



# **Delta Coal – Chain Valley Colliery Independent Environmental Audit 2022 Action Plan**

**Corrective Actions and Recommendations prepared by GHD Group Pty Ltd**

**Comments and Commitments made by Delta Coal**

**Audit conducted on: 12<sup>th</sup> April 2022**

Version Prepared: 11<sup>th</sup> July 2022

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**Table 1 – Corrective Actions**

Action Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
<b>Environmental Protection License 1770</b>									
1	L2.4 and L3.2	Keep DPE up-to-date on the progress of works under DA 845-2020 to address exceedances associated with licensed discharges.	Non-compliant (low-risk)	Annual Reviews for 2019, 2020 and 2021 Monitoring data for 2019, 2020, 2021 and 2022	Several non-compliances were recorded against this condition over the reporting period: Exceedance of faecal coliform limit at LDP01 on 31 August 2019 Exceedance of faecal coliform limit at LDP01 on 18 September 2019 Exceedance of faecal coliform limit at LDP01 on 17 December 2019 Exceedance of faecal coliform and TSS limit at LDP27 on 7 February 2020 Exceedance of faecal coliform and TSS limit at LDP27 on 26 July 2020 Exceedance of faecal coliform and TSS limit at LDP27 on 9 September 2020 Exceedance of faecal coliform and TSS limit at LDP27 on 18 March 2021 Exceedance of faecal coliform and TSS limit at LDP27 on 21 March 2021 Exceedance of faecal coliform limit at LDP01 on 18 January 2022 Exceedance of faecal coliform limit at LDP27 on 31 March 2022. These exceedances therefore form a non-compliance against this condition.	Agree  Delta Coal to provide DPE and EPA a quarterly progress report on works under DA 845-2020 – Chain Valley Colliery sewage connection.	Date: 31 July 2022  Quarterly thereafter  A completion report will be issued	Environmental Compliance Coordinator	20%  Update provided to DPE on 04/08/2022 and will be provided quarterly thereafter.
2	O1.1 and O7.2	As bins are clearly labelled and adequate disposal facilities are available across the site, Delta should investigate means to address the workforce culture in relation to inadequate disposal of waste that has persisted across this, and the previous, audit.	Non-compliant (low-risk)	Site inspection conducted 12 April 2022	2019 Audit recommendation: Ensure the minor waste management issues identified during the audit are rectified. Including: Improve bin labelling; Ensure all hydrocarbon containers (empty or full) are stored within bunds. 2022 IEA Findings: The site audit identified that there were adequate vessels for recycling on site, however recycling was not adequately implemented by staff. There were several instances of incorrect waste being placed into a clearly labelled waste stream bin.	Agree  Delta Coal will implement a waste management system to address this non-compliance.	30 June 2023	Environmental Compliance Coordinator	0%
3	M1.3	Ensure contractors record sample time when recording air quality monitoring data in accordance with the requirements of Condition M1.3.	Non-compliant (admin)	Depositional dust monitoring sheets Monitoring data for 2019, 2020, 2021 and 2022	Water sampling sheets were viewed during the site audit. They were found to be compliant with the requirements of this condition. Air quality sheets were found to be generally compliant, however they did not include a sample time, thus a non-compliance against clause (b) is recorded.	Agree  Delta Coal have instructed third party contractor to include sampling times on depositional dust sampling field sheets.	Completed	Environmental Compliance Coordinator	100%

