan melaksanakan *community development* (tokoh informal).

Instansi terkait yang dilibatkan dalam pendekatan institusi diantaranya:

1. Kementerian Lingkungan Hidup dan Kehutanan;
2. Dinas Lingkungan Hidup Provinsi Jawa Barat;

3. Dinas Lingkungan Hidup Kabupaten Subang;
4. Dinas Perhubungan Provinsi Jawa Barat;
5. Dinas Perhubungan Kabupaten Subang;
6. Dinas Tenaga Kerja dan Transmigrasi Kabupaten Subang.



Salinan sesuai dengan aslinya
PILOTEPA LA BIRO HUKUM,

MENTERI LINGKUNGAN HIDUP DAN
KEHUTANAN REPUBLIK INDONESIA,

ttd.

SITI NURBAYA

Appendix 2.

Responding Condition of ECC

Responding to Conditions of ECC

No.	Conditions	Responding
1	Conduct management and monitoring of environmental impacts as stipulated in Appendix I and II of this Decree of Minister	DGST have conducted management and monitoring of environmental impacts as stipulated in Appendix I and II of Nomor SK136/Menlhk/Setjen./PLA4/2/2017, and will continue those amended by Nomor SK120/Menlhk/Setjen./PLA4/2/2022.
2	Conduct coordination with central or regional agency, that related with this activity implementation	DGST have conducted and will continue conducting coordination with central or regional agency that related with this activity implementation.
3	Conduct socialization of the activity to regional government, public figure, and public (fishermen, fishpond owners, farmers, and community that live around project activity location) that are affected by activities of pre-construction phase, construction phase, and operational phase of this development plan including conduct socialization/notification when Environmental Permit of this development plan has published	DGST have conducted and will continue conducting socialization of the activity to regional government, public figure, and public (fishermen, fishpond owners, farmers, and community that live around project activity location) that are affected by activities of pre-construction phase, construction phase, and operational phase of this development plan including conduct socialization/notification when Environmental Permit of this development plan has published
4	Attempt application of reduce, reuse, and recycle (3R) to generated wastes	Dredging material have been and will be reused for reclamation by using Cement Pipe Mixing Method as much as possible. DGST will instruct contractors to carry out reduce, reuse and recycle for the other construction wastes as much as practicable.
5	Conduct provision for the implementation of the activity in accordance with Standard Operational Procedure (SOP)	DGST have instructed and will continue instructing contractors to carry out implementation of the activity in accordance with SOP. <ul style="list-style-type: none"> • DGST and DGH have instructed contractors to carry out implementation of the activity in accordance with the protocols specified by the Technical Specification of the contracts. • Technical Specification for : <ul style="list-style-type: none"> - Package 1 : Terminal Construction - Package 2 : Breakwater, Seawall and Channel Dredging Works - Package 3: Connecting Bridge - Package 5 Terminal Car Construction - Package 6 Terminal Construction
6	Conduct improvement continuously to technology reliability that is used in order to minimize impacts which are caused by this project activity plan	DGST have instructed and will continue instructing contractors to improve continuously to technology reliability that is used in order to minimize impacts which are caused by this project activity plan. DGST is continuously adapting construction methodologies which enable reuse of dredged material for reclamation instead of offshore dumping as the initial plan. Using CPM method which according to RKL-AMDAL is part of the sand dredging reduction effort; Using TSHD vessel to execute dredging which may ease to prevent dispersion of sediment at the sea when dredging activity is conducted.

Attachment B Responding to conditions of ECC

7	Formulate CSR and CD Program to affected community (Fishermen, Fishpond Owners, and community that live around project activity location) that is set with community needs and in the implementation, it is coordinated with local government	DGST have carried out and will continue carrying out CSR and CD program to affected communities. DGST is carrying out Livelihood Restoration Program for affected communities.
8	Documenting entire activities of management and monitoring of the environment which are conducted, and other activities related with those activities	<p>DGST have prepared and will continue preparing document for entire activities of management and monitoring of the environment which are conducted, and other activities related with those activities.</p> <p>DGST has prepared Environmental Management and Monitoring Report and submitted it to the Ministry of Environment and Forestry every six months.</p> <p>We have provided RKL/RPL Implementation Report in 6 monthly periods which is submitted to the Environmental and Forestry Ministry and Environmental Board of the Province of West Java.</p> <p>RKL/RPL Implementation submitted report on:</p> <ul style="list-style-type: none"> - Semester I/2019 (Oct 2018 – Mar 2019); - Semester II/2019 (Apr – Sept 2019); - Semester I/2020 (Oct 2019 – Mar 2020). - Semester II/2020 (Apr 2020 – Sept 2020). - Semester I/2021 (Oct 2020 – Mar 2021). - Semester II/2021 (Apr – Sep 2021). - Semester I/2022 (Oct 2021 – Mar 2022). - Semester II/2022 (Apr-Sept 2022) - Semester I/2023 (Oct 2022 – Mar 2023). - Semester II/2023 (Apr – Sep 2023)
9	<p>Prepare report on the implementation obligations as mentioned at number 1 (one) until number 8 (eight), at least once in 6 months during construction and operational take place and submit to:</p> <p>a. Ministry of Environment and forestry through</p> <ol style="list-style-type: none"> 1) Directorate General of Forest Planning and Environmental Order 2) Directorate General of Law Enforcement of Environment and Forestry <p>b. Governor of West Java through Head of Environment Agency of Province of West Java</p> <p>c. Bupati of Subang through Head of Environment Agency of Regency of Subang</p>	<p>DGST have prepared and will continue preparing report and submitting to the mentioned agencies at least every 6 months.</p> <p>We have provided RKL/RPL Implementation Report in 6 monthly period which is submitted to Environmental and Forestry Ministry and Environmental Board of Province of West Java.</p> <p>RKL/RPL Implementation submitted report on:</p> <ul style="list-style-type: none"> - Semester I/2019 (Oct 2018 – Mar 2019); - Semester II/2019 (Apr – Sept 2019); - Semester I/2020 (Oct 2019 – Mar 2020). - Semester II/2020 (Apr 2020 – Sept 2020). - Semester I/2021 (Oct 2020 – Mar 2021). - Semester II/2021 (Apr – Sep 2021). - Semester I/2022 (Oct 2021 – Mar 2022). - Semester II/2022 (Apr-Sept 2022) - Semester I/2023 (Oct 2022 – Mar 2023). - Semester II/2023 (Apr – Sep 2023).

Attachment B Responding to conditions of ECC

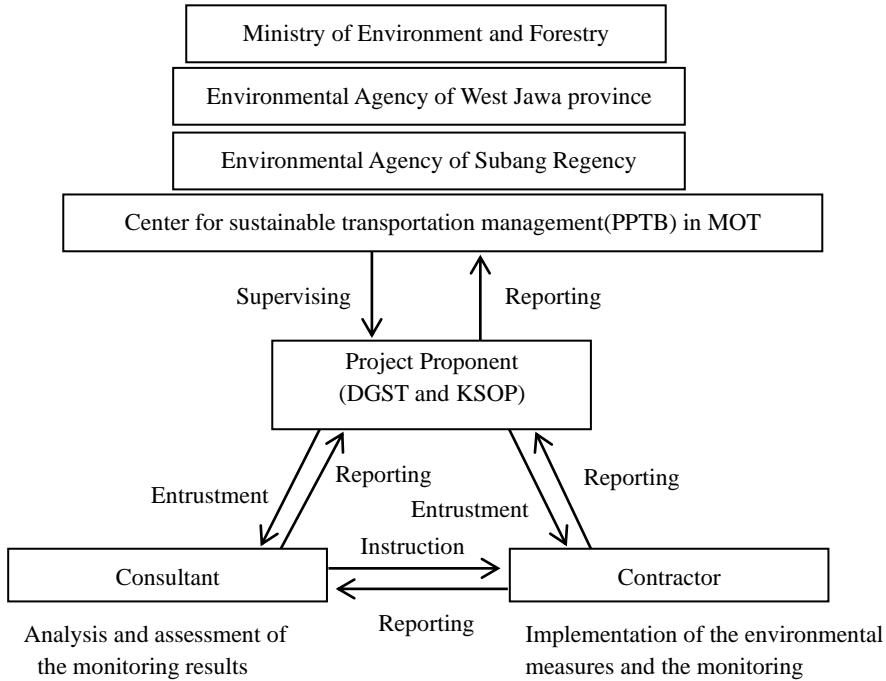
10	<p>Person In Charge of Business and/or Activity in implementation of the activity plan, must:</p> <ol style="list-style-type: none"> 1.Has business permit and/or other permits that are related with the activity, 2.Has Environmental Protection And Management Permit (EPMP) for construction and operation phase, in form of: <ol style="list-style-type: none"> a. Temporary storage of dangerous and poisonous waste (B3), and b. Permit of disposal of liquid waste to the sea 	<p>Port operators must have business permit and /or other permits.</p> <p>Each contractor has applied and will apply "Temporary storage of dangerous and poisonous waste(B3)" and "Permit of disposal of liquid waste" before port construction implementation.</p> <p>According to Technical Spec there has been permits for:</p> <ul style="list-style-type: none"> - Dredging & dumping <p>This subject has already been stated in Environmental Permit which has already available (SK 136/Menlhk/Setjen/PLA 4/2/2017).</p> <ul style="list-style-type: none"> - Wastewater discharge to the sea* <p>*This subject is still under preparation to be arranged since the design layout for the sewer line and STP at reclamation area has just been provided.</p> <p>Note*: Environmental Ministerial Decree No. 12/ 2006 pertaining to Requirement and Procedures of Permitting for Wastewater Discharge to the sea</p> <p>Other permit according to regulation is Temporary Hazardous (B3) Storage which is to be submitted by KSOP:</p>
11	<p>Person in Charge of Business and/or Activity must apply proposal of Environmental Permit Change if there is a change of the business and/or activity and/or by other cause in accordance with Criteria of listed changes in Article 50 Government Regulation Number 27 Year 2012 on Environmental Permit</p>	<p>DGST is has received the amended environmental permit of Nomor : 120./MenLHK/Setjen/PLA.4/2/2022. in accordance with Article 50, Governmental Regulation Number 27, 2017 on environmental permit.</p>

Appendix 3.

