

**U.S. Department of Labor**

Mine Safety and Health Administration  
Approval and Certification Center  
765 Technology Drive  
Triadelphia, West Virginia 26059



Approval No. 19-A090001-0  
A&CC PAR No. 93187

June 16, 2009

United Mining Equipment, Inc.  
Attention: Mr. Dustin Winkler  
579 Pittsburgh Road  
Butler, Pennsylvania 16002-7659

Dear Mr. Winkler:

The review of your application requesting a new approval for your Model KL5M LED Miner's Cap Lamp Assembly, Company Application Code No. 000002, is complete.

The design of this Model KL5M Cap Lamp Assembly meets the requirements of Title 30 Code of Federal Regulations, Part 19 and is approved as permissible for use in gassy underground mines. We assign Approval No. 19-A090001-0 to this design.

The following requirements apply to Approval No. 19-A090001-0:

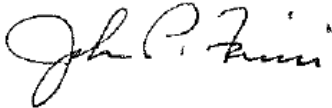
1. You must build each Model KL5M Cap Lamp Assembly bearing this approval number according to the drawings and specifications on file at the MSHA Approval and Certification Center. A list of these drawings and specifications is enclosed.
2. Our approval label information must be legibly reproduced with permanent lettering on a wear resistant material and must be prominently displayed on an exterior surface of this Model KL5M Cap Lamp Assembly (see the enclosed official approval label information required for this cap lamp). All of the approval label information must appear on the approval label.
3. You are not permitted to make changes to the design of this Model KL5M Cap Lamp Assembly without our approval.
4. We may require you to make changes to the design, or to modify the Model KL5M Cap Lamp Assembly in the field, in the interest of safety.
5. We have the right to revoke this approval, for cause, at any time.

6. The following requirements apply to the use of this Model KL5M Cap Lamp Assembly:
- a. The batteries are not to be replaced by the user.
  - b. The cap lamp is only to be charged in fresh air.

You will receive an invoice for the cost to process your application.

If you have any comments or questions relative to this letter, please contact Terry Garrison at 304-547-2016.

Sincerely,



John P. Faini  
Chief, Approval and Certification Center

Enclosures

**UNITED MINING EQUIPMENT  
NEW WISDOM MODEL KL5M  
PERMISSIBLE CAP LAMP ASSEMBLY**



**APPROVAL NO. 19-A090001-0**

**TESTED FOR INTRINSIC SAFETY IN METHANE-AIR MIXTURES ONLY**

**WARNINGS:**

- 1. THE BATTERIES ARE NOT TO BE REPLACED BY THE USER.
- 2. THE CAP LAMP IS ONLY TO BE CHARGED IN FRESH AIR.



Revised Approval Modification Program (RAMP) Acceptance issued to:

Company: United Mining Equipment, Inc.	Investigation No.: LP-23021
Attention: Dustin Winkler	Co. Appl. Code No.: 000000
Address: 885 Pittsburgh Rd. Butler, PA 16002	Approval/Cert. No.: 19-A090001-0

Model(s): MSHD3AA LED Headlight

**Description of change(s):** The following change is included in this RAMP:

- The battery supply has been changed from two parallel batteries (Lithium-ion cell, P.N. SPIM1270066, manufactured by MGL) to three parallel batteries (Lithium-ion cell, part # NCR18650, manufactured by Panasonic).
- Charge Protection PCB – Resistor (R1) was 100 Ω changed to 470 Ω.
- Charge Protection PCB – Resistor (R2) was 1K Ω changed to 2K Ω.
- Added alternative small battery box.

Title	Drawing No.	Revision
MSHA Drawing Manifest	UMM 31-0000-14	14
Cap Lamp Assembly Drawing	UMM 31-0001-05	5
Cap Lamp Explored View	UMM 31-0003-16	16
Cap Lamp Schematic	UMM 31-0005-08	8
Battery Box Sub-Assembly	UMM 31-0008-10	10
18650 Battery Assembly	UMM31-0021-05	5
Charge Protection PCB Layout	UMM31-0022-02	2
Charge Protection PCB Traces	UMM31-0023-03	3
Battery Lid, Small Box	31-01-0012	1
Small Battery Housing	31-01-0013	1
Lid Seal, Small Box	31-01-0014	1
Insulating Gasket	31-01-1401	1

Attachments (check all that are applicable):

Evaluation Report  
 Test Sheet(s)  
 Revised Approval Plate Design  
 Revised Conditions of Use

Approved by: *Kevin Anderson*      Date: *03-20-2013*