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2 June 2015

Mr Barry Broe Coordinator-General Office of the Coordinator General PO Box 15517 City East, QLD, 4002

Dear Barry,

# Byerwen Coal Project Southern Infrastructure Relocation – Change Request

As per your letter dated 29 May 2015, Byerwen Coal Pty Ltd (Byerwen Coal) notes that you consider the proposed relocation of the southern infrastructure on the Byerwen Coal Project (the Project), as was submitted to you on 13 May 2015, to be a change to the Project.

As a result Byerwen Coal formally submits an application for evaluation of the proposed change to the Project, under section Division 3A Subdivision 1 of the *Queensland State Development and Public Works Organisation Act 1971* (SDPWO Act).

#### **BACKGROUND**

Byerwen Coal is developing the Project located approximately 20 km west of Glenden and approximately 140 km west of Mackay. The Project was approved by the Queensland Office of the Coordinator General (OCG) on 2 July 2014. In April 2015 one of the six mining leases (MLs), being ML70435, was granted by the Queensland Department of Natural Resources and Mines (DNRM).

With the granting of ML70435, the Project became an active mine lease subject to Environmental Authority (EA) EPML00595013 under the *Queensland Environmental Protection Act 1994* (EP Act). As such, the responsibility for administration and assessment of Project changes in relation to potential environmental impacts (including assessment of EA amendments) transferred from the Queensland Department of Environment and Heritage Protection (DEHP) EIS Assessment team in Brisbane, to the DEHP Emerald Coal Assessment Hub.

Specifically, QCoal Pty Ltd (QCoal) has been advised by DEHP Delegate of the Administering Authority, Mr Justin Cagney that any assessment of environmental impacts in relation to EA amendments will be assessed by the DEHP Emerald Coal Assessment Hub, specifically Dr Wayne Boyd - Principal Environmental Officer (Assessment) Coal and Dr Boyd's assessment team.

The Project is subject to conditions in the following documents issued under relevant Commonwealth and state legislation:

- the Coordinator-General's evaluation report July 2014 (OCG Report) on the Byerwen Coal Project environmental impact statement (EIS), under the SDPWO Act.
- EA EPML00595013, administered by DEHP, under the EP Act.
- Australian Government Department of Environment (DoE) approval conditions issued under the Commonwealth Environment Protection and Biodiversity Act 1999 (EPBC Act), (EPBC Ref: 2010/5778).

The above documents stipulate operational conditions for the Project, intended to mitigate against potential environmental and social impacts identified and assessed during the EIS process. The EIS process involved the identification and assessment of potential impacts associated with the Project on the environmental values of the area, based on a specified Project layout. The Project layout is separated into northern and southern sections; both the northern and southern sections of the Project include a mine infrastructure area (MIA), a coal handling and preparation plant (CHPP) with rejects management facility, and a train load out facility (TLF) with rail spur and loop, to service the mining operations in the respective northern and southern areas. For the purposes of this document these infrastructure will collectively be referred to as the northern and southern infrastructure.

Since the completion of the EIS process and subsequent issuance of approval and approval documents as per the above, Byerwen Coal has identified an opportunity to improve operational efficiency in the initial years of mining, by relocating the southern infrastructure, to a new location closer to the initial areas of mining activity. A description of the propose change is provided in this letter.

Based on advice from DEHP, Byerwen Coal identified that the relocation of the southern infrastructure would require an amendment to EA EPML00595013, under the EP Act. As advised by DEHP, Byerwen Coal submitted an EA amendment application providing information of the proposed relocation and an assessment of potential environmental impacts associated with the new location.

DEHP have assessed the potential environmental impacts of the relocation of the southern infrastructure and determined that based on the information provided, from an environmental perspective, the relocation of the southern infrastructure will pose no additional risks and constituted a "minor change" under the EP Act.

As such DEHP completed the environmental impact assessment and has issued Byerwen Coal with an amended EA (EA EPML00595013) taking effect on 29 May 2015, in which the only changes made were updates to Figure 1 and Figure 2 in the EA (i.e. no changes required to any condition in the EA).

For any questions relating to the environmental impacts of the proposed amendment please contact Dr Boyd directly, as the Project has been approved and no longer reports to the DEHP EIS Assessment team in Brisbane. This will assist your team in assessing the amendment and avoid unnecessary duplication.

#### **MINING LEASE BOUNDARIES**

The ML boundaries shown in figures within this letter and the attached assessment document, present different boundary outlines. Since the approval of the Project and the release of the OCG Report, Byerwen Coal identified areas within three of the ML's (ML10355, ML10357 and ML70436), where no mining or surface operations were planned and excised those from the mining leases under the *Mineral Resources Act 1989* (MR Act).