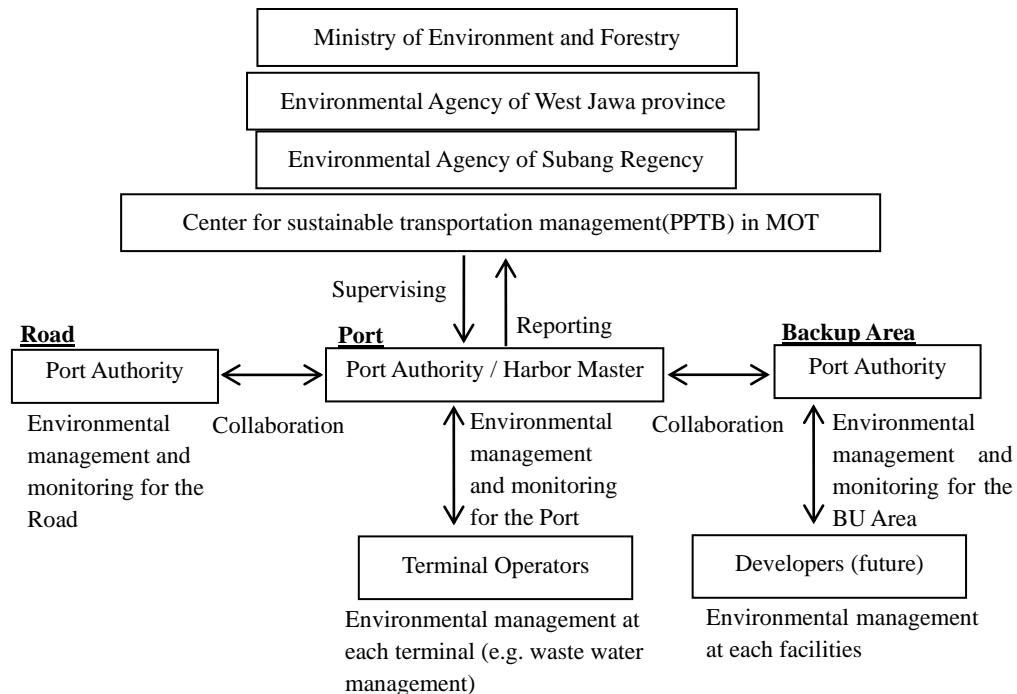
EMP and EMoP Framework

Attachment F EMP and EMoP Framework

Implementation Framework of Environmental Management during Construction Phase



Implementation Framework of Environmental Management during Operation Phase



Appendix 4.

EMP and EMoP Cost

Annual Cost for the Environmental Monitoring during Construction Phase

Category	Items	Unit	Quantity		Unit Price (JPY)*	Amount (JPY)
			Est per year	Act since 2023		
Port	Turbidity	times	365			
	Sea Water Quality	times	4	1		
	Sediment Quality	times	2	1		
	Bathymetric Survey	times				
	Nekton	times	2	1		
	Benthos	times	2	1		
	Fishery Production (Interview)	times	12	3		
Access Road	Air Quality	times	2	1		
	Noise	times	2	1		
	Surface water	times				
	Traffic counting	times	12	3		
Total (Including Baseline)						61.967.912
Total during construction period (1034 days) lumpsum						61.967.912

Annual Cost for the Environmental Monitoring during Operation Phase

Category	Items	Unit	Quantity	Unit Price (JPY)*	Amount (JPY)
Port	Turbidity	times	8 (during dredging)	200.000	1.600.000
	Sea Water Quality	times	4	700.000	1.400.000
	Sediment Quality	times	1	800.000	800.000
	Bathymetric Survey	times	2 (before/after dredging)	1.500.000	3.000.000
	Nekton	times	2	800.000	1.600.000
	Benthos	times	1	800.000	800.000
	Fishery Production (Interview)	times	1	1.000.000	1.000.000
Access Road	Noise	times	2	300.000	600.000
Total					10,800,000

Appendix 5.

Entitlement Matrix

Entitlement Matrix

No.	Impact/ Loss Category	Entitled People	Project Entitlement
A. LAND LOSS¹			
1	Loss of land, including agricultural, fishpond land and residential land	Those who have formal legal rights (certificate) or those whose claim over the land is recognized as a full title including persons occupying the state land in good faith ² .	<ul style="list-style-type: none"> • Cash compensation at replacement cost and reflective of fair market value at the time of payment of compensation³; or land replacement with at least similar attributes to the acquired land in term of value, productivity, location, and certification⁴. • Financial assistance for the renewal of the land ownership documents (certificate and land documents recognized as full title) for the residual area of the entitled persons'land⁵. • If the remaining affected land can't be functioned for the specific use and utilization, the entitled party can ask for compensation for their entire land at replacement cost (UU No. 2 tahun 2012 Pasal 35).⁶ • Tax incentives given to all entitled parties if they do not file a lawsuit against the decision of the location and the form and / or amount of compensation.
2	Government/ state enterprise land	Land owned / controlled by the government, state enterprises, village treasury	<ul style="list-style-type: none"> • Cash Compensation at replacement cost; or • Land replacement with similar value or higher (in terms of value, productivity, location, and titling).
B. LOSS OF CROPS AND TREES			
1.	Loss of Crops and Trees:	Owners, regardless of land tenure status (with certificate or recognizable rights, informal dwellers, occupants).	<ul style="list-style-type: none"> • Annual crops: cash compensation will be paid based on prevailing market rates. • Perennial crops: compensation at replacement cost taking into account their productivity and age⁷. • Timbers/trees: compensation at current market rate based on age, type of trees and diameter of trunk at breast height⁸.
C. LOSS OF STRUCTURE			
1	Loss of main structures (houses, offices,	Owners of the affected structure, regardless of tenure ⁹	<ul style="list-style-type: none"> • Compensation at full replacement cost that reflect prevailing market prices of materials and cost of labor for dismantling, transferring and rebuilding at the

¹ Law No. 2 of 2012, Article 36 states that compensation can be given in the form of; (i) cash / money; ii) replacement land; iii) resettlement; iv) shares ownership , and v) other forms agreed by both parties. Assessment of compensation by appraisers in accordance with Article 32 of Law should be done per plot.

² It is in line with the Law No. 2/2012, Article 40, and its elucidation and the PP No. 71/2012, Article 17-25.

³ See Law No. 2/2012, Article 36, PP No. 71/2012, Article 65. MAPPI's standard on Valuation for land acquisition for the development in the public interest.

⁴ Ibid

⁵ See MAPPI's valuation standard.

⁶ Article 35 of Law No. 2 of 2012 and Article 67 of the PP 71/2012.

⁷ For commercial plants, aside of considering market rate, appraiser will also consider DCF method for 1 cycle. While for non-commercial plants, the valuation is carried out in reference to the pricing standard issued by the concerned authorities. For plants, which are not productive yet, the valuation method uses cost approach.

⁸ Ibid.

⁹ Law No. 12/2012 Article 40 and the explanation, Indonesia Assessment Standards 2013 For commercial crops, in addition to considering market prices, assessors will also consider the DCF method for 1 cycle. Whereas for non-commercial crops, assessment is based on standards price issued by the competent authorities. For plants that are no longer productive, assessment uses the cost approach. See Indonesia Valuation Standards 306. MAPPI (Indonesian Society of Appraisers) 2013.

No.	Impact/ Loss Category	Entitled People	Project Entitlement
	independent shops) and secondary structures (fences, driveways, extended eaves, sheds, etc.)		<p>time of compensation payment. No depreciation should be applied or;</p> <ul style="list-style-type: none"> • Option of Resettlement with comparable access to employment and production. • For partially affected structures, the cost of repairing the residual unaffected portion of the structure in addition to the compensation at replacement cost for the affected portion of the same¹⁰. • Compensation for affected electric, telephone, and other services based on prevailing cost of disconnection and re-installation¹¹.
		Relocated entitled people regardless of land tenure	<ul style="list-style-type: none"> • Cash allowance for moving if the project is not able to provide the use of a truck or a means of transportation to carry goods to a new place.¹²
		Tenant house / shop regardless of tenure	<ul style="list-style-type: none"> • cash assistance equivalent of 12 months rental cost.
2	Infrastructure and public facilities / objects attached to land	Government or State Enterprises/ communal property and assets (eg schools, mosques, village office power poles, etc.)	<ul style="list-style-type: none"> • Rebuilding the facility or provide cash compensation based on the agreement with the affected parties¹³.
3	Tomb / grave	Owner	<p>A replacement for public cemetery though prior consultation with village officials and residents.</p> <p>Financial assistance to move the graves, including costs for the ceremony</p>
D. TEMPORARY IMPACT DURING CONSTRUCTION			
1	Temporary impact during construction to land	For those who have formal legal rights (certificate) or those whose claim on land is recognized as a full right	<p>For lease payments of the affected land by the contractor based on the applicable rental fees and agreements with landowners.</p> <p>For productive land, the cost of the rental will not be less than the net income that will be generated from productive affected land compensation for non-land assets acquired (trees / plants, buildings) will be provided at replacement cost</p> <p>Land will be restored to pre-project conditions or even better.</p>
		Those who do not have legal rights and entitlements that can be recognized as full ownership	<ul style="list-style-type: none"> • There is no land rental costs during the period of impact • Land will be restored as it was before the project, or even better.
E. OTHER APPRAISABLE LOSS			
1.	Loss of income, venture and job	Business owner and employees regardless the tenure	The loss of a permanent business (restaurant, café, shop) or a termination due to closure of business premises: Replace the loss in cash based on the loss of

¹⁰ Elucidation Article 33 of Law No 2/2012.

¹¹ Article 33 of Law No. 2 of 2012 and Indonesia Valuation Standards (SPI 306) 2013.

¹² Elucidation of Article 33 of Law No. 2 of 2012.

¹³ Article 33 of Law No. 2 of 2012 and Article 82 of the Presidential Regulation Number 71 of 2012.

No.	Impact/ Loss Category	Entitled People	Project Entitlement
			<p>business investment (capital, other production mode) is added to the total loss of revenue of at least 6 months and support the transition allowance in accordance with the time needed to stabilize the business.</p> <p>Temporary loss: Compensations in cash based on the loss of expected revenue is to be obtained from use of the affected assets¹⁴.</p> <p>Permanent job loss: Damages in cash equivalent to the amount of lost job income multiplied at least by 6 months, or Change profession: Cash compensation based on the costs required to change the profession on par with previous professions based on an assessment by a licensed appraiser</p> <p>Loss of temporary employees: Compensation equivalent to the income lost during the disruption.</p>
2	Loss of emotional attachment to assets (solatium)	Entitled party who loss the emotional bond with the affected assets (land, structures, and plants)	<p>Additional compensation of 10% - 30% of total compensation for physical assets affected. Compensation will include funding for:</p> <ul style="list-style-type: none"> • Transitional living allowance equivalent to 3 months of basic living expenses (at the provincial poverty line per household member which will be included in the solatium. • Reduction of building depreciation.
3	Transaction Cost	The entitled party who lost land and non-land assets	Allowance to cover of administration cost, renewal of land ownership (ownership name transfer) for residual land, land clearing ¹⁵
4	Compensation for the waiting period (interest)	The party entitled to receive compensation for late payment	Cash compensation based on the risk free interest, government bank interest
5	Other physical loss	Owner, regardless of tenure	Compensation for repair costs
6	Loss of the resource base (high risk of impoverishment)	Entitled Party who lost of 10% or more of total assets or earning revenue sources including marine fishermen; Entitled Party , poor and vulnerable, regardless of the severity of the impact	<p>Participate in livelihood restoration program (LRP)</p> <p>Given the opportunity to get a work related with the project</p>

¹⁴ See Standardized assessment of Indonesia (SPI 306), 2013, "Concepts and General Principles of Assessment", page 17.

