### Opportunities to Improve Efficiency in Category Development Presentation to the HDEOCP on Lessons Learned in PC-10—6/27/06



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# Opportunities to Improve Efficiency in Category Development

- Current State
- What is Needed
- Ideas for Improvement
- Recommendations

#### **Current State**

- Industry wide cooperation has improved significantly---more can be done to improve the effectiveness and efficiency of the process. Focus on better use of transition periods between categories....
- The current process does not fully meet everyone's needs.- test development and technology demonstration are compromised to meet a deadline.
  - Timing of EPA emissions regulations limits flexibility.
    - Performance profile based on limited knowledge of future specification needs.
    - Decisions on tests to be included occurs late in the process.
    - Limited time between final test procedure, test acceptance and limit setting.
    - Candidate approval time needed to qualify products for all classes of customers is negatively impacted June 27, 2006

#### Current State (cont.)

- New test development often takes longer than anticipated -compressing time needed for later category steps.
  - OEM hardware/emission strategies not finalized when test development begins.
  - Time pressure forces acceptance of unproven tests.
  - Test developed by updating hardware from previous tests (hardware different from field). As tests are developed the hardware continues to change = not enough time for new test development.
  - Data required to drop old tests (and old reference oils) is often not available resulting in redundancies
- The outcome of API CJ-4 is not yet known since first licensing is 10/15/06. Final lessons learned can be discussed at the 12/2006 HDEOCP meeting.

#### What is Needed

- Industry wide cooperation:
  - Essential to improve the effectiveness and efficiency of the category development process.
  - A clear understanding of all issues concerning all stakeholders must be developed with a commitment to address all issues.
- Longer Category Life:
  - Current rate of new category development is not sustainable; longer category life is needed.
- Performance tests:
  - Chemical limits are less desirable.
  - Correlation to field needs to be demonstrated.
  - Quality bench tests can be valuable.
  - Stable test platforms required
- Firm time commitment:
  - For test development and correlation
  - For technology assessment

#### Ideas for Improvement

- Reach early consensus on key issues
  - Needs Statement
  - Funding process for Matrix testing
  - Old and new engine tests to be included in "C" and OEM specs
  - Discovery and elimination of redundant tests.
  - Timeline
    - » including firm decision dates.
    - » Clear understanding of consequences of late delivery (in any step of the process).
- Consider options for greater industry participation in engine/ dyno development process.
- Build BOI/VGRA testing into Precision Matrix
  - Base stock type/availability and vis grades desired are changing.
  - Required for shortened category deployment.
- Develop a process to correlate testing from new tests to old tests.

## Recommendations

- Maintain current category approval structure but focus on improvements in timing and decision making.
- Identify the top 5 issues that need improvement over PC-10 by June 2007 ASTM meeting.
- Motion to form a team of volunteers from the HDEOCP.
- Form small teams, at the June 2007 ASTM, to address the 5 performance issues from PC-10, that would be included in a new category. Teams report to the ASTM HDEOCP.
- Teams have a firm date of December 2007 ASTM meeting to recommend improvements.
- Final agreement at June 2008 ASTM meeting.