Shown in **Figure 1**, are the current ML boundaries for the Project. Some figures used in the attached assessment document are extracted directly from the OCG Report and the EIS, and as such those figures may show the previous ML boundaries; however the difference in ML boundary does not affects the use of those figures in the assessment.

#### **DESCRIPTION AND REASONS FOR PROPOSED CHANGE**

Presented in **Figure 1**, is the existing location and the proposed new location of the southern infrastructure, in the south eastern corner of the Project. The new location was identified to enable faster construction schedules, significant cost reductions across construction and operation, more specifically the new location was identified to enable:

- Net reduction of ~3.1 km of rail requirements across the Project area and the removal of rail from across the Project area, with the relocated rail loop being adjacent to the GAP rail line. This represents a notable reduction in actual impacts, as well as reduced coal sterilisation compared to the original alignment.
  - o It is best practice to minimise potential resource sterilisation. At the time of the EIS resources beneath the original rail alignment were not economically feasible to recover and as such are not considered in the Project. However in the future (such as post Project) those resources may become economically viable to recover. As such avoiding sterilisation of potentially future economically recoverable coal is of consideration and benefit.
- Reduction of haul road requirements, truck haulage distance and dust creation;
- Removal of southern infrastructure from proximity to Collinsville-Elphinstone Road
- Net reduction of ~6km of water pipeline construction requirements, with the southern infrastructure being relocated closer to SunWater's Burdekin to Moranbah pipeline (a source of process makeup water).

The shorter rail spur distance of the new location means that there is less construction required and the construction schedules for the southern infrastructure will be shorter. In addition the shorter pipeline and shorter haul road requirements mean there is less civil work required, further reducing the construction phase of the southern infrastructure.

The proposed change reduces required clearance area for the southern infrastructure and does not increase any aspect of Project scale, activity type, process or intensity. As such Byerwen Coal believes the new location represents an improved design and Project layout.

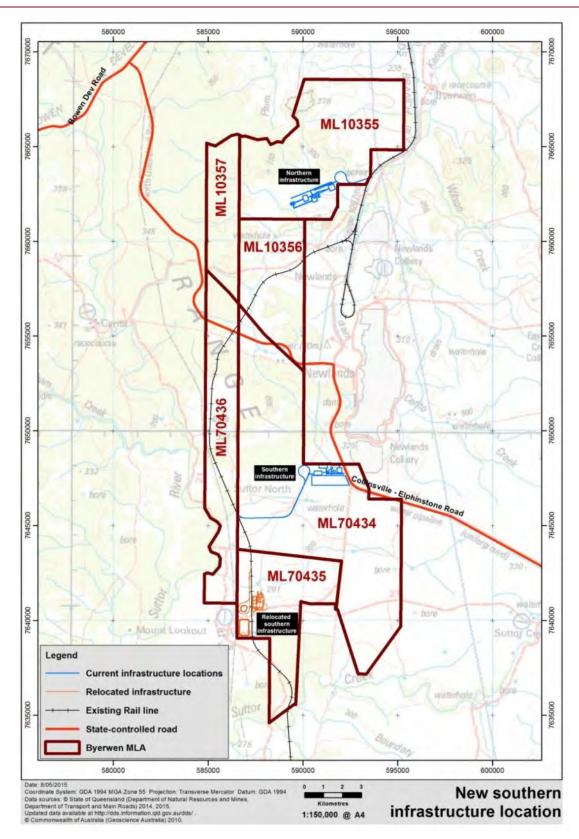


Figure 1: Existing and Relocated Southern Infrastructure (current ML boundary)

# INFORMATION ON THE CHANGE AND EFFECTS ON THE PROJECT, ENVIRONMENT AND COMMUNITY

Byerwen Coal has undertaken an assessment of the proposed change in southern infrastructure location. The objective of the assessment was to establish whether the change in the location of the southern infrastructure:

- · has any resultant effect on the overall Project;
- has any effects on the potential environmental impacts identified in the EIS;
- has any effect on the community and stakeholder potential impacts identified in the EIS; and
- has any effect on Commonwealth and state environmental approval conditions (i.e. whether the OCG Report conditions, the EA EPML00595013 conditions and the EPBC conditions remain applicable to address the potential impacts of the Project with the relocated southern Infrastructure).

The findings of the assessment as well as a more information on the proposed change, is presented in the document "Byerwen Coal Project – Assessment of Potential Impacts on Values associated with the Relocation of Southern Infrastructure" appended to this letter.

