



WHITEHAVEN COAL

28 May 2015

BY EMAIL

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Dear Mike,

**WHITEHAVEN COAL LIMITED – GUNNEDAH CHPP AND ROCGLLEN REJECTS
MANAGEMENT MODIFICATIONS AND ENVIRONMENTAL ASSESSMENT**

I am writing to you in regard to the management of coal reject materials at Whitehaven Coal Limited's (Whitehaven's) Coal Handling and Preparation Plant (CHPP) and the Rocglen Coal Mine (Rocglen). The Whitehaven CHPP and Rocglen are located approximately 5 kilometres (km) to the north-west, and 28 km to the north, of Gunnedah in New South Wales (NSW), respectively (**Figure 1**). Whitehaven wishes to make some adjustments to the coal reject management and disposal methods at these sites.

Further to the email dated 7 May 2015 from Matthew Riley of the Department of Planning and Environment (DP&E) to Richard Kirwood of Resource Strategies, please find attached to this letter applications to modify the CHPP Development Consent (DA 0079.2002) and the Rocglen Project Approval (PA 10_0015) under Section 75W of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act).

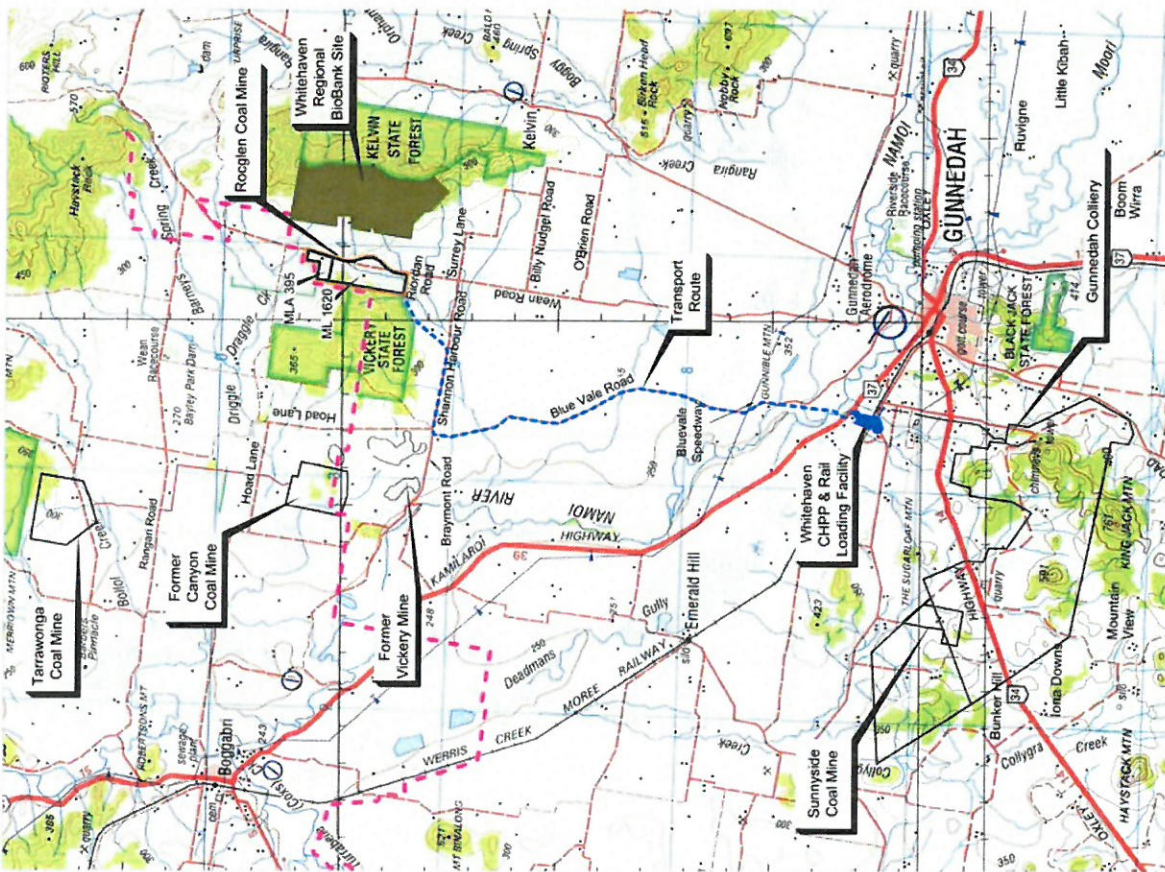
As per the 7 May 2015 email, this letter provides a description of the existing operations and proposed modifications to the Whitehaven CHPP and Rocglen, a justification for the proposed changes, and an environmental review. As part of the modification, Whitehaven also requests that the DP&E modify the two approvals to include the phrase 'generally in accordance', as neither currently contains this wording.

