



Mine Mineral Processing Plant Audit Checklist 202 Excellence 2026

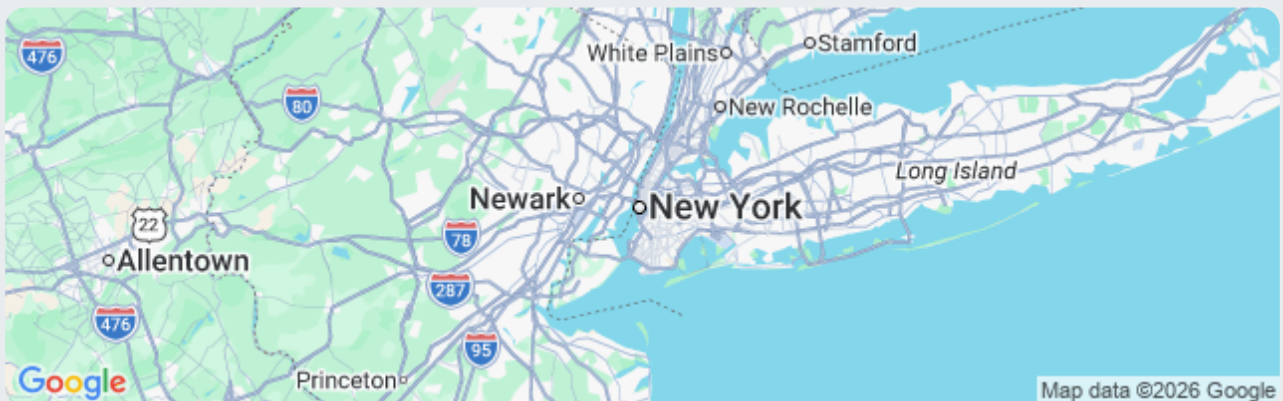
Crushing and Grinding Circuit Integrity

Verification of crusher liner wear, conveyor belt alignment, SAG/Ball mill liner condition, and motor vibration levels.

Inspection Date

Crusher/Mill Unit ID

 [Set My Current Location](#)



Crusher Liner Wear Status

- ☐ Good
- ☐ Moderate Wear
- ☐ Critical - Replace Immediately

Mill Vibration Level (mm/s)

Enter a number...

Observed Anomalies

- ☐ Excessive Noise
- ☐ Unusual Heat Generation
- ☐ Oil Leakage
- ☐ Unbalanced Loading

Detailed Observations and Maintenance Notes

Write something...

Photographic Evidence of Component Wear

 Upload File

Lead Metallurgist/Engineer Approval

Classification and Separation Efficiency

Inspection of cyclone performance, screen deck integrity, flotation cell froth levels, and reagent dosing accuracy.

Cyclone Performance Status

- ☐ Optimal
- ☐ Sub-optimal
- ☐ Critical/Failure

Measured Underflow Density (%)

Screening Area Inspection Points

- ☐ Primary Screen
- ☐ Secondary Screen
- ☐ Fine Screening Unit
- ☐ Trommel

Observation of Froth/Slurry Behavior

Write something...

Laboratory Assay Report Attachment

 Upload File

Process Engineer Verification

Reagent and Chemical Management

Audit of chemical storage stability, dosing pump calibration, MSDS accessibility, and spill containment readiness.

Inspection Date

Enter date...

Reagent Inventory Status

- ☐ Sufficient
- ☐ Critical Low
- ☐ Out of Stock

Current Reagent Concentration (%)

Enter a number...

Chemical Storage Inspection Points

- ☐ Secondary Containment Integrity
- ☐ Labeling and Signage Accuracy
- ☐ Spill Kit Availability
- ☐ Ventilation Functionality
- ☐ Compatibility Segregation

Discrepancies or Leakage Observations

Write something...

Updated MSDS/SDS Documentation

 Upload File

Chemical Supervisor Verification

Dewatering and Thickener Performance

Monitoring of thickener underflow density, flocculant dosage, belt filter press operation, and tailings sludge consistency.

Audit Date

Enter date...

Thickener Underflow Density (g/L)

- ☐ Low
- ☐ Optimal
- ☐ High

Flocculant Dosage Rate (kg/t)

Enter a number...

Slurry Flow Rate Observation

Write something...

Observed Anomalies

- ☐ Vortex Formation
- ☐ Rake Torque High
- ☐ Overflow Turbidity
- ☐ Pump Cavitation

Corrective Actions Required

Write something...

Auditor Signature

Conveyor and Material Handling Systems

Assessment of belt tension, scraper/cleaner effectiveness, pulley alignment, and transfer point blockage prevention.

Conveyor Belt Condition

- ☐ Excellent
- ☐ Good
- ☐ Fair (Requires Maintenance)
- ☐ Critical (Immediate Action Required)

Observed Belt Misalignment or Wear Details

Tension Level (Measured PSI/Bar)

Inspection Points Checked

- ☐ Idler/Roller Integrity
- ☐ Belt Splice/Splicing Condition
- ☐ Scraper/Cleaner Functionality
- ☐ Drive Motor/Gearbox Status
- ☐ Transfer Point Blockage Check

Photographic Evidence of Inspection

 Upload File

Lead Auditor Signature

Instrumentation and Process Control Automation

Calibration check of flow meters, level sensors, pressure transmitters, and SCADA/PLC system functionality.

