ChecklistGuro

Mine Ventilation Dilution Checklist

Pre-Shift Ventilation Checks

Initial assessment of ventilation system functionality before commencement of shift operations.

Shift Start Time

Ventilation System Status (Pre-Shift)

- [ ] Normal
- [ ] Reduced
- [ ] Standby
- [ ] Faulted

Pre-Shift Ventilation Fan RPM (Fan 1)

Enter a number...

Pre-Shift Ventilation Fan RPM (Fan 2 - if applicable)

Enter a number...

Emergency Ventilation System Availability

- [ ] Available
- [ ] Unavailable
- [ ] Testing

Notes on Pre-Shift Ventilation Condition

Write something...

Airflow Measurement

Verification of airflow rates at strategic locations within the mine.

Airflow Rate (m³/s)

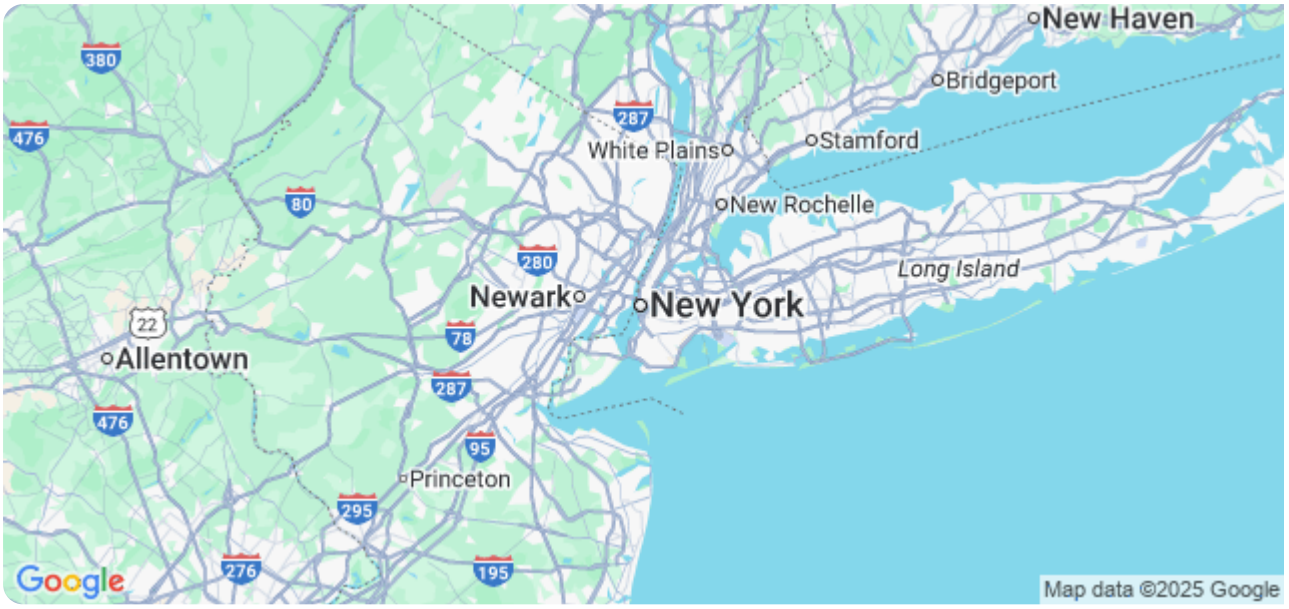
Enter a number...

Airflow Rate (CFM)

Enter a number...

Measurement Location (GPS Coordinates)

Set My Current Location



Measurement Device Used

- [ ] Anemometer
- [ ] Pitot Tube
- [ ] Laser Doppler
- [ ] Other

Pitot Tube Pressure (Pa)

Enter a number...

Measurement Time

Notes on Measurement Conditions

Write something...

Dilution Factor Calculation

Determination of dilution factors to ensure acceptable air quality.

Gas Emission Rate (m^3/s)

Enter a number...

Airflow to Mining Area (m^3/s)

Enter a number...

Total Airflow (m^3/s)

Enter a number...

Dilution Factor

Enter a number...

Gas Type (Primary Contributor)

- [ ] Methane
- [ ] Carbon Monoxide
- [ ] Other

Notes/Comments on Calculation

Write something...

Date of Calculation

Enter date...

Gas Monitoring

Monitoring of methane, carbon monoxide, and other hazardous gases.

Monitoring Start Time

Methane Concentration (ppm)

Enter a number...

Carbon Monoxide Concentration (ppm)

Enter a number...