A summary of the key findings presented in the assessment document is as follows:

- Project Operations
  - No change to scale, intensity, pit layout productivity, economics or schedule (other than a shorter construction time)
- Flooding
  - o Above the Q1000 flood level
- Air / Dust
  - o No change to equipment or methods so no change to dust creation profile
  - o Removed from proximity to Collinsville-Elphinstone Road
  - New location is not closer to any identified sensitive receptor
  - o New location is within an area previously assessed for dust creation
  - No new potential impacts identified for sensitive receptors
- Waste
  - o Relocation of surface facilities only so no change to waste creation profile
- Noise / Vibration
  - Relocation of surface facilities only and so no blasting
  - Removed from proximity to Collinsville-Elphinstone Road
  - o New location is not closer to any identified sensitive receptor
  - o New location is within an area previously assessed for noise creation
  - No new potential impacts identified for sensitive receptors
- Groundwater
  - Relocation of surface facilities only so no dewatering impact
  - o Seepage from dams addressed through regulated structure requirements

- Surface Water and Aquatic Ecology
  - No change to water balance and as such no change to release modelling or release requirements (quantity, frequency or quality)
  - o No change to release locations
  - o Same downstream receiving environment

#### Sewage

- No change to worker numbers or anticipated sewage volumes.
- Same land value so no change to sewage management criteria (irrigation quality)
- New irrigation area identified is above Q1000 flood level

#### Land, Rehabilitation

- No change to mine domains
- New location is in the same environment so rehabilitation objectives for the domains remains the same
- Reference sites will still apply once finalised
- Disturbance/Clearance and Terrestrial Ecology
  - Original southern infrastructure location is 271ha and the new location is 190ha (an 81ha or 30% reduction in area). Of the 190ha:
    - 169ha (89%) located on areas previously approved to be cleared
    - 21ha (11%) located on areas not in existing approved disturbance but does not intersect any regional ecosystems
  - No new use is proposed for the original location.
  - Will not disturb any regional ecosystems other than is what already approved to clear and accounted for in biodiversity offset strategy (no offset changes)

#### Regulated Structures

- No change to size requirements as no change to water balance
- Still subject to all Manual and RPEQ design, construct, certification and inspection requirements

#### Community and Stakeholders

- New location within Lot 1 CP905226, owned by Mr Christopher Wallin (QCoal Managing Director)
- The proposed change reduces the clearance area for the southern infrastructure and does not increase any aspect of Project scale, activity type, process or intensity; therefore, there is no change to the economic benefits, workforce requirements, public road use or social considerations of the Project.
- New location is within areas previously approved for mining activity disturbance; therefore the physical disturbance of the new location has been considered during the approval process, which included public consultation as well as consideration of submissions on the EIS.
- relocation of the southern infrastructure would not materially affect the community perception of this Project, and does not represent a material change to the Project presented to stakeholders.

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#### SDPWO ACT EVALUATION OF PROPOSED CHANGE

As previously stated, DEHP have assessed the potential environmental impacts of the relocation of the southern infrastructure and determined that from an environmental perspective, the relocation will pose no additional risks and constituted a "minor change" under the EP Act.

An amended EA (EA EPML00595013) comprising the relocated southern infrastructure was issued to Byerwen Coal, taking effect on 29 May 2015.

Based on DEHP's assessment, Byerwen Coal believes the proposed change is minor in nature and does not warrant public notification under the SDPWO Act, or changes to the imposed or stated conditions in the OCG report.

#### **REVIEW OF EPBC ACT AND EPBC CONDITIONS**

Byerwen Coal has also undertaken a review of the conditions issued by the DoE under the EPBC Act (EPBC Ref: 2010/5778), and provides the following summary:

- No change to disturbance limits of habitat
- No change to the requirements of the biodiversity offset management plan
- No change to requirements of the groundwater monitoring and management plan
- No change to groundwater quality and level triggers
- No change to reporting and notification requirements

As such the proposed change does not change or affect the conditions of approval under the EPBC Act, and those conditions remain applicable for the new location of the southern infrastructure.

It is Byerwen Coal's view that given the reduced environmental impacts and the reduction in the amount of coal sterilised, that this proposed change also has increased benefits for the State of Queensland.

Please contact me on 07 3002 2900 or hleary@gcoal.com.au with any queries.

Yours sincerely

Hayden Leary

General Manager – Environment and Risk



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2 June 2015

# Byerwen Coal Project – Assessment of Potential Impacts on Values associated with the Relocation of Southern Infrastructure

The following document presents a summary of the assessment undertaken for the proposed new location of the southern infrastructure, on the Byerwen Coal Mine (Project).

The Project underwent a full Environmental Impact Statement (EIS) process, culminating in approval from the Queensland Office the Coordinator General (OCG). As such this assessment aims to establish whether the relocation of the southern infrastructure changes the potential environmental impacts identified in the EIS, and therefore whether the Commonwealth and state environmental approval conditions to manage identified potential impacts remain applicable for the new location.