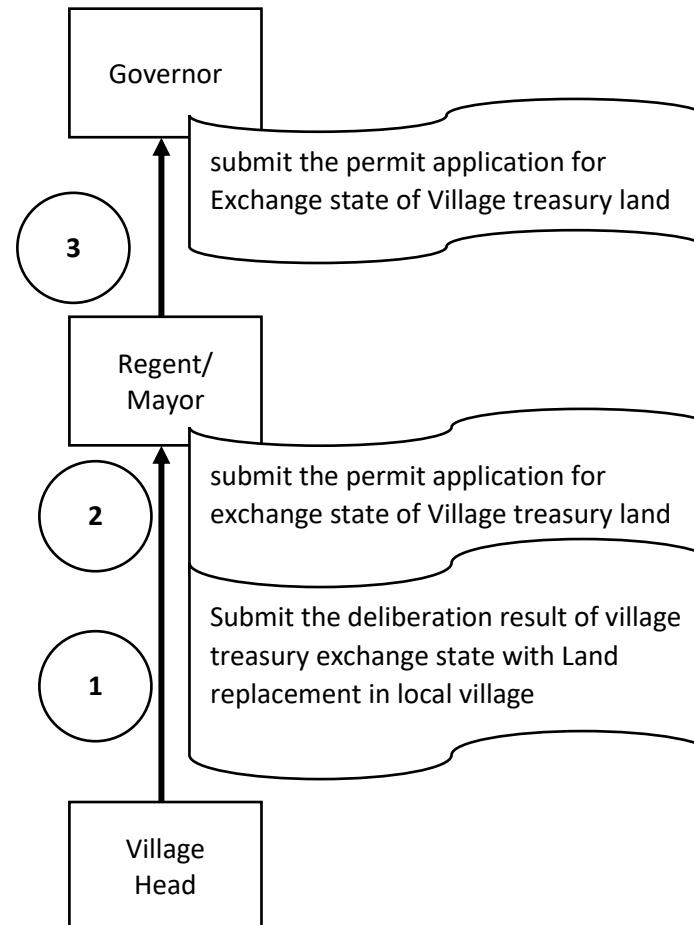
¹⁵ See Standardized assessment of Indonesia (SPI 306), 2013.

Appendix 6.

LARAP Framework

Village Treasury Land Exchange States Mechanism (Tukar Menukar Kas Desa/TKD) I

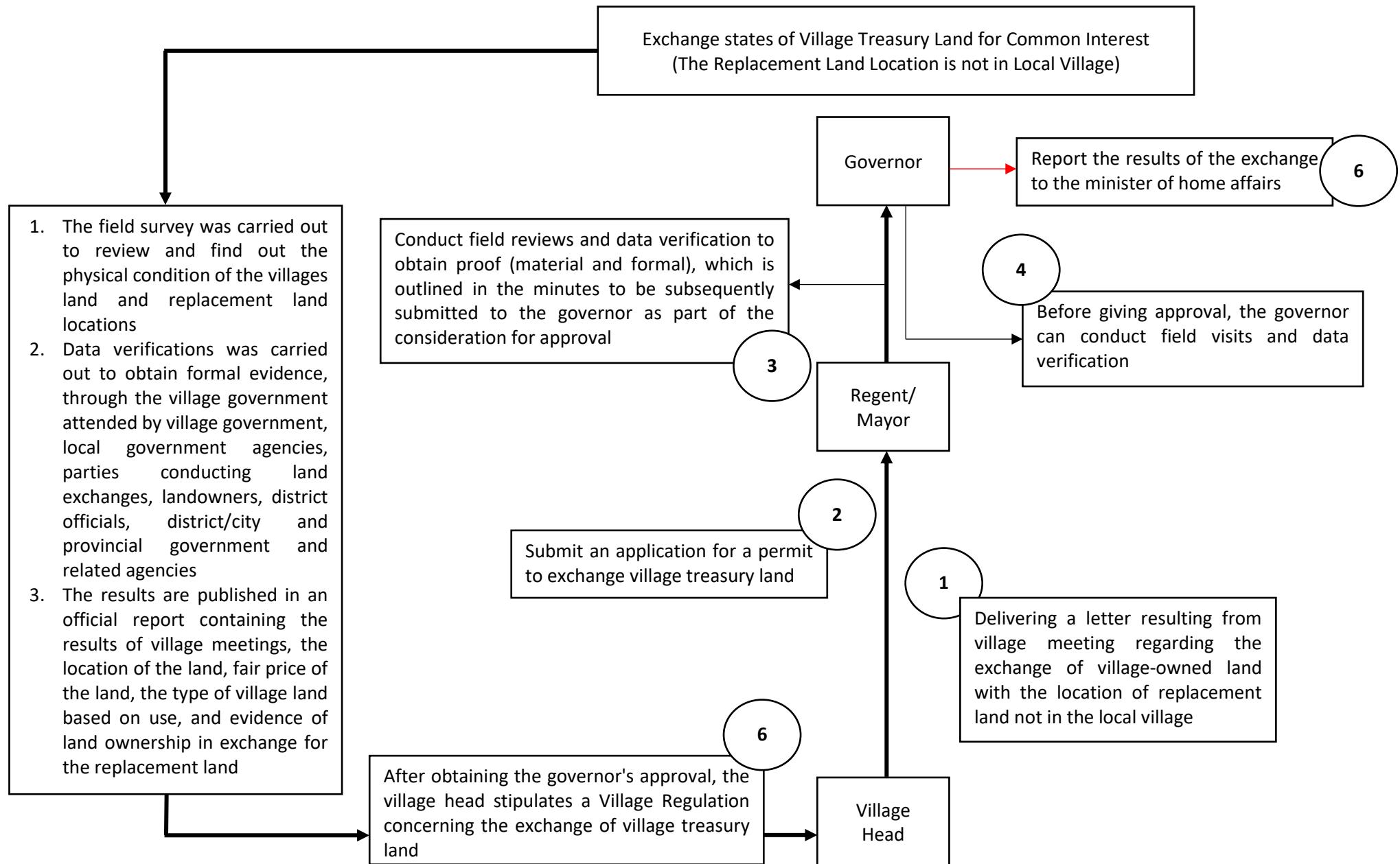
Exchange states of Village Treasury Land for Common Interest
(The Replacement Land Location is in Local Village)



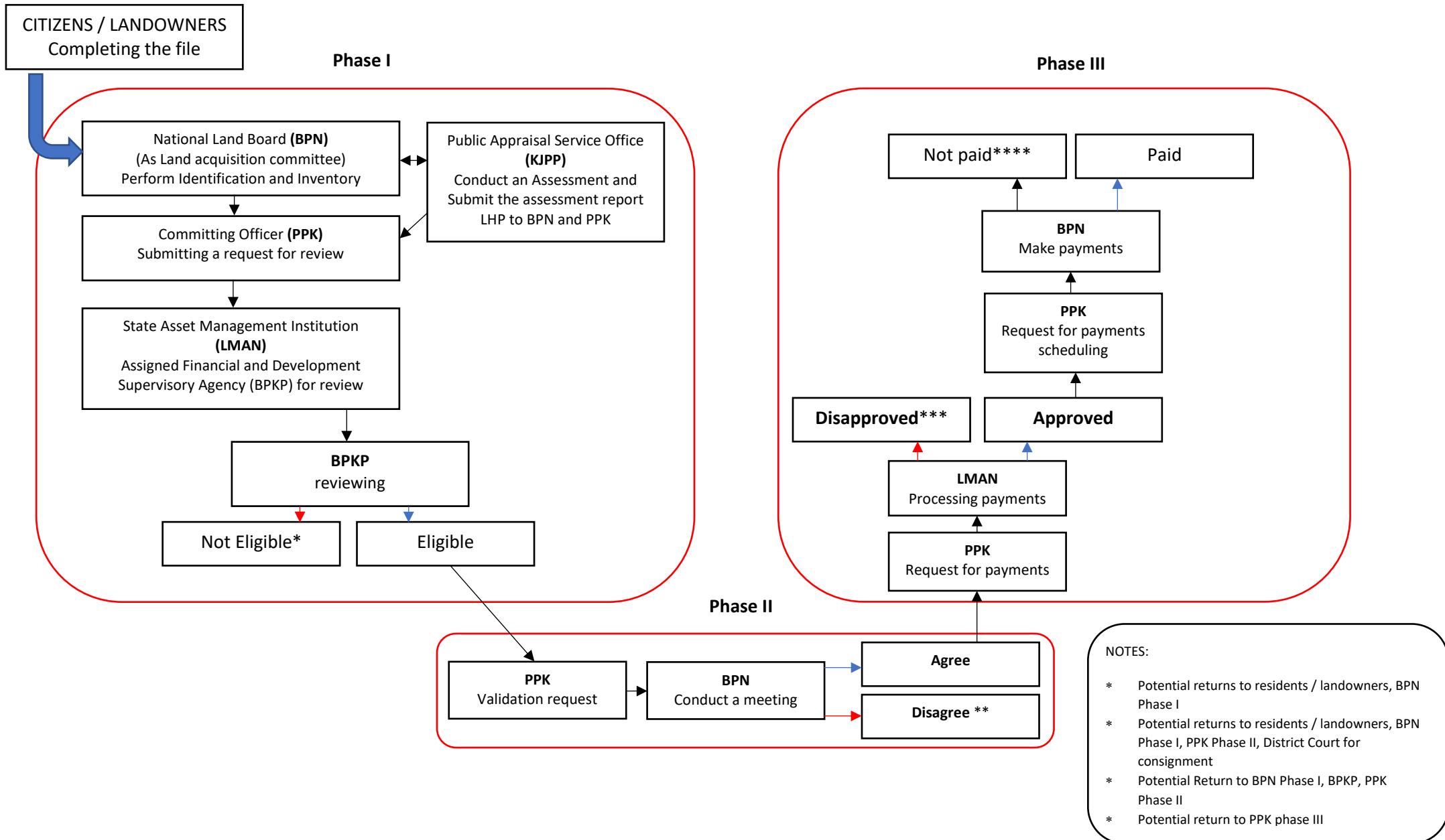
Remarks :

- Exchange state of Village treasury land process for Patimban Village at Number 1
- Exchange state of Village treasury land process for Gempol Village at Number 2

Village Treasury Land Exchange States Mechanism (Tukar Menukar Kas Desa/TKD) II



LAND PROCUREMENT PROCESS THROUGH THE PAYMENT MECHANISM BY LMAN



Appendix 7.