Oxygen Concentration (%)

Enter a number...

Gas Detection Equipment Model

- [ ] Model A
- [ ] Model B
- [ ] Model C

Calibration Expiration Date (YYYY-MM-DD)

Enter a number...

Gas Monitoring Notes

Write something...

Ventilation Control Settings

Review of ventilation control system parameters and adjustments as needed.

Fan Speed (RPM)

Enter a number...

Air Volume (m³/s)

Enter a number...

Ventilation Pressure (Pa)

Enter a number...

Ventilation Mode

- [ ] Normal
- [ ] High
- [ ] Low
- [ ] Standby

Time of Adjustment

Reason for Adjustment

Write something...

Control System Status

- [ ] Operational
- [ ] Alarm
- [ ] Fault

Fan Performance Evaluation

Assessment of fan RPM, power consumption, and overall efficiency.

Fan RPM (Revolutions Per Minute)

Enter a number...

Motor Amperage (Amps)

Enter a number...

Static Pressure (inches of water)

Enter a number...

Air Volume (CFM or m³/s)

Enter a number...

Fan Noise Level (Subjective)

- [ ] Normal
- [ ] Slightly Elevated
- [ ] Elevated
- [ ] Excessive

Fan Vibration Observation (Describe)

Write something...

Fan Efficiency Rating (if available)

- [ ] Unknown
- [ ] Less than 75%
- [ ] 75-85%
- [ ] 85-95%
- [ ] 95% or higher

Last Maintenance Date

Enter date...

Stoping Area Ventilation

Specific ventilation checks for active stoping areas.

Airflow (m^3/s) at Face

Enter a number...

Gas Concentration (methane, %) at Face

Enter a number...

Distance to Nearest Ventilation Control Panel (m)

Enter a number...

Ventilation Direction (as per plan)

- [ ] Correct
- [ ] Incorrect - Deviation Required

Observations & Deviations

Write something...

Time of Ventilation Check

Potential Hazards Identified

- [ ] Air Stagnation
- [ ] Gas Build-up
- [ ] Dust Concentration
- [ ] Insufficient Airflow
- [ ] None

Return Airway Assessment

Evaluation of airways used for return airflow.

Airflow Measurement (m³/s)

Enter a number...

Description of Airway Condition

Write something...

Evidence of Scaling/Support Required?

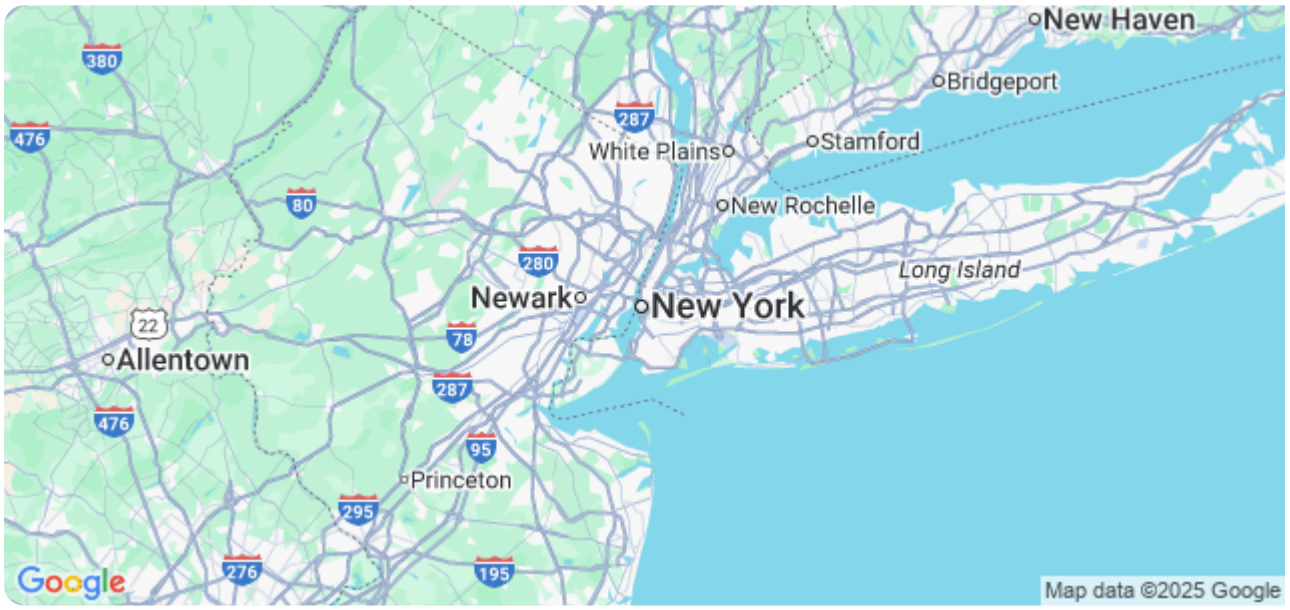
- [ ] Yes
- [ ] No
- [ ] Unsure

Potential Hazards Observed

- [ ] Blockage
- [ ] Water Inflow
- [ ] Ground Instability
- [ ] Poor Ventilation
- [ ] None