Whitehaven CHPP

Description of the existing operations and approvals

Coal-related activities at the site of the Whitehaven CHPP commenced in late 1986 following the issue of various development consents for the Vickery Coal Mine for transporting and loading coal at the rail loading facility. Development Consent DA 23/86 was issued in October 1986 by the Minister for Planning and included the construction and operation of the Gunnedah rail loading facility.

In June 2002 Whitehaven lodged a development application and an accompanying Environmental Impact Statement (EIS) with the Gunnedah Shire Council (GSC) for the construction and use of a CHPP adjacent to the coal loading facility. Development Consent (DA 0079.2002) for the Whitehaven CHPP was granted in 2002 by the GSC under delegation from the Minister for Planning. DA 0079.2002 was granted for a period of 20 years expiring on 2 October 2022.



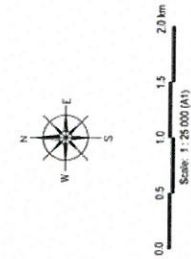
LEGEND

- Project Site Boundary
- Mine Lease Boundary
- Mine boundary
- State boundary
- Whitehaven Regional BioBank Site
- Coal transport route



LEGEND

- Project Site Boundary
- Mine Lease Boundary
- Mine boundary
- State boundary
- Whitehaven Regional BioBank Site
- Coal transport route
- Non-project related residence



LEGEND

- Area disturbed by infrastructure (prior to this MOP)
- Area disturbed by mining (this MOP)
- Area disturbed by overburden emplacement (this MOP)

Date of Report	Completed	Revised By	Revised Date
Author	Author	Revised By	Revised Date
ROGGLER COAL MINE - MINING OPERATION PLAN			
Mine and Context			
Date	12-08-11	Scale	Refer to Scale Bar
Prepared by	GSS Environmental	Page No.	1



The 2002 EIS described the coal separation process as involving the separation of product coal from poorer quality (reject) materials. Processing would be at a nominal rate of 400 tonnes per hour and to a maximum of 2 million tonnes per annum (Mtpa). The various processing modules (e.g. spirals, cyclones, screens, centrifuge) would be located in a plant building approximately 15 metres (m) high.

The 2002 EIS described the Whitehaven CHPP as producing two forms of solid waste for disposal (i.e. coarse and fine rejects). The coarse rejects were described as being *'conveyed to a live storage area from which it would principally be loaded into coal trucks for transport back to the source mines for disposal'*. The fine tailings were described as being pumped to the active fine reject ponds, where they would be allowed to dewater via gravity, before the semi-dried fines would be loaded into trucks and transported off-site to the source mine for disposal with the overburden or to areas at the Gunnedah Colliery requiring materials for post mining landform creation.

In 2008 Whitehaven lodged a Modification Application (with an accompanying Statement of Environmental Effects [SEE]) to increase the throughput through the Whitehaven CHPP to 3 Mtpa and to increase the rail loading capacity to 4.1 Mtpa. Modification 305208 to DA 0079.2002 was granted by the GSC in April 2008. The 2008 SEE described the proposal as involving the introduction of various additional fixed equipment components to the CHPP to increase production capacity (e.g. a stand-alone reject screen and circuit, an additional centrifuge for coal dewatering, and full re-establishment of the coarse coal circuit).

