



Standard 7

7 AIR QUALITY MANAGEMENT STANDARD

7.1 STANDARD

The purpose of this Standard is to define the requirements to manage point and non-point source air emissions and ambient air quality, to be protective of both human health and the environment.

This Standard does not include requirements associated with greenhouse gas or carbon emissions.

Operational requirements relating to air quality that are relevant to human health are defined in B2Gold OHS Performance Standard 1 – Occupational Health and Hygiene.

7.2 CRITERIA AND REQUIREMENTS

7.2.1 Regulatory Compliance

All approvals, licences and permits relating to air emissions shall be secured and sites shall maintain compliance with all relevant in-country regulatory requirements, licence conditions and any other applicable requirements.

Sites shall prevent a breach of any applicable limits and criteria under normal and reasonable worst-case operating conditions and meteorological conditions.

Sites shall formally identify all major point source and non-point source forms of air emissions for the operational phase of the project.

Sites that emit sources of point source air emissions shall be operated with appropriate air pollution controls to comply with in-country regulatory requirements, defined regulatory standards and/or site licence limits.

7.2.2 Air Quality Management Plan

Sites shall develop, implement, maintain and communicate a suitable Air Quality Management Plan that defines all relevant strategies, operational controls and management practices relating site air emissions.

Utilising relevant in-country standards, air quality objectives and internal performance criteria shall be established for air emission sources and ambient air quality.

Sites shall consider and document any relevant air risks and impacts during site management of change processes. Sites shall also consider and document air risks and impacts during the technical and financial evaluation of relevant capital projects.

7.2.3 Baseline Conditions

Relevant meteorological data and baseline ambient air quality conditions shall be characterised, monitored and recorded for any new site or project expansion to establish pre-operational conditions.



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Appropriate hazard identification, risk assessment and risk control planning shall be incorporated into any new project design or expansion to ensure that ambient air related risks and impacts are known and controlled during construction and operations.

Environmental impact assessments shall consider all requirements associated with air emissions and ambient air quality.

7.2.4 Air Emission and Impact Determination

Point source and fugitive dust emissions shall be identified, characterised and controlled in accordance with the potential risk to personnel, the local community and/or the environment.

Periodic ambient and where relevant, point source, air quality monitoring shall determine if any potential hazardous air pollutants are being emitted from sites. Air quality dispersion modelling is required where a potential risk of affecting human health or the environment exists. Where hazardous air pollutants are potentially emitted from a site and need to be controlled, suitable risk-based, cost-effective control technologies shall be implemented and maintained.

Where hazardous air emissions pose a significant risk to human health (i.e., employees and/or the community) and the environment, sites shall quantify the pollutant emissions (i.e., concentrations and/or total loadings) using calibrated monitoring equipment, mass balancing and/or other approved methods.

7.2.5 Calibration and Maintenance Schedule

Sites shall develop, implement and maintain planned calibration and maintenance schedules for any air emissions control and monitoring equipment.

7.2.6 Monitoring

Depending on location and risk profiles, sites shall develop and implement suitable monitoring and inspection programs to verify that point source air emission and ambient dust controls remain functional and effective and air emissions are not having an adverse effect on human health or the environment, inclusive of any visual impacts.

Particulate matter, sulfur oxide (SO_x), nitrogen oxide (NO_x) and heavy metals monitoring shall be conducted where relevant emissions exist (e.g., on-site power station, laboratory and/or gold room stack emissions) and/or community complaints are received.

7.2.7 Data Analysis and Management

Air emission and ambient air monitoring data shall be periodically reviewed inclusive of trend analysis, and the results communicated to site management.

7.3 TERMS AND DEFINITIONS

Relevant key terms and definitions that relate to B2Gold's Air Quality Management Standard are provided below:

Baseline Conditions: The existing environmental conditions, i.e., the physical, chemical, or biological setting, of a proposed project area prior to disturbance by project-related development.

Environmental Impact: Any change to the environment whether adverse or beneficial, wholly or partially resulting from a site's activities.

Monitoring: The gathering, analysis (especially for trends) and interpretation of information for the assessment of performance.



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Examples of monitoring subjects are: occupational health and safety, air, soil and water quality, flora and fauna, reclamation, social aspects including complaints, operational dust, noise, vibration, property damage, community health, community investment, historical and cultural sites.

Monitoring may be continuous, short-term or long term and may be undertaken manually or automated.

Point Source: A stationary location or fixed facility from which pollutants are or may be discharged (e.g., a pipe, stack, ditch, well, or ore pit).

Reclamation: The return of disturbed land to a physically and chemically stable, self-sustaining condition compatible with future land use objectives.

7.4 REFERENCE MATERIAL

Nil

7.5 DOCUMENT CONTROL

Revision	Approved	Date	Description
Final	Ken Jones	17 th August 2014	Original 2014 issue of the B2Gold Environmental and Biodiversity Performance Standards
Final	Ken Jones	24 th May 2018	2018 revision, update and issue of the original 2014 B2Gold Environmental and Biodiversity Performance Standards