

## EPA and DOE Answers to Specific Questions about Ethanol

July 14, 2010

1. Exactly what has happened since November 30, 2009 that has led to the changes in the decision schedule?

The decision schedule is directly linked to the testing program and the quality and completeness of that data. From a testing perspective, no delay in the test schedule has occurred over the indicated time period. As planned, we have 82 vehicles accumulating more than six million miles and undergoing over 200 sets of emissions tests. There have been slight delays (i.e., days to several weeks) on individual vehicles due to normal problems, such as unanticipated vehicle maintenance (a vehicle breaks down or has a minor accident and must be repaired). These delays have not occurred on critical-path vehicles, and therefore have not affected the overall schedule or test program end date.

The good news is that the testing is nearing completion. By the end of September, DOE testing on newer vehicles (covering the 2007 and younger motor vehicle fleet) will be completed and EPA plans to take action on the waiver request regarding the use of E-15 in those vehicles.

As part of a robust testing protocol, vehicle component teardown (engine and fuel system teardown) of vehicles as they complete testing was added as a component of the test program. This addition did not change the endpoint of the schedule (component teardown is conducted as a vehicle comes off test, and is only being conducted on vehicles that complete testing prior to September).

It was originally envisioned that a waiver decision could be made before full accumulation of all vehicle miles. Given the importance of the decision and the significant interest by stakeholders, the full data set needs to be collected and verified so that the decision can withstand challenges and provide a sound basis for the decision-making

2. What led to the decision to consider vehicles of model year 2007 and newer as a separate category?

Response: Model year 2007 and later vehicles are designed to meet the most stringent federal emissions requirements, called Tier 2. It is EPA's belief that these vehicles are best equipped to handle higher ethanol blends on a daily and long term basis without undue emissions increases or operational issues. The DOE test program is designed to provide technical data on these matters. In 2007 essentially all new passenger vehicles sold in the US met the Tier 2 standards.

3. What does DOE see as its role in supporting market acceptance for biofuels? What has this meant relative to expanding the use of ethanol?

DOE conducts the critical research and development that will enable industry to bring biofuels to market. This includes research on converting non-food, cellulosic biomass and other feedstocks (e.g., algae, etc.) to ethanol and higher

hydrocarbon-based fuels. It also includes testing of biofuels, such as ethanol and ethanol blends, to ensure that they are compatible with today's infrastructure and vehicles. Regarding end-use of ethanol, DOE has supported work in several areas: 1) fundamental and applied research on ethanol combustion and emission control, 2) distribution and fueling systems, 3) engines optimized for use with E85 for the next generation of FFVs and 4) deployment of technologies including E85 infrastructure. Regarding intermediate blend testing, the Department has invested more than \$45 million..

4. Please plan to provide us with the schedule for all E15 approval decisions and related actions.

Response:

E15 waiver and rule schedule:

- By the end of this September, DOE testing on newer vehicles (covering the 2007 and younger motor vehicle fleet) will be completed and EPA plans to take action on the waiver request regarding the use of E-15 in those vehicles. If those test results support E15, then EPA will also propose a labeling rule at that time on fuel dispensing equipment. The rule will also include proposed changes to the complex model used to certify gasoline.
- In November, DOE testing on vehicles covering the 2001-2006 model years will also be complete and EPA can then make a further determination on the use of E-15 for these vehicles. Again, if these tests are positive, then the label will be adjusted to reflect the expanded use of E-15.
- If a waiver for E-15 is granted, EPA will take final action on the fuel pump labeling rulemaking by the end of January 2011.
- Although we continue to evaluate all available information, it has become clear that insufficient data have been submitted on the use of E-15 in older vehicles and nonroad engines (such as chain saws and marine engines) to enable EPA to make a decision on a waiver that would allow the use of E-15 for these engines. EPA will of course review any relevant data that is submitted prior to making its decision.

E15 Fuel Registration Process:

- EPA has not yet received an application for fuel registration from the ethanol industry. The actual review time needed by EPA will depend on the completeness of the application and its supporting technical rationale. With the expected nature of information included in the application, EPA is estimating a two month review period before a final decision can be made. Additional time could be necessary to work with stakeholders if supplemental or clarifying information is needed with respect to the justification needed to show that E-10 health effects data can apply to E-15. It is EPA's understanding that a registration package will be submitted to the Agency in the August timeframe.

Fuel Tank Guidance - EPA's Office of Underground Storage Tanks (UST) is working on guidance to clarify EPA's UST compatibility requirement with regard to mid-

and high-level ethanol blends. EPA intends to issue draft guidance for public comment in September, and a final guidance by the end of the calendar year.

Fuel Dispensing Equipment Testing - DOE is conducting testing on materials compatibility of common fuel dispenser materials and has a joint program with Underwriter's Laboratory (UL) to conduct performance tests of the most common fuel dispensing equipment. DOE's test program for dispensing equipment is aimed at easing the implementation of E15 in the field if a waiver is approved. The vast majority of current dispensers are certified by UL for use with 10% ethanol or lower and were not tested for compatibility with fuel blends containing 15% ethanol or higher. DOE hopes this test program will elucidate the impact such blends may have on existing equipment and aid the local authorities having jurisdiction (AHJs) with decision making if a local fuel station wishes to sell E15. The test program is still ongoing with two phases planned. The first phase will be reported on in September 2010 and covers the most popular 80% of equipment in the field. The second phase will cover the remaining 20% of equipment and a report is expected in March 2011.

Changes to State Fuel Laws and Industry Fuel Standards - EPA has no jurisdiction in these areas.