**Table 1 – Corrective Actions**

Action Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
<b>Development Consent SSD-5465</b>									
4	Schedule 2, Condition 23	<p>Ensure that TARPs are included in the AQGHGMP, HMP, Seagrass Management Plan, Benthic Communities Management Plan and WMP in the next update. This includes developing a TARP to further detail the management procedures for the newly established PM2.5 alarms within the AQMP.</p> <p>Correspondence was received from DPIE on 9 October 2020 to provide approval for the AQGGMP, HMP, Land Management Plan (LMP) and NMP to be combined for Chain Valley Colliery and Mannering Colliery in the next update. As above, the AQGGMP has been updated, however the other three plans have not at the time of audit.</p>	Non-compliant (admin)	<p>Air Quality and Greenhouse Gas Management Plan (V2 – dated 21 January 2022)</p> <p>Biodiversity Management Plan (Rev 5 - Dated 1 December 2019)</p> <p>Environmental Management Strategy (Rev 1 – Dated 24 March 2021)</p> <p>Heritage Management Plan (Rev 3 – Dated 27 April 2020)</p> <p>Noise Management Plan (Rev 2– Dated 12 March 2014))</p> <p>Seagrass Management Plan (Rev 8 – Dated 10 July 2020)</p> <p>Water Management Plan (Rev 5 – Dated 24 August 2021)</p>	<p>2019 IEA Recommendation: All management plans require updating due to the length of time since the previous reviews. All should in a Delta Coal template. Ensure there is a cross referencing table covering this condition in management plans. Additional detail including Trigger, Action, Response Tables (contingency plan) should be developed in the next round of management plan updates.’</p> <p>2022 IEA Findings: The following management plans were completed for Chain Valley Colliery: Environmental Management Strategy (EMS): The EMS was published in March 2021. Attachment 1 contains a table of compliance with the conditions of approval.</p> <p>AQGGMP: This plan was most recently updated January 2022 to be combined with Mannering Colliery and cover both sites. The recommendation of the previous audit to incorporate Trigger Action Response Tables has not been incorporated into the plan.</p> <p>BMP: This plan was updated recently and is not due for review until December 2022. Appendix 2 contains a table outlining how the relevant conditions of approval are satisfied in the document. Table 9 contains the Trigger Action Response Tables recommended by the previous audit.</p> <p>HMP: This plan was updated recently and is not due for review until December 2022. Appendix 2 contains a table outlining how the relevant conditions of approval are satisfied in the document. There is no inclusion of the Trigger Action Response Tables recommended by the previous audit.</p> <p>NMP: The NMP for the site has not been updated within the reporting period and is therefore non-compliant with Clause (c). The NMP does not include Trigger Action Response Plans or a compliance table. The auditor notes that a new NMP is being prepared that satisfies the 2019 IEA Recommendations and the requirements of this condition. Therefore, no corrective actions are required.</p> <p>Seagrass Management Plan: This plan was most recently updated in July 2020 and was due for review in July 2021. Appendix 2 contains a table outlining how the relevant conditions of approval are addressed in the plan. There is no inclusion of the Trigger Action Response Tables recommended by the previous audit.</p> <p>WMP: This plan has been reviewed and updated recently and is not due for review until 2024. Appendix 3 contains a table outlining how the relevant conditions of approval are satisfied in the document. There is no inclusion of the Trigger Action Response Tables recommended by the previous audit. As the recommendation of the previous audit to ensure that Trigger Action Response Plans are added into the management plans has not been followed though in the audit, a non-compliance with clause (c) of this condition is recorded.</p>	<p>Agree:</p> <p>TARPs to be included in:</p> <ul style="list-style-type: none"> <li>Delta Coal Air Quality and Greenhouse Gas Management Plan</li> <li>Chain Valley Colliery Seagrass Management Plan</li> <li>Chain Valley Colliery Benthic Communities Management Plan</li> <li>Delta Coal Heritage Management Plan</li> <li>Delta Coal Land Management Plan</li> <li>Chain Valley Colliery Water Management Plan.</li> </ul>	<p>23<sup>rd</sup> November 2022</p> <p>Delta Coal NMP completed – 19/04/2022</p>	Environmental Compliance Coordinator	17%

