



Pioneer Sand Quarry - Notice of Intent

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Issue	Date	Recipient	Organisation
Revision 0	11 July 2023	Mr Nicholas Palmer	Sanbar Pty Ltd
Revision 0	13 July 2023		<b>Environment Protection Authority</b>



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#### 1. APPLICANT / PROPONENT INFORMATION

Entity name	Sanbar Pty. Ltd.
ABN	64 009 564 970
Registered address	83 Poets Road
	WEST HOBART, Tas. 7000
Postal address	As above
Postal address  Contact person	As above Nicholas Palmer

The proponent will also be the entity making application to the Dorset Council for a development permit.

#### 2. SITE INFORMATION

Project name	Pioneer Sand Quarry	
Mining lease	ML Number 10M/2008	
	Lease Holder	Sanbar Pty. Ltd.
	Area	86 hectares (will be adjusted to 67.15 hectares)
	Granted	16/07/2010
Property	Land tenure	Future Potential Production Forest (Crown Land)
	Property ID	3396565
	Land manager	NRE Tas
Permitting	Dorset Council	Level 1 permit (2011/19)
Regulatory limits	Extracted	4,999 cubic metres per annum
	Processed	1,000 cubic metres per annum
Area of disturbance	f disturbance 11.0 hectares (over the life of the quarry)	
Operating hours	Weekdays	7.00 am to 7.00 pm
	Saturdays	8.00 am to 4.00 pm
	Sundays and public holidays	No work

#### 3. Proponent details

#### Background

Sanbar Pty. Ltd. (proponent) holds the mining lease number 10M/2008 and is registered as the operator on that lease. The proponent has held and operated this lease since 2010 and has held and operated the Llanherne Sand Quarry since 2008. The proponent was issued an environmental permit in 2008 to extract and screen up to 95,000 cubic metres of sand from this lease, making this one of the larger capacity sand operations in the state.

#### 4. PROJECT DETAILS

#### Background

The resource consists of a substantial quantity of sand tailings that has been deposited on the land as a residue from an historic tin mining operation.

The deposit was the subject of an exploration program on Exploration Licence 46/92. The exploration work program concluded in 1995 with a final report showing the site had an estimated volume of 3,400,00 m3 of silica sand with an ideal particle size distribution for use in a variety of applications including concrete. The report provided grading curves and chemical analysis of representative samples. A copy of the report 95-3689 is included as Appendix 1.

#### Proposal

The Pioneer resource consists of tailings stockpiles remaining as a legacy of an historic alluvial tin mining venture. The resource consists of coarse sand and gravel stockpiles located close to Lake Pioneer, which have a light scrub recruitment vegetation cover.

The proposal consists of occasional stripping using an excavator. The stripping product will be windrowed alongside the worked areas until the resource is depleted, at which point the stripping and any unsuitable (organic topsoil) will be placed over the area for rehabilitation.

The sand / gravel will be recovered using a wheel loader which will feed a mobile mechanical screener. The screener will remove any deleterious material and sort the product into various particle size stockpiles. The stockpiles will be depleted over time by using the same wheel loader to load trucks and truck and trailer combinations to take the product to markets.

## Current permitting

The current operation is permitted as a Level 1 activity. The maximum annual capacity is restricted to 5,000 cubic metres extracted of which 1,000 cubic metres can be processed by mechanical means.

# New permit conditions sought

The Proponent is seeking to increase the annual regulatory limits to:

50,000 cubic metres per year processed. 50,000 cubic metres per year extracted.

#### Operations

The current equipment, infrastructure will be more consistently utilised in order to gradually increase throughput over the next 5 to 10 years.

Hours of operation will not change, although work will occur on more days throughout the year.

#### 5. LOCATION DETAILS AND MAPS

Proposal location

The proposal is located at Pioneer in north eastern Tasmania, approximately 14.5 kilometres south west of Gladstone. The current operation is situated on mining lease number 10M/2008. This mining lease encompasses a variety of land tenures which would have complicated the process to issue a development permit. The proponent submitted a partial surrender to adjust the mining lease boundary so the entire area is located on land classified as Future Potential Production Forest (Crown Land).

The following maps show the land area once the partial lease surrender has been processed and the superfluous areas have been released.