The 2008 SEE described that *'following the cessation of the reject back-loading program to the Whitehaven Coal Mine, the coarse reject would be loaded into trucks returning to Tarrawonga Coal Mine and/or Belmont Coal Mine'*. The 2008 SEE also stated that fine rejects would *'be transported to the source mine for disposal with overburden or to the Melville open cut to complete the post mining landform in that area'*. The coarse reject stockpile at the Whitehaven CHPP is described as being located immediately to the north-east of the plant, and having a capacity of 20,000 tonnes (t).

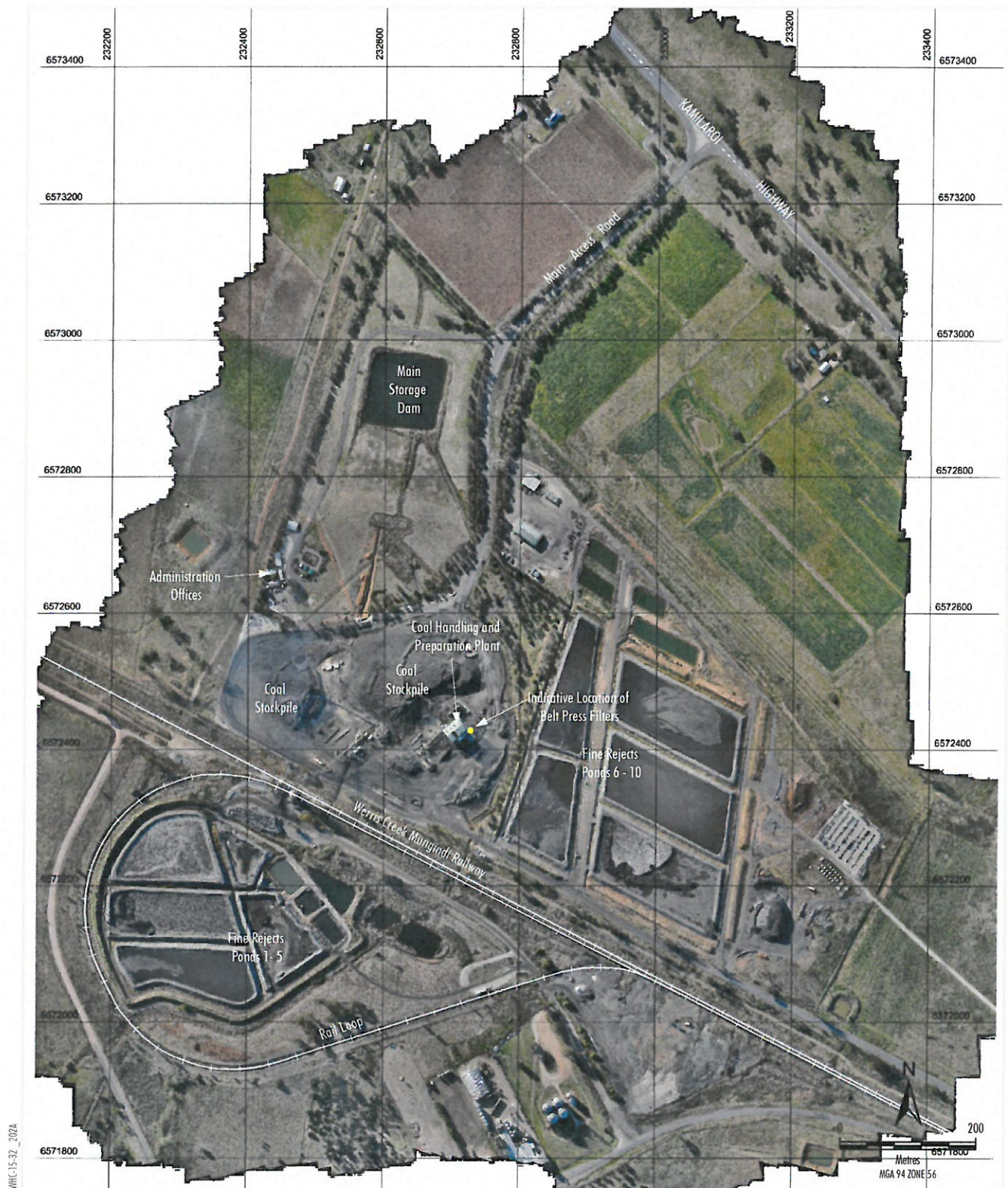
In 2011 Whitehaven lodged a Modification Application (with an accompanying Environmental Assessment [EA]) which sought approval for three additional fine rejects ponds (i.e. ten in total) and two settlement ponds. The NSW Minister for Urban Affairs and Planning granted approval for the modification under Section 75W of the EP&A Act in December 2011. The modified Development Consent replaced the previous conditions of DA 0079.2002 (as granted by the GSC on 2 October 2002) with new conditions provided in Schedules 2 and 3 of the Notice of Modification.


