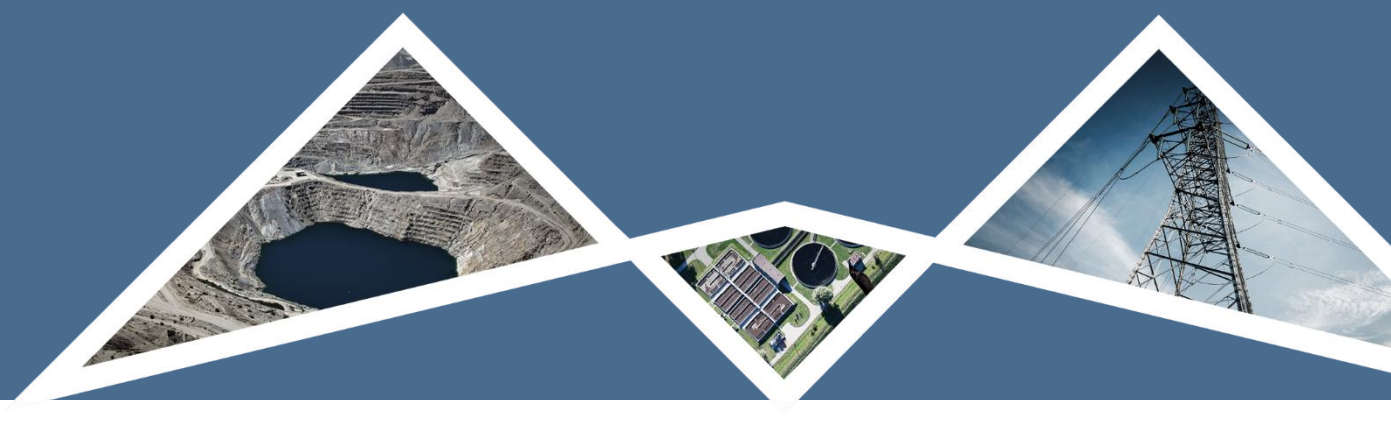
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TSHOBOKANYO YA BAKHUDUTHAMAGA

POROJEKE E E TSHITSHINTSWENG YA HARMONY WEST WITS YA GO BUSEDIWA LE GO BOLOKA KGOTSA GO KGOBOKANYA MASALEDI A MEEPO, LE MAFARATLHATLHA A A AMANANG LE YONE.
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TAOLO YA DITOKOMANE

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LETLHA LA TLHABOLOLO:	REV #	TLHALOSO
2026/10/26	TOKOMANE YA TSHIMOLOGO	Executive Summary

Tokomane e e na le tshedimosetso e e leng ya Environmental Impact Management Services (Pty) Ltd. mme ka jalo e tshwanetse go tsewa e le sephiri ntle le fa e supiwa ka tlhamalalo jaaka tokomane ya setšhaba ke molao. Tokomane ga e a tshwanela go kopiwa, go gatisiwa gape kgotsa go dirisiwa ka tsela epe ntle le tetla e e kwadilweng go tswa go EIMS. Tetlo khopi e sirelеditswe ka tlhamalalo.

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1 TSHOBOKANYO YA BAKHUDUTHAMAGA

Randfontein Estates Limited (khampani e e ka fa tlase ga Harmony Gold Mining Company) (gongwe e tla bidiwang mokgatlha o o ikopelang) e thapile ba Environmental Impact Management Services (Pty) Ltd (EIMS) jaaka Modiredi wa Tshekatsheko ya Tikologo (EAP) go thusa ka ditsamaiso tse di tlhokegang tsa ditumelelo (go tsenyeletsa le ditsamaiso tsa semolao tsa go tsenya lentswe ga baagi), le go kwala le go romela ditokomane tse di tlhokegang go tshegetsa kopo ya porojeke e e tshitshintsweng e ntsha ya West Wits Reclamation and Deposition. Porojeke eno ya West Wits e na le lefelo le le tshitshintsweng la Deelkraal II Lefelo la Polokelo ya Masalela (Tailings Storage Facility (TSF) le mafaratlhatlha a a amanang le lone mo setsheng se se fitlhelwang dikilometara di le 13 borwabophirima jwa Carletonville mo Mmasepaleng wa Selegae wa Merafong City, Mmasepala wa Tikologo wa West Rand, mo Porofensing ya Gauteng.

