

Industry Regulation fact sheet Coal mining

This fact sheet provides guidance on the Department of Water and Environmental Regulation's (DWER) administration of licences and works approvals for coal mining premises.

Any premises where an activity listed in Schedule 1 of the <u>Environmental Protection</u> <u>Regulations 1987</u> (EP Regulations) is carried out at, or above, the specified production or design capacity are prescribed premises and regulated by DWER under Part V of the <u>Environmental Protection Act 1986</u> (EP Act).

Prescribed premises require a works approval for construction and either a licence or registration to operate.

Coal mining is described in Category 9 of the EP Regulations:

Category 9: Coal mining

Description of category	Production or design capacity
Category 9	
Coal mining: premises on which — a) water is extracted and discharged into the environment to allow coal mining; or b) coal mining or processing occurs and tailings are discharged.	5,000 tonnes or more per year

Application

Interpretation

Mining and processing of brown (lignite), sub-bituminous or bituminous, black or anthracite coal, or graphite are considered to be Category 9 activities.

Coal mining under Category 9 does not include:

- operations that mine, extract or process peat, shale, coal seam gas, or other forms of fossil fuels or hydrocarbon-enriched material;
- the manufacture or production of char and coke (refer to Category 37: Char manufacturing; and Category 39: Coke production);
- operations that do not mine coal, but crush coal purchased or supplied from coal mines.
 These operations may fall under other categories, such as Category 52: Electric power generation; Category 44: Metal smelting or refining; and Category 58: Bulk material loading or unloading; and
- disposal of fly ash from coal burning into mined voids.



Coal mining may involve a range of activities, from clearing vegetation to backfilling mined voids for final rehabilitation.

Coal mining and processing may comprise the following activities:

- transporting large volumes of topsoil, overburden, and inter-burden with earthmoving and mining equipment;
- dewatering and storage, treatment and discharge of dewatering effluent;
- open cut or underground mining of coal seams;
- wet or dry crushing, grinding, screening and/or blending of coal to produce the desired particle size range;
- beneficiation or washing of mined coal to remove impurities such as sand and rock;
- stockpiling products;
- disposal of overburden, inter-burden, sand, clay and coal processing tailings either separately or together into specific containment structures or into mined voids; and
- closure of mined voids through stabilisation or backfill, including rehabilitation and revegetation.

Production/design capacity

The production or design capacity for Category 9: Coal mining is measured in wet tonnes, and is the larger of:

- (a) the amount of ore that can be mined; or
- (b) the amount of ore that can be processed.

'Wet tonnes' is determined with reference to the moisture content of the ore as it is mined or processed.

Environmental risk

Coal mining involves a risk of causing pollution or environmental harm unless prescribed premises are appropriately regulated and managed. The EP Act sets out a range of offences that specifically relate to occupiers of prescribed premises, in addition to general offences relating to pollution and environmental harm. For further information on these offences, refer to DWER's *Industry Regulation Guide to Licensing* and the EP Act.

Emissions and discharges from coal mining and processing typically include:

- noise from fixed and mobile plant;
- dust from open areas and material handling operations;
- point source dust from coal processing;
- · point source discharge of dewatering and coal processing wastewater;
- contaminated stormwater;
- disposal of solid wastes (sand, clay and coal processing tailings); and
- seepage to groundwater from solid waste containment or disposal locations.

Coal mining may also disturb or generate large quantities of acid mine drainage discharge water.



Monitoring

The volume and quality of waste discharged onto air, land or waters may require monitoring to determine the annual discharge fee payable. Pollutants monitored can include, but are not limited to, particulate matter, total dissolved solids (TDS), total suspended solids (TSS), dissolved oxygen, iron, and magnesium.

Assessment

DWER applies a risk-based approach to its regulatory functions under the *EP Act*. DWER publications, <u>Guidance statement: Decision-making</u> and <u>Guidance statement: Risk assessments</u>, detail the approach taken by the Department in assessing applications for works approvals and licences under Part V of the EP Act.

In assessing applications for works approvals and licences for Category 9 premises, DWER will:

- have regard to emissions management and contingency measures implemented by the operator;
- consider waste generated either onsite or offsite through coal mining and processing; including sand tailings; clay tailings; co-disposed sand and clay mixtures; coal processing wastes; and small quantities of waste related to coal mining and processing, to be 'tailings';
- assess the disposal of tailings into mining voids as a component of coal mining and processing;
- assess the onsite disposal of waste generated from offsite coal processing (not including downstream production of char, coke or fly ash) as an integral part of coal mining and processing;
- consider that coal mining commences at the point of overburden removal, after vegetation and topsoil have been cleared;
- consider that coal mining is complete when the mined voids achieve the landform state, as defined in the approved Mine Closure Plan for the premises; and
- not assess the reinstatement of topsoil and rehabilitation of vegetation as part of coal mining or processing.

In addition, DWER will:

- consider the required final landform state; and
- consider the likelihood of environmental protection being achieved if mining voids are likely to be filled by water or adversely affected by the presence of coal, sulphides and so on.

Coal mining or processing operations may also be subject to State Agreement Acts administered by the Department of Jobs, Tourism, Science and Innovation, and may be regulated by the Department of Mines, Industry Regulation and Safety under the <u>Mining Act</u> 1978 and the <u>Mines Safety and Inspection Act 1994</u>.

Where a prescribed premises has been assessed by the Environmental Protection Authority as a 'significant proposal' and is subject to a Ministerial Statement granted under Part IV of the EP Act, the conditions of a works approval or licence granted under Part V must not be contrary to the conditions of the Ministerial Statement.



Closure

Where mine voids remain open and water quality is impacted, DWER may impose a Closure Notice or other form of regulatory control either in conjunction with, or in addition to, other statutory authorities.

Other prescribed premises categories that may be relevant

The following activities may constitute a separate prescribed premises category on a coal mining premises:

- dewatering 50,000 tonnes or more of coal orebody per year (Category 6: Mine dewatering);
- fly ash disposal of 1,000 tonnes or more per year (Category 53: Fly ash disposal);
- electric power generation facilities of 20 MW or more (natural gas) or 10 MW or more (for fuel other than natural gas) for Category 52;
- acceptance of 500 tonnes or more of inert waste for burial, per year (Category 63: Class I inert landfill site); and
- acceptance of 20 tonnes or more of putrescible waste for burial, per year (Category 64: Class II or III putrescible landfill site).

Refer to the relevant fact sheets for further information on these categories.



More Information

For further information, please contact DWER Regulatory Services (Environment) on 6364 7000. This document is available in alternative formats and languages on request.

Additional publications about Industry Regulation are available online at www.der.wa.gov.au/our-work/licences-and-works-approvals/publications or can be requested by phone on the above number.

Legislation

This document is provided for guidance only. It should not be relied upon to address every aspect of the relevant legislation. Please refer to the State Law Publisher (SLP) for copies of the relevant legislation, available electronically from the SLP website at www.slp.wa.gov.au.

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