The assessment was undertaken to address the following specific considerations:

- 1. Suitability of the proposed new location in terms of operational and physical constraints, in particular
  - o Operational considerations in the context of the overall Project
  - o Flooding risk assessment of the proposed location
- 2. Potential impacts associated with the proposed new location including a review of Queensland Environmental Authority (EA) EPML00595013 conditions:
  - o Air (with a review of the proximity of sensitive receptors)
  - Waste
  - Noise and Vibration (with a review of the proximity of sensitive receptors)
  - o Groundwater
  - o Surface Water
  - Sewage
  - Land, Rehabilitation and Ecology
  - o Community and Stakeholders

This document should be read in conjunction with the cover letter dated 1 June 2015, which gives a description and justification of the relocation of the southern infrastructure.

# 1) OPERATIONAL AND PHYSICAL SUITABILITY OF SELECTED LOCATION

The relocation will reduce the actual clearance footprint of the southern infrastructure from 271 ha to 190 ha (a 30% reduction), with proportionate reduction in associated surface related potential impacts. The new location is sited almost entirely within the previously approved disturbance area, previously designed for mining activities with buffered clearance.

A review of the operational layout of the southern section of the Project was undertaken, to establish if the relocation of the southern infrastructure results in required operational or layout changes elsewhere in the Project. Additionally the flooding associated with the Suttor River and tributaries adjacent the new location was assessed to establish the requirement for any flood protection for the relocated southern infrastructure.

#### **OPERATIONAL LAYOUT**

Shown in Figure 1 is the relocated southern infrastructure layout.



Figure 1: Relocated southern infrastructure (current ML boundary)

Shown in **Figure 2**, is the approved clearance area for the southern section of the Project and the new location of the southern infrastructure. As is shown the new location has been selected to ensure it is primarily within approved disturbance areas, with the exception of a small section of rail (the rail spur) which is not within the current identified disturbance area. The rail spur section is assessed in **Section 2 - Land, Rehabilitation and Ecology Offsets** (Schedule H), of this document.

ML70435

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This means that the new location for the southern infrastructure has previously been approved for clearance (except for the rail spur).

Figure 2: Approved disturbance area around relocated southern infrastructure (current ML boundary)

Shown in **Figure 3** is the proposed new location of the southern infrastructure overlayed over the EIS layout of the area. As can be seen the rail loop and rejects facilities are located on what was previously designated as waste rock dump. The CHPP, MIA and ROM are located partially on South Pit 1 dump, partially on South Pit 2 dump and partially on buffered disturbance area.

From an operational context the loss of waste rock dump space was specifically considered. A process of continual review and improvement in design and mine plan has been ongoing since 2012, prior to the financial commitment associated with commencing construction. That process has identified a more suitable location for the southern infrastructure with the proportionate loss of waste rock dump area. Accordingly a review of the materials balance in the initial stages of mining was undertaken to factor in the loss of this area as dump space. The materials balance has been updated since 2012 with more site specific data and more detailed mining layout/designs, such that the area of waste rock dump is no longer required and the materials balance retains the same ratios, without any additional dumps or changes to existing dumps.

As such the relocated southern infrastructure does not have any resultant effects on the mine operational parameters, as were presented and approved for the overall Project.

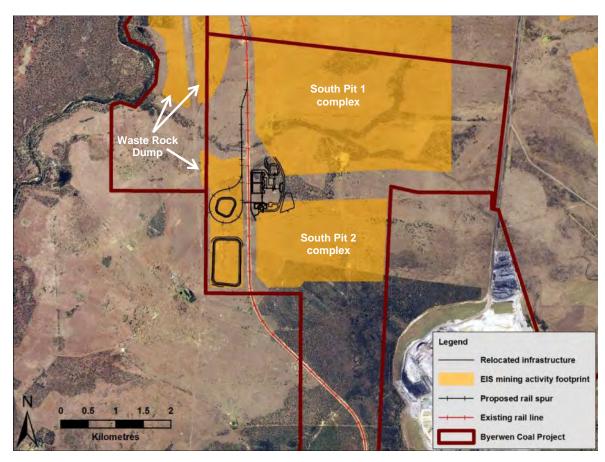


Figure 3: Relocated Southern Infrastructure over EIS layout (current ML boundary)

#### **MINING SEQEUNCE**

The relocation of the southern infrastructure has been identified as an more cost efficient model, especially for the early years of mining, when the Project commences. The mining sequence presented in the EIS has been updated as per **Figure 4.** 

As is shown the commencement of mining will be in South Pit 2, the south western corner of South Pit 1, and a small section of West Pit 1. This updated schedule is linked to the updated southern infrastructure location and is a result of the process of continual review and improvement. The previous and updated haul road configuration is shown.

The EIS layout haul road configuration for the entire Project was 23.7km. The revised haul road configuration for the entire Project with the relocated southern infrastructure is 14.5km. A 9.2km reduction in haulage road requirements associated with the relocated southern infrastrucre, over a continuous driving loop 24hr/day, 7day/week for ~50 years is a substantial reduction in operational haulage hours, haulage circuit distances and costs.

