



## Bulli Seam Operations Annual Compliance Report – August 2018 (EPBC 2010/5350)

**Date of submission:** 14 August 2018

**South32 Website Upload Request Date:** 14 August 2018

Abbreviations:

DOtEE – Federal Department of the Environment & Energy

DOPE – NSW Department of Planning and the Environment

OEH – NSW Office of Environment and Heritage

CCL – Consolidated Coal Lease

UOW – University of Wollongong

EPBC – Environment Protection and Biodiversity Conservation

ACARP – Australian Coal Association Research Program

In accordance with condition 14 of the EPBC approval (2010/5350) within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the compliance report is published.

Condition	Condition Summary	Status	Compliant Y/N
1	<u>Persoonia Hirsuta</u> Provide proposed <i>Persoonia hirsuta</i> offset area for approval.	Proposed offset area submitted to DOtEE in the <i>Persoonia hirsuta</i> Offset Management Plan. Application submitted on 26 Nov 2013 to amend CCL724 via a s238 Condition under the Mining Act 1992 to legally secure a <i>Persoonia</i> Offset Area at West Cliff Mine as required by our Bulli Seam Operations EPBC Approval (2010/5350). The Minister for Resources and Energy amended CCL 724 on 23 March 2014.	Yes
2	<u>Persoonia Hirsuta</u>	<i>Persoonia</i> management plan was submitted to DOtEE prior to the 31 <sup>st</sup>	Yes - 2015



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	Develop a management plan for the <i>Persoonia hirsuta</i> offset area.	December 2012 and approved on 22 November 2013 (ref 2013/10882). Plan has since been reviewed and was approved in April 2016. Plan is available on our website. <a href="https://www.south32.net/docs/default-source/illawarra-coal-bulli-seam-operations/management-plans/bulli-seam-operations-project-hirsuta-offset-management-plan.pdf?sfvrsn=c3d12502_7">https://www.south32.net/docs/default-source/illawarra-coal-bulli-seam-operations/management-plans/bulli-seam-operations-project-hirsuta-offset-management-plan.pdf?sfvrsn=c3d12502_7</a> Persoonia hirsuta Condition Reports submitted as required in 2013, 2014, 2015 (submitted late), 2016 and 2017.	Persoonia Condition Report submitted late.
3	<u>Persoonia Hirsuta</u> Engage a suitably qualified expert to undertake targeted research to inform conservation activities. Make research publicly available.	The 'targeted research' is being undertaken by both the University of Wollongong and Royal Botanic Gardens and Domain Trust. The following research has been completed by University of Wollongong to date: <ol style="list-style-type: none"> <li>1. Honours project #1 titled The Demography and Habitat Characteristics of the Endangered <i>Persoonia hirsuta</i> (submitted 2013)</li> <li>2. Honours project #2 titled Conservation genetics of the rare and endangered plant, <i>Persoonia hirsuta</i> (proteaceae) (submitted 2015)</li> <li>3. Honours Project #3 (Continuation of #2) titled Can the seed bank act as a reservoir of genetic diversity? A Conservation genetic study of <i>Persoonia hirsuta</i></li> </ol> <p>UOW will publish the outcomes from this work. We expect the final paper/s to be available late 2018.</p> <p>The following research is underway with the Royal Botanic Gardens and Domain Trust:</p> <ol style="list-style-type: none"> <li>1. Trial propagation using cuttings collected from the West Cliff and other populations. The aim is to develop a population of stock plants at the nursery which will be used to collect seed for germination trials and translocation. This project is ongoing, progress has been slow due to the overall germination and survival rates for this species being very low.</li> <li>2. ACARP 24013 (2017). <i>Managing and conserving native plant species in the mining environment - seed germination biology and alternative ex situ storage of Persoonia germplasm for</i></li> </ol>	Yes