Mokopi o tlhoka bokgoni jo bo oketsegileng jwa go boloka masaledi a meepo mo ditirogelong tsa kgaolo ya West Wits. Mokopi o rulaganya go aga lefelo la Deelkraal II Tailings Storage Facility (TSF) go tlamela ka bokgoni jwa kamoso jo bo oketsegileng. Deelkraal II TSF e e tshitshintsweng eno e tla aparela kgotsa go tsaya lefelo le bophara jwa tšhimo jo bo ka nnang dihektara di le 430. TSF eno e tla amogela masaledi go tswa kwa madirelong a Kusasalethu le Savuka, gape e tla thusa mo go busetseng metsi a a dirisitsweng mo tsamaisong (return process water) go kgona go busetsa le go thuthuntsha Deelkraal I TSF le Kusasalethu TSF e e leng teng jaanong, go tlo fefiwa kwa madirelong a Kusasalethu. Mafaratlhatlha a mangwe a a rulagantsweng a tsenyeletsa diphaephe tse di farologaneng tsa leraga la meepo (slurry), metsi a a nwang, le diphaephe tsa metsi a a busediwang, ditsela tsa go tsena, megala ya motlakase, diteishene tsa go pompa metsi, le matamo a mantsfha a metsi a a busediwang. Ditlhabololo tse di tshitshintsweng mo madirelong a Kusasalethu a a leng teng gompieno le tsone di tshitshintswe jaaka karolo ya porojeke eno.

YBB e tla kokoanya le go romela ditokomane tse di tlhokegang go tshegetsa kopo ya gago:

- Tetla ya Tikologo (EA) le Laesense ya Tsamaiso ya Matlakala (WML) go ya ka Molao wa Bosetšhaba wa Tsamaiso ya Tikologo NEMA (Molao wa 107 wa 1998) - Tirelo e e Kwadilweng: Kitsiso ya Kitsiso 2, Tirelo 6 le 15 le ditiro tse di farologaneng tsa Kitsiso 1 le 3 mmogo le Molao wa Bosetšhaba wa Tsamaiso ya Tikologo: Molao wa Matlakala NEMWA (Molao wa 59 wa 2008) - Tirelo B7, B10 le B11;
- Laesense ya Tiriso ya Metsi (WUL) go ya ka Molao wa Bosetšhaba wa Metsi – NWA (Molao wa 36 wa 1998). Tiriso ya metsi: Karolo 21 (c), Karolo 21 (i) le Karolo 21 (g). Kopo e e farologaneng ya Laesense ya Tiriso ya Metsi (WUL) e dirilwe kwa Lefapheng la Metsi le Kgelelolesewe (DWS) ya dilo tse di bakang tiriso ya metsi; le
- Laesense ya go ntsha mosi wa mowa (AEL) go ya ka Molao wa Bosetšhaba wa Tsamaiso ya Tikologo: Boleng jwa Mowa, 2004 e tla tsenngwa mo dintlafatsong tse di rulagantsweng.

1.1 MAIKAELELO A PEGELO YA EIA

Maikaelelo a thulaganyo ya EIA ke go:

- go tlhomamisa maemo a pholisi le semolao a tiro e leng mo go ona le go kwala ka moo tiro e e tshisinngwang e tsamaelanang le go tsibogela maemo a pholisi le peomolao;
- Tlhalosa tlhokego le tlhokego ya tiro e e tshitshinngwang, go akaretsa tlhokego le tlhokego ya tiro mo maemong a tlhabololo mo lefelong le le amogetsweng jaaka go akantswe mo pegelong e e amogetsweng;
- Lemoga lefelo la tlhabololo mo lefelong le le amogetsweng jaaka go akanngwa mo pegelong e e amogetsweng ya Scoping e e ikaegileng ka thulaganyo ya tshekatsheko ya ditlamorago le kotsi e e akaretsang ditlamorago tse di kopaneng le thulaganyo ya maemo a mefuta yotlhe ya tlhabololo e e tlhalositsweng e e lebaganeng le dintlha tsa thutafalo, tsa mmele, tsa baoloji, tsa loago, tsa ikonomi, ngwao-boswa le tsa setso tsa tikologo;