**Table 1 – Corrective Actions**

Action Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
5	Schedule 3, Condition 5	Ensure a summary of the results of Independent Traffic Audits are included in Annual Reviews.	Non-compliant (admin)	Annual Review for 2019, 2020 and 2021	2019 IEA Recommendation: Ensure the report is submitted to the DPE.  A summary of the Independent Traffic Audit findings are not included in the annual review documentation. This constitutes and administrative non-compliance	Agree  Summary of traffic audit to be included in 2022 Annual Review.	31 March 2023	Environmental Compliance Coordinator	0%
6	Schedule 6, Condition 5	Ensure plans are updated within three months of submission of this IEA and otherwise in accordance with the requirements of Schedule 6, Condition 5.	Non-compliant (admin)	Site interviews conducted 12 April 2022	Refer to discussion for Schedule 2, Condition 23 and Schedule 3, Condition 9. Failure to complete a review and (as necessary) a revision of the relevant plans has resulted in an administrative non-compliance with clauses (c) and (d). Corrective action 7: Ensure plans are updated within three months of submission of this IEA and otherwise in accordance with the requirements of Schedule 6, Condition 5.	Agree  Delta Coal will review all relevant management plans within 3 months of submission and revise plans requiring amendment within 6 weeks.	Review: 12 October 2022 Revise: 23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%
7	Schedule 6, Condition 13	Ensure that the most up to date management plans are uploaded onto the website.	Non-compliant (admin)	Delta Coal Website ( <a href="https://www.deltacoal.com.au/">https://www.deltacoal.com.au/</a> )	A review of the documentation on the website found that it generally contained the information listed in this clause. The information was up to date, and generally easy to find. There were however some documents on the website that were not the most up to date versions available. These were: Benthic Communities Management Plan Seagrass Management Plan Built Features Management Plan Noise Management Plan This therefore constitutes a non-compliance against clause (b) of this condition. Corrective action 8: Ensure that the most up to date management plans are uploaded onto the website.	Agree  Management Plans identified in the action have had the most recent approved version updated on the website.	Completed 11 July 2022	Environmental Compliance Coordinator	100%

Table 2 – Recommendations									
Recommendation Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
<b>Environmental Protection License 1770</b>									
1	P 1.1	As part of updates required to the AQMP, update Figure 3 to show the location of the meteorological station.	N/A	Air Quality and Greenhouse Gas Management Plan (V2 – dated 21 January 2022), including DPE approval 21/03/2022 Noise Management Plan (Rev 2– Dated 12 March 2014)	Delta Coal operate a meteorological station that collects data continually. Whilst not a non-compliance, the AQGMP does not show the location of the meteorological station.	Agree  Weather station location will be identified in figure 3 in Delta Coal Air Quality and Greenhouse Gas Management Plan	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%
2	L2.4	There is an inconsistent naming convention for the discharge locations between sites. It is recommended that they are consistently referenced across management plans and annual reviews.	N/A	Annual Reviews for 2019, 2020 and 2021 Monitoring data for 2019, 2020, 2021 and 2022	-	Agree  Delta Coal will use consistent naming conventions for discharge locations	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%
3	M2.2	To improve data capture for PM10, review possibilities of backup power supply for the system.	N/A	Air Quality and Greenhouse Gas Management Plan (V2 – dated 21 January 2022) Monitoring data for 2019, 2020, 2021 and 2022. Annual reviews for 2019, 2020 and 2021	A review of the monitoring data provided indicates that the development is monitoring in accordance with the requirements of this condition. The TEOM stopped recording data for a short period in December 2020 due to severe thunderstorms. The gap in monitoring is recorded as a non-compliance against this condition. Delta Coal have since rectified the system and no corrective action is required, The 2019 IEA recommended that the TEOM is set up with alarms and notifications when the short-term criterion for particulate matter is approached or exceeded. Delta Coal provided evidence that this has occurred, and this recommendation is considered closed out. The 2019 IEA recommendation to investigate back up power supply for the TEOM has not been carried out in the reporting period.	Disagree  TEOM unit is connected to mains power supply.  Delta Coal has reviewed the potential for installing a back-up power supply and concluded that the installation of a separate generator is not proportionate to the incident.	N/A	Environmental Compliance Coordinator	100%

