FACTSHEET 2

Preparing a resource estimate

On 26 January 2020, updated regulations came into effect for the Victorian quarrying (extractive) industry. The *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019* introduced changes to annual reporting requirements for all Victorian extractive industry work authorities.

The new requirements apply to all annual reports submitted by work authorities from the 2020–21 financial year onward. For more information on the new regulations, visit **earthresources.vic.gov.au/extractivesregs**.

Guidance materials have been developed to explain the new reporting requirements and to assist the extractive industry in adjusting to the changes.

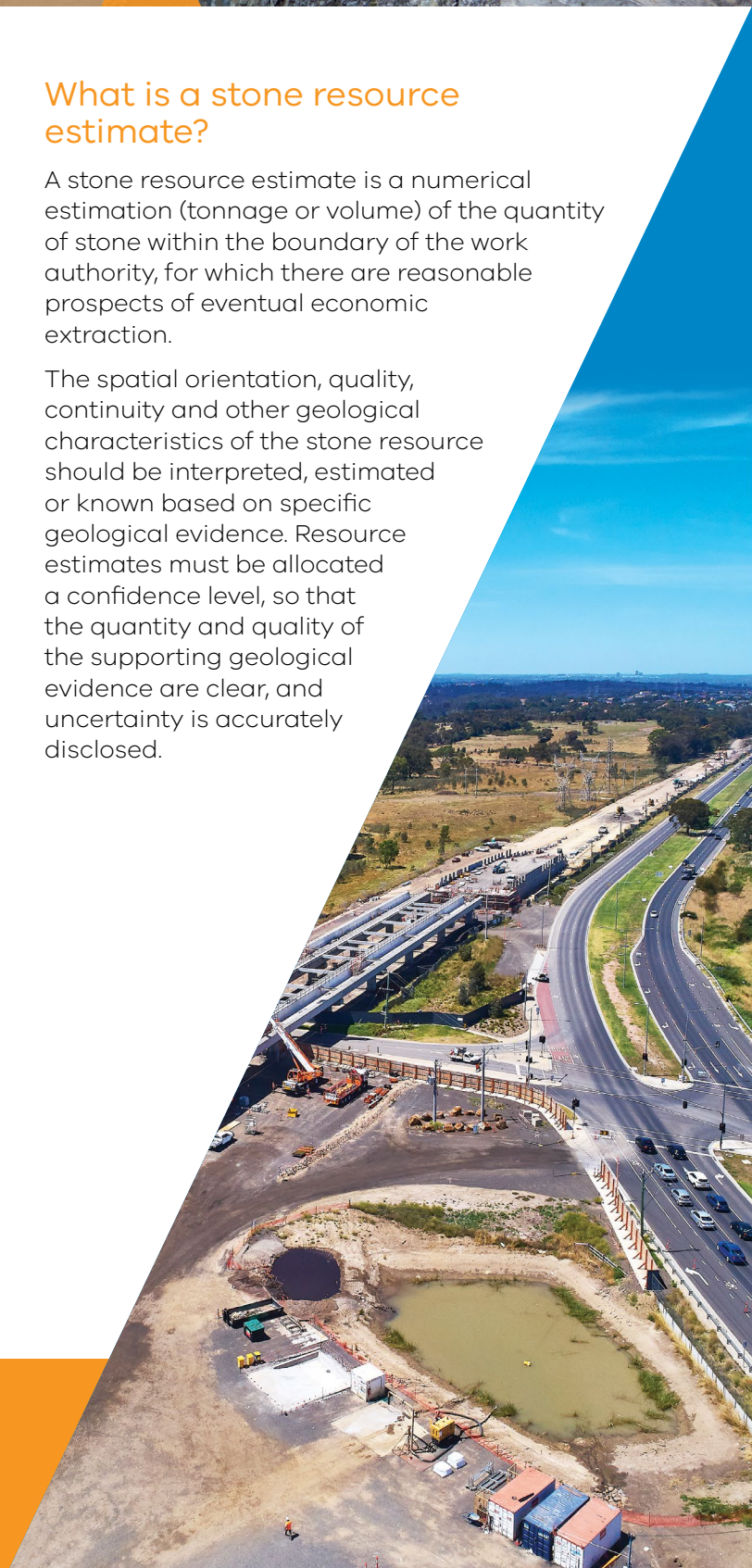
This fact sheet provides information on how to report stone resource estimate information.

The resource estimate reporting framework is adapted from Australia's Joint Ore Reserve Committee (JORC) Code (2012) and is covered in more detail in *Fact sheet 5: The Joint Ore Reserve Committee (JORC) Code*.

What is a stone resource estimate?

A stone resource estimate is a numerical estimation (tonnage or volume) of the quantity of stone within the boundary of the work authority, for which there are reasonable prospects of eventual economic extraction.

The spatial orientation, quality, continuity and other geological characteristics of the stone resource should be interpreted, estimated or known based on specific geological evidence. Resource estimates must be allocated a confidence level, so that the quantity and quality of the supporting geological evidence are clear, and uncertainty is accurately disclosed.



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Extractive work authorities will be asked to provide the:

1. **date of the most recent stone resource estimate**: There is no requirement to supply a 'recent' estimate, nor is there any date range within which the estimate needs to have been completed; the most recent estimate available is all that is required. It is not necessary to supply a new estimate for each subsequent reporting period, nor to revise or adjust estimates to reflect subsequent production.
2. **background of the person who made the estimate**: Select one of three options:
   a. Competent Person as defined by the JORC Code
   b. other geological, engineering or technical specialist
   c. neither of the above.

   There is no requirement that a Competent Person nor a specialist be involved and there is no adverse consequence for selecting 'neither of the above' (option c should be the default answer if not otherwise known).
3. **estimated quantities**: These may be reported in tonnes or cubic metres and must be rounded to appropriate significant figures, reflecting the uncertainty of the estimate. In many cases, this will be to the nearest hundred thousand, or million, tonnes.
4. **confidence level of the estimate**: This primarily reflects the quality and quantity of geological evidence upon which the estimate is based. In order of lowest to highest, the confidence levels are:
   a. *unknown or unspecified* – the default category, which should be selected if estimates were not generated by a Competent Person (defined by the JORC Code) or a geological or technical specialist, or if estimates are not substantiated by physical samples (usually obtained from drill holes)
   b. *inferred resource* – estimated on the basis of limited geological evidence and sampling, which implies, but does not verify, geological continuity between observation points
   c. *indicated resource* – estimated on the basis of detailed geological evidence and sampling, such that geological continuity between points of observation can be assumed
   d. *measured resource* – substantiated by highly detailed geological evidence, sampling and testing, which is sufficient to confirm geological continuity, and leaves no reasonable doubt about the quantity and quality of the resource.
5. **proportion deemed to be recoverable**: This is the percentage of the total resource estimate that is expected to be technically and economically recoverable. In this context, 'technically' refers to engineering and infrastructure factors (e.g. overburden, quarrying method, pit design, fixed plant and processing considerations), whereas 'economically' refers to economic, legal and environmental factors (e.g. dilution, loss allowance, actual or forecast demand, capital and operating expenditure, approval to extract).

When reporting resource estimate information, the JORC Code allows extractive industry work authorities to provide responses that have an accurate expression of uncertainty, rather than being speculative or aspirational.

Many work authorities may have some resource estimate information contained in their work plan. Work authorities should consult their work plans or work plan variation documents as a starting point.

Further information

For more information on the new reporting requirements, contact Earth Resources Regulation:
Email: **errfeedback@ecodev.vic.gov.au**
Phone: 1300 366 356
Web: **earthresources.vic.gov.au/extractivesreporting**