

Papua LNG Project Upstream ESHIA Synthesis Executive Summary

10 September 2026

Papua LNG Projek

Upstream ESHIA Synthesis

Sotpela Toktok bilong ol Boslain

10th Septemba 2026

Kamapim ol gupela samting i stap longpela taim

Ol hevi em i no bilong mipela

Dispela pepa, "*Papua LNG ESHIA Synthesis*", em wanpela Kampani, "*Earth Active Ltd*", i bin mekim, na long hia yumi ken kolim ("EA"), insait long akaun bilong "*TotalEnergies EP PNG Limited*" husat i opereta na mekim dispela wok long Papua LNG Projek long taim dispela pepa i kamaut ("Kastama") na mipela yusim save bilong mipela na lukautim gut long bihainim ol lo bilong dispela wok ol i bin givim long mipela, na mipela bihainim dispela wok wantaim ol risos na woklain mipela i bin agri pinis wantaim dispela Kastoma.

Dispela pepa, "*Earth Active Ltd*" i bin raitim long Tok Inglis. Sapos i gat sampela lain i laik tanim tok i kamap long Tok Pisin, em ol narapela lain i mekim na dispela wok yu ken yusim long halivim long bung toktok na kisim save tasol.

Mipela traim hat long skelim gut ol Tok Inglis na Tok Pisin pepa, tasol, dispela pepa long Tok Inglis tasol em i stap nambawan pepa long bihainim insait long lo, na sapos wanpela samting i no klia, yumi mas bihainim pepa i stap long Tok Inglis tasol.

Dispela pepa i bihainim ol wok skel bilong ol lain o kampani i givimaut dinau na em i skelim gut na bungim ol tingting insait long ol pepa i bin kisim kam long Kastoma na ol narapela lain ("ol Projek Pepa") we ol dispela pepa i toktok long Papua LNG Projek.

Ol skel bilong dispela wok em long kisim, bungim na stretim olgeta projek pepa na raitim we em i isi long ol lain long ritim na kisim save gut. Em i no bin ol wok bilong EA long mekim wok painimaut, o wok stret long ol hap graun bilong projek o skelim ol risk o birua i ken kamap, na bihainim ol wok na pasin long daunim ol risk (dispela ol i kolim mitigesen o "*Mitigation*") na em tasol ol i kisim ol Projek Pepa na bungim ol wantaim long mekim dispela ripot.

Na bilong dispela, ol toktok na infomesen i stap insait long dispela pepa, em i no toktok bilong EA na em i no tingting bilong ol tu. Na sapos EA i no bin toktok olsem, EA ol yet, i no wanpis i bin skelim ol infomesen i stap insait long dispela pepa na em orait olsem ol i ken bilip long ol infomesen i stap.

EA i no mekim wanpela promis (long ol toktok stret na ol tingting tu) olsem dispela ol Projek Pepa i stret olgeta na i no gat sampela liklik rong long ol.

Dispela Pepa i bihainim ol toktok i stap insait long ol Projek Pepa (na dispela i karamapim ol tok envaironmen, lo na polisi) na ol infomesen i bin stap taim ol i raitim dispela pepa.

Ol samting i stap insait long dispela pepa i bihainim ol Projek Pepa tasol EA i bin kisim, na olsem, sapos ol i no kisim olgeta pepa we i gat sampela bikpela toktok insait long en, dispela em i no rong bilong EA.

Na tu, em i no wok bilong EA long painim ol nupela infomesen o toksave i bin kamap bihain long dispela ripot na bungim insait long dispela pepa inap Kastoma i askim ol long mekim.

EA i bin agri stret olsem dispela pepa ol mani lain i ken yusim long saptim ol wok ol i mas mekim long tok klia long yumi long inapim yumi long skelim gut na kisim save gut long hau ol bai peim long dispela projek. Tasol, EA i no ken promis olsem, dispela infomesen i trutru olgeta.

Wok bilong EA em ol savelain long envaironmen tasol na dispela pepa em i no samting bilong lo, fainens o toksave long halvim ol bikpela mani lain long givim dinau. Yu mas ritim olgeta samting i stap insait long dispela pepa i karamapim ol as toktok na ol pinis tok na skelim olgeta wantaim.

Dispela pepa i bihainim ol lo bilong IFC/WBG, "*Equator Principles 4*" na OECD toktok, tasol, EA i no ken givim tok promis olsem olgeta mani lain na ol grup i gat interes bai wanbel wantaim olgeta samting i stap insait long dispela pepa.

Sotpela Toktok bilong ol Boslain

Dispela pepa, "*Papua LNG ESHIA Synthesis*", ol i bin mekim bilong TotalEnergies TEP PNG Limited husat i opereta na mekim ol "*upstream*" na "*midstream*" wok long Papua LNG Projek ("*Papua Liquefied Natural Gas (LNG) Project*") i stap insait long Papua Niugini (PNG). Long mekim tok klia, ol "*upstream*" wok (em minim, painim na kamautim ol gas na ol "*midstream*" wok em minim lukautim na salim ol gas i go long paip na ol "*downstream*" wok em minim ol wok long yusim gas long mekim ol samting.

Dispela pepa bai karamapim ol "*upstream*" na "*midstream*" wok tasol (yumi bai kolim ol Hap bilong "*Upstream*") na long hia yumi bai kolim "Papua LNG Projek" o "Projek" tasol.

Dispela wok bung ol i bin kamapim long kompyuta tasol na ol i bungim olgeta wok skel bilong envaironmen na sosel (E&S) wantaim. Dispela wok i save bungim ol planti pepa bilong Projek i bin kamap inap long dispela "*Upstream Environmental Impact Statement (2019)*", long hia yumi bai kolim EIS (2019), na dispela i karamapim:

- "*Upstream EIS PRL-15 Addendum: Main Report & Appendices (2024)*", long hia yumi bai kolim "*EIS Addendum (2024)*".

- "FEED Changes Environmental Assessment Report (2025)", long hia yumi bai kolim "FEED Changes EAR (2025)"; na
- Ol sampela stadi bilong ol saveman o meri.

Ol luksave bilong ol bikpela samting i kamap na skel bilong ol, i mas sut long mak bilong ol PNG lo na ol gutpela intenesenel mak i karamapim "*International Finance Corporation (IFC) Performance Standards (PS)*", "*Equator Principles (EP)*", na "*OECD Common Approaches*".

Dispela sotpela toktok bilong ol boslain i makim ol nambawan as tok i stap insait long dispela "*ESHIA Synthesis*".

Hap Graun bilong Wok na Sotpela Projek Toktok

Dispela wok skel i pasim tok olsem dispela Projek em i stap insait long wanpela ples bus we ol i mas tingting gut long envaironmen, na ol i mas tingting long ol kain sosel trabel i ken kamap olsem ol kastom lo bilong lukautim graun, na ol gutpela sindaun bilong ol, na ol pis bilong kliawara na solwara, na tu, ol asples lain (ol i kolim (IP) "*Indigenous Peoples*") we laip na kalsa bilong ol i stap wantaim ol insait long ples bilong ol we dispela ples em i Hap Graun bilong Projek (ol i kolim (PAol) "*Project Area of Influence*").

Dispela Projek i karamapim 3-pela ples klia we ol bai drilim hul na ol i stap insait long hap graun we i gat planti gas aninit long en, ol i kolim "*Elk*" na "*Antelope*". Tupela long dispela dril ples (ANT-10 and ELK-10) bai kamatim ol gas i luk olsem wara. Na namba 3 hap (ANT-11) ol bai yusim long sutim ol sampela kain wara na gas i no ken yusim (olsem gas i gat "*acid*" i stap) i go bek insait long graun.

Na dispela ol gas i luk olsem wara bai lusim ELK-10 i go long ANT-10 insait long tupela paipplain i winim 14" long sais o brait bilong ol. Na bihain, em bai lusim ANT-10 na ol bai salim i go insait long tupela paipplain i winim 22" long sais o brait bilong ol. Dispela gas bai raun i go samting olsem 10 na 30km we em bai kamap long wanpela Sentral Prosesin Fesiliti (ol i kolim (CPF) o "*Central Processing Facility*") i stap 120m klostu long wanpela sait bilong Purari Wara.

Long dispela hap graun bilong CPF, ol i mas kliaim na rausim ol bus na stretim graun. Antap long dispela graun ol bai wokim ol kainkain haus olsem ples bilong wokim gas na ples bilong holim ol gas i luk olsem wara (ol i kolim "*condensate*"), ol taua we gas i ken kamaut na em bai paia tu, na pasis bilong sip.

Long CPF tu, ol bai tilimaut ol gas olsem ol gas stret, ol "*condensate*", ol wara stret na ol narapela kain gas i gat "*acid*" i stap. Na ol wara stret wantaim gas i gat "*acid*" i stap ol bai salim i go 30km not insait long paipplain i go long ANT-11 dril ples, we ol bai sutim olgeta i go bek insait long graun.