All other operational sequencing remains as presented in the EIS.

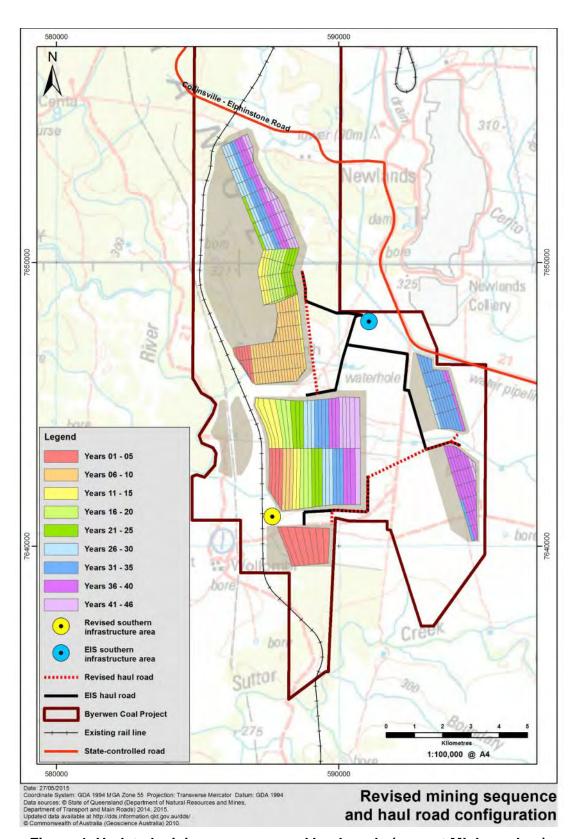


Figure 4: Updated mining sequence and haul roads (current ML boundary)

#### FLOODING ASSESSMENT

Peak discharges in the waterways in the vicinity of the new location were considered using available methods (e.g. flood frequency analysis and rainfall-runoff hydrologic modelling) to obtain an estimate of design floods. A range of design storms were assessed including: 100 and 1,000 year average recurrence interval (ARI) flood events.

A hydraulic model for the area around the new location was developed using a combination of SOBEK software for the Suttor River and HEC-RAS software for the unnamed tributary adjacent the new location, as was used in the EIS. The model was specifically written for the analysis of complex flow patterns in broad river floodplains and is well suited to the requirements of this assessment. Presented in **Figure 5** is the baseline flood level for the 1,000 year ARI event and the proposed relocated southern infrastructure.

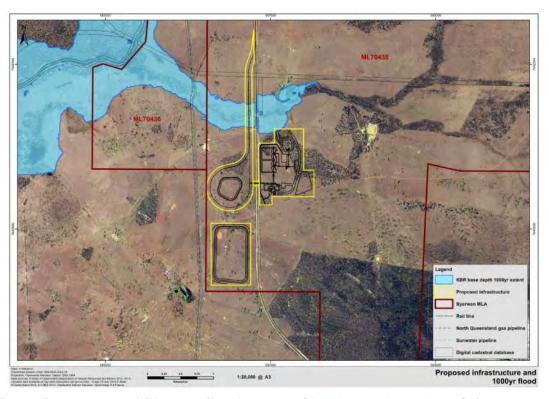


Figure 5: 1,000 year ARI event flood extent with relocated southern infrastructure (current ML boundary)

The results indicate that the new location is above the existing 1,000 year ARI event and as such does not need any commensurate flood protection. It is noted that the relocated rail spur linking the rail loop to the GAP rail line crosses the unnamed tributary and as such the bridge will be designed accordingly.

The new location of the southern infrastructure is partially situated on the final section (final ~1km) of a diversion (designated Diversion 2 in the OCG Report and EIS documentation), where the diversion feeds back into the natural watercourse alignment.

Accordingly that final ~1km section of Diversion 2 will be designed to flow as presented as summarised below:

- from immediately upstream of the southern infrastructure (the eastern side);
- around the northern edge of the southern infrastructure area; and
- back into the natural watercourse alignment.

This section of Diversion 2 will run through the edge of the south western corner of South Pit 1 waste rock dump, which will inherently be slightly adjusted to accommodate the diversion. As stated previously the materials balance has been updated and accounts for this, with effect on the materials ratios or the need to change any other waste rock dump configurations. No other change to Diversion 2 alignment is required

Regardless of the final alignment of this section of diversion, an application to divert must be made to the Department of Natural Resources and Mines (DNRM) under the *Water Act 2000* (Water Act), which will assessed under the Water Act at that time. The principles of diversion design including, velocities, stream power, scouring, lengths, curves materials, ecology etc that were approved during the EIS still apply in full to whatever alignment this section of diversion will take. As such the modification in the proposed alignment of this section of Diversion 2 has no effect on any aspect of the Project or previously assessed environmental impacts, specifically downstream water quality and ecology, and the hydrology of that area of the Project.