LARAP Schedule

Environmental and Social Consideration Quarterly Progress Report No.20

Period of October – December 2023

Description of Land Acquisition Implementation Schedule

	ACTIVITIES	SCHEDULE: AS OF 2016-2017	ACTUAL IMPLEMENTATION AS OF DECEMBER 2021
I	PLANNING STAGE		
1.	Completion of Detailed Design Construction	May 2016 – April 2017	July 2017
2.	Public Consultation	June 2016 – October 2016	July – December 2016
3.	Identification of affected assets and Socio-Economic Survey to affected Person	June – October 2016	June – October 2016
4.	Preparation of Livelihood Restoration Program	October - November 2016	October-December 2016
5.	Preparation of LARAP Document	June – November 2016	June – December 2016
6.	Endorsement of LARAP Document	November 2016	March 2017
7.	Revealing the land procurement planning documents to the public (the party entitled and other stakeholders) and website	November 2016	
8.	Land Acquisition Planning Document Delivery to the Governor of West Java Province	November 2016	December 2016
II	PREPARATION STAGE		
1.	Land Acquisition Planning Documents Received By the Governor of West Java Province	November 2016	December 2016
2.	Formulated The Preparatory Land Acquisition Team	February 2017	February 2017
3.	Notice Patimban Port Development Plan to the Community	8 March 2017	8 March 2017
4.	Early Identification and Data Collection Entitled Party and the object of the Land Acquisition	March 2017	March 2017
5.	Public Consultation Related to Development Plan	March-April 2017	22 March 2017
6.	Determination Location	27 April 2017	13 April 2017
III	IMPLEMENTATION STAGE		
1.	Preparation of Land Acquisition Implementation (14 days)	May 2017	May 2017
2.	Establishment of Land Acquisition Implementation Team	May 2017	May-October 2017
3.	Inventory and identification (30 Days)	May-June 2017	October-November 2017
4.	Announcement of Definitive PAP'S and Complain Period (14 Days)	July 2017	December 2017 - January 2018
5.	Re-inventory and Re-Identification If There Rebuttal (14 Days)	August 2016	January-February 2018
6.	Selection Process and Independent Appraisal Determination (30) and Assessment of Land Procurement Object (30 days)	15 June – 15 August 2017	March 2018 – Mei 2018
7.	Discussion of Compensation and Announced of Compensation schedule (30 Days)	16 August – 16 September 2017	Mei 2018 – Nov 2020
8.	Objection and the completion of the Court (if there is 88 days)	December 2017	Sept 2019 – Dec 2019
9.	Giving Compensation (if no filing objections) (30 days)	17 September - 17 October 2017	June 2018 – Dec 2021
10.	Submission Results (transfer of rights and certification)	18 October – 30 Des 2017	December 2021
IV	MONITORING AND DELIVERY OF RESULTS		
1.	Internal Monitoring	Nov 2016 – December 2017	2019 – until completion of the land aquisition
2.	External Monitoring	April – December 2017	July 2020 - June 2022

Implementation Schedule of Livelihood Restoration Program

NO.	ACTIVITIES	SCHEDULE: AS OF 2016-2017	ACTUAL IMPLEMENTATION AS OF NOVEMBER 2021
1.	Preparation of Livelihood Restoration Program	January - June 2017	January 2017- July 2018
2.	Implementation of Livelihood Restoration Program	Dec 2017 – Dec 2021	2018 - 2021

Appendix 8.

LARAP Cost

Environmental and Social Consideration Quarterly Progress Report No.20

Period of October – December 2023

Cost for Implementing Larap

Items		Amount (Rp) (as Sep 2023)	Financial source
Replace ment Cost	Physical replacement cost (include Solatium)	Replacement cost of Landowner and wage earner	826.624.695.356
	Non-physical replacement cost	Livelihood Restoration Program	12.666.742.562
Subtotal		839.291.437.918	-
LARAP administrative and external monitoring cost		4.292.080.000	DGST
Ground total		843.583.517.918	-

Source : DGST, 2023

Appendix 9.

Certificates Laboratory Analysis Of Air Quality, Noise, Sea Water Quality, Benthos, Sediment

Environmental and Social Consideration Quarterly Progress Report No.20

Period of October – December 2023

REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Laboratory :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA – JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : AMBIENT AIR

DATE OF SAMPLE RECEIVED : December 22, 2023

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : SO₂, CO, NO₂, PM₁₀ and Dust
(PPRI No.22/2021, Appendix VII)

DESCRIPTION OF SAMPLE : Date of sampling : December 18, 2023 to December 19, 2023

SAMPLE IDENTIFICATION : AN1
Coordinate : S 06° 16' 51.43"
: E 107° 51' 49.75"

Parameter	Sampling Period	Unit	Test Results	Requirement	Methods
Sulfur Dioxide (SO ₂)	24 Hours	µg/m ³	< 21	75	SNI 7119.7-2017
Nitrogen Dioxide (NO ₂)	24 Hours	µg/m ³	< 4	65	SNI 7119.2 : 2017
Carbon Monoxide (CO)	8 Hours	µg/m ³	286	4000	SNI 7119.10 : 2011
PM ₁₀	24 Hours	µg/m ³	26.4	75	SNI 7119.15 : 2016
TSP (Dust)	24 Hours	µg/m ³	43.4	230	SNI 7119-3 : 2017

Field Data

Temperature : 27 – 34 °C
Humidity : 59 – 89 %
Pressure : 755.8 – 759.0 mmHg
Wind Speed : 0.9 – 4.50 m/s
Wind Direction : West
Weather : Clear

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Sub Dept. Environment Laboratory



Eko Widaryanto

CBT102.4.01660023.01



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MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : AMBIENT AIR

DATE OF SAMPLE RECEIVED : December 22, 2023 to

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : SO₂, CO, NO₂, PM₁₀ and Dust
(PPRI No.22/2021, Appendix VII)

DESCRIPTION OF SAMPLE : Date of sampling : December 21, 2023 to December 22, 2023

SAMPLE IDENTIFICATION : AN2
Coordinate : S 06° 16' 13.01"
E 107° 52' 24.21"

Parameter	Sampling Period	Unit	Test Results	Requirement	Methods
Sulfur Dioxide (SO ₂)	24 Hours	µg/m ³	< 21	75	SNI 7119.7-2017
Nitrogen Dioxide (NO ₂)	24 Hours	µg/m ³	< 4	65	SNI 7119.2 : 2017
Carbon Monoxide (CO)	8 Hours	µg/m ³	< 115	4000	SNI 7119.10 : 2011
PM ₁₀	24 Hours	µg/m ³	24.9	75	SNI 7119.15 : 2016
TSP (Dust)	24 Hours	µg/m ³	36.2	230	SNI 7119-3 : 2017

Field Data

Temperature : 25 – 34 °C
Humidity : 56 – 89 %
Pressure : 756.6 – 759.8 mmHg
Wind Speed : 0.4 – 5.8 m/s
Wind Direction : North
Weather : Clear

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SUCOFINDO

Eko Widaryanto

CBT102.4.01660023.02



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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : AMBIENT AIR

DATE OF SAMPLE RECEIVED : December 22, 2023

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : SO₂, CO, NO₂, PM₁₀ and Dust
(PPRI No.22/2021, Appendix VII)

DESCRIPTION OF SAMPLE : Date of sampling : December 20, 2023 to December 21, 2023

SAMPLE IDENTIFICATION : AN3
Coordinate : S 06° 14' 26.71"
: E 107° 53' 44.91"

Parameter	Sampling Period	Unit	Test Results	Requirement	Methods
Sulfur Dioxide (SO ₂)	24 Hours	µg/m ³	< 21	75	SNI 7119.7-2017
Nitrogen Dioxide (NO ₂)	24 Hours	µg/m ³	< 4	65	SNI 7119.2 : 2017
Carbon Monoxide (CO)	8 Hours	µg/m ³	< 115	4000	SNI 7119.10 : 2011
PM ₁₀	24 Hours	µg/m ³	23.4	75	SNI 7119.15 : 2016
TSP (Dust)	24 Hours	µg/m ³	41.1	230	SNI 7119-3 : 2017

Field Data

Temperature : 24 – 34 °C
Humidity : 58 – 87 %
Pressure : 755.9 – 759.3 mmHg
Wind Speed : 0.4 – 4 m/s
Wind Direction : Northwest
Weather : Clear

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This test result (s) related to the sample (s) submitted only and the report cannot be reproduced in any way, except in full context and with the prior approval in writing from Sucofindo Laboratory

Sub Dept. Environment Laboratory



Eko Widaryanto

CBT102.4.01660023.03





REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Laboratory :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA – JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : AMBIENT AIR

DATE OF SAMPLE RECEIVED : December 22, 2023

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : SO₂, CO, NO₂, PM₁₀ and Dust
(PPRI No.22/2021, Appendix VII)

DESCRIPTION OF SAMPLE : Date of sampling : December 19, 2023 to December 20, 2023

SAMPLE IDENTIFICATION : AN4
Coordinate : S 06° 13' 43.37"
: E 107° 54' 29.53"

Parameter	Sampling Period	Unit	Test Results	Requirement	Methods
Sulfur Dioxide (SO ₂)	24 Hours	µg/m ³	< 21	75	SNI 7119.7-2017
Nitrogen Dioxide (NO ₂)	24 Hours	µg/m ³	< 4	65	SNI 7119.2 : 2017
Carbon Monoxide (CO)	8 Hours	µg/m ³	206	4000	SNI 7119.10 : 2011
PM ₁₀	24 Hours	µg/m ³	18.8	75	SNI 7119.15 : 2016
TSP (Dust)	24 Hours	µg/m ³	33.9	230	SNI 7119-3 : 2017

Field Data

Temperature : 27 – 33 °C
Humidity : 53 – 78 %
Pressure : 756.3 – 759.5 mmHg
Wind Speed : 0.4 – 5.8 m/s
Wind Direction : Northwest
Weather : Clear

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Sub Dept. Environment Laboratory



Eko Widaryanto

CBT102.4.01660023.04



REPORT OF ANALYSIS

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : NOISE

DATE OF SAMPLE RECEIVED : December 22, 2023

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : Noise
(Kep.48 / MENLH / II / 1996)

DESCRIPTION OF SAMPLE : Date of measurement : December 18, 2023 to December 19, 2023

SAMPLE IDENTIFICATION : AN1
Coordinate : S 06° 16' 51.43"
E 107° 51' 49.75"

Time of Sampling	Unit	Test Results
L1 (06.00)	dB(A)	65.4
L2 (07.00)	dB(A)	69.7
L3 (08.00)	dB(A)	68.1
L4 (09.00)	dB(A)	65.5
L5 (10.00)	dB(A)	68.8
L6 (11.00)	dB(A)	66.4
L7 (12.00)	dB(A)	65.7
L8 (13.00)	dB(A)	68.9
L9 (14.00)	dB(A)	65.1
L10 (15.00)	dB(A)	67.2
L11 (16.00)	dB(A)	66.4
L12 (17.00)	dB(A)	70.0

Time of Sampling	Unit	Test Results
L13 (18.00)	dB(A)	66.8
L14 (19.00)	dB(A)	70.4
L15 (20.00)	dB(A)	65.6
L16 (21.00)	dB(A)	68.1
L17 (22.00)	dB(A)	65.6
L18 (23.00)	dB(A)	68.4
L19 (24.00)	dB(A)	65.9
L20 (01.00)	dB(A)	67.9
L21 (02.00)	dB(A)	60.4
L22 (03.00)	dB(A)	65.4
L23 (04.00)	dB(A)	66.9
L24 (05.00)	dB(A)	66.4

Time of Sampling	Unit	Test Results	Requirement	Methods
L Day (06.00 – 21.00)	dB(A)	67.7	-	SNI 8427-2017
L Night (22.00 – 05.00)	dB(A)	66.3	-	SNI 8427-2017
L Day Night	dB(A)	69.3	70	SNI 8427-2017

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Laboratory :

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TYPE OF SAMPLE	:	NOISE
DATE OF SAMPLE RECEIVED	:	December 22, 2023
DATE OF ANALYSIS	:	December 22, 2023 to December 29, 2023
TESTED FOR	:	Noise (Kep.48 / MENLH / II / 1996)
DESCRIPTION OF SAMPLE	:	Date of measurement : December 21, 2023 to December 22, 2023
SAMPLE IDENTIFICATION	:	AN2 Coordinate : S 06° 16' 13.01" E 107° 52' 24.21"