Tupela narapela paipplain bai salim ol gutpela gas na condensate i go long Orokolo Bay i stap long nambis bilong Galp Provins we ol bai salim i go long ol narapel kantri.

Taim ol paip lain i lusim nambis na go long solwara, tupela paip bai i go narawe na bihainim wainkain rot bilong ol. Ol gas bai i go 260km long saut is na kamap long hap bilong PNG LNG long "*Caution Bay*". Na long hia, ol bai wok long en na kamapim ol LNG gas bilong salim long mani.

Na ol "*condensate*" bai raun insait long paip i go 90km long saut wes i go long wanpela hap we wanpela narapela kampani i gat dispela hap i stap antap long solwara long lukautim ol condensate, ol i kolim "*Floating Storage and Offloading (FSO) unit*".

Ol kain hap i stap long sapotim ol wok bilong PNG LNG em olsem, 43km bilong ol rot bilong ol, ol nupela haus long "*Herd Base*", ol hul bilong digim ston na karanas, ol hul ol i kolim "*borrow pit*" bilong digim graun, wesen, liklik ston na klei bilong pulimapim hul na wokim haus, na ol hul bilong troimwe ol nogut graun, nupela Purari Ples Balus, ol haus na kem bilong ol woklain i ken stap sotpela taim tasol, ples helikopta, ples bilong lukautim ol pipia graun na narapela rabis, na drejing insait long Purari Wara (em wok long rausim ol malumalu graun i stap aninit long wara tru) em long halivim ol sip long raun isi (ol graun ol i rausim em samting olsem 2 milien m³).

Plen bilong laip bilong Projek em i 30 yia, we 5-pela yia em bilong redim ol samting na 25 yia bilong wokim operesen na mekim gas. Bihain long 30 yia mipela bai stretim ol graun gen na kamapim ples we i sef olsem bipo wok i bin stat.

Long taim bilong kamapim ol haus bai i gat planti ka, sip na balus i go kam samting olsem 85,500 raun bilong ol woklain insait long dispela 5-pela yia.

Namba bilong ol woklain bai kamap olsem 6000 (sampela bai stap long graun na sampela long solwara) na long taim bilong operesen, bai i gat 250-300 woklain bai stap.

Ol sampela woklain bai slip long *Herd Base* kem na i gat planti ol haus na kem bilong ol narapela woklain i ken stap sotpela taim tasol.

Em i plen bilong Projek long mekim ol bagarap long graun liklik tasol, na olsem, ol graun mipela i yusim i gat arere long en. Na sapos mipela inap long wokim, mipela bai yusim graun ol sampela i bin yusim na i bin bagarap liklik bipo. Sais bilong Projek graun, long graun na long solwara, em i samting olsem 2453 hekta. Na long dispela, "*EIS Addendum (2024)*" em i tok olsem 190 hekta bai stap long graun we ol sampela i bin yusim bipo, na abrusim ol nupela, gutpela graun.

Na tu, Projek bai yusim samting olsem 1280 hekta long sotpela taim tasol, na bihain, mipela bai stretim gut dispela graun na larim ol diwai na bus long kambek gen. Lukim seksen 3, Tebol 3-3 long lukim ol kain hap wok insait long Projek.

Hap Graun bilong Projek (o (PAoI) "*Project Area of Influence*") i stap insait long Piksa 0-1 aninit.

Sotpela Toktok long ol Bikpela Painimaut

Dispela wok long bungim ol toktok em i luksave long ol sampela E&S risk o sans trabel bai kamap. Na planti long dispela ol risk em ol kamap long sampela hap long taim ol wok long mekim haus. Dispela ol risk i kamap insait long ol bus ples wantaim ol ples lain husat i gat nid long ol graun bilong tumbuna na ol samting i stap long en.

Ol bikpela wari bilong envaironmen em i kam long ol wok long mekim ol haus na rot. Na tu i gat sampela wari long taim bilong ol wok operesen olsem "*greenhouse gases*" (GHG), baiodaivesiti (em ol kainkain laip i stap), wara risos na ol kainkain samting olsem sosel wari na wok bisnis o fainensel wari i bung wantaim ol narapela samting bilong bipo na nau.

Ol sosel wari i kamap em olsem, yusim graun, pasim ol lain long mekim wok, komyuniti helt na sefti (moa yet we i gat planti kar o sip, na ol ples bilong drejing na salim sip i go kam), ol rait bilong ol pleslain, ol nid long toktok wantaim ol (ol i kolim (ICP) "*Informed Consultation and Participation*") na bihainim pasin bilong (FPIC) "*Free, Prior and Informed Consent*". Dispela FPIC i luk olsem:

We sampela wok i ken senisim o bagarapim graun bilong ol komyuniti, yumi i mas i gat rait long givim tok orait o nogat. Tok orait yumi gat rait long givim, na givim pas long wok i stat, na save gut long as bilong en.

FPIC i minim olsem, em wanpela "Tok orait" we yumi bin yusim save bilong yumi long tingting na skelim gut pastaim, na yumi i stap fri long givim dispela tok orait.

Na tu ol sosel wari i karamapim ol wokples pasin na lukautim tingting bilong ol bikpela mani lain na ol lain i gat interes, insait dispela developmen i go longpela taim stret.

Projek i gat wanpela Envaironmen na Sosel Menesmen Sistem (ESMS) na em i givim ol bun bilong mekim wok olsem: luksave long ol samting, sekelim ol samting, na lukautim helt, sefti, sekuriti, E&S risk insait long laip bilong Projek na PAol.

ESMS em i bihainim na strongim ol promis na wok i stap insait long wanpela pepa, ol i kolim "*commitments register*" i stap insait long EIS (2019) na em i bungim wantaim ol nupela promis mipela i putim insait long ol dispela pepa olsem: "*EIS Addendum (2024)*", "*FEED Changes EAR (2025)*", "*Purari River Dredging and Barging Impact Assessment*" (em olsem D&B ESIA (2025)), na "*Hou Creek Aggregate Dredging Environmental Assessment Report, 2025*", (em olsem "*Hou Creek Aggregate Dredging EAR (2025)*"), na olgeta promis bai bihainim ol nupela senis i kamap insait long Projek Plen.

Insait long olgeta hap bilong ol E&S subjek, pasin bilong abrusim na daunim ol risk em stap insait long Projek plen na ol liklik risk i stap bihain long dispela mipela makim na stretim insait long wok bilong menesmen. Sampela wari stap yet we i gat ol samting we sapos yumi bagarapim i no gat we long stretim o we sampela lain i ken kisim bagarap isi, o we wok bilong Projek i ken bagarapim graun wara o pasin bilong ol asples lain.

Long bikpela hap, ol tingting bilong wanem ol bikpela samting bilong E&S bai kamap em stap wantaim dispela taim bilong wokim ol haus na rot, na ol bai kamap long ples stret tasol Projek i gat sampela we long abrusim na daunim ol wari (dispela ol i kolim mitigesen o "*Mitigation*") insait long ESMS.

Long winim dispela wok bilong Projek, mipela i mas wok yet wantaim ol komyuniti (ICP) na bihainim gut ol pasin bilong FPIC, na mekim gupela pasin na lo long yusim graun na risos bilong ol na lukautim baiodaivesiti, na skelim ol dispela wok na mekim senis long wok pasin bilong mipela sapos i gat nid long en insait long taim bilong Projek.

Ol Nambawan Risk na Wari bilong Envaironmen

Nambawan as bilong ol risk bilong envaironmen em stap wantaim ol wok long mekim haus na rot na ol narapela kain biding we dispela wok i kamap insait long ol hap graun i bai isi long kisim bagarap. Dispela envaironmen i gat ol bikpela bus, na ol gupela kliawara na solwara hap. Ol nambawan risk em olsem, bagarapim na brukim graun na haus bilong ol animal na diwai, na putim ol liklik pipia i go insait long wara na bagarapim ol wara risos, mekim ol biknois, kamapim planti pipia nabaut, putim planti sip long wara na kisim ol nupela animal o nogut binatang i kam na bagarapim graun.

Ol mak bilong bagarap long dispela Projek i bai kamap "*Minor to Moderate*" (em olsem i no bikpela wari tumas) sapos mipela bihainim ol pasin long daunim ol risk (mitigesen o "*Mitigation*") na bihainim ol plen bilong FEED, na ol sampela menesmen plen i bin makim na stretim ol liklik wari nabaut.

