

Boral Seaham Quarry

Growing Newcastle, Port Stephens, the Hunter and beyond

April 2018

For more than 25 years Boral's Seaham Quarry, located off Italia Road at Balickera, north of Raymond Terrace, has supplied the hard rock materials underpinning the rapid growth and development of the greater Hunter and surrounding regions.

Extracting the best from rock

Our Seaham Quarry is positioned within a rich reserve of ignimbrite, an igneous 'hard' rock resulting from volcanic action in the Seaham area millions of years ago.

Ignimbrite is particularly useful due to its strength and durability. When in **aggregate** (crushed) form, we use it to make our high quality materials like concrete and asphalt.

Boral has been quarrying ignimbrite at Balickera since **1991**. On average, between **700 000** and **800 000** tonnes of aggregates are produced each year by the site for customers including Boral's Hunter Concrete and Asphalt networks.

This means it's likely you come into contact with Seaham rock every day. Over the site's history, it has been used for upgrading the Pacific Highway, rebuilding rockwalls and breakwaters at Newcastle and Stockton, and now forms the base of the Newcastle V8 Supercars circuit.



Arranging aggregates

While the process of producing aggregates at the Boral Seaham Quarry is straightforward, the technology we use, and regulations we need to follow, add complexity.

Before any quarrying can commence, the **overburden** must be removed. Overburden consists of any topsoil, subsoil and vegetation positioned between the surface and the rock to be **extracted** (quarried).

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'Our Commitment' to learn more
about our quarries



Extraction from the quarry **pit** is typically done using **controlled blasting** – a **designed** process managed by computer which sets off **charges** at millisecond intervals, minimising any potential for noise and vibration.

Once a blast has been carried out, the fractured material is then taken by truck to the **primary crushing plant**. As the name suggests, it is here the large 'chunks' of rock are broken down between the crusher's steel jaws. The remnants are then **screened** (sorted) into the various **grades** (sizes) needed by customers.



Seaham Quarry also has **secondary** and **tertiary** crushers which can further screen the materials into ever smaller grades.

The completed aggregates are then **stockpiled** until they are needed by customers.

Our team at Seaham, which includes **16** site employees as well as **more than 20** contractors and drivers, run these activities from **6am** to **10pm Monday to Friday**, and between **6am** and **5pm** on **Saturdays**.

Product on the move

The Boral Seaham Quarry is fortunate to be located close to a major route in the Pacific Highway, allowing products to be readily moved to where they are needed.

Aggregates are transferred from site to customers by **truck-and-dogs**, also called **tippers**. We have both our own employees and contractors driving these heavy vehicles.

Our business relies upon heavy vehicle transport, so we take road safety very seriously.

Our drivers undergo **site specific orientations** to familiarise them with the characteristics of each location, and they **must** adhere to our **Driver's Code of Conduct**.



Boral Fleet heavy vehicles are also fitted with **electronic monitoring** which records reviewable measures like speed and braking.

We openly encourage observations about any of our vehicles, or those readily associated with the quarry, to be reported to us at any time.

Details such as **registration, fleet numbers, colour, time** and **place** will help us identify any vehicles driven inappropriately.

To offer your views, you can send an email to feedback@boral.com.au, or call the Seaham Quarry team on **4987 2303**.

Engaging the environment

The area around the Boral Seaham Quarry is heavily forested, both with natural bushland and state forestry. While this is ideal for our operations in some aspects, it also means we need to work carefully with our surrounds.

The quarry's unique location offers some advantages not available at other sites.

Our Quarry Manager at **Seaham** is **Sean Murphy**. Contact Sean on **4987 2303** or sean.murphy2@boral.com.au.

For example, the undulating surrounds and heavy vegetation almost entirely screen the quarry from surrounding viewpoints.

The hilly landscape also assists the minimising of noise from daily operations, which also benefit from on-site mitigation such as the enclosure of the main plants.

The terrain allows water to be easily harvested after rainfall. As with most of our quarries, Seaham uses water it collects for things like dust suppression in both the stockpiling areas and on internal roads.



Apart from local residents, the bushland surrounding the quarry is also home to a variety of flora and fauna, the protection of which we also consider as part of our daily operations.

Within our site, we've set aside a specific area containing **Melaleuca Styphelioides** trees, known to be a favourite of the **squirrel glider**.

This habitat area has been sectioned off, but not with traditional fencing – flag bunting and non-metal pickets are used to avoid exposing the gliders' 'wrist-wings' to injury.

Beyond the quarry, we've also been involved in improving the Seaham environment through our partners, Conservation Volunteers Australia.

With CVA, we've undertaken several planting, revegetation and weed management activities at places like the Seaham Wetlands, adjacent to the Williams River, resulting in a thriving natural area which the whole community can now enjoy.

