

Coal Air Discharge Resource Consent Frequently Asked Questions

Last updated: October 30, 2020

We are in the process of renewing our Coal Dust Resource Consent, which enables us to store and handle coal for export. Details about the process can be found here:

<https://www.lpc.co.nz/community/coal-dust-resource-consent-renewal/>

Throughout the consent application process, we will keep this FAQ document updated to ensure you have the most up-to-date information.

If you have a question you would like to be answered, please email lpccommunications@lpc.co.nz or call 03 328 8198 to speak to a member of our Engagement and Sustainability Team.

Q. What's the difference between thermal coal and coking coal?

A. Thermal coal is burned for energy and is often used in electricity generation. Coking coal, also known as metallurgical coal, is used as an ingredient in the production of steel.

Q. Steel has coal in it?

A. Steel is composed of three main mineral ingredients – iron ore, limestone and carbon. The carbon is made from coking coal. Coking coal is a particular type of coal with a high carbon content. It is heated in coking ovens to form 'bricks' of carbon, which are combined with iron ore and limestone at very high temperatures to create steel.

Here's a detailed diagram of how the process works:

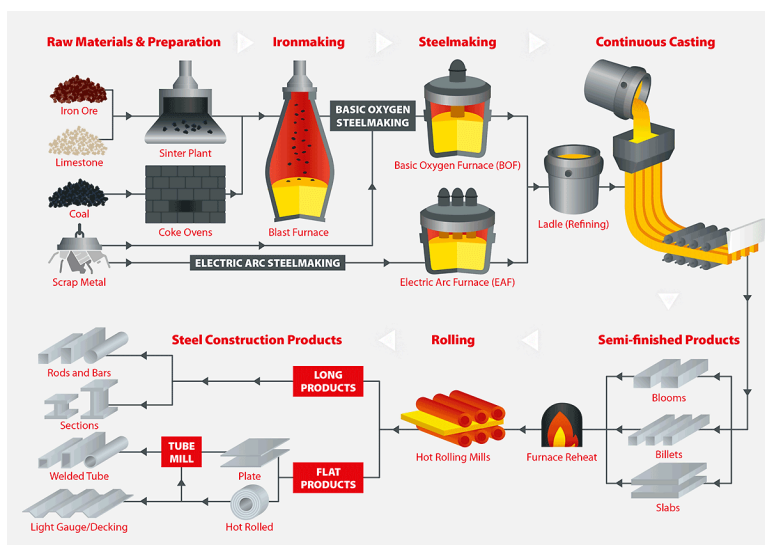


Diagram credit: <https://www.newsteelconstruction.com/wp/an-introduction-to-steelmaking/>

Q. Can steel be made without coking coal?

A. Steel can be produced without coking coal, however the technology is not currently available at the scale required to meet the global demand for steel.

Q. What's the difference between thermal coal and coking coal in terms of climate change effects?

A. Thermal coal is burned for energy and has high CO₂ emissions and associated climate change effects relative to other forms of energy. Coking coal is used in the steel making process as a raw material (not for energy). The emissions from steel production are associated with where the energy is sourced from to power the production process, may include the burning of thermal coal.

Currently there's no alternative to coal as a raw material in steel making, and steel itself remains an essential product for buildings, household goods, transport, medical equipment and much more.

Q. What are LPC's commitments regarding sustainability?

A. We have developed a Sustainability Strategy which lays out a plan for LPC to achieve net zero emissions by 2050, zero waste by 2040, and have a net positive effect on biodiversity. You can read more about this [here](#). As an active participant of the NZ Sustainable Business Council and the Climate Leaders Coalition, advancing sustainability is a key aspect of our business.

Q. Where does the coal stored at LPC come from?

A. All coal stored and handled at LPC is transported by train from mines on the West Coast.

Q. Where does the coal exported from LPC go to?

A. Coal that leaves our port is shipped mostly to China, Japan, India and Australia.

Q. Where is the LPC coal storage yard?

A. The coal yard is located on the eastern side of the port, around the hill from the township.

Q. Is the coal storage area being enlarged?

A. No. This consent application is purely regarding the management of coal dust and LPC has no plans to enlarge its current yard.

Q. What is dust?

A. What we call dust is actually fine particles that come from a range of organic and inorganic substances, depending on the environment. When we sample dust in Lyttelton and analyse its composition, we could find a range of substances including mineral particles, organic materials, soot, coal, salt etc.

Q. I've noticed black dust at my residence. Is this from the coal yard?

A. Coal dust can be transported by wind and accumulate on surfaces. This is called 'deposition'. It's possible that what you're seeing is coal dust – however not all dark coloured dust is from coal. When we test suspected coal dust it can sometimes turn out to be particulate emissions from log burners, pollen or sea salt amongst a number of other sources.

Q. What should I do if I think I have coal dust at my property?

A. Please email lpccommunicatons@lpc.co.nz if you believe you are experiencing coal dust so we can discuss this with you.

Q. What if I'm worried about coal dust affecting the health of myself and my family?

A. Our consent will require us to keep coal dust below levels that might impact human health in all residential and recreational areas.