Sampela ol mak bilong bagarap bai kamap "*Moderate*" (em olsem i no bikpela wari) we i ken kamapim bagarap bilong ol sampela bus na diwai insait long "*Critical Habitat*" bus (dispela em ol kain bus we yumi mas lukatim gut ol baiodaivesiti bilong wanem em ol narakain stret na i no gat dispela kain laip long ol narapela hap). Na tu senis bilong graun stret i ken kamap na ol liklik pipia i ken go insait long kliawara na bagarapim ol wara risos na kamapim bagarap stret long ol solwara na kliawara we mipela i mas wokim haus, biding, drejing na salim sip i go kam.

Insait long Purari Wara sistem, bilong wanem ol sampela drejing na planti sip i go kam, dispela i ken kamapim ol senis aninit long wara na senisim ol wesan i stap, na pulapim wara wantaim ol sampela liklik pipia ston na bagarapim ol laip bilong pis na animal insait long wara, na maski long wok bilong mipela long abrusim dispela ol wari.

Ol bagarap bilong ol animal na ol hap we ol i slip na hait i ken kamap bilong wanem ol biknois i stap o planti strongpela lait bilong masin i kamap. Long abrusim dispela kain bagarap long envaironmen, mipela makim ol rot na hap bilong wok we mipela i ken abrusim ol dispela kain hap graun. Na mipela i gat ol ensinia i save long kontrolim ol pipia na graun i bagarap na stretim long taim bilong wok mipela i mekim.

Tasol, sampela bagarap bai kamap, na long dispela, mipela bai inapim dispela wok we ol dispela bagarap i no bikpela na i stap insait long mak bilong inteneseenal lo.

Long bikpela hap, sapos ol ESMS na ol envaironmen menesmen plen i stap, ol wari bilong envaironmen bai stap long ol sampela liklik hap tasol na mipela bai inap lukautim ples gut na was gut long abrusim sampela bagarap i kamap, na mipela bai bihainim ol lo bilong IFC PS.

Ol Bikpela Samting i ken kamapim Birua na Wokpasin long Abrusim

Ol bikpela birua em i no kamap planti taim. Na sapos sans bilong wanpela bikpela birua i kamap i no bikpela, sapos wanpela i kamap, orait, yumi i gat bikpela wari nau. Bilong wanem, sampela lain i ken dai pinis. Na olsem, yumi mas lukaut gut na abrusim ol bikpela birua.

I gat wanem kain birua? Taim ol i skelim ol birua, ol nambawan kain i kamap em olsem, paia, bikpela pairap, poisin gas, bagarap bilong guria, na disel o bensin i ken kapsait. Na ol wok mipela mekim long daunim ol risk, skel mak bilong birua em i kamap liklik, ol i kolim "*As Low as Reasonably Practicable (ALARP)*".

Ol plen bilong kamapim ol fesiliti i gat tingting long sefti i stap olsem, bai i gat ol hap bilong pasim paia, ol mekim strongpela bilding i ken stap strong na pasim bikpela pairap, ol was gut long ol paipain i stap aninit long graun, ol liklik masin nabaut i ken luksave long ol kainkain birua, i gat ol sistem long ofim ol masin hariap, na i gat ol rot na hap bilong ol woklain long hait o ranawe sapos bikpela birua i kamap.

Ol redi bilong ol long sampela bikpela birua i stap insait long wanpela plen o ERP bilong lukautim ol lain long dispela wari, ol i kolim "*Affiliate Emergency Response Plan*" na nem stret long en em i "*Affiliate ERP, Oil Spill Contingency Plan (OSCP)*" na narapela plen em i "*Blowout Contingency Plan (BOCP)*", we i gat sampela eksesa bilong ol we bai ol i redim ol yet long kainkain birua i kamap. Na tu i gat wanpela komyuniti toktok na wanpela komyuniti ERP na dispela plen bai stap wanpis na tu i ken stap insait long bikpela ERP antap.

Ol narapela kain birua i stap, ol bai i gat ol sefti sistem i stap stret long wokples, na ol bai givim sampela bung toktok (woksop) long daunim risk na tu ol i toksave long ol sapos i gat ol nupela toktok long strongim ol plen.

"*Greenhouse Gases (GHG)*" em olsem Ol sampela gas i stap antap long skai i save pasim hat bilong san

"*Scope 1 na 2 emissions*" (em ol gas i kamaut) ol i putim wantaim dispela "*Climate Change Risk Assessment Synthesis Report, 2025*", ol i kolim "*CCRA Synthesis Report (2025)*". Ol wokples bilong Projek i tok klia long wanem samting em i "*Scope 1 emissions*" tasol "*Scope 2 emissions*" i liklik bilong wanem, mipela kamapim pawa bilong mipela yet.

Ol gas o "*emissions*" i kamaut long ol wok long bildim ol samting em olsem, na as bilong planti long dispela gas em kam long klian bus na katim na kukim ol diwai, na tu long digim na tanim graun (em i aninit long 2% bilong olgeta "*Scope 1 emissions*" insait long taim bilong Projek).

Ol "*emissions*" i kam long operesen stret em kam long ol jenset i mekim pawa, kukim ol gas, na ol kar na sip i go kam. Na long skelim dispela ol traim long sutim ol sampela acid wara i go bek insait long graun (samting olsem 18,000 kt CO_{2e}). Ol emission i kam

long operesen i stap antap long namel long laip bilong Projek na ol bai i go daun bihain taim hamas bilong ol LNG gas i go daun.

Sampela we long daunim dispela wari (mitigesen) em olsem, pasim taim bilong kukim gas, yusim ol gutpela masin na wok sistem, sutim "*acid*" gas i go bek long graun na bihainim ol gutpela kontrol na menesmen plen bilong operesen.

"Climate Change na Climate Risk" (em olsem, senis i kamap long klaimet olsem ren na hat na kol na ol birua dispela bai i ken kamapim)

Ol nambawan klaimet risk o birua i stap yet long Projek em i olsem, haiwara, ol ren wasim maunten na sait bilong ol i pundaun, em i ken hat tumas, na sampela bagarap long nambis. Ol dispela risk em ol bikpela samting bilong wanem Projek i gat planti ol wok long graun olsem rot, paipain na sip i go kam, na dispela wok i ken bagarapim o pasim rot bilong ol manmeri o kago i go kam. Na ples i strongpela long wok wantaim dispela ol birua na karim ol hevi na dispela ol i kolim ("*low vulnerability* na *high adaptive capacity*").

Na bihaintaim, ol senis bilong klaimet bai i ken mekim ol dispela birua i kamap strongpela moa, na kamap sampela moa taim. Na bilong dispela, ol risk bilong haiwara bikpela ren na ples i hat tumas em bai kamap moa, na wari em bai moa yet bihain long 2030.

Pasin bilong daunim ol dispela hevi (mitigesen) em i karamapim, sutim ol "*acid*" gas i go bek insait long graun, bihainim gutpela plen long karim ol hevi bilong klaimet senis, wokim ol gutpela baret nabaut long lusim wara, strongim ol sait bilong maunten, yusim ol sistem long mekim ol masin i kol moa, pasim ol ros i kaikaim ol aian samting, lukautim gut ol masin na skelim gut ol risk i ken kamap.

Dispela senis long pasin bilong ol gavman na kampani we yumi traim long stopim klaimet senis i gat sampela risk i kamap, na bihain long 2030 ol bai kamap bikpela moa. Ol plen bilong ensinia i ken daunim sampela risk, na tu ol operesen kontrol, ol kain kontrak bilong ol kampani na ol nupela teknoloji (olsem holimpas ol CO₂, mekim pawa i kam long "*hydrogen*") i ken halivim long daunim ol risk. Tasol, long strongim yumi longpela taim, yumi bai needing sampela plen long senis na daunim ol dispela risk na kamapim nupela teknoloji gen na senisim pasin bilong yumi.

Nois na Seksek

Ol wok long skelim noise i soim olsem, ol noise i kam long graun na long viles o ples na i no gat planti noise i kam long Projek. Ol mekim sampela piksa long soim we olgeta noise bilong ol operesen bai kamap, na i no planti na em bai stap insait long lo. Tasol, sampela bikpela noise em i ken kam long taim ol i pairapim gas i kamaut long bikpela

taua. Ol sampela nois aninit long wara i kam long ol sip, drejing, na wokim ol post bilong bris i ken winim dispela level we em bai i ken kirapim ol pis na animal bilong wara.

Sapos ol i bihainim Projek plen, ol i kolim, "*Noise & Vibration Management Plan*" na ol narapela we long kontrolim, ol bai inap daunim ol risk.

Ol narapela liklik risk long taim bilong kamapim CPF na ol operesen bilong en, em ol i makim "*Minor to Moderate*" (olsem risk i liklik). Ol tingim em bai i gat sampela "*Moderate*" o liklik nois bai kamap long "*Pokore Hamlet*", long nait long taim bilong pairapim gas i kamaut long bikpela taua, bilong wanem em i klostu long ol Papagraun. Tasol dispela nois bai kamap long wanwan taim tasol na i no planti taim, na ol i ken daunim ol hevi sapos ol i bihainim wanpela taim plen, kontrolim ol masin na salim ol toksave i go long komyuniti.