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		<p><i>restoration</i>. This work is a collaborative project between Illawarra Coal, Centennial Coal and Royal Botanic Gardens and Domain Trust with foundation funding from the Australian Coal Association Research Program (ACARP). The research had two main aims:</p> <ul style="list-style-type: none"><li>a. To optimise propagation of <i>Persoonia</i>, through seed and vegetative material, with a focus on several species relevant to current mining leases in South-Eastern Australia. The objectives within this aim include:<ul style="list-style-type: none"><li>i. - Optimising the collection of seed and vegetative material</li><li>ii. - Understanding dormancy preventing high rates of seed germination for multiple species and optimising germination conditions to establish cultivation protocols</li><li>iii. - Trialling various approaches to vegetative propagation.</li></ul></li><li>b. To determine the most appropriate ex situ conservation options for successful reintroduction of these species as part of restoration programs. The following objectives were addressed:<ul style="list-style-type: none"><li>i. Determination of the long-term suitability of seedbanking for <i>Persoonia</i></li><li>ii. Identification of optimal conditions for the successful propagation and healthy growth and survival of <i>Persoonias</i> in the nursery</li><li>iii. Establishment of a protocol for storage of germplasm as seed (seedbanking) and plantlets (tissue culture) to maximise survivorship.</li></ul></li></ul> <p>The above project (Phase 1) commenced February 2015 and completed in March 2017. This project was granted further funding in 2016 and extended for two years (Phase 2) (to conclude late 2019) to include high interest native plants in mine site restoration programs and propagation, translocation and re-introduction of plants for the establishment of offset populations. Mt Annan RBG are currently undertaking seed collections, germination and pollinator observations. To date, the project has</p>	



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		<p>resulted in successful germination of <i>P. hirsuta</i> seed in the nursery. The next stage will involve translocations of plants grown from seed in the nursery back to the mine site. Phase 1 has resulted in several published research articles.</p> <p>3. PhD (Collaboration with Royal Botanic Gardens and Western Sydney University) titled <i>Addressing Drivers of Dieback in an Endangered Tree Species, Persoonia hirsuta (Hairy Geebung)</i>. The aim of this project is to assess environmental factors that may be linked to dieback, particularly those related to beneficial and detrimental microbes and to plant nutrition. These factors will be assessed in field and glasshouse experiments and using state-of-the-art laboratory techniques. This project will commence mid-2018 and run for the next 3 years.</p>	
4	<p><u>Shale/Sandstone Transition Forest</u> Conduct an ecological survey that demonstrates quality and extent of proposed offset area.</p> <p>Setup mechanism to protect the shale/sandstone transition forest offset in perpetuity.</p>	<p>In 2012, IC provided an offset management plan as well as ecological survey information to comply with these conditions. The plan was approved by the Department of the Environment &amp; Energy (DOtEE) in June 2013. In 2014, IC requested an extension to the deadline to have the offset secured in perpetuity. DOtEE granted an additional 18 months, making the deadline March 2016. In October 2015, IC made an application to NSW Office of Environment &amp; Heritage (OEH) to have the SSTF offset secured via a BioBanking Agreement under Part 7A Division 2 of the <i>Threatened Species Conservation Act 1995</i>. The BioBanking Agreement was finalised and executed on 1st February 2017.</p>	Yes
5	<p><u>Shale/Sandstone Transition Forest</u> Develop a management plan for shale/sandstone transition forest.</p>	<p>Management plan submitted and approved on 7<sup>th</sup> June 2013. The revised Plan was updated and approved on 2<sup>nd</sup> September 2014.</p> <p>The Management Plan was updated in 2018 and re-submitted to the Department to reflect the new offset mechanism (BioBanking). Condition 5A was added to the EPBC approval in May 2018:</p>	Yes



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		<div data-bbox="981 245 1637 497" style="border: 1px solid black; padding: 5px;"> <p>Conditions attached to the approval</p> <p>5A If the <b>Shale Sandstone Transition Forest</b> is legally secured as a registered NSW BioBanking site, the management plan developed under the NSW BioBanking Agreement for that site is an Offset Management Plan for the purposes of Condition 4. The annual reporting required under that scheme may be provided to the department in place of the reports containing monitoring results required at Condition 5c, on the proviso that all measures specified in Condition 5 are covered.</p> </div> <p>The 2017 SSTF monitoring was conducted under the requirements of the Biobanking Agreement. The annual monitoring report was provided to DOtEE on 31 May 2018 which is later than “30 days of every 12-month anniversary of the date the Offset is protected in perpetuity” (technically required by March 2018 as a requirement of Condition 5c). S32IC delayed submission of the report until the DOtEE decision to revise Condition 5. S32IC received the Department’s decision May 2018.</p>	
6	<p><u>Coal Wash Emplacement Staging and Rehabilitation Plan</u></p> <p>Develop a Coal Wash Emplacement Staging and Rehabilitation Plan for stage 4 coal wash emplacement area.</p>	<p>The West Cliff Coal Wash Emplacement Area Management Plan (available on our website) incorporates the requirements of both the EPBC Act approval and NSW EP&amp;A. The Plan was approved by DOEE on 18<sup>th</sup> Aug 2017..</p>	Yes
7	<p><u>Southern Brown Bandicoot and Broad Headed Snake Management Plan or Plans</u></p> <p>Develop a Southern Brown Bandicoot and Broad Headed Snake conservation management plan or plans.</p>	<p>Draft Plans completed and submitted to DOtEE on the 15<sup>th</sup> May 2013.</p> <p>Plans revised following comments from DOtEE and OEH. Final Plans re-submitted to DOtEE and OEH on 29 April 2014. Plans approved on the 28 May 2014. The Plans were revised in 2016 and resubmitted to DOEE for approval.</p> <p>The revised Southern Brown Bandicoot Plan was approved November 2017.</p> <p>The revised Broad-headed Snake Plan is still under review by DOtEE. The</p>	Yes