# 2) ENVIRONMENMTAL VALUES and OPERATIONAL CONSIDERATIONS

To assess whether the new location for the southern infrastructure may have potential environmental impacts which have not previously been identified, mitigated and approved, the following provides a review of the new location against the key environmental values. Additionally the assessment was used to establish what amendments would be required to EA EPML00595013, with the southern infrastructure relocation.

#### **GENERAL** (EA Schedule A)

The conditions in Schedule A of EA EPML00595013 relate to:

- description of activities
- general monitoring data requirements
- financial assurance requirements
- risk management system requirements
- emergency notification requirements
- complaints handling
- third party reporting

The only aspect of Schedule A which relates to the proposed relocation of the southern infrastructure, is as part of the description of activities where Condition A3 and Condition A4 reference EA EPML00595013 Figure 1, which shows:

- areas approved for disturbance (designated "A")
- areas where disturbance may not occur (designated as area "B"), and
- areas where disturbance may occur for ancillary activities (designated area "C")

Schedule A does not define disturbance areas but refers to EA EPML0059501 Figure 1 which does show disturbance areas. Any change in layout or disturbance will not require changes to conditions in Schedule A, but will require amendment of EA Figure 1. As previously stated in **Section 1** of this document and defined in the cover letter, the relocated southern infrastructure is mostly within approved disturbance areas established during the Project approval (see **Figure 2**).

#### AIR and SENSITIVE RECEPTORS (EA Schedule B)

The relocation of the southern infrastructure does not involve any change to the processes, methods or equipment, and as such there are no new sources of potential air impact (dust or odour) to the Project. The physical sources of potential air impacts, remains the same as profiled in the Project approval and subsequently accounted for in the EA conditions.

The amendment relates to the relocation of infrastructure, to an area previously assessed for mining activity during the Project approval studies. As such potentially sensitive receptors in the proximity of the new location of the southern infrastructure have previously been identified during the EIS and subsequently accounted for in the environmental conditioning

Presented in **Figure 6** are the potentially sensitive receptors in the vicinity of the southern Project area. As part of this assessment, a review of those potentially receptors was undertaken by Byerwen Coal, and confirmed that:

- there has been no change in the status of previously identified sensitive receptors;
- no additional sensitive receptors have been identified.

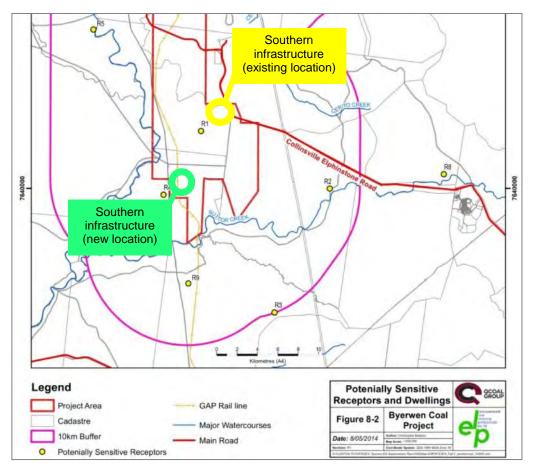


Figure 6: Potentially sensitive receptors southern Project (EIS ML boundary)

In the southern Project area, seven potentially sensitive receptors were identified (R1, R2, R3, R4, R5, R8 and R9); three potentially sensitive receptors were identified in the north (R6, R7 and R10). All potentially sensitive receptors (including R1, R2, R3, R4, R5, R8 and R9) are described in detail in the EIS and the EMP. There are no changes to the status of those potentially sensitive receptors from the EIS and EMP, as follows:

- R1 (Suttor North Homestead), R4 (Wollombi Station Homestead) and R9 (two sheds) were assessed as not being sensitive receptors as they will either not be occupied for the duration of the Project or are not residences.
- R2 (Suttor Creek Station Homestead), R3 (Lancewood Station Homestead), R5 (Cerito Station Homestead) and R8 (Glenden Station Homestead) were identified as sensitive receptors for the Project.

Accordingly the EIS assessed potential impacts to R2, R3, R5 and R8 from the Project. The new location of the southern infrastructure remains within the disturbance footprint assessed in the EIS for the Project; therefore the relocation of the southern infrastructure does not introduce any sources of impact into unassessed potentially sensitive receptors.

The relocation of the southern infrastructure will therefore not impact on any sensitive receptors previously assessed for air. As such there is no additional potential for any air impacts to occur and no changes to Schedule B are required.

#### WASTE (EA Schedule C)

No change in waste generation (type or amount) is associated with the relocation of the southern infrastructure, as the proposed relocation does not affect any aspect of Project scale, activity type, process or intensity. As such there are no changes to Schedule C required.