Ol narapela wok long skelim nois bai kamap long taim bilong mekim wok ensinia. Ol narapela kain wok olsem putim ol paip long hap graun we ol paip plain lusim solwara na kamap long nambis, drejing, na drilim ol hul we dispela hul i no sanap na i go stret daunbilo, dispela hul em i stap kostu long graun antap na slip aninit liklik tasol, na ol i kolim "*Horizontal Directional Drilling (HDD)*" produce. Dispela wok i no mekim bikpela nois na ol i makim olsem "*Negligible o Minor*" na em bai i stap aninit long (≤ 2 dBA).

Bilong wanem taim i sotpela, na long wanem ol hap bilong wok i stap, dispela ol wok insait long wara na solwara em ol liklik tasol, ol i makim olsem "*Minor*". Na olsem, dispela nois i no inap bagarapim ol pis na animal bilong wara. Ol seksek i kamap aninit long wara tu em i samting wankain nois aninit long wara, na em i no bikpela risk na ol seksek bai i kamap long sotpela taim tasol na klostu long ol hap stret bilong wok.

Ol wok mitigesen em karamapim ol plen na kontrol, kontrolim ol wok aua, salim toksave i go long komyuniti, yusim masin long daunim nois, taim ol i wokim ol post bilong bris ol i ken stat long paitim isi isi, skelim gut lukaut bilong ol pis na animal insait long wara, na skelim sapos ol kampani i bihainim ol lo, plen na polisi.

Ol birua bilong seksek i kamap long taim bilong wok bilda, drejing, planim ol paip plain, na long taim ol sip i save go na kam em ol bai stap klostu long hap bilong Projek. Na ol dispela seksek bai ron sotpela taim tasol na i no inap kamap strongpela, na olsem, ol i makim dispela skelim long olgeta samting i stap long nambis i kamap "*Minor to Negligible*".

Long skelim ol seksek wantaim ol stat level i stap nating insait long PAol, em ol daunbilo tru, na i no gat sampela hap we ol seksek i ken bagarapim ol, na dispela ol

seksek i go daunbilo tru sapos em i longwe liklik. Na i gat ol sampela lukaut na waswas i stap, na olsem, i no inap givim hevi long ol komyuniti, haus, o ples tambu.

Ol graun tasol na ol Stadi long graun, ston na gas

Hap graun bilong Projek i karamapim, antap long maunten, ol ples kunai, na ol ples daun long nambis, we ol graun i gat planti "*acid*" na salfa na i no gutpela long karim kaikai.

Ol birua bilong graun stret, em i karamapim, wara i rausim na i bagarapim ol graun, o sait long maunten i save pundaun, tasol dispela ol risk i stap pinis insait long plen bilong mekim ol haus. Hap bilong CPF em i stap strong.

Na taim ol i wokim ol haus, dispela bai bagarapim graun, na apim sans bilong sampela graun i pundaun na dotim graun wantaim "*acid sulphate oxidation*". Mitigesen i karamapim ol rot long oraitim graun na stretim sampela pipia long en, na strongim graun we em i no inap pundaun, lukaut long "*Potential Acid Sulphate Soil (PASS)*" na pasim rot long sampela gas o marasin i ken kapsait long graun.

Ol narakain risk i kamap long graun na ol hap bilong ston na gas i liklik tasol, ol i makim olsem "*Negligible to Minor*". Sampela liklik risk em olsem ol graun long liklik maunten i ken lus, olsem graun i ken pundaun na tu long ol bikpela hul ("*borrow pit*") long Elk-2 na ol rot klostu long en. Planti ol narapela risk long graun em olsem, graun i pundaun long ol wanwan *borrow pit* na ol ples we wesana i ken pundaun, "*PASS oxidation/disturbance*", ol ples long katim na movim graun, na ol kainkain "*HDD Horizontal Directional Drilling*" klostu long nambis. Dispela olgeta risk em i no bikpela na ol i makim "*Negligible*".

Stadi long wara, Stadi long wara insait long graun na ol Wara Risos

Klostu long maus bilong Purari Wara, we ol hap graun i kisim na bungim ol renwara, em i gat planti wara i ron, na dispela wara i no klia tumas. Na i no gat planti ol "*nutrient*" na "*metals*" (em ol kain ain), na em i gat sampela "*sediment*" (em ol liklik ston, wesana na ol sampela ol liklik binatang) wantaim sampela "*acid*" na salfa.

Ol wok bilong Projek bai i ken sensisim dispela wara, na muvim ol "*sediment*", senism wara we skel bilong en i gutpela, kamapim sampela senis bilong drejing, na ol sip i go kam. Na long wokim paip lain i go long hapsait, ol bai haitim paip i stap insait long graun.

Ol graunwara i stap insait long graun, em i no longwe aninit long graun. Ol pleslain i save digim hul bilong wara na kamautim dispela wara long dringim en. Ol skelim dispela graunwara na em i nogat planti marasin o kemikol i stap insait long en. Tasol,

ol sampela wok bipo long skelim ol graunwara i bin soim sampela bintang nogut i stap insait long en. Na dispela ol liklik hevi i no samting bilong Projek.

Ol sampela hul bilong kamautim graunwara i klostu long rot bilong paip (PER), i hat long pulim wara i kam bilong wanem ol bikpela baret bilong paip i bagarapim. Sampela bagarap i kamap long ol hul bilong graunwara long ol viles na tu long hap bilong CPF, na as bilong dispela em kam long sampela kapsait bilong Projek na narapela em kam long ol pipia ansait long graun ol i kolim "*waste leachates*".

Long stretim dispela ol birua, ol mas kontrolim lus graun i pundaun, na bihainim ol rot long oraitim graun na stretim sampela pipia long en, PASS menesmen, salim paip i kalapim wara we i no bagarapim ol samting, pasim hamas wara ol i ken rausim long graun, na abrusim ol gas na marasin kapsait. Ol dispela birua i no bikpela na ol i makim "*Negligible to Minor*".

Ol wok i stap klostu long Purari Wara na "*Hou Creek*" we i save wokim drejing long painim ol liklik ston na we i gat sampela sans long ol gas i ken kapsait, ol i makim liklik risk o "*Moderate*", na dispela i karamapim ol doti bilong wara na ol bikpela senis i kamap long graun tasol Projek i ken kontrolim dispela ol birua.

Sampela bagarap long graun we ol i digim klostu long hap bilong CPF P3 na kamapim sampela TSS, we wara i no klia na sampela "*sediment*" (em ol liklik ston, wesana na ol sampela ol liklik binatang) i kamap tu. Dispela kain bagarap ol i tok em i liklik tasol o "*Moderate*".

Ol Risos na Lukautim ol Pipia

Wanpela bikpela nid bilong Projek em ol "*aggregate*" (em ol liklik ston na wesana long mekim haus na rot). Na Projek i nidim 2.7 MT i kam long ol hul nabaut na long drejing dispela "*Hou Creek*" insait long Purari Wara. Ol nambawan kain bagarap i karamapim, ol bus na plaua na diwai bai lus, haus bilong ol animal na plau bai kisim bagarap, ol klia bilong wara i ken senis na ol planti das, nois, seksek, pipia na ol binatang nogut ken kamap. Dispela i ken putim sampela hevi long ol komyuniti insait long dispela sotpela taim.

Long stretim ol dispela birua, Projek bai mekim olsem; kliaim ol bus isi isi, kontrolim ol lus graun i ken pundaun, abrusim ol gas na marasin i kapsait, skelim gut ol hap we ol plaua na animal i stap, kontrolim ol nogut plaua na binatang, daunim ol das na nois. Sapos ol i mekim ol dispela ol birua bai i no inap kamapim sampela hevi, ol i makim "*Negligible or Minor*" level.

Nambawan wari em long ol bagarap long ol wara i kam long ol gas na marasin i kapsait long taim ol i mekim wok long drejing "*Hou Creek*".

Ol wok long statim Projek na mekim ol operesen bai kamapim planti ol pipia na nogut pipia, na dispela ol i mas lukaut gut na rausim ol dispela pipia. Pasin long kontrolim ol pipia ol i kolim "*waste mitigation hierarchy*" na ol bai mekim pasin we ol bai traim long painim we long abrusim na mekim ol pipia i kamap na sapos ol i no inap abrusim olgeta, ol i mas daunim hamas pipia i kamap. Sapos sampela pipia i stap, ol bai traim long yusim gen.

