



NMA/MSHA Approval Workshop

MSHA Approvals

Approval and Certification Center

May 21 and 22, 2008





Why is MSHA Approval Required?

- Federal Mine Safety & Health Act of 1977, Public Law 91-173
- 30 CFR 75.500 requires the use of “permissible” equipment in gassy areas of underground coal mines
- 30 CFR 57.22302 requires MSHA approved equipment for use in hazardous areas of underground gassy metal and nonmetal mines



What Does “MSHA Approved” Mean?


- Official notification by MSHA that product under consideration meets the applicable 30 CFR requirements
- No likely explosion hazard under normal operation when used in methane-air atmosphere or coal dust
- Typically does not include performance requirements with several exceptions (e.g., methane detectors and cap lamps)



What Mining Products does MSHA Approve?

Part 7 – Testing by Applicant or Third Party

- Subpart B – Brattice Cloth and Ventilation Tubing
- Subpart C – Battery Assemblies
- Subpart D – Multiple Shot Blasting Units
- Subpart E – Diesel Engines
- Subpart F – Diesel Power Packages
- Subpart J – Electric Motor Assemblies
- Subpart K – Electric Cables, Signaling Cables and Cable Splice Kits



What Mining Products does MSHA Approve?

Part 18 – Electric Motor-Driven Mine Equipment

- Explosion-Proof Enclosures (XPs)
- Intrinsically Safe Circuits, Instruments and Apparatus
- Longwall Mining Systems, Continuous Miners, Shuttle Cars, Roof Bolters, Scoops, etc.
- Conveyor Belt, Conduit Hose, Packing Gland Material, etc.



What Mining Products does MSHA Approve?

- Part 19 – Electric Cap Lamps
- Part 20 – Electric Mine Lamps other than Standard Cap Lamps
- Part 22 – Portable Methane Detectors
- Part 23 – Telephones and Signaling Devices
- Part 27 – Methane Monitoring Systems




What Mining Products does MSHA Approve?

- Part 33 – Dust Collectors
- Part 35 – Fire Resistant Hydraulic Fluids
- Part 36 – Mobile Diesel-Powered Transportation Equipment



What Other Acceptance Programs Does MSHA Offer?

- Ground Wire Monitors
- STEs (lighting systems)
- Mine Wide Monitoring Systems
- Voluntary Program titled “*Solid Products Taken Into Mines*” (formerly Interim Criteria)
 - Products are evaluated for flame resistance



What is the Difference Between an Approval / Certification / Acceptance?

- ***Approval*** – A formal document issued by MSHA which states that a completely assembled product has met the applicable requirements and which authorizes the attachment of an approval plate.
 - Part 7 products are also referred to as “approved”
- ***Certification*** – A formal written notification issued by MSHA which states that a component complies with the applicable requirements and is suitable for incorporation on approved equipment. (e.g., XPs and MMs)
- ***Acceptance*** – Written notification by MSHA that a product has met the applicable requirements and will be listed by MSHA as acceptable.



What's Up With the MSHA Approval Numbering System?

18-ISA080001-0

- 18 – represents the applicable 30 CFR Part
- IS – represents special approval number designations
 - IS for intrinsic safety
 - XP for explosion proof enclosure
 - Nothing for approved machinery
- A – represents 30 CFR standards
 - B would refer to non-MSHA product safety standard such as the IEC
- 08 – Two digit calendar year in which approval is issued
- 0001 – four digit sequential approval number issuance
- 0 – extension number



Where Can I Find Information on the MSHA Approval Process?

- www.msha.gov

- A&CC Homepage

- (<http://www.msha.gov/TECHSUPP/ACC/ACCHOME.HTM>) includes:

- Application Procedures
- Application Status Feature
- Evaluation Criteria (e.g. Intrinsic Safety Evaluation Criteria)
- Test Procedures
- Lists of Approved Products



How Can I Monitor My Application Status Online

- www.msha.gov Product Approval / Application Status Search
- Manufacturer ID from ipso@dol.gov
- Application Lifecycle from Estimate to Invoice Payment
- Link to A&CC Telephone Directory to speak to Investigator



How Can I Monitor My Application Status Online

Online application status site provides:

- PAR #
- Date Rec.
- Company ID
- Employee Name
- Status Code
 - 2 – Awaiting Initial Action
 - 3- Investigation in Progress
 - 4C – Awaiting company response
- Status Date



Where Can I Get Help Preparing My Application?