Time of Sampling	Unit	Test Results
L1 (06.00)	dB(A)	50.2
L2 (07.00)	dB(A)	49.6
L3 (08.00)	dB(A)	51.4
L4 (09.00)	dB(A)	50.3
L5 (10.00)	dB(A)	49.7
L6 (11.00)	dB(A)	50.9
L7 (12.00)	dB(A)	49.9
L8 (13.00)	dB(A)	52.8
L9 (14.00)	dB(A)	51.4
L10 (15.00)	dB(A)	53.6
L11 (16.00)	dB(A)	50.9
L12 (17.00)	dB(A)	49.7

Time of Sampling	Unit	Test Results
L13 (18.00)	dB(A)	51.2
L14 (19.00)	dB(A)	49.6
L15 (20.00)	dB(A)	49.5
L16 (21.00)	dB(A)	50.6
L17 (22.00)	dB(A)	48.7
L18 (23.00)	dB(A)	49.1
L19 (24.00)	dB(A)	48.6
L20 (01.00)	dB(A)	49.4
L21 (02.00)	dB(A)	49.5
L22 (03.00)	dB(A)	50.2
L23 (04.00)	dB(A)	48.2
L24 (05.00)	dB(A)	51.6

Time of Sampling	Unit	Test Results	Requirement	Methods
L Day (06.00 – 21.00)	dB(A)	50.9	-	SNI 8427-2017
L Night (22.00 – 05.00)	dB(A)	49.5	-	SNI 8427-2017
L Day Night	dB(A)	52.5	55	SNI 8427-2017

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Laboratory :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10 – 11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : NOISE

DATE OF SAMPLE RECEIVED : December 22, 2023

DATE OF ANALYSIS : December 22, 2023 to December 29, 2023

TESTED FOR : Noise
(Kep.48 / MENLH / II / 1996)

DESCRIPTION OF SAMPLE : Date of measurement :

SAMPLE IDENTIFICATION : AN3
Coordinate : S 06° 14' 26.71"
E 107° 53' 44.91"

Time of Sampling	Unit	Test Results
L1 (06.00)	dB(A)	49.5
L2 (07.00)	dB(A)	50.6
L3 (08.00)	dB(A)	49.7
L4 (09.00)	dB(A)	47.8
L5 (10.00)	dB(A)	51.4
L6 (11.00)	dB(A)	52.3
L7 (12.00)	dB(A)	52.1
L8 (13.00)	dB(A)	51.6
L9 (14.00)	dB(A)	50.8
L10 (15.00)	dB(A)	50.5
L11 (16.00)	dB(A)	51.3
L12 (17.00)	dB(A)	50.2

Time of Sampling	Unit	Test Results
L13 (18.00)	dB(A)	49.6
L14 (19.00)	dB(A)	50.1
L15 (20.00)	dB(A)	49.8
L16 (21.00)	dB(A)	49.7
L17 (22.00)	dB(A)	50.1
L18 (23.00)	dB(A)	50.8
L19 (24.00)	dB(A)	49.9
L20 (01.00)	dB(A)	48.9
L21 (02.00)	dB(A)	49.2
L22 (03.00)	dB(A)	50.6
L23 (04.00)	dB(A)	49.8
L24 (05.00)	dB(A)	51.6

Time of Sampling	Unit	Test Results	Requirement	Methods
L Day (06.00 – 21.00)	dB(A)	50.6	-	SNI 8427-2017
L Night (22.00 – 05.00)	dB(A)	50.2	-	SNI 8427-2017
L Day Night	dB(A)	52.7	70	SNI 8427-2017

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Eko Widaryanto

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Laboratory :

CLIENT	:	PENTA OCEAN – TOYO – RINKAI – PP – WIKA – JAKON CONSORTIUM MID Plaza 2 Lt. 24 JI. Jend. Sudirman Kav. 10 – 11 Karet Tengsin, Tanah Abang Jakarta Pusat – DKI Jakarta
TYPE OF SAMPLE	:	NOISE
DATE OF SAMPLE RECEIVED	:	December 22, 2023 to
DATE OF ANALYSIS	:	December 22, 2023 to December 29, 2023
TESTED FOR	:	Noise (Kep.48 / MENLH / II / 1996)
DESCRIPTION OF SAMPLE	:	Date of measurement : December 19, 2023 to December 20, 2023
SAMPLE IDENTIFICATION	:	AN4 Coordinate : S 06° 13' 43.37" E 107° 54' 29.53"

Time of Sampling	Unit	Test Results
L1 (06.00)	dB(A)	55.6
L2 (07.00)	dB(A)	56.1
L3 (08.00)	dB(A)	55.1
L4 (09.00)	dB(A)	55.6
L5 (10.00)	dB(A)	55.2
L6 (11.00)	dB(A)	56.2
L7 (12.00)	dB(A)	55.9
L8 (13.00)	dB(A)	56.1
L9 (14.00)	dB(A)	55.8
L10 (15.00)	dB(A)	54.9
L11 (16.00)	dB(A)	56.1
L12 (17.00)	dB(A)	55.4

Time of Sampling	Unit	Test Results
L13 (18.00)	dB(A)	50.2
L14 (19.00)	dB(A)	51.3
L15 (20.00)	dB(A)	50.6
L16 (21.00)	dB(A)	51.2
L17 (22.00)	dB(A)	50.6
L18 (23.00)	dB(A)	50.8
L19 (24.00)	dB(A)	50.1
L20 (01.00)	dB(A)	51.4
L21 (02.00)	dB(A)	50.9
L22 (03.00)	dB(A)	50.8
L23 (04.00)	dB(A)	51.2
L24 (05.00)	dB(A)	51.6

Time of Sampling	Unit	Test Results	Requirement	Methods
L Day (06.00 – 21.00)	dB(A)	54.9	-	SNI 8427-2017
L Night (22.00 – 05.00)	dB(A)	50.9	-	SNI 8427-2017
L Day Night	dB(A)	55.3	70	SNI 8427-2017

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Sub Dept. Environment Laboratory




Eko Widaryanto

CBT102.4.01660023.08



{Nomor Sertifikat}
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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W1 (Surface)
Date of Sampling : December 13, 2023
Time of Sampling : 09.48 WIB
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.30	4500 H ⁺ -B
Temperature on site	°C	31.1	2550 B
Dissolved Oxygen on site	mg/L	5.16	4500 O-G
Turbidity on site	NTU	2.57	2130 B
Salinity on site	mg/L	28.7	2520 B
Total Suspended Solid	mg/L	12	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

< = Less than the detection limit indicated

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SBU Laboratorium

CBT102.2.01663923.01

Tony Supardi

CBT202200043206

{Nomor Sertifikat}
Date: January 24, 2024

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W2 (Surface)
Date of Sampling : December 13, 2023
Time of Sampling : 10.24 WIB
Coordinate : S 06° 12' 56.57" ; E 107° 53' 59.09"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.23	4500 H ⁺ -B
Temperature on site	°C	31.5	2550 B
Dissolved Oxygen on site	mg/L	5.59	4500 O-G
Turbidity on site	NTU	9.78	2130 B
Salinity on site	mg/L	28.4	2520 B
Total Suspended Solid	mg/L	7	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

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SBU Laboratorium

CBT102.2.01663923.02

Tony Supardi

CBT202200043206

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W3 (Surface)
Date of Sampling : December 13, 2023
Time of Sampling : 07.59 WIB
Coordinate : S 06° 13' 40.82" ; E 107° 55' 59.96"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.33	4500 H ⁺ -B
Temperature on site	°C	30.1	2550 B
Dissolved Oxygen on site	mg/L	5.89	4500 O-G
Turbidity on site	NTU	8.39	2130 B
Salinity on site	mg/L	28.6	2520 B
Total Suspended Solid	mg/L	7	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

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Tony Supardi

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REPORT OF ANALYSIS

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W4 (Surface)
Date of Sampling : December 13, 2023
Time of Sampling : 09.15 WIB
Coordinate : S 06° 11' 38.29" ; E 107° 54' 50.64"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.24	4500 H ⁺ -B
Temperature on site	°C	30.8	2550 B
Dissolved Oxygen on site	mg/L	5.47	4500 O-G
Turbidity on site	NTU	5.79	2130 B
Salinity on site	mg/L	28.9	2520 B
Total Suspended Solid	mg/L	4	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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Tony Supardi

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W5 (Surface)
Date of Sampling : December 13, 2023
Time of Sampling : 08.41 WIB
Coordinate : S 06° 12' 23.84" ; E 107° 56' 29.07"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.38	4500 H ⁺ -B
Temperature on site	°C	30.6	2550 B
Dissolved Oxygen on site	mg/L	7.44	4500 O-G
Turbidity on site	NTU	3.86	2130 B
Salinity on site	mg/L	28.6	2520 B
Total Suspended Solid	mg/L	6	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

< = Less than the detection limit indicated

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CBT102.2.01663923.05

Tony Supardi

CBT202200043206

{Nomor Sertifikat}
Date: January 24, 2024

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W6 (Surface)
Date of Sampling : December 14, 2023
Time of Sampling : 07.16 WIB
Coordinate : S 06° 13' 23.15" ; E 107° 57' 24.07"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods *) Part Number
pH on site	-	7.28	4500 H ⁺ -B
Temperature on site	°C	30.1	2550 B
Dissolved Oxygen on site	mg/L	5.18	4500 O-G
Turbidity on site	NTU	0.52	2130 B
Salinity on site	mg/L	28.8	2520 B
Total Suspended Solid	mg/L	1	2540 D

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

< = Less than the detection limit indicated

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SBU Laboratorium

CBT102.2.01663923.06

Tony Supardi

CBT202200043206

{Nomor Sertifikat}
Date: January 24, 2024

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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W7 (Surface)
Date of Sampling : December 14, 2023
Time of Sampling : 08.14 WIB
Coordinate : S 06° 04' 13.06" ; E 107° 57' 0.92"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	7.35	4500 H ⁺ -B
Temperature on site	°C	30.0	2550 B
Dissolved Oxygen on site	mg/L	5.04	4500 O-G
Turbidity on site	NTU	0.25	2130 B
Salinity on site	mg/L	28.1	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

< = Less than the detection limit indicated

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CBT102.2.01663923.07

Tony Supardi

CBT202200043206

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W8 (Surface)
Date of Sampling : December 14, 2023
Time of Sampling : 09.00 WIB
Coordinate : S 06° 05' 21.05" ; E 107° 55' 23.00"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.31	4500 H ⁺ -B
Temperature on site	°C	30.0	2550 B
Dissolved Oxygen on site	mg/L	5.65	4500 O-G
Turbidity on site	NTU	1.73	2130 B
Salinity on site	mg/L	28.8	2520 B
Total Suspended Solid	mg/L	2	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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CBT102.2.01663923.08