Ol pipia nogut, ol bai rausim olgeta i go long Port Morseby or arasait long PNG. Mipela bai mekim wanpela bikpela hul bilong planim ol pipia, insait long PRL-15 we dispela wok i bihainim lo bilong Kampani long mekim dispela kain hul, ol i kolim "*Landfill Design and Operation for E&P Sites*" (GS EP ENV 421) (Ref. PG-P15-00-PHSE-000032). Na dispela hul bai holim ol pipia i no gat sampela birua insait long en. Sais bilong hul bai kamap olsem 50,000m³. Long taim bilong mekim dispela hul, mipela bai kisim ol sampela liklik masin i kam bilong kukim stret ol pipia. Dispela ol i kolim "*incinerator*", na em yusim strongpela paia long rausim ol diwai. Na bihain, mipela bai inap putim wanpela masin i bikpela moa long ol dispela liklik masin. Dispela masin bai bihainim ol lo na mak bilong "*IFC Environment, Health and Safety (EHS) standards*".

Na ol pipia i stap bihaintaim mipela bai lukautim aninit long Levell 3 "*environmental permit*" na "*Project Waste Management Plan (2024)*", yumi ken kolim *Waste MP (2024)* na dispela bai halivim long lukautim envaironmen.

Ol Graun na Lukluk bilong en

PRL-15 em i gat planti bus, maunten na ples we haiwara i ken kamap. I no gat planti ol pleslain, na i no gat planti developmen, olsem tu, i no gat ol planti hap we lukluk i go bilong ol i klia. Wanpela hap klostu we em i isi long luksave long en, em i "*Pokore Hamlet*", i kamap long 2019 na i sapos yu sanap long dispela hap yu ken lukluk i go long Purari Wara i go yet long hap bilong CPF. Dispela hap em bai stap long ai bilong olgeta na mipela bai painim we long haitim ol sampela bikpela mak bilong Projek we i ken bagarapim lukluk bilong graun.

Wanpela we long painimaut sapos yu ken lukluk i go long wanpela hap, em long yusim LIDAR. Dispela ol i kolim "*3D Light Detection and Ranging (LiDAR) based viewshed analysis* (EIS Addendum, 2024)" na dispela masin i tok klia olsem i no gat planti hap bilong Projek we i sanap long ai bilong ol na bagarapim lukluk bilong ples.

Ol sampela hap i sanap long ai bilong ol em i taua bilong paia long CPF, na narapela taua bilong salim ol hatpela stim o wara i seif i go antap. Yu ken lukim dispela sapos yu sanap longwe long 12km. Ol bus klostu i winim 20-40m antap na em i pasim sampela lukluk. Bihain, mipela i ken halivim ol bus long karamapim en na katim hamas taim paia bai lait. Dispela ol wari ol i no bikpela samting na ol i makim olsem

"Negligible to Minor". "Pokore Hamlet" bai stap yet long ai bilong ol tasol em bai liklik wari tasol.

Envaironmen bilong Solwara

Ol wok skel long "Orokolo Bay", rot bilong paipplain, na "Caution Bay" i soim olsem solwara em i klia na gutpela na "sediment" tu i gutpela. Ol senis long FEED em i kamapim sampela nupela we long mekim ol wok bilda. Dispela em i karamapim yusim HDD long "Caution Bay" na wanpela hap long "Orokolo Bay" we ol i mekim haus insait long solwara na pamim ol wara i kamaut (ol i kolim "cofferdam"). Dispela cofferdam bai halivim wok i go het long planim paipplain we ol i no bagarapim ol solwara nabaut.

Ol wara i kamaut long ol bikpela wara teng ("hydrotest") na ol pipia wara i kam long ol sip mipela bai kontrolim aninit long ol lo bilong "MARPOL standards (International Convention for the Prevention of Pollution from Ships)".

Mipela bai yusim gen ol "hydrotest" wara long daunim hamas wara mipela i yusim, na daunim ol namba long sip i go kam. "Mitigese"n bai karamapim, ol paipplain i kamap long nambis we ol paip bai stap aninit long graun, bihainim ol gutpela plen, kontrolim ol lus graun i pundaun, skelim gut ol we bilong digim hul bilong ol paip, yusim ol gutpela kain marasin insait long "hydrotest" wara, na bihainim ol lo na mak bilong lukaut gut long ol wara i kamaut long ol "hydrotest". Dispela ol wari bai i liklik, ol i makim "Negligible to Minor".

Ol Ka, Balus na Sip i go kam

Ol ka, balus na sip i go kam insait long Projek, ol bai stap klostu long Purari Wara. na dispela hap graun i no bikpela na ol komyuniti lain bilong ples i save yusim tu. I no gat sampela narapela rot long yusim. Long taim bilong mekim ol wok bilda, long taim em i bisi, ol namba bilong balus, sip, na drejing bai i go antap. Na dispela wok bai kamapim sampela hevi long wara we wara na sampela rot i pulap liklik. Dispela i ken kamapim ol sampela risk olsem; stiaim sip, sefti, bikpela si bruk, rot i pas, na graun i stap arere long sait bilong wara i ken kisim sampela bagarap, ol ples tambu na ol animal na pis i stap long wara. Drejing tu bai kamapim sampela hevi olsem; dotiwara, nois, planti lait, lus graun i pundaun, na mipela mas lukautim gut. Long taim bilong operesen, ol namba bilong sip bai go daun, na ol bai mekim wok tasol. Ol i no ken wok wantaim ol komyuniti long dispela taim we ol i laik kalap long ol sip. Sapos i gat ol mitigesen i

stap, olsem; spid bilong ol sip, kontrol bilong ol si bruk, gutpela stia bilong sip long san taim, mekim ol gutpela taim plen, salim toksave i go long komyuniti, lukautim ol ples tambu, na bihainim ol *"MARPOL-compliant waste and discharge controls"*, dispela ol hevi bai liklik, ol i kolim *"Negligible to Minor"*. Mipela mas skelim gut na toktok wantaim komyuniti long daunim sampela wari bilong ol wantaim ol wok drejing.

Biodaivesiti (Long graun, kliawara na solwara)

Hap graun bilong Projek i gat ol planti kainkain ples we animal i save stap long en, ol i kolim *"habitat"*. Dispela ol *"habitat"* i stap long graun, insait long kliawara na insait long solwara. Em olsem ol bikpela bus, ples mangro, ples kunai, rip kambang, na gras long solwara, na ol dispela ol *"habitat"* i save lukautim planti laip we ol klostu indai olgeta. Na tu, wok skel bilong Projek i painim sampela nupela kain laip insait long PAol. Bilong dispela, ol i bin makim dispela hap wanpela CH o *"Critical Habitat"*, na i gat sampela lo long lukautim ol biodaivesiti insait long dispela kain *"habitat"*.

Ol wok bilda bai bagarapim sampela habitat, na ol dotiwara na pipia bai i go antap moa, na ol nupela kain nogut binatang i ken kam insait. Long solwara ol sampela rip kambang na ples mangro i ken lus na ol wok tu bai inap long pasim ol rot bilong pisin o pis i laik go kam long ol narapela hap.

Long stretim ol dispela birua, mipela bai daunim hamas ol hevi i ken kamap insait long PAol, abrusim ol ples i ken bagarap isi, statim sampela progrem long lukautim stret ol sampela animal na plaua, kontrolim ol nogut binatang i kam long arasait, kontrolim ol wara nogut na ol dotiwara, makim ol spid ol draiva i no ken antapim, makim ol sampela hap we ol manmeri i no inap long go insait, skelim ol senis i go longpela taim.

Sapos mipela mekim ol dispela kain mitigesen wok, liklik hevi bai kamap na ol bai makim olsem *"Negligible to Minor"*. Tasol long hap bilong CH o Critical Habitat, bai i gat sampela risk (ol i makim *"Moderate"*) long bagarapim bus, apim ol dotiwara insait long ol liklik wara, na bagarapim sampela habitat long solwara.

Bai i gat sampela bikpela risk, olsem *"Moderate to Major"*, we ol sampela plaua i no strongpela na i no gat planti long ol, i ken lus olgeta. Wanpela progrem long lukautim ol biodaivesiti longpela taim em bai senisim na kamapim sampela nupela *"habitat"* long givim sans long ol laip long kamap gut long ol narapela hap klostu.

Long skelim gut ol biodaivesiti longpela taim, dispela bai larim mipela long luksave sapos ol sampela hevi kamap na mipela bai inap stretim. Dispela ol i kolim

"*Biodiversity Monitoring and Evaluation Plan (BMEP)*" na em i tok klia long ol wok skel long lukautim ol baiodaivesti na mekim ol senis sapos i gat nid long en.