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		current Plans are available on the S32IC website. <a href="https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents">https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents</a>	
8	<u>Surface and Ground Water Quality Monitoring and Adaptive Management Plan</u> Develop a Surface and Ground Water Quality Monitoring and Adaptive Management Plan for species listed in the EPBC Act.	Original Plan submitted on the 30 <sup>th</sup> September 2012 to DOfEE. Plan was approved on 3 July 2014. The Plan was revised and submitted to DOfEE on 29 <sup>th</sup> June 2017; however, the new Plan has not yet been approved. Current Plan is available on the S32IC website: <a href="https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents">https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents</a>	Yes
9	<u>Mine Closure Environmental Management Plan</u> Develop a mine closure plan 3 years prior to closure for EPBC Act listed species.	Current mining plan is for next 30 years, therefore plan not required.	Yes
10	<u>Mine Closure Environmental Management Plan</u> Management for EPBC listed bats through the decommissioning of mining equipment.	Plan not yet submitted. To be submitted in the mine closure plan.	Yes
11	<u>Shapefiles</u> Provide offset area shapefiles to the DOE.	Shapefiles provided on 26 November 2013.	Yes
12	<u>Notification of Actual Date of Commencement</u> Notification date of commencement to be supplied to DSEWPaC.	Letter sent to DOfEE 31 May 2012.	Yes
13	<u>Publication Requirements</u> publish all management plans, reports, strategies or agreements with DSEWPaC	Undertaken as required. See website. <a href="https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents">https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents</a>	Yes
14	<u>Compliance Report</u>	This compliance report meets this condition. The 2013, 14, 15,16 and 17 reports	Yes – See



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	Publish a report on website addressing compliance with each of the conditions of this approval.	were submitted and are available on our website. The 2013 compliance report was submitted five days after the due date required by the condition. This was found to be non-compliant due to late submission of the compliance report. All other reports have been submitted on time.	comments regarding the 2013 report.
15	<u>Accurate Records Must be Maintained</u> Maintain accurate records substantiating all activities associated with or relevant to the conditions of approval.	Documents are maintained in the Illawarra Coal controlled document registers.	Yes
16	<u>Minister's Approval of the Modification to a Management Plan, Report, Strategy or Agreement</u> Apply to the minister for approval to modify management plans, reports, strategies or agreements.	Undertaken as required.	Yes
17	<u>Minister's Modification to a Management Plan, Report, Strategy or Agreement</u> Comply with the minister's request to modify management plans, reports, strategies or agreements.	No requests received from the Minister.	Yes
18	<u>Independent Auditor</u> Commission and pay the full cost for independent environmental auditor of the project.	Independent Environmental Audit was conducted by ERM. The Audit commenced January and completed February 2017; the report was provided to Illawarra Coal on 22 <sup>nd</sup> March 2017. A copy of the report was provided to DOtEE on 22 March 2017 to satisfy Condition 18 (g). EPBC condition (2) was found to be administratively non-compliant as one of the Annual Personia condition-monitoring reports was submitted late (2015 report). EPBC condition (14) was previously found to be non-compliant in the 2013 Independent Environmental Audit due to late submission of the 2013 compliance	Yes



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		report (5 days late). This most recent report t is available on the South32 website. <a href="https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents">https://www.south32.net/what-we-do/places-we-work/illawarra-metallurgical-coal/documents</a>	
19	<u>Unsatisfactory Commencement of Action</u> If work has not commenced within 5 years of approval, written approval needs to be obtained from the minister.	Work commenced 15 <sup>h</sup> May 2012 as per date of commencement letter sent to Department of the Environment.	Yes