Tony Supardi

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REPORT OF ANALYSIS

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W9 (Surface)
Date of Sampling : December 14, 2023
Time of Sampling : 11.09 WIB
Coordinate : S 06° 07' 05.77" ; E 107° 56' 13.90"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.22	4500 H ⁺ -B
Temperature on site	°C	31.0	2550 B
Dissolved Oxygen on site	mg/L	7.78	4500 O-G
Turbidity on site	NTU	1.17	2130 B
Salinity on site	mg/L	29.0	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W10 (Surface)
Date of Sampling : December 15, 2023
Time of Sampling : 10.30 WIB
Coordinate : S 06° 06' 01.00" ; E 107° 57' 50.57"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.13	4500 H ⁺ -B
Temperature on site	°C	31.2	2550 B
Dissolved Oxygen on site	mg/L	5.89	4500 O-G
Turbidity on site	NTU	2.04	2130 B
Salinity on site	mg/L	28.8	2520 B
Total Suspended Solid	mg/L	2	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W11 (Surface)
Date of Sampling : December 15, 2023
Time of Sampling : 11.10 WIB
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.33	4500 H ⁺ -B
Temperature on site	°C	31.3	2550 B
Dissolved Oxygen on site	mg/L	5.76	4500 O-G
Turbidity on site	NTU	10.03	2130 B
Salinity on site	mg/L	28.4	2520 B
Total Suspended Solid	mg/L	7	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W12 (Surface)
Date of Sampling : December 15, 2023
Time of Sampling : 11.40 WIB
Coordinate : S 06° 14' 46.55" ; E 107° 55' 07.49"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.50	4500 H ⁺ -B
Temperature on site	°C	32.0	2550 B
Dissolved Oxygen on site	mg/L	4.50	4500 O-G
Turbidity on site	NTU	8.63	2130 B
Salinity on site	mg/L	19.4	2520 B
Total Suspended Solid	mg/L	12	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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Tony Supardi

CBT202200043206

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The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W1 (Bottom)
Date of Sampling : December 13, 2023
Time of Sampling : 09.48 WIB
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods *) Part Number
pH on site	-	8.37	4500 H ⁺ -B
Temperature on site	°C	31.1	2550 B
Dissolved Oxygen on site	mg/L	4.68	4500 O-G
Turbidity on site	NTU	3.33	2130 B
Salinity on site	mg/L	28.7	2520 B
Total Suspended Solid	mg/L	11	2540 D

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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CBT202200043206

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Date: January 24, 2024

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W2 (Bottom)
Date of Sampling : December 13, 2023
Time of Sampling : 10.24 WIB
Coordinate : S 06° 12' 56.57" ; E 107° 53' 59.09"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.15	4500 H ⁺ -B
Temperature on site	°C	31.5	2550 B
Dissolved Oxygen on site	mg/L	4.89	4500 O-G
Turbidity on site	NTU	14.32	2130 B
Salinity on site	mg/L	28.5	2520 B
Total Suspended Solid	mg/L	22	2540 D

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CBT102.2.01663923.14

Tony Supardi

CBT202200043206

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W3 (Bottom)
Date of Sampling : December 13, 2023
Time of Sampling : 07.59 WIB
Coordinate : S 06° 13' 40.82" ; E 107° 55' 59.6"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.29	4500 H ⁺ -B
Temperature on site	°C	5.33	2550 B
Dissolved Oxygen on site	mg/L	30.3	4500 O-G
Turbidity on site	NTU	4.59	2130 B
Salinity on site	mg/L	28.6	2520 B
Total Suspended Solid	mg/L	2	2540 D

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CBT102.2.01663923.15

Tony Supardi

CBT202200043206

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W4 (Bottom)
Date of Sampling : December 13, 2023
Time of Sampling : 09.15 WIB
Coordinate : S 06° 11' 38.29" ; E 107° 54' 50.64"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.25	4500 H ⁺ -B
Temperature on site	°C	30.8	2550 B
Dissolved Oxygen on site	mg/L	5.52	4500 O-G
Turbidity on site	NTU	6.61	2130 B
Salinity on site	mg/L	28.7	2520 B
Total Suspended Solid	mg/L	4	2540 D

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W5 (Bottom)
Date of Sampling : December 13, 2023
Time of Sampling : 08.41 WIB
Coordinate : S 06° 12' 23.84" ; E 107° 56' 29.07"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.40	4500 H ⁺ -B
Temperature on site	°C	30.9	2550 B
Dissolved Oxygen on site	mg/L	5.06	4500 O-G
Turbidity on site	NTU	6.77	2130 B
Salinity on site	mg/L	28.6	2520 B
Total Suspended Solid	mg/L	4	2540 D

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Tony Supardi

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W6 (Bottom)
Date of Sampling : December 14, 2023
Time of Sampling : 07.16 WIB
Coordinate : S 06° 13' 23.15" ; E 107° 57' 24.07"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.01	4500 H ⁺ -B
Temperature on site	°C	28.6	2550 B
Dissolved Oxygen on site	mg/L	5.85	4500 O-G
Turbidity on site	NTU	5.06	2130 B
Salinity on site	mg/L	28.9	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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Tony Supardi

CBT202200043206

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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W7 (Bottom)
Date of Sampling : December 14, 2023
Time of Sampling : 08.14 WIB
Coordinate : S 06° 04' 13.06" ; E 107° 57' 0.92"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.30	4500 H ⁺ -B
Temperature on site	°C	30.0	2550 B
Dissolved Oxygen on site	mg/L	5.90	4500 O-G
Turbidity on site	NTU	6.88	2130 B
Salinity on site	mg/L	28.9	2520 B
Total Suspended Solid	mg/L	0	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

< = Less than the detection limit indicated

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SBU Laboratorium

CBT102.2.01663923.19

Tony Supardi

CBT202200043206

{Nomor Sertifikat}
Date: January 24, 2024

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN – TOYO – RINKAI – PP – WIKA - JAKON
CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W8 (Bottom)
Date of Sampling : December 14, 2023
Time of Sampling : 09.00 WIB
Coordinate : S 06° 05' 21.05" ; E 107° 55' 23.00"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.40	4500 H ⁺ -B
Temperature on site	°C	30.2	2550 B
Dissolved Oxygen on site	mg/L	5.66	4500 O-G
Turbidity on site	NTU	2.10	2130 B
Salinity on site	mg/L	28.9	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

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CBT102.2.01663923.20

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W9 (Bottom)
Date of Sampling : December 14, 2023
Time of Sampling : 11.09 WIB
Coordinate : S 06° 07' 05.77" ; E 107° 56' 13.90"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.15	4500 H ⁺ -B
Temperature on site	°C	30.5	2550 B
Dissolved Oxygen on site	mg/L	5.54	4500 O-G
Turbidity on site	NTU	1.50	2130 B
Salinity on site	mg/L	29.0	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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CBT102.2.01663923.21

Tony Supardi

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REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

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CONSORTIUM
MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W10 (Bottom)
Date of Sampling : December 15, 2023
Time of Sampling : 10.30 WIB
Coordinate : S 06° 06' 01.00" ; E 107° 57' 50.57"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.05	4500 H ⁺ -B
Temperature on site	°C	31.0	2550 B
Dissolved Oxygen on site	mg/L	5.19	4500 O-G
Turbidity on site	NTU	1.85	2130 B
Salinity on site	mg/L	28.9	2520 B
Total Suspended Solid	mg/L	1	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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Tony Supardi

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REPORT OF ANALYSIS

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MID Plaza 2 Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W11 (Bottom)
Date of Sampling : December 15, 2023
Time of Sampling : 11.10 WIB
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	8.23	4500 H ⁺ -B
Temperature on site	°C	31.5	2550 B
Dissolved Oxygen on site	mg/L	6.74	4500 O-G
Turbidity on site	NTU	5.96	2130 B
Salinity on site	mg/L	28.1	2520 B
Total Suspended Solid	mg/L	9	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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REPORT OF ANALYSIS

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Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical and Chemical analysis

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : W12 (Bottom)
Date of Sampling : December 15, 2023
Time of Sampling : 11.44 WIB
Coordinate : S 06° 14' 46.55" ; E 107° 55' 07.49"

YOUR REFERENCE : JKT.IWO.23.13336-13338

Parameter	Unit	Test Results	Methods •) Part Number
pH on site	-	7.78	4500 H ⁺ -B
Temperature on site	°C	31.5	2550 B
Dissolved Oxygen on site	mg/L	5.87	4500 O-G
Turbidity on site	NTU	7.02	2130 B
Salinity on site	mg/L	27.6	2520 B
Total Suspended Solid	mg/L	10	2540 D

•) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

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CBT102.2.01663923.24

Tony Supardi

CBT202200043206

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REPORT OF ANALYSIS

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Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEA WATER

DATE OF ORDER : December 13, 2023

DATE OF ANALYSIS : December 13, 2023 to January 24, 2024

TESTED FOR : Physical, Chemical and Microbiological

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : See The Attachment

YOUR REFERENCE : JKT.IWO.23.13336-13338

The attachment available is an integral part of this report of analysis

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Tony Supardi

CBT202200043206

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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W1 Surface
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"
Time of Sampling : 09.48 WIB
Date of Sampling : December 13, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	2	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	< 0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0009	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

{Nomor Sertifikat}
Date: January 24, 2024

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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W2 Surface
Coordinate : S 06° 12' 56.57" ; E 107° 53' 59.09"
Time of Sampling : 10.24 WIB
Date of Sampling : December 13, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	1	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.02	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0006	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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Date: January 24, 2024

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REPORT OF ANALYSIS

Sample Identification : W3 Surface
Coordinate : S 06° 13' 40.82" ; E 107° 55' 59.96"
Time of Sampling : 07.59 WIB
Date of Sampling : December 13, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	2	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.11	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0006	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.04	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W4 Surface
Coordinate : S 06° 11' 38.29" ; E 107° 54' 50.64"
Time of Sampling : 09.15 WIB
Date of Sampling : December 13, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	2	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.02	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0006	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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REPORT OF ANALYSIS

Sample Identification : W5 Surface
Coordinate : S 06° 12' 23.84" ; E 107° 56' 29.07"
Time of Sampling : 08.41 WIB
Date of Sampling : December 13, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	3	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	< 0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0003	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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REPORT OF ANALYSIS

Sample Identification : W6 Surface
Coordinate : S 06° 13' 23.15" ; E 107° 57' 24.07"
Time of Sampling : 07.16 WIB
Date of Sampling : December 14, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	3	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.16	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0003	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.07	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W7 Surface
Coordinate : S 06° 04' 13.06" ; E 107° 57' 0.92"
Time of Sampling : 08.14 WIB
Date of Sampling : December 14, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	8	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0005	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W8 Surface
Coordinate : S 06° 05' 21.05" ; E 107° 55' 23.00"
Time of Sampling : 09.00 WIB
Date of Sampling : December 14, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	8	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0006	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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Date: January 24, 2024

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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W9 Surface
Coordinate : S 06° 07' 05.77" ; E 107° 56' 13.90"
Time of Sampling : 11.09 WIB
Date of Sampling : December 14, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	8	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	< 0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0009	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

*) Exclude the scope of accreditation KAN

**) Based on the MPN table

< = Less than the detection limit indicated

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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W10 Surface
Coordinate : S 06° 06' 01.00" ; E 107° 57' 50.57"
Time of Sampling : 10.30 WIB
Date of Sampling : December 15, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	12	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	< 0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0007	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