Ol gutpela samting ol pleslain i kisim long envaironmen ("*Ecosystem Sevis*")

Ol wok skel i luksave long planti ol kainkain gutpela samting ol pleslain i kisim long envaironmen bilong ol. Dispela em i karamapim; kaikai, diwai, wara bilong dring, pis, strongpela graun i no isi long pundaun, ol samting i halivim wara i stap klia, ol pasin tumbuna, "*habitat*" long sapotim ol nid bilong ol pleslain na givim gutpela sindaun.

Wok bilong Projek bai i ken kamapim ol senis long dispela ol sevis olsem; kliaim na rausim ol bus, pasim rot bilong ol manmeri i laik go kam long kisim ol risos bilong ol, ol senis bilong kliawara, ol sampela bagarap long ol pis. Tasol, em bai i gat sampela gutpela samting i ken kamap long laip bilong ol pleslain tu.

Long stretim ol dispela birua, mipela bai daunim hamas ol hevi i ken kamap insait long PAol long taim bilong wok bilda we ol i kliaim na rausim ol bus. Mipela bai mekim ol wok skel bipo long kliaim ol bus, ol i kolim "*Pre-Clearance Surveys (PCS)*", lukautim klia wara, sampela progrem long halivim long lukautim ples longpela taim, ol lukaut long solwara, kontrolim ol sip i go kam, na toktok i go wantaim ol lain o grup i gat interes long Projek. Dispela ol senis i liklik tasol, ol i kolim "*Negligible to Minor*".

Ol dispela senis i kamap em ol samting i kam long ol Projek wok long taim bilong wok bilda olsem, drejing, ol rot we sip i go na kam. Mipela i ken lukautim dispela ol senis sapos mipela skelim wok gut na toktok wantaim ol lain. Ol wok bilong skelim wanem Ecosystem Sevis bai kisim senis we Projek i as bilong ol, ol bai stap insait long progrem bilong lukautim ol baiodaivesiti longpela taim.

Olgeta senis we ol manmeri i bin mekim i kamap long envaironmen na we i bin kalapim ol sampela boda tu

PNG em i wanpela kantri i gat planti ol gutpela risos i kam long graun. Ol planti plen bilong bikpela projek i stap long kirapim, painim nupela hap graun o mekim operesen yet long kamautim na developim dispela ol risos we dispela i bihainim ol lo na mak bilong halivim PNG i gohet.

Dispela "*EIS Vol. 1 Ch. 17 Cumulative Impacts, 2019*", yumi bai kolim "*EIS Cumulative Impacts (2019)*" ol mekim bilong EIS (2019), em i luksave long 6-pela senis i kam long 6-pela projek we ol i ken kamapim sampela bikpela samting long yumi.

EIS (2019) i tok olsem, sampela long dispela ol projek, olsem "*P'nyang LNG Project, Exxonmobil PNG LNG Facility long Caution Bay*" na dispela Projek, em ol bung wankain

olsem kandere na we ol i save yusim ol wankain patna kampani long mekim wok olsem ka, sip o balus, na tu ol save tilim ol masin long mekim ol gas o oil.

Na long graun bilong PNG, dispela Prjek em stap insait long wanpela hap we i gat ol kainkain habitat i ken kisim bagarap i kam long wok olgeta kandere projek i mekim. Ol wok bagarap i kam long dispela Projek na i bung wantaim ol narapela projek, i no bikpela na ol i kolim olsem "*Minor*" sapos yu skelim wantaim ol narapela projek, na mipela luksave olsem, i no gat planti toksave nabaut i tok klia long dispela wok skel.

Tasol, wok skel bilong mipela tasol i tok olsem. Long lukautim na stretim ol sampela birua i ken kamap na bung long olgeta projek wantaim, Gavman bilong PNG i mas mekim sampela wok olsem:

- Bosim na lukautim ol hap we i gat sampela hap i gat laisens i kalapim ol narapela hap laisens insait long long PRL-15 na i go long "*Orokolo Bay*" we paipain i lusim nambis i go long solwara.
- Bosim na lukautim ol hap i gat sampela plaua na animal we namba bilong ol i liklik o we ol i no strong tumas, na ol envaironmen o graun bilong ol pleslain we ol wok long rausim bus i ken kamapim sampela bagarap.
- Mekim gut ol rot, na pawa, na wara saplai insait long Galp Provins, na sapotim ol bisnis na kamapim ol sampela wok bilong ol pleslain bilong bihaintaim.

Ol bikpela Sosel Risk na Senis i ken kamap

As bilong ol sosel risk i stap wantaim dispela Projek em i kamap long taim bilong mekim wok bilda, long ples longwe we ol pleslain i gat ol kastom bilong ol yet na sindaun gut long ples bilong ol we i gat klia wara, solwara na gutpela graun.

Bihain long traim dispela mitigesen plen, ol planti long dispela ol sosel hevi i stap yet i no bikpela samting, ol i makim olsem "*Negligible to Minor*" na sampela i "*Moderate*" na wanpela i "*Major*".

Dispela ol liklik hevi i stap yet i gat planti i kamap long ol liklik komyuniti i no strongpela na ol sampela ples tambu.

Sampela ol liklik hevi i stap yet em olsem komyuniti helt na seft, ol i kolim "*Community Health & Safety (CHS)*", na dispela i karamapim ol lain i laik mov i kam insait long hap

graun bilong Projek long kisim sampela win mani, ol i kolim "*potential project induced in migration* (PIIM)" na dispela ol lain i save mekim hevi i kamap long ol klinik na haus sik, wara saplai na ol paip na masin long rausim ol pipia na wara bilong toilet. Ol dispela nupela lain i kam insait i ken apim ol sans bilong pait i kamap na ol pait i kamap wantaim ol papamama, na tu, apim ol wari bilong ol meri na pikinini meri.

Na ol hevi i kamap wantaim ol pleslain em karamapim, mekim hatwok bilong ol kastom lida na Lokal Gavman Kaunsil, brukim strong bilong ol komyuniti long wok wantaim, skulim ol yangpela long tok ples, kalsa na pasin tumbuna. Na as bilong ol dispela em olsem, nupela kain wok nabaut, senis long hamas pe mani ol manmeri i ken winim, na senis long ol rot i go kam long ol ples bilong ol na wara sistem.

Wanpela bikpela hevi i kamap wantaim ol pasin kalsa na ol gutpela samting ol pleslain i kisim long envaironmen em long "*Purivo Junction*" i stap long Purari Wara. Long hia i Projek i kamapim sampela senis long wesana long arere long wara na em i wanpela ples tambu tu.

Na taim ol mekim wok skel, ol i no makim sampela we long abrusim dispela hevi. Bipo ol i statim wok drejing, ol bai sindaun wantaim komyuniti na painim wanpela we long lukautim dispela hap long taim bilong wok drejing. Dispela ples tambu em i bikpela samting tasol, sapos ol i no mekim wok isi isi, na lukautim gut long taim bilong wok, em i ken kisim sampela bagarap.

Ol kainkain wok o we long painim mani na sindaun gut bilong ol pleslain i ken senis olsem, ol i ken lusim gaden, wara, ples blong painim pis o welabus, ol risos na ol kainkain samting i strongim laip bilong ol. Dispela hevi i ken kamap sapos ol lusim rait long wokim graun bilong ol yet o painim pis o mekim gaden. Tasol, sapos ol i kisim kompensesen, dispela havi bai go daun na ol i makim dispela olsem "*Negligible to Minor*".

Sosel menesmen em wok long painim ol we long abrusim dispela ol hevi pastaim, na tu em i kamapim ol bung toktuk long kisim tok orait pastaim we i bihainim tingting bilong "*Free, Prior and Informed Consent* FPIC" na tu em i bihainim dispela program long lukautim kalsa, ol i kolim "*Cultural Heritage Management Plan* (CHMP)". Narapela wok bilong sosel menesmen em olsem, makim ol komyuniti helt na sefti pasin, na we bilong lukautim ol woklain, kontrolim ol arasait lain (PIIM), givim ol pleslain sampela we long autim bel hevi bilong ol na bihainim ol menesmen pasin we i ken senis sapos i gat nid long en.

Na tu, ol Projek lain i mas luksave olsem, taim ol i mekim wok bilda, sampela sosel senis i ken kamap olsem; kisim ol nupela lain i kam insait long ples na bagarapim

sindaun na ples tambu o pasin tumbuna. Dispela ol hevi em bai hat long abrusim, na olsem, ol i mas sekim gut na lukautim ol hevi i go yet long longpela taim.

Kibung long wok wantaim ol grup, komyuniti na lain i gat interes na ol rot long autim bel hevi bilong ol

Ol mekim kibung long wok wantaim ol grup, komyuniti na lain i gat interes. Dispela ol kibung i winim 11 yia na insait long taim bilong Projek. Ol i kamapim 13,800 ol ripot na pepa i karamapim, olgeta hap bilong "*upstream*" wok (we ol i bin painim na kamautim ol gas), ol hap kliawara, solwara long nambis, na ol hap klostu long taun i karamapim Gavman, Papagraun, ol pleslain na ol narapela lain i gat interes husat i no strong long lukautim ol yet gut.