# NOISE / VIBRATION and SENSITIVE RECEPTORS (EA Schedule D)

The relocation of the southern infrastructure does not introduce any new sources of noise or vibration to the Project and does not introduce noise or vibration sources into a new "unassessed" area of the Project. No additional processes, methods or equipment are required and as such the physical sources of noise and vibration remain the same as was profiled in the Project approval, and subsequently accounted for in the EA conditions.

As the amendment relates to the relocation of infrastructure to an area already assessed for mining activity, potentially sensitive receptors have previously been profiled in the Project approval and subsequently accounted for in the EA conditioning. Please refer to **Figure 6** and discussion for "**Air** (Schedule B)" which addresses proximity to sensitive receptors. As determined for "**Air** (Schedule B) the relocation of the southern infrastructure will not impact on any sensitive receptors previously assessed for noise and vibration.

As such there is no additional potential for any noise or vibration impacts to occur and no changes to Schedule D are required.

# **GROUNDWATER** (EA Schedule E)

The relocation of the southern infrastructure relates to surface infrastructure only, which do not require any groundwater affecting activities (i.e. dewatering). As such it will not affect groundwater levels and will therefore not require the installation of additional groundwater monitoring bores. The only potential groundwater impacts associated with the southern infrastructure relocation which could occur, relate to potential seepage of surface contaminants into the underlying groundwater, such as from regulated dams (e.g. rejects co-disposal facilities). The EA Schedule E currently includes quality parameters for groundwater, with trigger values to be based on baseline quality.

Potential seepage of dams as a source of groundwater contamination is addressed in the design, construction, RPEQ¹ certification and monitoring requirements (such as seepage detection) of regulated dams.

As such there are no changes to Schedule E required.

#### WATER and AQUATIC ECOLOGY (EA Schedule F)

The surface water values for the southern section of the Project are based around the Suttor River as the downstream receiving waters. Both the existing and proposed locations of the southern infrastructure have the Suttor River as the downstream receiving water and surface water value. As such the existing water quality objectives for the Suttor River remain applicable.

The relocation of the southern infrastructure reduces the required clearance area for the southern infrastructure and does not increase any aspect of Project scale, activity type, process or intensity, and as such, there is no anticipated change in the water balance for the Project. The water balance was the basis for establishing the approved release requirements (frequencies and volumes), release locations and release water quality criteria. No release locations are associated with the southern infrastructure. Accordingly the relocation of the southern infrastructure does not introduce any change to the frequency or volume of releases, the quality requirements of release water, the downstream water quality objectives or the release locations. Consequently there is no change to the potential impacts to the aquatic ecology of the receiving environment and as such the existing locations and requirements for the Receiving Environment Monitoring Program (REMP) remain applicable.

The surface infrastructure MIA will include workshops, fuels storage and other potential sources of surface water contamination, in the event of a spill. Byerwen Coal will continue to adopt best practice hydrocarbon and chemical handling, storage and spill clean-up procedures for the new location, as was proposed for the original location. This will minimise the risk of contaminant release or contain any accidental releases. Fuel and chemical storages will be constructed and bunded to the relevant Australian Standard. Re-fuelling areas will incorporate oil-water separators. In addition the erosion and sediment control plan (ESCP) will be designed and implemented for construction and operation phases of the Project. The ESCP will include the southern infrastructure, with the objective of managing sediment laden water while allowing clean runoff to flow directly into the natural environment. As such the potential for surface water chemical or sediment contamination from the southern infrastructure is considered minimal. The relocated infrastructure, while downstream from the original proposed location, remains above the Q1000 level.

The surface water management addressed in the EA (reporting requirement and Water Management Plan) will not change with the relocation of southern infrastructure.

<sup>&</sup>lt;sup>1</sup> Registered Professional Engineer Queensland

#### **SEWAGE** (EA Schedule G)

The requirements for sewage management on the Project will not change as part of the relocation of the southern infrastructure. However the designated sewage effluent irrigation area associated with that infrastructure will evidently require relocation. The requirements for selection of an irrigation area are stipulated in Schedule G of the EA and as such those will be adhered to in selecting a relocated southern irrigation area. The effluent criteria established in the EA is based on the DEHP Model Mining Conditions and accordingly those criteria remain applicable, particularly as the relocated irrigation area will be on the same soil types and within the same hydrological sub-catchment as the previous location.

The area designated nominated for release (irrigation) of treated effluent is shown on Figure 2 of the EA, which is referred to (but not defined by) by Schedule G. EA Figure 2 requires an amendment to show the relocated irrigation area (which is a component of relocating the MIA); however there are no changes to Schedule G required.

#### LAND, REHABILITATION and ECOLOGY OFFSETS (EA Schedule H)

The relocation of southern infrastructure does not represent any previously unconsidered domain/s. As such the relocated infrastructure will be subject to the same domain based rehabilitation objectives outlined in EA Appendix 1, regardless of where it is located.