{Nomor Sertifikat}
Date: January 24, 2024

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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W11 Surface
Coordinate : S 06° 14' 07.61" ; E 107° 54' 10.67"
Time of Sampling : 11.10 WIB
Date of Sampling : December 15, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	1	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.08	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0007	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : W12 Surface
Coordinate : S 06° 14' 46.55" ; E 107° 55' 07.49"
Time of Sampling : 11.40 WIB
Date of Sampling : December 15, 2023
Date of Analysis : December 13, 2023 to January 24, 2024

Parameter	Unit	Test Results	Threshold Limit Value	Methods *) Part Number
<i>Physical :</i>				
Brightness on site	Meter	1	> 3	Visual
Odour	-	Natural	Natural	PO/LK/157 (Organoleptic)
<i>Chemical :</i>				
Ammonia Total (as N)	mg/L	0.01	0.3	4500 NH ₃ -F
Phosphate as P *	mg/L	< 0.01	0.015	4500 P-D
Sulfide as H ₂ S	mg/L	< 0.001	0.01	SNI – 6964.4 : 2003
Polyaromatic Hydrocarbon (PAH)	mg/L	< 0.001	0.003	US EPA SW 846-8100/8270 C
Phenol Compound	mg/L	0.0007	0.002	5530 C
Polychlorinated Biphenyl (PCB)	µg/L	< 0.002	0.01	US EPA SW 846-8082 C
Surfactant Anionic as MBAS	mg/L	< 0.02	1	5540 C
Oil & Grease	mg/L	< 0.3	1	5520 C
Tributyl Tin (TBT) *	µg/L	< 0.008	0.01	6710 B
<i>Heavy Metals dissolved:</i>				
Mercury	mg/L	< 0.0008	0.001	3112 B
Cadmium	mg/L	< 0.0008	0.001	3113 B
Copper	mg/L	< 0.006	0.008	3120 B
Lead	mg/L	< 0.003	0.008	3113 B
Zinc	mg/L	0.01	0.05	3120 B
<i>Microbiology :</i>				
Total Coliform	MPN/100 mL	< 1.8 **	1000	9221 B

*) Standard Methods, 23rd Edition 2017, APHA-AWWA-WEF

**) Exclude the scope of accreditation KAN

***) Based on the MPN table

< = Less than the detection limit indicated

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

The following sample (s) was submitted and identified by Sucofindo Jakarta Branch Office :

CLIENT : SUCOFINDO CABANG JAKARTA
Jl. Cumi No. 33-35, RT. 004 / RW. 008, Tj. Priok
Jakarta Utara 14310 – DKI Jakarta

TYPE OF SAMPLE : SEDIMENT

DATE OF ORDER : December 14, 2023

DATE OF ANALYSIS : December 14 to January 23, 2024

TESTED FOR : Benthos

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory
Packing : Unsealed glass bottle

YOUR REFERENCE : JKT.IWO.23.13336-13338

The attachment available is an integral part of this report of analysis

This Certificate/report is issued under our General Terms and Conditions, copy of which is available upon request or may be accessed at www.sucofindo.co.id

This test result (s) related to the sample (s) submitted only and the report
cannot be reproduced in any way, except in full context and with the prior
approval in writing from Sucofindo Laboratory

Sub Dept. Environment Laboratory

CBT102.2.01663923.02

Dewi Ria Agustin

CBT202200043206

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – SCI JKT 1
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
GASTROPODA		
<i>Calliostoma</i> sp.	25	
<i>Eglisia</i> sp.	1675	
<i>Natica</i> sp.	25	
<i>Turricula</i> sp.	25	
BIVALVIA		SNI 03-3401-1994
<i>Corbicula</i> sp.	175	
<i>Corbula</i> sp.	25	
Taxa (S)	6	
Abundance (Ind/m²)	1950	
Diversity Index (H')	0.82	
Equitability Index (E)	0.32	
Dominance Index (D)	0.75	

*) Benthos Calculation using Log₂

Sample Identification : Sediment – SCI JKT 2
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
GASTROPODA		
<i>Calliostoma</i> sp.	25	
<i>Eglisia</i> sp.	600	
<i>Turricula</i> sp.	25	
BIVALVIA		SNI 03-3401-1994
<i>Corbula</i> sp.	125	
Taxa (S)	4	
Abundance (Ind/m²)	775	
Diversity Index (H')	1.03	
Equitability Index (E)	0.52	
Dominance Index (D)	0.63	

*) Benthos Calculation using Log₂

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – SCI JKT 3
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		SNI 03-3401-1994
GASTROPODA		
<i>Eglisia</i> sp.	625	
BIVALVIA		
<i>Corbula</i> sp.	50	
Taxa (S)	2	
Abundance (Ind/m²)	675	
Diversity Index (H')	0.38	
Equitability Index (E)	0.38	
Dominance Index (D)	0.86	

*) Benthos Calculation using Log₂

Sample Identification : Sediment – SCI JKT 4
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		SNI 03-3401-1994
GASTROPODA		
<i>Cerithium</i> sp.	2700	
<i>Eglisia</i> sp.	25	
BIVALVIA		
<i>Siliqua</i> sp.	50	
Taxa (S)	3	
Abundance (Ind/m²)	2775	
Diversity Index (H')	0.20	
Equitability Index (E)	0.13	
Dominance Index (D)	0.95	

*) Benthos Calculation using Log₂

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
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Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – SCI JKT 5
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
GASTROPODA		
<i>Cerithium</i> sp.	300	
BIVALVIA		
<i>Siliqua</i> sp.	100	
CEPHALORHYNCHA		
<i>Priapulus</i> sp.	75	SNI 03-3401-1994
POLYCHAETA		
Taxa (S)	4	
Abundance (Ind/m²)	525	
Diversity Index (H')	1.64	
Equitability Index (E)	0.82	
Dominance Index (D)	0.39	

*) Benthos Calculation using Log₂

Sample Identification : Sediment – SCI JKT 6
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
GASTROPODA		
<i>Aliculastrum</i> sp.	25	
<i>Eglisia</i> sp.	25	
<i>Oliva</i> sp.	25	
Taxa (S)	3	
Abundance (Ind/m²)	75	
Diversity Index (H')	1.58	
Equitability Index (E)	1.00	
Dominance Index (D)	0.33	

*) Benthos Calculation using Log₂

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – SCI JKT 7
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
GASTROPODA		
<i>Aliculastrum</i> sp.	25	
OLIGOCHAETA	25	
Taxa (S)	2	SNI 03-3401-1994
Abundance (Ind/m²)	50	
Diversity Index (H')	1.00	
Equitability Index (E)	1.00	
Dominance Index (D)	0.50	

*) Benthos Calculation using Log₂

Sample Identification : Sediment – SCI JKT 8
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
CEPHALORHYNCHA		
<i>Priapulus</i> sp.	50	
POLYCHAETA	25	
Taxa (S)	2	SNI 03-3401-1994
Abundance (Ind/m²)	75	
Diversity Index (H')	0.92	
Equitability Index (E)	0.92	
Dominance Index (D)	0.56	

*) Benthos Calculation using Log₂

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
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Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – SCI JKT 9
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
BIVALVIA		
<i>Corbicula</i> sp.	25	
Taxa (S)	1	SNI 03-3401-1994
Abundance (Ind/m²)	25	
Diversity Index (H')	0.00	
Equitability Index (E)	0.00	
Dominance Index (D)	1.00	

*) Benthos Calculation using Log₂

Sample Identification : Sediment – SCI JKT 10
Date of Analysis : December 14 to January 23, 2024

Organisme	Test Results	Methods
MACROBENTHOS		
CEPHALORHYNCHA		
<i>Priapulus</i> sp.	25	
OLIGOCHAETA	100	
Taxa (S)	2	SNI 03-3401-1994
Abundance (Ind/m²)	125	
Diversity Index (H')	0.72	
Equitability Index (E)	0.72	
Dominance Index (D)	0.68	

*) Benthos Calculation using Log₂

Date: January 30, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/88321166
Email: surahman@sucofindo.co.id

REPORT OF ANALYSIS

The sample was submitted by Sucofindo Jakarta with the following identification :

CLIENT : PENTA OCEAN-TOA-RINKAI-PP-WIKA CONSORTIUM.
ADDRESS : MID Plaza 2 Lt. 24.
Jl. Jend. Sudirman Kav. 10-11 Karet Tengsin, Tanah Abang.
JAKARTA PUSAT.
TYPE OF SAMPLE : SEDIMENT.
DATE OF RECEIVED : 10/01/2024.
TEST REQUIRED : Loss on Ignition (LOI).
DESCRIPTION OF SAMPLE : Form : Sediment.
Packing : Plastic bag.
SAMPLE IDENTIFICATION : See at The Result.
DATE OF ANALYSIS : 10/01/2024 to 30/01/2024.
YOUR REFERENCE : IWO No. : JKT. IWO. 23. 13792 ; JKT. IWO. 23. 13793.

Result:

Parameter	Unit	Results					Method
		S4	S5	S6	S7	S8	
Loss on Ignition (LOI)	%	11.61	11.98	12.10	8.02	9.31	Gravimetric
Particle Size Distribution:							
Gravel	%	1.22	0.00	0.00	0.00	0.00	ASTM D422-63
Sand	%	53.66	49.35	48.59	0.40	3.63	
Material finer than no. 200 sieve	%	45.12	50.65	51.41	99.60	96.37	
Silt	%	31.71	38.09	38.68	52.66	38.34	
Clay	%	13.41	1.56	12.73	46.94	58.03	
Density	g/ml	2.584	2.673	2.655	2.491	2.458	ASTM D854-14

Parameter	Unit	Results					Method
		S9	S10	S11	S12	S13	
Loss on Ignition (LOI)	%	11.28	11.01	10.26	8.54	4.16	Gravimetric
Particle Size Distribution:							
Gravel	%	0.00	0.08	0.00	0.00	0.03	ASTM D422-63
Sand	%	0.39	1.25	0.40	0.10	5.37	
Material finer than no. 200 sieve	%	99.61	98.67	99.60	99.90	94.60	
Silt	%	54.89	49.47	55.23	41.02	62.81	
Clay	%	44.71	49.20	44.37	58.88	31.79	
Density	g/ml	2.452	2.403	2.358	2.365	2.548	ASTM D854-14

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SBU Mineral

1106.50.000050

Harmen Mardona

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

The following sample (s) was drawn and identified by Sucofindo Jakarta Branch Office :

CLIENT : PENTA OCEAN-TOYO-RINKAI-PP-WIKA – JAKON
CONSORTIUM
MID Plaza 2, Lt. 24
Jl. Jend. Sudirman Kav. 10-11
Karet Tengsin, Tanah Abang
Jakarta Pusat – DKI Jakarta

TYPE OF SAMPLE : SEDIMENT

DATE OF ORDER : December 27, 2023

DATE OF ANALYSIS : December 27, 2023 to January 24, 2024

TESTED FOR : Total Concentration

DESCRIPTION OF SAMPLE : Using sample container tool kit provided by Sucofindo Laboratory