Dispela ol kibung em kamap wantaim wanpela komyuniti progrem i stap, ol i kolim "*Community Relations programme*", na dispela progrem i karamapim ol Komyuniti Liesen Opisa ("*CLO, Community Liaison Officers*"), ol Viles Liesen Opisa ("*VLO, Village Liaison Officers*"), ol Komyuniti Kibung, ol kibung i makim sampela hevi tasol i kamap, ol rot long autim bel hevi bilong ol na ol wok long bihainim pasin bilong FPIC/ICP. Dispela ol wok long stretim ol hevi i tingim long graun bilong ol pleslain, wok bilong ol na ol kain menesmen ol i nidim long lukautim na bosom ol senis.

Projek save ronim wanpela progrem long halivim ol pleslain long long autim bel hevi bilong ol, ol i kolim "*Community Concerns and Grievance Mechanism (CCGM)*" na dispela progrem i soim planti kain rot we ol pleslain i ken autim hevi bilong ol na stretim ol dispela hevi.

Bihain long dispela wok, i ken i gat sampela liklik risk i stap yet insait long laip bilong Projek na taim ol i mekim wok bilda, na em ol olsem, bilip bilong ol lain i gat interes, trensperensi, o sapos i gat sampela lain i no inap salim toktok o kam long ol kibung, inapim menesmen long mekim senis long ol Projek plen sapos i gat nid long en, stretim ol hevi long pleslain long yusim graun bilong ol, ol wok na promis bilong FPIC, na tu ol hevi bilong ples lain na driman bilong komyuniti long kamapim gutpela sindaun bilong ol bihain taim.

Ol woklain na wokples sindaun bilong ol

Projek bai nidim planti woklain long mekim wok bilda na wok kamda long sotpela taim. Dispela woklain bai winim 6000 lain, tasol ol namba bai go daun taim wok bilda i pinis na ol operesen i stat.

Ol namabawan risk em wantaim OHS (em olsem helt na sefti bilong ol woklain), ples bilong slip, menesmen bilong ol woklain, na kain toktok o hevi i ken kamap wantaim ol woklain na ol pleslain insait long komyuniti.

Projek i kamapim wanpela menesmen sistem long bosim ol woklain na lukautim dispela risk olsem, bihainim IFC PS 2 (dispela em i Intenesenel Fainens Koperesen Wok Level 2), PNG lo bilong ol woklain na wanpela polisi Projek i bihainim em i "*Labour and Working Conditions Management Procedure* (2025)". Na ol dispela wok i kisim sapot i kam long ol kainkain wok bilong Projek olsem; pasin bilong painim ol woklain, harim tok bilong ol woklain, mekim ol lo bilong wokples, lukaut bilong ol woklain, na ol pasin bilong stretim bel hevi insait long wokples. Dispela ol wok stretim i kamap wantaim HSE menesmen sistem bilong Projek.

Dispela sistem i karamapim ol gutpela pasin long mekim olsem; painim ol nupela woklain, harim toktok na hevi bilong woklain, ol pasin na lo bilong wokples, mekim ol lo na polisi stret we ol woklain i kisim wankain tritmen, lukaut long ol woklain, bosim ol nupela woklain i save kam insait kwiktaim.

Sapos ol mekim ol dispela wok antap, orait, ol risk i stap yet bai liklik na ol i makim olsem "*Negligible to Minor*". Tasol, menesmen i mas wok i go i go long stiam na stretim ol risk wantaim ol nupela woklain i save kam insait kwiktaim, ol hevi i kamap wantaim ol meri, gutpela pasin long painim ol nupela woklain na ol kain toktok o hevi i kamap wantaim ol woklain na ol pleslain insait long komyuniti.

Komyuniti helt na Sefti (CHS)

Ol nambawan risk i kamap wantaim CHS em long taim bilong wok bilda. As bilong dispela em olsem, ol planti nupela rot bai kamap, na bai i gat planti ka, sip na balus i go kam, wantaim ol drejing na liklik sip i go kam long wara, ol kainkain sik yu ken kisim long ol narapela lain olsem kus, flu, HIV, TB na skin hat. Na i gat planti gutpela helt sevis i stap yet na dispela ol nupela risk bai givim hevi long ol.

Ol komyuniti klostu long wara o long nambis, em ol save nidim klia rot long wara long yusim kanu o dingi long mekim wok bilong ol o painim kaikai, bihainim pasin tumbuna na painim ol sevis ol nidim. Ol wok mitigesen em i karamapim; wanpela gutpela Komyuniti, Helt na Sefti Menesmen Plen (CHSS), strongim ol pasin long wok hariap sapos i gat sampela birua i nidim dokta kwiktaim, statim ol progreim i makim stret ol kainkain sik na halivim ol lain long luksave long ol, kontrolim ol sefti bilong ol sip i go kam long wara, bihainim ol pasin bilong "*Voluntary Principles on Security and Human Rights* (VPSHR)" (em ol Volanteri Pasin long Sekuriti na ol Rait bilong Wanwan

Manmeri). Sapos mitigesen i stap, ol hevi bilong CHS bai liklik na ol i kolim "*Minor to Moderate*".

Ol levul bilong hevi ol i makim "*Moderate*" bai kamap long taim bilong mekim wok bilda, na bihain long taim bilong operesen, dispela risk bai go daun na kamap "*Minor*". Ol sampela risk i ken kamap long ol arasait lain i kam insait (PIIM), ol pait i kamap wantaim ol papamama, na ol sampela grup i no strong long lukautim ol yet gut, orait, dispela bai nidim sampela wok skel long lukautim long olgeta taim bilong Projek i go yet.

Sekuriti

As bilong ol sekuriti risk i ken kam long ol pasin bilong ol lokal komyuniti sekuriti na hau ol toktok wantaim ol arasait lain i givim sekuriti (olsem bilong Gavman o ol sekuriti kampani), na ol woklain na ol pleslain insait long hap graun bilong Projek.

Sapos yu tingim long ol hevi i stap yet, olsem, lo na oda, ol pait bilong graun, ol lain i gat nid long dring na drak, i no gat planti sevis o halivim, ol birua i kam long ol arasait lain, ol pait i kamap wantaim ol papamama o ol sanguma lain; orait, ol nambawan kain risk bilong Projek na ol komyuniti i karamapim, ol hevi bai i ken kamap bikpela moa, sampela nupela kain pait o hevi i ken kamap, ol raskol pasin, pretim o pait wantaim ol narapela lain, ol pait i kamap wantaim ol papamama.

Ol menesmen sistem bilong Projek long kontrolim sekuriti em save bihainim IFC PS4 (dispela em i Intenesenel Fainens Koperesen Wok Level 4) na VPSHR (em ol Volanteri Pasin long Sekuriti na ol Rait bilong Wanwan Manmeri). Na dispela sistem tu em i karamapim ol wok long skelim sekuriti risk i kamap long wanwan yia, skelim na trening ol i mekim wantaim ol sekuriti kampani, lukautim na bosim ol Gavman sekuriti ("*GSF, Government Security Forces*") husat i save bihainim wanpela MoU, ol sekuriti lain i save wok wantaim ol lokal komyuniti, ol rot o ples we ol lain i ken autim bel hevi bilong ol, na bungim ol tingting long rait bilong ol manmeri i go insait long ol menesmen plen bilong ol sekuriti boslain.

Ol sampela sekuriti risk i stap yet, ol i skelim aninit long EIS (2019). Dispela Projek i gat wanpela wok long skelim ol sekuriti risk, ol i kolim "*community security risk assessment (CSRA)*" we em i bihainim tingting bilong PS4 (mak wok levul 4) na VPSHR ("*Voluntary Principles on Security and Human Right*").

Graun, ol Wok na ol lain i mas painim nupela hap.

Long kamapim dispela Projek, em i nidim graun, na ol rait long kam insait na wokim ol haus, planim ol paipain, digim ol hul bilong painim ston, mekim ol nupela rot bilong ronim ka na karim ol kago, na dispela olgeta bai stap insait long ol graun bilong ol

Papagraun. Na sans bilong ol sampela lain i bai lusim we bilong lukuatim ol yet em i ken kamap bilong wanem, ol i ken lusim sans bilong wokim graun bilong ol o yusim o kamapim ol risos olsem gaden bilong saksak, kliawara, na painim kaikai olsem pis. Na tu i gat sampela risk we ol sampela lain i mas lusim ples bilong ol stret, na dispela em klostu long "*Pokore Hamlet*", tasol mipela i no klia yet long dispela.