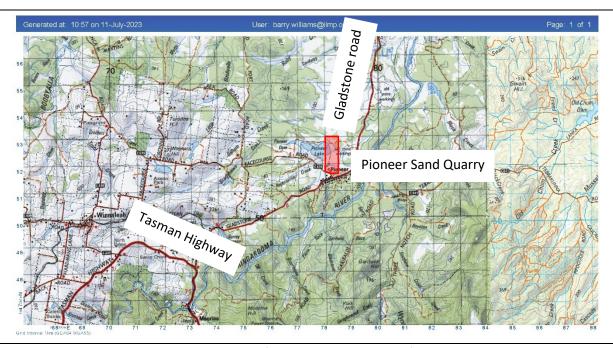


FIGURE 1: PIONEER SAND QUARRY SITE - LOCATION MAP (THE LIST 1:25k TOPOGRAPHIC)

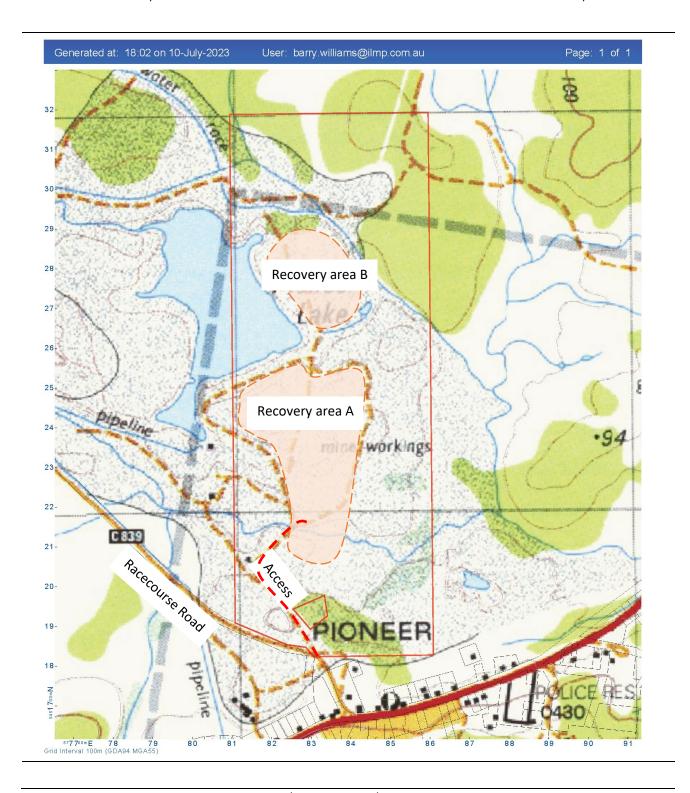


FIGURE 2: PIONEER SAND QUARRY — DEVELOPMENT PLAN (EXTRACT THE LIST)

#### 6. STAKEHOLDER ENGAGEMENT

#### Agencies

The proponent received advice relating to permitting from the Dorset Council that a development application is required. The proposal will be subjected to the local government public consultation process.

The proponent submitted a revised quarry development plan to Mineral Resources Tasmania for comment.

This notice of intent is formally requesting the Environment Protection Authority to consider the proposal for assessment under the *Environmental Management* and *Pollution Control Act 1994*.

The proponent will convene a public meeting for local residents to inform them of the proposal and to canvas for any questions, comments and concerns.

#### 7. PHYSICAL ENVIRONMENT

#### Topography

The deposit is situated on the southern and eastern bank of Pioneer Lake. Pioneer Lake is an artificial impoundment formed by flooding the abandoned Pioneer Mine workings area.

The land rises from around 85 m to 95 m AHD on the top of the stockpiles. The entire mining lease area has been highly modified by previous mining operations.

Watercourses within the mining lease area are highly modified having been channelised and redirected to provide water for the previous mining operations.

#### Geology

Geological mapping shows the area of the mining lease where sand recovery will take place is identified as Cenozoic cover sequences further described as Quaternary and older alluvium of river terraces.

#### Soils

The area is not covered by soil mapping. The soil on the stockpile areas is likely to be thin sandy soil derived from the underlying sand mixed with organic matter from the overlying scrub vegetation and wind-blown dust.

The stockpiles were derived from the previous tin mining operation which washed the natural alluvium removing the fine particles. The coarse nature of the stockpiled product is demonstrated by the grading curve included in the exploration report (Appendix 1). Experience with the current operation shows that rainfall infiltrates rather than running off and as a result the stockpiles have a high moisture content naturally suppressing dust emissions.