Condition H3 of the EA, states that rehabilitation must commence progressively in accordance with the Plan of Operations. As such to comply with the EA, a Plan of Operations will be developed which stipulates the scheduling of mining progression and corresponding rehabilitation scheduling. However as a general principle, mining will commence in South Pit 2 on the western side and progress east, with initial waste rock dumps out of pit. When South Pit 2 has sufficient volume of mined void available, in pit backfilling will occur. Rehabilitation of waste rock dumps will commence as soon as active dumping in that area is completed.

The other aspects of environmental land management addressed in the EA, such as topsoil management, mining waste management, contaminated land and residual void outcomes, will not change with the relocation of southern infrastructure. With specific regard to ecological impact and biodiversity offsets, Byerwen Coal is currently finalising a Biodiversity Offset Strategy to be submitted as is required and this amendment does not affect that strategy.

Presented in **Figure 7** are the Regional Ecosystems (RE) in the southern section of the Project (Queensland Herbarium, June 2014), with the current disturbance footprint and the relocated southern infrastructure. Those areas of RE impacted by the relocated southern infrastructure have already been considered in impact assessments, subsequently approved for disturbance and are addressed accordingly in the Biodiversity Offset Strategy. As is shown there is no additional impact to RE associated with the relocation of the southern infrastructure and as such no change to the ecology impact mitigations already in development.

Project construction is planned to commence at the southern infrastructure new location in 2015, with any necessary offsets (e.g. RE 11.4.2) required to be addressed as per the Biodiversity Offset Stagey in consideration of the 2015 intended commencement.

As such there are no changes to Schedule H required.

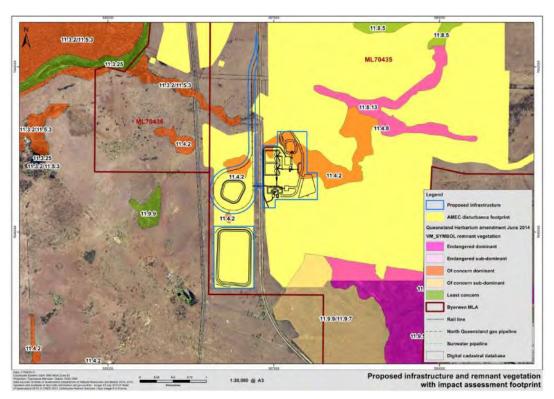


Figure 7: REs/Offset area (southern section) with relocated southern infrastructure (current ML boundary)

With specific regard to the ecology associated with Matters of National Environmental Significance administered by the Commonwealth Department of Environment (DoE). Byerwen Coal reviewed the DoE conditions issued under the EPBC Act (EPBC Ref: 2010/5778) for the Project as follows:

- The EPBC conditions do not stipulate or define an approved Project layout;
- The EPBC conditions stipulate maximum disturbance area for designated habitats
- The EPBC Conditions stipulate conditions for a Bio Diversity Offset Management Plan

It is reiterated that the relocation of the southern infrastructure is entirely within a disturbance footprint previously assessed and approved by the DoE, with the exception of the rail spur leading onto the GAP cleared rail easement.

As for the Queensland ecology, **Figure 7** shows the southern infrastructure within approved disturbance areas, except for the rail spur which does not intersect vegetation. Accordingly as clearing of the footprint has already been approved, there is no additional impact to MNES ecology from relocating the southern infrastructure.

#### **COMMUNITY and STAKEHOLDERS**

The new location of the southern infrastructure is wholly situated on Lot 1 CP905226. The Lot is owned by QCoal's Managing Director. (Lessee: Christopher Wallin). The closest third party land parcel to the new location is Lot 667 on PH1321, which is ~2.5km to the north-west; therefore the relocation of the southern infrastructure does not affect third party properties in the vicinity of the Project.

The proposed change reduces the required clearance are for the southern infrastructure and does not increase any aspect of Project scale, activity type, process or intensity. As such there is no change to the economic benefits, workforce requirements, public road usage or social considerations associated with the Project.

The new location is within areas previously approved for mining activities; therefore the physical disturbance of the location has been considered during the approval process, which included public consultation as well as consideration of submissions on the Project Environmental Impact Statement (EIS). Specifically, the general public, local, state and commonwealth government agencies, non-government organisations and businesses, were afforded through the EIS process opportunity to make comment and submission on the Project, which included the area of disturbance now proposed for the southern infrastructure.

Of note is that the new location is actually removed from proximity to public, as it is now located away from the Collinsville-Elphinstone Road (a public road).

Therefore Byerwen Coal does not believe that the relocation of the southern infrastructure would materially affect the community perception or concerns regarding this Project, and does not represent a material change to the Project presented to stakeholders in the vicinity, such as holders of adjacent mining tenements.