- Tlhomamisa tlholego, botlhokwa, ditlamorago, selekanyo, boleele le kgonagalo ya ditlamorago tse di tlhagelelang go itsise mekgwa e mengwe e e tlhophilweng le selekanyo se ditlamorago tseno di ka fetolwang morago, di ka baka tatlhegelo e e sa fetogeng ya metswedi mme di ka thibelwa, tsa laolwa kgotsa tsa fokodiwa;
- supa lefelo le le siameng thata la tiro mo lefelong la tlhabololo la lefelo le le amogetsweng jaaka go akantswe mo pegelong e e amogetsweng ya Scoping go ikaegile ka maemo a a kwa tlase a tikologo a a supilweng ka nako ya tshekatsheko;
- supa, sekaseka le go baya ditlamorago tse tiro e tla di tlisang mo tlhabololong ya lefelo le le amogetsweng jaaka go akantswe mo pegelong e e amogetsweng ya Scoping mo botshelong jwa tiro;
- go supa dikgato tse di maleba tsa go efoga, go laola kgotsa go fokotsa ditlamorago tse di lemogilweng; le
- Lemoga dikotsi tse di setseng tse di tlhokang go laolwa le go tlhokomelwa.

1.2 THULAGANYO YA GO TSAYA KAROLO GA SETŠHABA

Thulaganyo ya go tsaya karolo ga setšhaba (PPP) ya porojeke e e tshisintsweng e dirilwe e bile e tla tswelela go dirwa go ya ka ditlhokego tsa Molao wa Bosetšhaba wa Tsamaiso ya Tikologo (NEMA) go ya ka melawana ya Tsamaiso e e Kopaneng ya Tikologo (IEM). PPP e simolotse ka la 6 Tlhakole 2026 ka kitsiso ya ntlha le pitso ya go ikwadisa jaaka batho ba ba nang le kgatlhego le ba ba amegang. Ditshwaelo tse di amogetsweng go tswa go I&APs ka nako ya pitso ya ntlha ya go ikwadisa le go akgela go fitlha jaanong di tsentswe mo Pegelong ya go tsaya karolo ga setšhaba mo **Error! Reference source not found.**.

Ditshwaelo tse di amogetsweng mo nakong eno ya tshekatsheko ya Pegelo ya EIA le tsona di tla kokoanngwa le go tsenngwa mo pegelong ya go tsaya karolo ga setšhaba e e rometsweng kwa Bothati jo bo Nang le Bokgoni (CA) le Pegelo ya Bofelo ya EIA, go akaretsa le EMPr, go tsaya ditshwetso.

Pegelo eno ya EIA e tshwanetse go nna teng gore setšhaba se sekaseke le go tshwaela ditshwaelo mo pakeng ya malatsi a le 30.

1.3 DIPOROJEKE TSE DINGWE

Tlhopho ya lefelo la TSF e bontshitse tiriso ya maemo a phokotso, ka bosupi jo bo totobetseng jwa go efoga, go fokotsa le go tsosolosa dikgato tse di beilweng kwa pele le go tsenngwa mo thulaganyong ya porojeke. Ga go na ditsela tse dingwe tse di utlwalang kgotsa tse di kgonagalang tsa lefelo tse di ka supang ka ntlha ya dikgoreletsi tsa sebaka le maikutlo a a supilweng go dikologa setshe. Lefelo la ga jaana la Deelkraal II ka jalo le tsewa e le lona fela lefelo le le siameng la TSF, ka ntlha ya bogolo le ditlhokego tsa lefelo le mathata a mafelo a mangwe.

Gone jaanong, mokgwa o o ratwang thata wa go dira gore go nne le kgogolego ke wa go dirisa kgogolego e e dirwang ka setsuatsue mo ditirong tse dintsi tse Harmony e di dirang gone jaanong tsa TSF ka ntlha ya mabaka a a tlhalositsweng fa godimo. Ditlamorago tsa tikologo tse di di amanang le mokgwa mongwe le mongwe wa go latlhelwa ga metsi di a tshwana le tsa go latlhelwa ga metsi ka tsela ya kgwanyape le fa go ntse jalo, go latlhelwa ga metsi ka tsela ya kgwanyape go na le selekanyo se se kwa godimo sa go busediwa ga metsi mme gape go a ratega go ya ka pono ya theknoloji ya lefatshe. Deelkraal II TSF e tla direlwa go dirisa mokgwa o wa go tshela/kgobokanyo ka setsokotsane.