#### Vegetation

TasVeg 4.0 identifies the majority of the area that will subjected to clearing as being regenerating cleared land (FRG). On the verges of the sand recovery areas some remnant vegetation exists including:

- Eucalyptus obliqua forest over Leptospermum (WOL)
- E. obliqua dry forest (DOB)
- E. viminalis grassy forest and woodland (DVG)
- Melaleuca squarrosa scrub (SMR)

#### 8. KEY IMPACTS

#### Environmental

Recovering the sand deposited in the stockpiles will necessitate clearing of the colonising vegetation. Any values present will be temporarily lost. As these communities have regenerated from previous disturbance it can be assumed they will re-establish once rehabilitation works are underway.

Once the stabilising vegetation is removed the exposed surface will be susceptible to wind and water erosion. As stated previously wind and water erosion in this instance are naturally controlled by the granular nature of the deposit. Water tends to infiltrate, increasing the normal moisture content of the stockpile naturally supressing dust emissions.

Pioneer Lake may provide habitat for aquatic bird species and is a recreational fishery which is stocked biennially. Water quality of any discharge into the lake will need to be controlled.

An increase in the total annual capacity of the operation will give rise to an increase in the number of heavy vehicles travelling through the township of Pioneer which may have traffic noise implications for residents.

#### Economic

The demand sand for concrete, asphalt, bedding and general construction will continue to expand. Recovering sand stockpiled from previous abandoned mining operations will relieve pressure from natural dune sand extraction, extending the life of existing operations.

#### Social

Increasing the level of production from the Pioneer resource will increase the cartage task and hence potentially increase the number and scale of local cartage contracts.

The land surrounding Pioneer Lake is highly modified. The removal of the sand stockpiles will provide an opportunity in the future for rehabilitation of the land surface to a more natural landscape, enhancing opportunities for the local community enjoy the lake side environment.

#### 9. Surveys and studies

#### **Ecological**

The surface of the stockpiles is regenerating with native species. No observations of threatened flora or fauna species have been recorded. Some threatened species tend to colonise disturbed ground. The Proponent has commissioned an ecological assessment in spring to be confident that no such species or communities will be lost through clearing works.

#### Noise

The mining lease boundary is situated close to the township of Pioneer but the actual recovery and screening operation will be located remotely from residences. It is unlikely that emissions noise will be a significant environmental factor.

Air quality	Sand quarries tend to be a source of fugitive dust emissions. In this instance, the coarse nature of the source product along with the high moisture content in situ reduces the risk of dust emissions. Experience handling the product indicates that dust suppression will not be necessary.
Erosion and sediment control	Exposed ground and stockpiles can increase the threat of turbid and sediment entrained runoff water leaving the site and affecting neighbouring land.  Experience shows that rainfall tends to infiltrate the source product increasing the moisture content of the stockpiles rather than running off.  Sand recovery will be stood back from the bank of Lake Pioneer ensuring that run off is directed into the recovery area rather than onto the neighbouring ground.

#### 10. PROJECT TIMELINE

Period	September '23	December '23	February '24	April '24
Milestone	documents	EPA assessment	MVC assessment	Permit

### 11. SECTION 27B(2)(K)

1)	An ecological specialist with experience in this area advised that it is unlikely that the activity will impact on Matters of National Environmental Significance.
2)	The proposal will not be referred to the Commonwealth Government for a determination on whether approval is required under the <i>Environment Protection</i> and <i>Biodiversity Conservation Act 1999</i> .
3)	Assessment under a Bilateral Agreement will not be required.
4)a)	The Dorset Council will require a single development permit application.
b)	The Dorset Council will require a single development permit application.
c)	The application will be made under Part 4 Division 2 of the Land Use Planning and Approvals Act 1993 (LUPA Act).
d)	The proposal site is contained wholly within the 20. Rural land use zone.
e)	The proposal is for an intensification of an existing Level 1 activity.
f)	Pioneer Sand Quarry has a Development Permit with Dorset Council but this proposal constitutes a 'substantial intensification' under Subsection 12 (7) of the LUPA Act.
5.	The proposal is not for an activity that requires an Environmental Licence under the Environmental Management and Pollution Control Act 1994.