

MSHA Part 7 Equivalency Evaluation.txt

From: Edward L. Nash [ednash100@juno.com]
 Sent: Friday, May 12, 2006 1:18 PM
 To: Saseen, George P - MSHA; Faini, John P - MSHA
 Cc: cody.garcelon@isza.com; Coyle, Denise A - MSHA;
 Frank.Schraner@isza.com; Bill.Smith@isza.com; gis3@cdc.gov
 Subject: MSHA Part 7 Equivalency Evaluation

Dear John & George,

In response to the Equivalency Evaluation request for comments dated March 28, 2006 in the Federal Register, and in behalf of Isuzu Motors of America, PowerTrain Div, the following comments are submitted:

1. This request for comments is 2 years late. This should have been issued shortly after the Coal Diesel Partnership meeting of March 16, 2004, and by now it should be a proposal that would have been prepared based on tests that should have been run during the past 2 years.

2. To be really efficient, any additional tests required for MSHA approval should be clearly stated in a joint EPA-MSHA Test Schedule to emphasize the coordination and non-duplication of requirements for MSHA approval.

3. It should be very clear that only those engines selected by the manufacturer for mining approval require the Joint Test Schedule. Thus if a manufacturer makes 20 models, and only 2 are selected for mining applications, then only those 2 specific models would get the Joint Test Schedule.

4. The minimum WOT speed test for max allowable undiluted CO of 2500 ppm should be part of the Joint Test Schedule, lug down only from peak torque.

5. The high-altitude fuel deration schedules need to be accurately pre-determined by MSHA to minimize (avoid where possible) such testing (either actual or simulated) on each engine:

- (a) Naturally aspirated: 3%/1000 ft above 1000 ft
- (b) Turbocharged Non-wastegated: 3%/1000 ft above 3000 ft, then 7%/1000 ft above 5500 ft.
- (c) Turbocharged wastegated: To be determined by testing program.
- (d) Electronic Controlled: Submit Map of fuel deration in agreement with above schedule, or submit high altitude test results.

6. This is a good time to reduce the excessive "rounding up" of vent rates and PI rates. The 500 cfm round up for rates less than 20,000 cfm is gross and unfair for engines in the lower ranges, and causes as much as 20-25% inflation in these rates. There has been no justification given for this procedure, except verbally that "it has been done this way for years!" Then to compound the error, the inflated PI rate is used to recalculate the DPM concentration values!! I submit that an engine that tested 2063 cfm PI was rounded up to 2500 cfm (a 21.1% raise), and then the tested 3.51 gm/hr DPM was thus inflated by 21.1% to 4.25 gm/hr and that was reported as factual on the MSHA web site. I therefore submit that rounding up should be (A) abolished as being a subjective factor not supported by any test data required or submitted for any engine, or (B) limited to the next 100 cfm steps for easy addition (!) with accuracy within 5% instead of 25% at 2000 cfm.

Sincerely,
 Ed Nash, PE
 5-12-2006
 Isuzu Mining Engine Engr.

Equivalency Evaluation Request for Part 7E-B Diesel Engines.txt

From: Edward L. Nash [ednash100@juno.com]
Sent: Monday, May 15, 2006 10:58 AM
To: Faini, John P - MSHA; Saseen, George P - MSHA
Cc: cody.garcelon@isza.com; Frank.Schraner@isza.com; gis3@cdc.gov;
Bill.Smith@isza.com; edward.nash@isza.com
Subject: Equivalency Evaluation Request for Part 7E-B Diesel Engines

Dear John & George,

In further response to the subject request of March 28, 2006, and in behalf of Isuzu Motors of America, PowerTrain Div., the following comment is added to my earlier note:

7. The filing requirement of drawings per the Approved Components List should be dropped in favor of keeping the list, and requiring drawings only upon request by MSHA such as due to a change in part numbers. Then the original and replacement drawings are submitted to verify the details and functional interchangeability. This will continue to make drawings available when needed but will greatly reduce filing operations and even delays in submission or approval.
Sincerely, Ed Nash, PE Isuzu Mining Engine Engineer