**Table 2 – Recommendations**

Recommendation Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
<b>Development Consent SSD-5465</b>									
4	Schedule 2, Condition 22	The outcome of consultation is not included in the BMP, it is recommended a statement be added to indicate no comments were received to be included in the plan.	N/A	Biodiversity Management Plan (Rev 5 – Dated 1 December 2019)	Consultation requirements were generally in compliance with the requirements of this condition. The BMP was sent to the parties outlined in Schedule 3 Condition 20. No comments were received.	Agree  Chain Valley Colliery Biodiversity Management Plan will be updated to include evidence of consultation	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%
5	Schedule 3, Condition 17 and Condition 18	The WMP has not been implemented as approved in relation to sewage management. Ensure the WMP is updated to reflect the changes to on-site sewage management, which are scheduled to be completed by 26 August 2022.	N/A	Water Management Plan (Rev 5– Dated 24 August 2021) Annual Review for 2019, 2020 and 2021 Monitoring data for 2019, 2020, 2021 and 2022 Site inspection on 12 April 2022 Servicing records	2019 IEA Recommendation: Include additional detail in the Water Management Plan regarding sewage management. Include an update of sewage system during the audit period in the Annual Review. Ensure servicing is completed and records kept onsite. 2022 IEA Findings: The wastewater system was viewed during the site audit. The sewage system installation is proposed to be completed by 26 August 2022 as per condition U1.1 and U1.2 of EPL 1770. An update on the progress of this project is included in Section 12.2 of the Annual Review, In regard to the recommendation from the 2019 IEA, additional details have been included in the WMP regarding the wastewater system. The proposed upgrades are not discussed as at the time of audit they have not been constructed.	Agree  Chain Valley Colliery Water Management Plan will be updated to include sewage system upon completion.	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%
6	Schedule 3, Condition 18	Ensure a maintenance schedule is established to ensure dams and drainage lines are free of silt and water storage is maximised.	N/A	Water Management Plan (Rev 5– Dated 24 August 2021) Site inspection on 12 April 2022	2022 IEA findings: The WMP includes a Water Balance that adequately fulfils the requirements of clause (a). The Water Balance has been updated since the previous IEA fulfilling the recommendation. Surface water management is described in Section 4 and satisfies the requirements of (b). Inspection and maintenance are described in Section 5.8. The implementation of the plan on site was generally adequate. It is noted that maintenance schedules are currently not established for desilting dams on site. Therefore the recommendation of the previous IEA is still applicable.	Agree  Delta Coal will develop and implement a maintenance schedule for desilting on-site dams and drains.	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%

**Table 2 – Recommendations**

Recommendation Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
7	Schedule 6, Condition 1	Include a requirement in the EMS to notify landowners of exceedances 'as soon as practical'. Define a time period for as 'soon as practical'.	N/A		<p>2019 IEA Recommendations: Prepare a cross referencing table outlining where sub conditions have been covered. Ensure plans are reviewed as per Schedule 6 Condition 5. Include Schedule 5 Condition 2 requirement in the EMS to notify landowners of exceedances 'as soon as practical'. Define a time period for as soon as practical.</p> <p>2022 Findings: The EMS document provides an overview of the strategic framework and statutory approvals for the development in Appendix 3 and 4. The Environmental policy is provided in Appendix 1. The roles and responsibilities for implementation are outlined in Section 3.10. Community communication is adequately discussed in Section 4. Emergency response is described in Section 5.2 and 5.3. Non-compliance and incident response is adequately described in Section 5.4. The EMS adequately outlines the Environmental Management Plans required under this consent in Section 3.1. Monitoring requirements briefly covered in Appendix 7. In regard to the recommendations of the previous audit, cross referencing tables are provided in Appendix 3 and Appendix 4. The EMS has been reviewed within the reporting period and is compliant with the required revision timeframe. The recommendation from the previous audit to notify land owners has not been incorporated into the EMS. This therefore remains outstanding.</p> <p>Recommendation 7: Include a requirement in the EMS to notify landowners of exceedances 'as soon as practical'. Define a time period for as 'soon as practical'.</p>	<p>Agree</p> <p>Landowner notification will be included in the Delta Coal Environmental Management Strategy to inform affected land owners as soon as practical and define this timeframe.</p>	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%



