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 MM’s)

**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](http://www.msha.gov) Product Approval / Application Status Search

  - Manufacturer ID from [ipso@dol.gov](mailto: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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