The Whitehaven CHPP and train loader are operated in accordance with DA 0079.2002, and Environment Protection Licences (EPLs) 3637 and 2298 which have been issued under the *Protection of the Environment Operations Act, 1997*. **Figure 2** shows the general arrangement of the Whitehaven CHPP site.

Description of the proposed change to the CHPP

The current fine rejects emplacement area at the Melville open cut is approaching its maximum capacity, and once it is full it will be capped and rehabilitated. As a result, fine rejects from the Whitehaven CHPP will need to be disposed of in alternative areas in the near future.

The Rocglen Project Approval allows for the disposal of coarse and fine rejects from the processing of Rocglen coal to be back-loaded from the Whitehaven CHPP and placed into the open cut. However, and as described previously, only coarse rejects are currently disposed of at the site.





 CHPP AND ROCGLEN REJECT MANAGEMENT

 General Arrangement of the

 Whitehaven CHPP

Figure 2



In light of the above, Whitehaven wishes to conduct rejects disposal and management activities at the Whitehaven CHPP as follows:

- Continue to transport coarse rejects from the Whitehaven CHPP to Whitehaven open cut mines as per the existing practice; and
- Continue to partially dewater fine rejects at the Whitehaven CHPP in the existing fine rejects ponds and then transport them to Whitehaven open cut mines (e.g. Melville or Rocglen) either separately or combined with coarse rejects; or
- Install Belt Press Filters (BPF) at the Whitehaven CHPP and use them to produce a dewatered fine rejects 'filter cake' which would be transported to Whitehaven open cut mines via truck (either combined with coarse rejects or separately).

As per the existing situation and CHPP Development Consent, coal from the various Whitehaven mines (currently Rocglen and the Tarrawonga Coal Mine) is not processed in separate campaigns at the Whitehaven CHPP. As a result, the coarse and fine rejects typically consist of material from more than one mine. This situation would not change, and in fact, additional sources of coal (i.e. Vickery and Sunnyside) may be processed at the CHPP in the future (as allowed by their respective Project Approvals).

Rocglen Coal Mine

Description of the existing operations and approvals

The Rocglen Coal Mine (formally known as the Belmont Coal Project) was originally approved by the Minister for Planning in April 2008 (i.e. Project Approval PA 06_0198). This approval allowed for the extraction of up to 1.5 Mtpa of coal from the Rocglen open cut, on-site coal processing (i.e. crushing and screening) and loading into trucks for transport off-site.

In May 2010 the Minister for Planning issued an approval under Section 75W of the EP&A Act to modify PA 06_0198. This modification permitted Whitehaven to undertake unplanned emergency earthworks to stabilise the eastern highwall following slippage adjacent to a fault structure in the north-eastern portion of the approved open cut.

In 2010 Whitehaven lodged a project application (with an accompanying EA) for the Rocglen Coal Mine Extension Project. The Rocglen Coal Mine Extension Project EA sought approval for: the expansion of the open cut design limit to access up to an additional 5 Mt of coal; an increase in the anticipated mine life of up to four years; and extension to the footprint and height of the out-of-pit Northern Emplacement Area; plus various other activities.

The application sought approval for the project under Part 3A of the EP&A Act (i.e. as a new approval rather than a modification to the existing consent due to the scale of the proposal). Approval for the project (i.e. PA 10_0015) was granted by a delegate of the Minister for Planning and Infrastructure in September 2011.