Go ya ka diphitlhelelo tsa ditlhatlhobo tsa baitseanape, Pipeline le Powerline Corridor 1 (borwa jwa corridor)) e a ratwa ka ntlha ya ditlamorago tse di kwa tlase mo mafelong a a nang le metsi le mo dikarolong tsa mefutafuta ya ditshedi tsa mo lefatsheng. Gape go ka nna molemo go dirisa tsela ya corridor1 go ya ka mabaka a botegeniki.Ga go na ope yo o neng a itlhophela mo dithutong tse di kgethegileng tse di neng di dirilwe mo go Corridor 2. Ka jalo, go tlhophiwa tsela ya corridor1 (e e ka fa borwa e e nang le diphaepe le diphaepe tsa motlakase) jaaka tsela e nngwe e e ka tlhophiwang.

Go solofetswe gore selaletsi (liner) jaaka thulaganyo ya go thiba e e pitikolotsweng (inverted barrier system) se tla bo se siame go thibela seabe sepe se se ka nnang teng sa go kgotlela metsi a a kafa tlase ga lefatshe

(groundwater) mo lefelong le le gaufi. Go ya ka dipoelo tse di bonahalang ka ntlha ya go ala selaletsi (liner)mo TSF, tlhopho e e nang le selaletsi (liner) ke yona e e ratiwang thata.

Go ne ga dirwa diphetogo tse di farologaneng morago ga thulaganyo ya ntlha e e neng e rulaganyeditswe go sekasekwa mo kgatong ya EIA. Mafelo otlhe a a neng a na le mmu o o kwa godimo, mafelo a a neng a agelwa go beelwa mmu le seteišene sa pompo sa Kusasalethu TSF se ne sa fudusiwa go tswa mo thulaganyong ya kwa tshimologong go tila mafelo a a bongola le mafelo a SEI a a nang le bothata jo bogolo fa go kgonega. Tsela ya bofelo e e bontshitsweng mo Setshwantshong 69 le Setshwantshong 70 sa pego eno e bontsha tsela e e siametseng porojeke eno e e theilweng mo dikgoreletsong tsotlhe tsa botegeniki le tsa tikologo tse di lemogilweng.

Deelkraal II TSF gape e tla tlamela ka go baakanya di-TSF di le dintsi go ralala kgaolo ya West Wits tse di tla nnang le seabe se se botlhokwa se se siameng. TSFs e tla dirwa sesha le go fetolwa kwa lefelong la Kusasalethu. TSF eno e tla tsosolosiwa ka botlalo mme e bo e tsosolosiwa gape ka botlalo mo isagweng. Seno gape se tla dira gore Harmony e kgone go laola TSF e le nngwe fela e kgolo go na le go tshwanelwa ke go dirisana le mafelo a le mantsi a mannye a TSF, e leng se gape se tshwanetseng go tokafatsa tsamaiso e e amanang le dikgang tse di farologaneng tsa tikologo le tsa loago tsa TSF tse di leng teng mo kgaolong eo. Ditshono tseno di tla nyelela fa porojeke eno e sa tswelele pele. Ka jalo, tsela e nngwe e e ka se kang ya dirisiwa ga e tsewe e le e e ka kgonegang kgotsa e e utlwalang.

1.4 TSHEKATSHEKO YA DITLAMORAGO TSA TIKOLOGO

Nngwe le nngwe ya dikotsi le ditlamorago tse di lemogileng mo dikgatong tse di farologaneng tsa porojeke di ne tsa sekasekwa. Ditekanyetso tsa tshekatsheko di akaretsa sebopego, selekanyo, boleele, bogolo / bokgoni, phetogo, kgonagalo, ditlamorago tse di oketsegileng, le tatlhegelo e e sa fetogeng ya didiriswa.

Ditlamorago tse di sa siamang le tse di siameng di sekasekisitswe mo pegelong eno ya EIA. Dikgato tse di ka nnang teng tsa phokotso di supilwe mme di tokafaditswe go ya ka ditshwaelo go tswa go Moitseanape wa Tshekatsheko ya Tikologo (EAP), ditherisano tsa setšhaba, le tshekatsheko ya baitseanape mo kgatong ya EIA ya porojeke. EMPr e e amanang le yona e supa mekgwa e e maleba ya go fokotsa go efoga, go fokotsa le/kgotsa taolo ya ditlamorago tse di sa siamang le go tokafatsa dintlha tse di siameng.