Return Airway Location

Set My Current Location



Date of Assessment

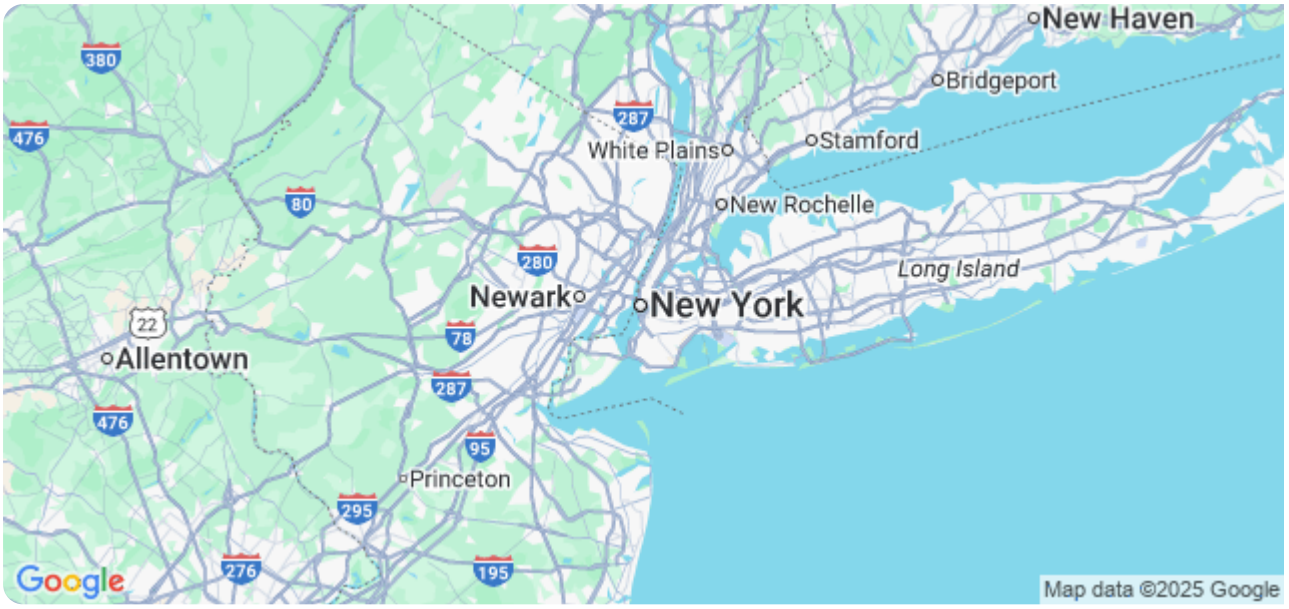
Enter date...

Ventilation Obstruction Check

Identification and correction of any obstructions affecting airflow.

Obstruction Location (GPS Coordinates)

Set My Current Location



Type of Obstruction

- [ ] Rockfall
- [ ] Equipment
- [ ] Debris
- [ ] Material Storage
- [ ] Other

Detailed Description of Obstruction

Write something...

Estimated Obstruction Volume (m^3)

Enter a number...

Impact on Airflow?

- [ ] No Impact
- [ ] Minor Impact
- [ ] Moderate Impact
- [ ] Significant Impact

Photo of Obstruction

Upload File

Time Obstruction Notified

Record Keeping & Reporting

Documentation of ventilation data and reporting of any discrepancies.

Date of Ventilation Dilution Check

Enter date...

Time of Ventilation Dilution Check

Average Methane Concentration (ppm)

Enter a number...

Average Carbon Monoxide Concentration (ppm)

Enter a number...

Dilution Factor Achieved

Enter a number...

Dilution Factor Acceptance Status

- [ ] Acceptable
- [ ] Marginal
- [ ] Unacceptable

Observations & Deviations

Write something...

Ventilation Officer Signature