Mitigesen long dispela ol risk bai karamapim kompensesen bai kam sapos ol Projek yusim graun bilong ol klen, na ol bai kamapim sampela progrem long halivim ol lain kisim wok na gutpela sindaun we dispela i kamap long sampela hap stret insait long PAol. Ol namabawan rot long mekim dispela ol mitigesen, em i olsem ol plen long halivim ol lain ol i kolim "*Land Access and Livelihood Development Plans (LALDPs)*", mekim klia long wanem em ol rait bilong ol na ol prais bilong kompensesen na we bilong kisim dispela, ol progrem long halivim ol lain kisim wok na gutpela sindaun, inapim ol long kisim halivim isi, na skelim gut long lukautim dispela ol progrem.

Sapos ol sampela lain long Pokore hamlet i mas lusim ples olgeta, Projek bai bihainim IFC PS5 and kisim ol tok orait olsem FPIC i tok. Na dispela ol tok orait bai i mas kam long ol wanwan haus stret na ol komyuniti tu (IPF 2026) na ol bai kamapim wanpela plen long muvim ol lain i go long wanpela nupela hap, dispela plen ol i kolim "*Resettlement Action Plan (RAP)*".

Ol wok bilong ICP na FPIC, na wok bung bilong ol komyuniti, ol lain i gat interes na ol save lain bai halivim ol long painimaut wanpela rot long stretim envaironmen. Na tu, bai i gat wanpela progrem long halivim ol lain long kisim trening o wok na kamapim gutpela sindaun. Dispela ol plen i go yet, bai i karamapim ol lain i no inap lukautim ol yet gut.

Na bilong ol komyuniti klostu long nambis o ol lain i stap klostu long ol wok *upstream* we ol i painim na kamautim ol gas, ol sampela risk bilong ol i stap long laip bilong ol em olsem, yusim graun o risos bilong ol, sampela bagarap long ol samting ol pleslain kisim i kam long envaironmen em ol olsem liklik wari na ol i makim "*Minor or Negligible*". Na ol hevi i kamap long painim wok o mani em i liklik o em bai ol i gat gutpela sans long sindaun gut.

Ol Asples Lain (*Indigenous Peoples*)

Gavman bilong Papua Nuigini, i no save yusim dispela kain toktok ol i kolim "*Indigenous Peoples*". Tasol, planti ol lain insait long PAol i save bihainim mak bilong IFC PS7 we i making ol olsem as ples lain o "*Indigenous Peoples*".

Olsem na, dispela pepa o "*ESHIA Synthesis*" i save yusim dispela toktok "*Indigenous Peoples*" i bihainim IFC PS7. Planti ol as ples lain i stap insait long PAol, na ol i gat

stongpela as bilong ol wantaim kalsa, ples tambu na pasin tumbuna, i stap wantaim dispela graun, na ol kliawara na solwara envaironmen.

Ol risk i ken kamap em bai wankain ol ples kanaka na ol risos rait, mak na bilip bilong kalsa, ol we bilong mekim desisin, na givim sans long ol long kisim ol hakivim i kam long Projek. Dispela Projek i save bihainim ol tok orait wantaim FPIC, na we i kisim sapot i kam long "*Indigenous Peoples Framework (2026)*", mipela i kolim IPF (2026), na wanpela plen, ol i kolim "*ICP/FPIC Implementation Plan (2025)*", na ol narapela plen ol i kolim "*Land Access and Livelihood Development Plans (LALDPs)*". Na tu bai i gat ol menesmen sistem long lukautim ol pasin na ples tumbuna na long givim ol lain sampela rot long autim bel hevi bilong ol. Na dispela ol sistem bai wok wantaim ol lain long givim rot long Projek long yusim graun na tu long halivim ol lain long kisim wok na painim gutpela sindaun.

Ol risk i stap yet em bai stap aninit long wok i go het bilong ICP/FPIC, na givim maus bilong olgeta wanwan manmeri long autim toktok na painim wok, na mekim klia long ai bilong ol, we ol halivim i kam long na husat i kisim dispela halivim. Planti long ol dispela risk em olsem long lusim ol mak na bilip bilong kalsa, na lusim ol gutpela sindaun long ples tumbuna we Projek i rausim bus na pasim ol rot long go insait long ples, na kamapim wari i kam long ol arasait lain o PIIM.

Ol Pasin na Ples Tumbuna

Planti ol Pasin na Ples Tumbuna i stap klia insait long hap graun bilong Projek. Dispela i karamapim ol ples tumbuna, ol ples matmat, ol ples insait long graun i gat sampela as long en, ol ples bilong taim bipo, na ol ples tumbuna klostu long wara na long nambis.

Ol pasin na ples tumbuna em wanpela samting i bung wantaim ol tinging bilong ol pleslain long mak na bilip bilong kalsa bilong ol yet, na wantaim ol ples kanaka, laip na sindaun bilong ol na ol hap we ol i kisim ol klia wara.

Na rispek bilong ol pasin na ples tumbuna em bikpela moa long Purari Wara, "*Orokolo Bay*", na ol narapela hap long kliawara na ol hap i arere long nambis we ol i save bihainim yet ol pasin tumbuna na we laip bilong ol i stap klostu long ples we ol wara na graun i bung wantaim. Em long ol dispela hap we ol i bin painmaut ol sampela samting bilong tumbuna i kam long taim bipo tru.

Ol risk i ken kamap long hia em olsem, bagarapim sampela graun o pasim rot long go insait long taim bilong wokim haus bilda, na taim ol i planim ol paipplain, digim hul bilong ston na mekim sampela wok drejing o salim sip i go kam long wara.

Ol mitigesen plen i wok strong long bihainim dispela plen long lukautim kalsa na ol pasin na ples tumbuna, ol i kolim "*Cultural Heritage Management Plan (CHMP)*". Na dispela plen em i save bihainim pasin bilong abrusim pastaim, wantaim ol wok skel long painim ol mak bilong ol pasin na ples tumbuna bipo ol i statim ol wok bilda. Na sapos dispela pasin bilong abrusim pastaim i no wok, orait, ol bai yusim ol kainkain we long lukautim gut ol samting bilong ples ol manmeri i wokim long taim bipo. Na tu ol bai bihainim CPF o "*Chance Finds Procedures*" na dispela em olsem, ol skulim ol woklain long mekim wanem samting sapos ol i painim wanpela samting bilong bipo olsem olupela bun i kamap ston. Na ol mas wok wantim ol pleslain na bihainim ICP/FPIC wantaim sampela ol pleslain i gat namba long lukautim ol dispela samting bilong ples, ol i kolim "*customary custodians*".

Ol risk i stap yet em ol liklik olsem "*Minor to Moderate*". Na as bilong dispela em ol samting bilong bipo i ken i stap long graun, na i no gat wanpela we long bekim o senisim em sapos em i lus o bruk. Wanpela bikpela risk i stap yet long "*Purivo Junction*" long Purari Wara, we ol senis long wesana long arere long wara bai i ken bagarapim wanpela ples tumbuna. Long hia, ol wok mitigesen i orait, tasol dispela hevi i bikpela, bilong wanem, dispela ples tumbuna em i gat namba wantaim ol Papagraun. Ol bai traim long abrusim pastaim, nai bihainim CHMP. Ol bai wokim menesmen plen i ken senis wantaim wok i go yet long taim bilong mekim wok drejing, na ol bai givim ol lain sampela we long go insait na bihainim pasin tumbuna we i sef bilong ol.

Planti ol Bikpela Samting i Bung na Kamapim ol Sosal Risk

Ol sosial risk i kamap we planti ol bikpela samting bilong ol lain i bung wantaim i gat as long olgeta hevi na projek na wok developmen i kamap insait long dispela hap. Dispela ol risk i karamapim; ol arasait lain i kam insait long ples, graun i ken kisim bagarap, laip na sindaun bilong ol i ken go daun, ol komyuniti sevis na rot long go na kam i ken senis, na ol hevi i kamap long yusim ol risos i kam long ol hap kliawara na solwara i ken bung, na helt bilong ol komyuniti i ken kisim taim, na ol pasin tumbuna i ken pilim dispela hevi.

Ol risk i kam long Projek, we i Projek i ken bungim ol dispela hevi wantaim, i luk olsem, i no bikpela hevi, na ol i makim olsem "*Minor*". Ol mas yusim ol gutpela menesmen pasin long wokim ol mitigesen plen long daunim ol dispela hevi, na ol i mas wok wantaim Gavman, indastri na ol narapela lain i gat interes, long stretim ol bikpela hevi i kamap long provins. Ol mas yusim ol menesmen sistem we i ken skelim gut ol hevi i kamap na kisim skul long dispela na sensim wok we olgeta lain i ken hamamas na sindaun gut.