SAMPLE IDENTIFICATION : See The Attachment

YOUR REFERENCE : JKT.IWO.23.13679

The attachment available is an integral part of this report of analysis

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This test result (s) related to the sample (s) submitted only and the report
cannot be reproduced in any way, except in full context and with the prior
approval in writing from Sucofindo Laboratory

Sub Dept. Environment Laboratory

CBT102.2.01721923

Syaafri Zulkifli

CBT202300016174

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – Jakarta Branch 1 – S4
Date of Sampling : December 13, 2023
Time of Sampling : 09.32 WIB
Coordinate : S 06° 05' 25.25"
E 107° 56' 9.81"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.66	ASTM D854
Volatile Solid *	% w/w	6.15	EN 13039
Ash Content *	% w/w	52.8	EN 13039
Total Organic Carbon *	% w/w	0.65	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

Sample Identification : Sediment – Jakarta Branch 2 – S5
Date of Sampling : December 13, 2023
Time of Sampling : 09.50 WIB
Coordinate : S 06° 05' 36.02"
E 107° 56' 39.24"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.63	ASTM D854
Volatile Solid *	% w/w	6.01	EN 13039
Ash Content *	% w/w	46.5	EN 13039
Total Organic Carbon *	% w/w	0.75	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – Jakarta Branch 3 – S6
Date of Sampling : December 13, 2023
Time of Sampling : 10.10 WIB
Coordinate : S 06° 05' 49.26"
E 107° 57' 8.52"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.56	ASTM D854
Volatile Solid *	% w/w	5.69	EN 13039
Ash Content *	% w/w	48.3	EN 13039
Total Organic Carbon *	% w/w	0.71	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

Sample Identification : Sediment – Jakarta Branch 4 – S7
Date of Sampling : December 14, 2023
Time of Sampling : 10.27 WIB
Coordinate : S 06° 12' 56.57"
E 107° 53' 59.09"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.61	ASTM D854
Volatile Solid *	% w/w	5.35	EN 13039
Ash Content *	% w/w	35.2	EN 13039
Total Organic Carbon *	% w/w	1.31	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – Jakarta Branch 5 – S8
Date of Sampling : December 14, 2023
Time of Sampling : 11.10 WIB
Coordinate : S 06° 14' 7.61"
E 107° 54' 10.67"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.71	ASTM D854
Volatile Solid *	% w/w	5.71	EN 13039
Ash Content *	% w/w	39.7	EN 13039
Total Organic Carbon *	% w/w	1.05	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

Sample Identification : Sediment – Jakarta Branch 6 – S9
Date of Sampling : December 14, 2023
Time of Sampling : 07.59 WIB
Coordinate : S 06° 13' 40.02"
E 107° 55' 59.96"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.54	ASTM D854
Volatile Solid *	% w/w	6.95	EN 13039
Ash Content *	% w/w	37.6	EN 13039
Total Organic Carbon *	% w/w	1.36	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – Jakarta Branch 7 – S10
Date of Sampling : December 13, 2023
Time of Sampling : 07.16 WIB
Coordinate : S 06° 13' 23.15"
E 107° 57' 24.07"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.56	ASTM D854
Volatile Solid *	% w/w	5.74	EN 13039
Ash Content *	% w/w	32.3	EN 13039
Total Organic Carbon *	% w/w	1.31	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

Sample Identification : Sediment – Jakarta Branch 8 – S11
Date of Sampling : December 13, 2023
Time of Sampling : 09.15 WIB
Coordinate : S 06° 11' 38.29"
E 107° 54' 50.64"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.66	ASTM D854
Volatile Solid *	% w/w	5.96	EN 13039
Ash Content *	% w/w	31.5	EN 13039
Total Organic Carbon *	% w/w	1.26	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

{Nomor Sertifikat}
Date: January 24, 2024

Issuing Office:
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia
Phone/Fax: +62 21 88321176/021 88321166
Email: cs.cbt@sucofindo.co.id

REPORT OF ANALYSIS

Sample Identification : Sediment – Jakarta Branch 9 – S12
Date of Sampling : December 13, 2023
Time of Sampling : 09.48 WIB
Coordinate : S 06° 14' 7.61"
E 107° 54' 10.67"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.70	ASTM D854
Volatile Solid *	% w/w	6.51	EN 13039
Ash Content *	% w/w	42.7	EN 13039
Total Organic Carbon *	% w/w	1.27	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

Sample Identification : Sediment – Jakarta Branch 10 – S13
Date of Sampling : December 13, 2023
Time of Sampling : 11.44 WIB
Coordinate : S 06° 14' 46.55"
E 107° 55' 7.49"
Date of Analysis : December 27, 2023 to January 24, 2024

Parameter	Unit	Test Results	Methods
Appearance *	-	Sludge	Organoleptic
Odor *	-	Odorless	Organoleptic
Colour *	-	Brown	Organoleptic
Specific Gravity *	-	2.70	ASTM D854
Volatile Solid *	% w/w	5.83	EN 13039
Ash Content *	% w/w	47.7	EN 13039
Total Organic Carbon *	% w/w	1.03	GLOSOLAN-SOP-02

*) Exclude the scope accreditation KAN

CERTIFICATE OF ANALYSIS

COA No : 24RB0101.Rev01

Report To:

PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Jl. Jend. Sudirman Kav 10-11, Karet, Tengsin, Tanah Abang, Jakarta Pusat, DKI Jakarta

Attention:

Mr. Rahmadimi Trulyan

Project :

PENTA-TOYO-RINKAI-PP-WIKA-JAKON-CONSORTIUM

PT. WLN Indonesia

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REPORT REMARKS & DESCRIPTION
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

REMARKS

COA of 24RB0101 was changed to 24RB0101.Rev01, in this draft result of Mercury (Hg) sample ID 2308055 was revised.

USEPA	:	United State Environmental Protection Agency
APHA	:	American Published Health Association
mg/kg dry	:	Milligram per kilogram dry
UoM	:	Unit of Measurement
DL	:	Detection Limit
GRL	:	Government Regulation Limit
Rem Q	:	Remarks of KAN Accredited parameters
<	:	Less than Detection Limit indicated
n/a	:	Not available
COC	:	Chains of Custody

DESCRIPTIONS

Blank : Blank or also known as Reagent Blank performed during analysis to determine contribution reagents and preparative analytical steps to error in the measurement. Blank result acceptance are below detection limit stated on the report (APHA,2017).

% Recovery Control Standard : Control standard performed during analysis is a reagent water samples to which a known concentration of the analytes of interest has been added. It is use to evaluate laboratory performance (APHA,2017)

Detection Limit : Smallest amount that can be detected above the noise in a procedure and within stated confidence level. The confidence level are set so that the probabilities of errors are acceptably small (APHA,2017)

Bogor, 03 January 2024
 Reviewed by:



Peni A. Saputri
 Laboratory Manager

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PROJECT INFORMATION

Contract No.	: BH195100	WLN PQ No.	: -
PO ref	: -	WLN COC No.	: P1155-23
WLN Project No.	: P1155-23	WLN WO No.	: -

SAMPLE INFORMATION

Number of sample : 10

No	Customer sample ID	WLN Lab ID	Sample Matrix	Sampling Date	Registration Date
1	S4	2308052	Sediment	-	19-Dec-23
2	S5	2308053	Sediment	-	19-Dec-23
3	S6	2308054	Sediment	-	19-Dec-23
4	S7	2308055	Sediment	-	19-Dec-23
5	S8	2308056	Sediment	-	19-Dec-23
6	S11	2308057	Sediment	-	19-Dec-23
7	S12	2308058	Sediment	-	19-Dec-23
8	S13	2308059	Sediment	-	19-Dec-23
9	S9	2308060	Sediment	-	19-Dec-23
10	S10	2308061	Sediment	-	19-Dec-23

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S4	WLN Lab ID	: 2308052
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	53.2	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	14.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	< 0.02	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	22.3	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	5.6	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	15.2	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.04	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	17.2	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	51	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S5	WLN Lab ID	: 2308053
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	48.4	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	15.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.03	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	23.5	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	5.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	15.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.46	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	18.1	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	53	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S6	WLN Lab ID	: 2308054
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	54.4	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	9.5	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	< 0.02	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	21.6	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	4.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	14.4	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.13	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	15.2	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	52	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S7	WLN Lab ID	: 2308055
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	58.6	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	9.2	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.07	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	13.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	17.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	14.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.14	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	12.6	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	80	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S8	WLN Lab ID	: 2308056
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	62.1	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	12.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.05	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	10.6	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	12.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	13.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.08	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	9.4	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	63	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S11	WLN Lab ID	: 2308057
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	66.5	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	8.4	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.12	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	12.8	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	15.5	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	12.7	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.03	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	11.5	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	70	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S12	WLN Lab ID	: 2308058
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	58	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	8.3	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.18	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	10.7	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	13.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	12.1	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.04	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	9.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	65	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S13	WLN Lab ID	: 2308059
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	38.7	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	14.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.04	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	10.8	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	5.8	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	12.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.03	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	8.3	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	61	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S9	WLN Lab ID	: 2308060
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	66	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	9.4	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.08	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	11.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	11.1	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	12.5	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	0.35	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	9.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	62	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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SEDIMENT ANALYSIS RESULTS
PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

Customer sample ID	: S10	WLN Lab ID	: 2308061
Sample Matrix	: Sediment	Reg. Date	: 19-Dec-23
Sampling By	: Customer	Coordinates	: -
Sampling Date	: -		
Government Regulation Limit (GRL)	: -		

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
Physical Test						
1	Moisture Content	%	68.3	n/a	Gravimetric	
Metals						
2	Arsenic (As)	mg/kg dry	10.0	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
3	Cadmium (Cd)	mg/kg dry	0.15	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
4	Chromium (Cr)	mg/kg dry	12.7	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
5	Copper (Cu)	mg/kg dry	12.2	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
6	Lead (Pb)	mg/kg dry	13.3	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
7	Mercury (Hg)	mg/kg dry	< 0.01	n/a	USEPA 3050 B 1996 dan USEPA 245.1 (2005)	Q
8	Nickel (Ni)	mg/kg dry	9.9	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q
9	Zinc (Zn)	mg/kg dry	63	n/a	USEPA 3050 B 1996 dan APHA 3125 B 2017 (ICP MS)	Q

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 LABORATORY QUALITY CONTROL
 PENTA OCEAN-TOYO-RINKAI-PP-WIKA-JAKON CONSORTIUM

No	Test Description	UoM	DL	Blank	% Recovery Control Standard	Analysis Location
Metals						
1	Arsenic (As)	mg/kg dry	0.1	< 0.1	99%	Bogor
2	Cadmium (Cd)	mg/kg dry	0.02	< 0.02	95%	Bogor
3	Chromium (Cr)	mg/kg dry	0.2	< 0.2	90%	Bogor
4	Copper (Cu)	mg/kg dry	0.2	< 0.2	85%	Bogor
5	Lead (Pb)	mg/kg dry	0.2	< 0.2	85%	Bogor
6	Mercury (Hg)	mg/kg dry	0.01	< 0.01	86%	Bogor
7	Nickel (Ni)	mg/kg dry	0.2	< 0.2	86%	Bogor
8	Zinc (Zn)	mg/kg dry	1	< 1	93%	Bogor