The Rocglen Extension Project EA describes how crushed and screen coal will continue to be transported approximately 30 km by road via the approved haulage route to the Whitehaven CHPP for selective washing, stockpiling and dispatch by rail to the Port of Newcastle or by road to domestic customers.

With regard to the disposal of coal rejects at the mine, the Rocglen Extension Project EA states that production wastes that would be disposed of at the mine site would include overburden and interburden from the development of the open cut and coarse and fine reject material from processing of the coal at the Whitehaven CHPP. It states that *'at a ROM coal production rate of 1.5 Mtpa, annual coarse and fine reject production from Rocglen operations is approximately 300,000 t and 85,000 t, respectively'*.



The Rocglen Extension Project EA states in various places that *'a proportion of the coarse and fine reject material generated at the Whitehaven CHPP from the processing of Rocglen coal is approved to be back-loaded to the project site for placement in the mined-out areas of the open cut'*. The EA also states in the main text and Statement of Commitments *'that any coal rejects placed in the mine void will be covered with at least 3 metres of overburden material'*.

Only coarse rejects are, and have been, disposed of at the Rocglen Coal Mine to date.

The Rocglen Extension Project EA describes how the bulk of the truck fleet would consist of 40 t capacity B-double trucks and the occasional semi-trailer. Average daily heavy vehicle movements associated with the transport of coal and rejects would be 240 movements (i.e. 120 round trips). This would equate to between 17 and 24 movements per hour over a typical operational day, with dispatch of coal permitted between 7.00 am and 9.15 pm Monday to Friday and between 7.00 am and 5.15 pm on Saturdays.

In November 2014 the Secretary of the DP&E granted approval for a modification of PA 10_0015 (i.e. MOD 1) under Section 75W of the EP&A Act. The modification inserted new conditions pertaining to coal transport in the project approval. Specifically; no more than 1.5 Mtpa of ROM can be transported from the site in any calendar year; and that, together with the owners of the Tarrawonga and Vickery coal mines, the proponent must ensure that the cumulative haulage of coal along the approved haulage route does not exceed 3.5 Mtpa.

Condition 27 of Schedule 3 of PA 10_0015 MOD 1 requires the preparation and implementation of a Traffic Management Plan (TMP), and for it to be submitted to the Secretary of the DP&E for approval by 30 June 2015. The TMP is currently being prepared.

Figure 1 shows the regional location and the general arrangement of the Rocglen Coal Mine as depicted in the 2011 – 2018 Mining Operations Plan (MOP).

Description of the proposed change to the Rocglen Coal Mine

Whitehaven wishes to change the rejects management strategy at Rocglen so that the rejects disposed of at the site would not be restricted to just Rocglen-sourced coal (i.e. it would be a combination of coal from all Whitehaven mines that process coal at the Whitehaven CHPP).

Whitehaven also wishes to adjust the transportation of rejects so that it would involve a combination of back-haulage using returning coal trucks (i.e. as is currently the case for coarse rejects), as well as reject-specific trucks (i.e. these trucks would carry reject back to the mine but would not carry coal). These reject-specific trucks may be required if operational and safety constraints preclude the use of back-haulage trucks at the CHPP. Despite this change, the average daily heavy vehicle movements associated with the transport of coal and rejects to and from the mine would remain unchanged. The haulage operation would also continue to be undertaken during the currently approved hours specified in PA 10_0015.

The quantity of reject material, the disposal method, and the disposal location at Rocglen would remain unchanged (i.e. coarse and/or fine rejects would be disposed of in the open cut and buried with at least 3 m of overburden material in accordance with PA 10_0015).



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Environmental Review

The above adjustments to the rejects disposal strategy would provide a degree of flexibility in the way that Whitehaven manages rejects disposal at Whitehaven's CHPP and mine sites, and would provide several environmental benefits.

If installed, the BPFs would increase the efficiency of water removal from the fine tailings (i.e. a higher proportion of the water entrained within the tailings would be removed [and recycled], and the dewatering would be performed more quickly and efficiently than would otherwise occur in the existing fine rejects ponds). This would reduce the overall make-up water demand for the CHPP and would mean that less water would need to be abstracted from the Namoi River and/or the three existing licensed bores located on or adjacent to the site.