Audit Date

Enter date...

Sensor Calibration Status

- ☐ Fully Calibrated
- ☐ Requires Calibration
- ☐ Out of Calibration

Flow Meter Deviation Percentage

Enter a number...

Instruments Inspected

- ☐ Pressure Transmitters
- ☐ Level Sensors
- ☐ Flow Meters
- ☐ Temperature Probes
- ☐ Density Meters

Automation System Observations & Anomalies

Write something...

Calibration Certificate Upload

 Upload File

Lead Automation Engineer Approval

Plant Structural and Mechanical Integrity

Inspection of structural steelwork, pump casing integrity, bearing lubrication cycles, and gearbox oil levels.

Structural Steelwork Condition

- ☐ Excellent
- ☐ Good
- ☐ Fair - Maintenance Required
- ☐ Critical - Immediate Action Needed

Observed Corrosion or Structural Defects

Pump Bearing Temperature (°C)

Completed Maintenance Tasks

- ☐ Lubrication Performed
- ☐ Seal Replacement
- ☐ Bolt Tensioning
- ☐ Liner Inspection

Structural Integrity Inspection Photos

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Lead Mechanical Inspector Signature

Electrical and Power Distribution Safety

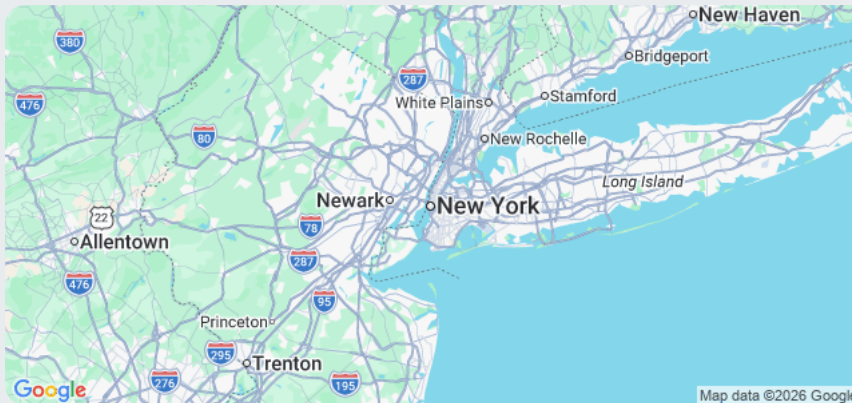
Review of substation cleanliness, transformer oil levels, circuit breaker functionality, and emergency stop (E-Stop) accessibility.

Inspection Date

Enter date...

Substation or Panel ID

 [Set My Current Location](#)



Transformer Oil Level Status

- ☐ Normal
- ☐ Low
- ☐ Critical

Circuit Breaker Trip Test Status

- ☐ Passed
- ☐ Failed
- ☐ Not Tested

Measured Voltage (kV)

Enter a number...

Safety Device Inspection Checklist

- ☐ Emergency Stop Functionality
- ☐ Arc Flash Boundary Markers
- ☐ Insulation Resistance Testing
- ☐ Grounding/Earthing Connection Integrity

Electrical Fault Observations & Remarks

Write something...

Electrical Engineer/Auditor Signature

Environmental and Dust Mitigation Compliance

Audit of dust suppression sprayers, baghouse filter performance, and perimeter air quality monitoring systems.

Dust Suppression System Status

- ☐ Fully Operational
- ☐ Partial Functionality - Maintenance Required
- ☐ Non-Operational - Critical Issue

Particulate Matter (PM10/PM2.5) Reading

Enter a number...

Last Air Quality Monitoring Date

Enter date...

Active Dust Mitigation Methods

- ☐ Water Sprays/Misting
- ☐ Chemical Dust Suppressants
- ☐ Enclosure/Housing
- ☐ Windbreak Barriers

Observation Notes and Mitigation Actions

Write something...

Dust Monitoring Report Upload

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Environmental Officer Verification

Process Safety and Occupational Health

Verification of pressure vessel certifications, lockout/tagout (LOTO) compliance, and guarding of rotating machinery.

Safety Equipment Inspection Checklist

- ☐ Emergency Eyewash Stations Functional
- ☐ Fire Extinguishers Inspected & Charged
- ☐ Safety Showers Accessible & Operational
- ☐ Personal Protective Equipment (PPE) Availability
- ☐ First Aid Kits Fully Stocked

LOTO (Lockout/Tagout) Compliance Status

- ☐ Compliant
- ☐ Non-Compliant
- ☐ Not Applicable

Identified Safety Hazards and Observations

Write something...

Safety Certification/Permit Documentation

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Safety Auditor Acknowledgment

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✔ Finish

🔧 Generate Sample Report