- A&CC webpage compliance guide search feature for ESD products
- Application procedure forms and checklists
- Free A&CC approval application consultation services
- Hoping to introduce online application option



How can I submit my application electronically?

- Email
 - Send as attachments (max size 20 megabytes)
 - Can send multiple emails for same application
 - ipso@dol.gov
- FTP Submittal
 - Posted at mfgr.msha.gov
 - No file size limit or number of files limit
 - Files can be organized and viewed by applicant
 - Contact ipso@dol.gov for more information on setting up a FTP account
 - Can still use email to send drawing corrections directly to the investigator



How Does the MSHA Approval Process Work?

In general the process is as follows:

- Fee estimation process
 - Preliminary Review
 - Pre-authorizations
 - Blanket Authorizations
- Documentation Review / Compliance Verification
- Discrepancy Letters
- Testing / Inspection
- Finalization / Approval Letter
 - conditions of use



How Do I Modify a Previously MSHA Approved / Certified / Accepted Product?

- Revised Approval Modification Program (RAMP)
 - Replaced the popular SNAP and SRA programs
 - Permits multiple changes to previously issued approvals
 - Testing can be performed under a RAMP
 - Submit description of changes and revised drawings
- Extensions of Approval
 - Need is determined by applicant or in consultation with A&CC investigator
 - Extension process is described in 30 CFR
 - Generally extensions include more extensive changes than RAMPs



What is MSHA's Quality Assurance Program?

- Approval-holder responsible for producing products in accordance with approved drawings and specifications
- MSHA Post-approval product audit program
- Applicant submits factory inspection form / certified statement with approval request.
- After receiving equipment/products, owner is responsible for maintaining in accordance with MSHA approval



How Does MSHA Secure MSHA Approval Documents?

- MIMs Drawing System
- 30 CFR Confidentiality Obligation
- Trade Secrets Act
- MSHA maintains confidentiality of all approved documentation
- Documents are for exclusive use of MSHA personnel



What is MSHA's Cancellation Policy?

- 6 month response time
 - Must address all items in discrepancy letter
 - If additional discrepancies are noted, additional letters will be sent
 - A&CC is considering reducing time frame (e.g., 3 months)

- 3 month reminder

- 1 week warning

- No extensions of time



What Types of Applications Does MSHA Assign High Priority?

- Any application that MSHA enforcement identifies as necessary to address an imminent safety or health concern
- Longwalls and related approval applications
- Communications and Tracking



Why Doesn't MSHA Accept IEC Standards?

- Proposed Part 6 in 1994
- Revised Part 6 promulgated in 2003
- Federal Mine Safety & Health Act of 1977 requires that all new standards promulgated must provide at least the same degree of protection as existing standards



IEC Acceptance Complications

- IEC standards are for components only
- IEC standards do not provide for system evaluations like:
 - Longwalls, machines, communication systems, tracking systems, shield control systems, etc.
- Most countries that utilize IEC standards have additional requirements:
 - System Safety Analyses that must be performed by mine operators



What Approval Alternatives does Part 6 Permit?

- Independent Laboratories can perform test and evaluation to MSHA Requirements
 - Lab must be recognized by a reputable accrediting organization (e.g., OSHA NRTL or IECEx)
 - Complete evaluation report with test data
- MSHA can approve equipment designed to third party standards (e.g. IEC) if MSHA determines such standards are equivalent
 - Only IEC 60079-1 (Flameproof Enclosures) so far
 - IEC 60079-11 (IS) is under consideration



What Does Part 7 Offer?

- Testing by Applicant or Third Party
- Mature product lines for which testing results are considered non-subjective
- MSHA reserves the right to witness product testing
- Very successful program – other certifying bodies are only now beginning to consider similar programs



What Can Applicants do to Expedite the MSHA Approval Process?

- Ensure all required documentation is included with original application
- Provide timely response to investigator requests for corrections or test samples



Questions?

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