Installation of BPFs would also significantly reduce the number of fine rejects ponds required at the CHPP (currently ten are required). If/when BPFs are installed Whitehaven would still need to retain approximately three ponds for contingency purposes during periods when the BPFs are not operating (i.e. scheduled maintenance or unforeseen shutdowns). However, the remaining ponds would be progressively decommissioned and rehabilitated once the fine tailings stored in them has been removed and disposed of. The decommissioning of these ponds would reduce the overall footprint of the Whitehaven CHPP, reduce dust and noise emissions, visual impacts and water use (as described above).

Installation of BPFs would also significantly reduce the number of trucks operating in the local area as filter cake could be back-loaded in the existing coal trucks that would have been returning to the mine site empty. This will mean that up to 16,000 truck movements per annum currently associated with transporting fine reject to the Melville open cut would not be required.

If/when they are installed, the BPFs would be constructed near the existing conveyor that exits the main CHPP building. **Figure 1** shows the location of the CHPP and the indicative site where the BPFs would be installed. **Plates 1 and 2** below show the existing CHPP building and conveyor. The actual location would be subject to the detailed engineering design.



Plate 1 – Existing CHPP Building



Plate 2 – Existing CHPP Building and Conveyor



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The BPFs would be the same or similar to the ones recently installed at Whitehaven's Maules Creek Coal Mine (i.e. Phoenix 3m model). A dewatering screen and associated piping and electrical equipment would also be installed within the existing CHPP building. The BPFs would likely be operated 24 hours per day and operate at a sound power level of approximately 76 decibels. Given their proximity to the existing conveyor and CHPP building, as well as other approved noise sources at the CHPP (i.e. front end loaders, coal and reject transport trucks) the BPFs are not expected to materially change the overall sound power level of the CHPP site, and therefore no additional noise impacts on potentially sensitive residences are predicted to occur. Whitehaven would continue to operate the CHPP in accordance with DA 0079.2002 and the EPLs for the site (i.e. manage operations to comply with the relevant noise criteria).

Figure 3 provides a series of schematic diagrams of the potential configuration of the BPFs adjacent to the CHPP building.