Dikotsi le ditlamorago tse di botlhokwa thata tse di lemogilweng e ne e le tse di sa ntseng di le kwa godimo kgotsa tse di kwa godimo go ya ka botlhokwa jwa tsone tota le morago ga gore go sekasekiwe dikgato tsa go fokotsa ditlamorago. Ditlamorago tse di latelang tse di lemogilweng di ne tsa lemogiwa gore di ka nna le ditlamorago tse di kwa godimo go ya go tse di kwa godimo:

- Ditlamorago tsa metsi a a ka nnang teng ka nako ya go tswalwa;
- Phokotsego ya metsi ka nako ya kago le tiragatso;
- Go senyega le go senngwa ga mafelo a a nang le metsi ka ntlha ya TSF le go kgaogana ga mafaratlhatlha fa go agiwa le fa go dirisiwa;
- Ditlamorago tsa phetogo ya tlelaemete ka nako ya tiro;
- Tshenyo, tatlhegelo e e oketsegileng le go kgaoganngwa ga mafelo a bonno le tatlhegelo ya SCC ka nako ya kago;
- Tshenyo ya mafelo a a sa kgoneng go itshokela ka nako ya kago;
- TSF e thuba lobota lwa letamo, e dira gore go nne le morwalela o mogolo o o sa laolesegeng wa seretse sa metsi;
- Ditiro, tlhabololo ya bokgoni le ditshono tsa go reka ka nako ya kago;
- Tshireletso, bosenyi le bogodu ka nako ya kago;
- Go fuduga le go latlhegelwa ke matshelo ka nako ya kago; le

- Poifo ya go palelwa ka nako ya tiragalo.

Go na le ditlamorago tse di rileng, malebana le mefutafuta ya ditshedi tsa lefatshe, tse di bolokang seabe se se kwa godimo sa masaledi morago ga go dirisa phokotso yotlhe e e utlwalang le e e kgonagalang. Seno se kaya kgotsa se tlhagisa tlhokego ya offset go tlhokomela ditlamorago tse di botlhokwa tse di saletsweng. Go tilwa ga mafelo a mangwe a a tlhokang tlhokomelo go dirilwe ka go tokafatsa thulaganyo ya porojeke, fela go tila gotlhelele mafelo a mangwe a a tlhokang tlhokomelo ga go kgonege, mme go tla tlhokega phapanyetsano/puseletso (offset) bakeng sa dintlha tseno tse di kgethegileng.

1.5 DITSHWETSO LE DIKATLANEGISO

Diphitlhelelo tsa dipatlisiso tsa boitseanape di swetsa ka gore ga go na diphoso tse di kotsi tsa tikologo tse di tshwanetseng go thibela porojeke e e tshitshinngwang go tswelela, fa fela dikgato tsotlhe tse di tshitshinngwang tsa phokotso le taolo di tsenngwa tirisong le tharabololo le tumalano ka ga ditshenyegelo tse di tlhokegang tsa mefutafuta ya ditshedi di le teng pele ga kago e simolola. Go ikaegilwe ka mofuta le bogolo jwa porojeke e e tshitshinngwang, maemo a selegae a kgoreletso a a boleletsweng pele ka ntlha ya kago le tiro ya moepo, diphitlhelelo tsa dipatlisiso tsa EIA, le go tlhaloganya maemo a botlhokwa a ditlamorago tse di ka nnang teng tsa tikologo, ke kakanyo ya setlhopha sa porojeke ya EIA gore maemo a botlhokwa a bontsi jwa ditlamorago tse di sa siamang tse di lemogiwang ka kakaretso di ka fokotswa ka go tsenya tirisong dikgato tse di tshitshinngwang tsa phokotso.

Le fa go na le ditlamorago tse di sa siamang tse di bakilweng ke TSF, go tshwanetse ga elwa tlhoko gore go na le ditlamorago tse di siameng, segolo thata go ikaegile ka ditšhono tsa ditiro le maiteko a Leano la Loago le Badiri (SLP). Go ikaegilwe ka mofuta le bogolo jwa porojeke e e tshitshinngwang le ditlamorago tse di solofetsweng ka ntlha ya kago, tiro le go tswalwa ga setheo, diphitlhelelo tsa EIA, le go tlhaloganya maemo a a kwa tlase a a kwa tlase morago ga phokotso ya ditlamorago tse di ka nnang teng tsa tikologo, ke kakanyo ya setlhopha sa porojeke ya EIA gore ditlamorago tsa tikologo tse di amanang le kopo ya porojeke e e tshitshinngwang ya West Wits Reclamation and Deposition di ka fokotswa go ya kwa maemong a a amogelesegang mme porojeke e tshwanetse go letlelelwa.