You may also be reassured to know that a 2019 analysis by Source Testing NZ showed that that even on-site in our coal yard, the level of coal dust exposure was unlikely to result in adverse health effects for the average worker.

Q. How does LPC minimise dust from the coal yard and coal handling?

A. We use a range of dust control systems to minimise any dust issues. Our staff in coal services identify when weather patterns are forecast that may result in dust being generated. They then activate a number of controls such as use of a large water cart to spray sources of dust throughout these events. A sprinkler system is also used to keep the area wet and prevent dust occurring. LPC also has a range of infrastructure such as conveyors and bottom dumping trains that allows coal to be transported in a way that minimises dust when trains are off-loaded and ships are loaded for export.

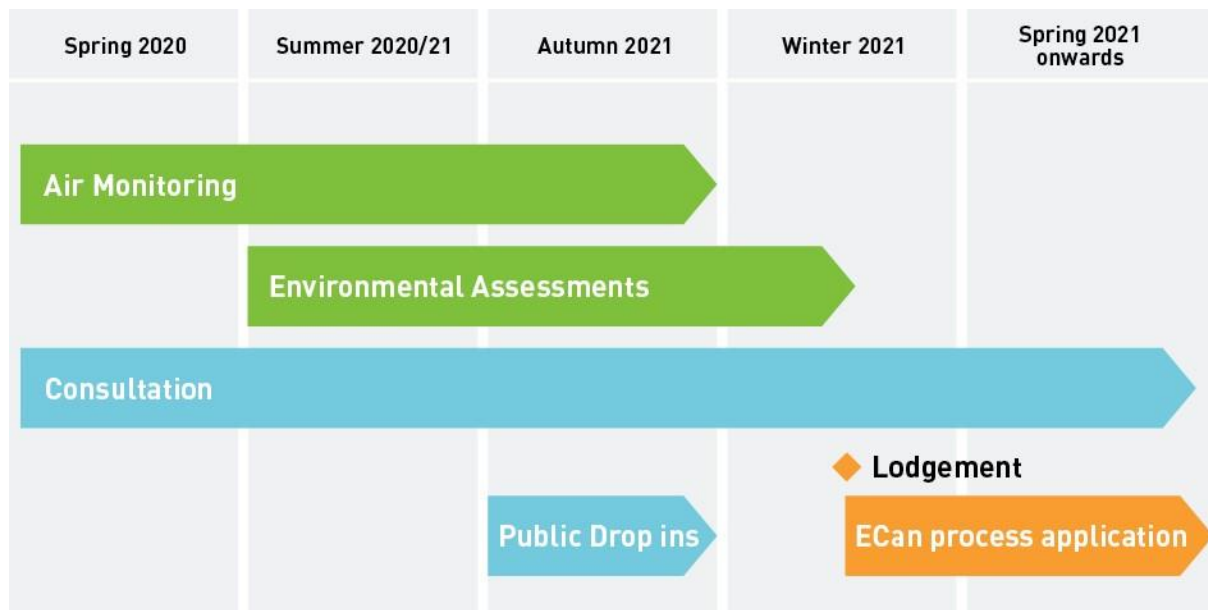
Q. What types of dust is LPC monitoring?

A. LPC already undertakes regular monitoring of depositional dust in accordance with the current resource consent. This occurs at 13 stations throughout the Port and Lyttelton township. Each sample is analysed for sources of dust to identify what proportion is from coal. In addition to these sites, LPC is adding three new dust deposition sites and one instrument measuring fine particulates (PM₁₀ and PM_{2.5}). This site will be active throughout the dry months when dust can be most prevalent. LPC is seeking to understand the sources of this dust so will be analysing samples to see where the dust is coming from.

Q. What does LPC need to do in order to complete its consent application?

A. We need to assess the environmental effects of coal handling and storage at Lyttelton Port, including considering how dust moves and if it affects the residential area. We will be consulting with the public as well as other stakeholders and interested parties. We also need to perform a range of assessments including air quality, ecological, economic and cultural values assessments to identify the effects of the activity and any measures required to manage these. We will aim to determine these and share findings with the community in public drop in sessions before lodging our consent application mid-2021.

Here's a timeline of our programme:



Q. Are other potential effects such as stormwater and noise included in the application?

A. This consent application specifically deals with emissions to air (coal dust) under the Canterbury Air Regional Plan. Other issues, if relevant, are authorised by separate consents, approvals or permitted activity rules in relevant plans.

Q. When does LPC's consultation close?

A. LPC is undertaking consultation throughout the application stages until lodgement in mid-2021. Consultation may include meetings, public drop-in sessions or site meetings. Once lodged, the consent authority will determine whether further consultation is required.

Q. Where can I get more information?

A. We will be sending out regular update emails to interested parties until lodgement in mid-2021. To register for these emails or for any further information, please email lpccommunications@ipc.co.nz or call 03 328 8198.

More information:

LPC Resident Information Sheet, September 2020

<https://www.ipc.co.nz/wp-content/uploads/2020/10/Coal-Dust-Resource-Consent-Renewal-Information-Sheet-for-Residents-September-2020.pdf>