**Table 2 – Recommendations**

Recommendation Number	Condition	Details	Compliance status	Relevant evidence	Commentary	Delta Coal Comments	Proposed Completion Date	Person Responsible	Percentage Complete
8	Schedule 3, Condition 27	Ensure the RMP required by SSD-5465 is updated to consider the requirements of the RMP and Annual Rehabilitation Report and Forward Program currently being prepared (as now required by the NSW Resources Regulator instead of a MOP) and documents where topsoil will be stored and the estimated volumes required for rehabilitation.	N/A		<p>2022 findings: A review of the MOP found them compliant with the requirements of SSD-5465. The RMP was also found to be generally compliant with the requirements of SSD-5465.</p> <p>There were no areas of the site under active rehabilitation over the reporting period. General maintenance vegetation maintenance and weed management have been undertaken.</p> <p>It is noted Delta are in the process of preparing a Rehabilitation Management Plan (RMP) and Annual Rehabilitation Report and Forward Program (as now required by the NSW Resources Regulator instead of a MOP from 2 July 2022). This RMP is recommended to ensure to discuss topsoil storage and estimated volumes required for rehabilitation.</p>	<p>Delta Coal is preparing a Rehabilitation Management Plan to meet the requirements of amendment to Schedule 8A of the Mining Regulation 2016.</p> <p>The Management Plan will be provided to stakeholders including DPE and the Resources Regulator for approval.</p>	1 October 2022	Environmental Compliance Coordinator	90%
9	Schedule 3, Condition 9	The outcomes of the noise mitigation study currently being completed should be captured in a revised noise management plan and reflect any changes to monitoring, as relevant.			<p>It is understood Delta Coal are currently in the process of undertaking a noise mitigation study in consultation with DPE – Compliance, the results of which should assist in further mitigating and managing noise from the site, particularly during adverse meteorological conditions. The outcomes of this study should be captured in a revised noise management plan and reflect any changes to monitoring, as relevant.</p>	<p>Phase 1 of the noise mitigation study is currently underway, to be provided to DPE by the 30<sup>th</sup> September 2022.</p> <p>If required, phase 2 of the study will be commenced based on outcomes of phase 1.</p> <p>Following completion of the study and acceptance by DPE, Delta Coal will revise the noise management plan to include findings of the study.</p>	30 <sup>th</sup> September	Environmental Compliance Coordinator	60%
<b>Actions still relevant from the 2019 IEA</b>									
10	Schedule 4, Condition 1-4	Assess the triggers from the Extraction Plans e.g. ANOVA/ANOSIM level is approaching 5% in the bi-annual monitoring reports.			<p>Still relevant action from the 2019 Audit</p> <p>2022 IEA Finding: Review of relevant document indicates this comment has not been closed during the audit period.</p>	<p>Delta Coal is will complete a bi-annual benthic statistics assessment and update the predictive model in 2022.</p> <p>The results will be compared to triggers in the Extraction plan.</p>	31 <sup>st</sup> December 2022	Environmental Compliance Coordinator	10%
11	Schedule 4, Condition 2	Develop a TARP when updating the Benthic Communities Management Plan. This should address the wording of Schedule 4 Condition 2 SSD 5465. A series of triggers should be developed based on quantitative data and this should be reported in the bi-annual monitoring reports and the Annual Review. An example of a trigger would be ‘% change in organisms between monitoring events’.			<p>The recommendation of the previous audit to ensure that Trigger Action Response Plans (TARPs) are added into the management plans has not been followed though in the audit for the AQMP, HMP, Seagrass Management Plan, Benthic Communities Management Plan and WMP. A non-compliance with clause (c) of this condition is recorded in Section 4.3.</p> <p>Therefore, the recommendation for TARPs to be included in management plan updates.</p>	<p>Delta Coal will develop and include a TARP within the Benthic Communities Management Plan, including triggers from both monitoring and statistical evaluation.</p>	23 <sup>rd</sup> November 2022	Environmental Compliance Coordinator	0%