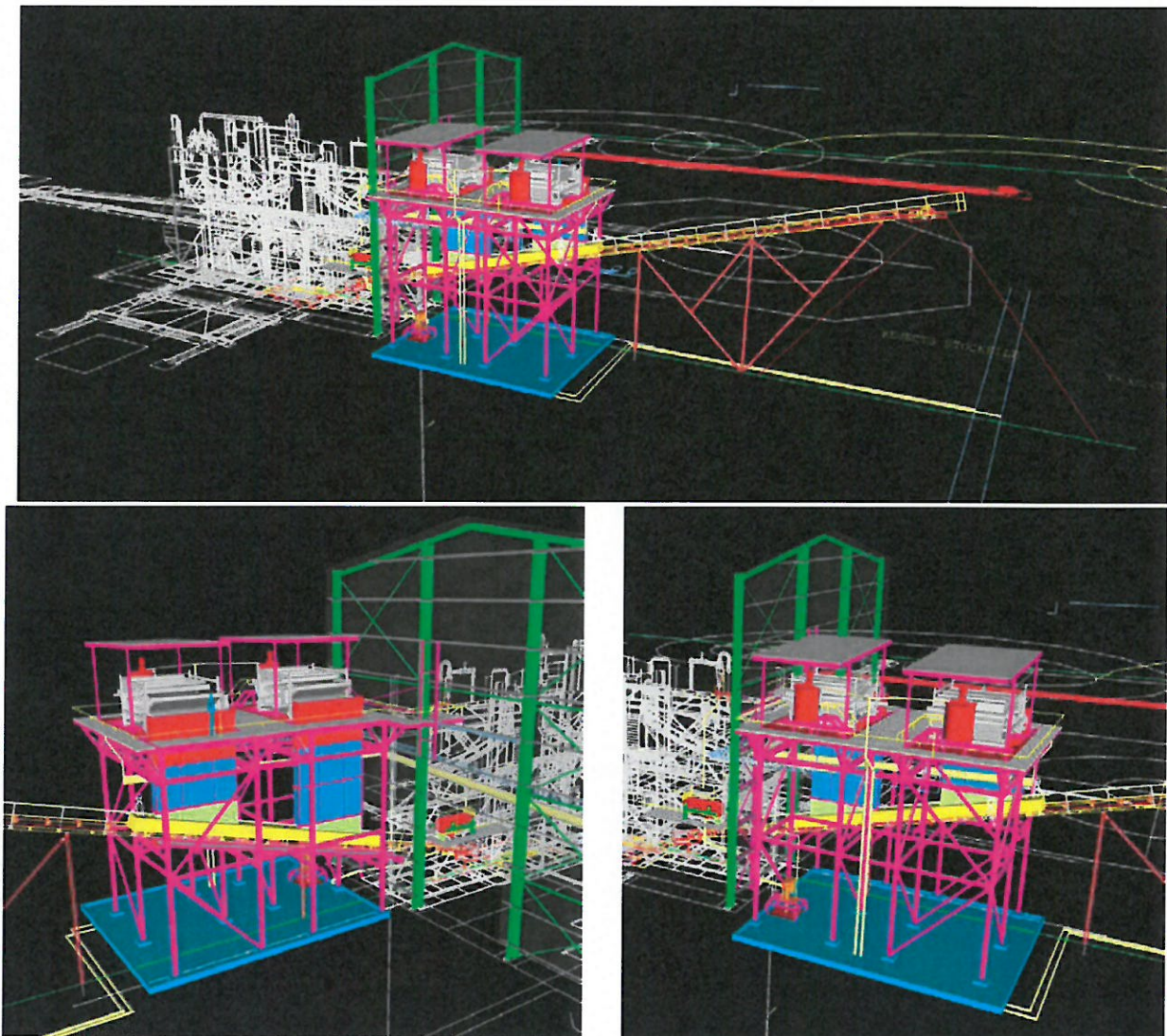


Figure 3 Schematic Diagrams of the Potential BPF Configuration at the CHPP



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As discussed, the Rocglen Project Approval authorises the back haulage and disposal of coarse and fine rejects generated by the processing of Rocglen coal at the Whitehaven CHPP. Under the proposed change the rejects back-hauled to the Rocglen mine would be 'mixed' rejects (i.e. sourced from all Whitehaven mines that process coal through the CHPP) rather than just Rocglen reject. As the coal seams mined at the various Whitehaven mines all originate from the same coal measures (the Maules Creek Formation) their geochemical characteristics are very similar. Consequently, the rejects generated from the CHPP (i.e. from processing coal from multiple sources) is not materially different from rejects that would be generated by processing Rocglen coal on its own.

The trucks used to transport the rejects back to the mine site would be a combination of returning coal trucks and reject-specific trucks. However, the total number of heavy vehicle movements transporting coal and/or rejects would remain unchanged from what was assessed in the Rocglen Extension MOD EA, and the operating hours would also be the same. As a result, no material impacts on the local road network, other road users, and adjoining residences would occur.

Conclusion

Whitehaven is planning on modifying the reject management strategy at the Whitehaven CHPP and the Rocglen Coal Mine. The proposal would clarify the reject management methods and disposal destinations for coarse and fine reject materials generated at the Whitehaven CHPP. As part of the strategy, Whitehaven may install belt press filters at the CHPP, which would produce a fine rejects filter cake that would be trucked to Whitehaven mine sites. The proposal is generally consistent with the CHPP Development Consent and the Rocglen Project Approval, and it would provide several environmental advantages (e.g. reduced truck numbers on local roads, reduced water use and emissions from the CHPP).

I trust that the Environmental Assessment information contained in this letter, and the two accompanying Section 75W modification application forms, is sufficient to enable the DP&E to process the applications.

In the meantime please do not hesitate to contact me on 0419 645 713 if you have any queries.

Yours sincerely,

Mark Edmondson 29/5/2015

Mark Edmondson
General Manager – Technical Services

CC: David Kitto DP&E
 Matthew Riley DP&E

