

E-91 Additional Q&A (composite)

Please define the following:

- Bidder - **The company submitting a proposal.**
- Contractor – **The company awarded a contract to perform the project.**
- Sponsor - **The company (presume CRC) and other companies or govt. departments / agencies (not yet defined) that are providing the funding and directing the effort.**
- Supplier - **The term “supplier” here is used in the context of the fuels, and refers to the company that supplies the fuels.**
- Summertime Ambient conditions – **The bidder should propose their recommendation for these conditions.**

Approach

It is stated on page 3, “The test program will consist of testing a minimum of 10 vehicle models”...”Two of each type of vehicle will be tested...”

- Is the expected minimum quote for 20 vehicles to be tested? **20 types (make, model) of vehicles. Considering the 4 fuels, there are a total of 80 vehicles.**
- Will CRC make the final selection of which types of vehicles will be included in the test program? Or will that be left to the decision of the selected bidder? **CRC will make the final selection, but may ask the contractor for recommendations.**

Permeation Measurement

This section deals with a 'Dyno in a SHED' facility.

- Will alternative methods to "vehicle drive in the SHED" portion be acceptable? **Bidders are welcome to propose alternatives, with the understanding that the RFP describes the preferred approach.**

Aging Cycle

- It is stated that the cycle shall consist of driving "on a test track". Would driving the cycle on a chassis dynamometer be acceptable? **No – track mileage is required.**
- It is stated that the vehicles shall be fueled every 5 days. That means that the vehicles will travel 260-300 miles between fueling. What shall be done if a vehicle cannot travel that distance before running out of fuel? **The vehicle will be refueled every 5 days or as required.**
- Does this cycle assume that the test facility is open and running 7 days/week? – **The RFP makes no assumptions about the test facility schedule; the proposal should contain an accurate timeline so that the impact of the facility schedule on the project duration is clearly understood.**

Conditioning Cycle

The conditioning procedure states to hold vehicles at "summertime ambient".

- Does the vehicle need to be in that ambient only during the SRC driving cycle, or does the vehicle need to be in that ambient for the entire two weeks? **Vehicles should be kept in the ambient conditions for the entire two weeks.**
- Are there any requirements on how that ambient is maintained? **No. Bidders should describe their approach to maintaining summer ambient conditions in detail.**

While we were working on our technical proposal for this project we noted a discrepancy in the description of the E-77 test sequence between pages 8 and 9 of your RFP. On page eight, following the dynamic permeation test the sequence calls for a drain and fill, 4 x LA-4 road course preparatory drive and a 65 degF soak of indeterminate length while on page nine it states that following the dynamic permeation test the vehicle should be moved immediately into the VT shed and a 24 hour 72 degF soak started. While it is not a major concern from a costing stand-point we do want our technical description to be absolutely correct. **It appears that there is a mistake on page 6 of the RFP. According to the test procedure in the E-7 project, there is no 4 LA4 drive and soak after the hot soak... the procedure requires an immediate start of the VT diurnal.**

We also had one more question regarding the RFP. It states that the test location should have four season weather. Can you better define what that means in terms of location? Our is located in California and while our winter is somewhat milder than say Michigan, it is much the same as Phoenix and San Antonio. Would this meet your definition of four season or should we include a plan within our proposal to move the vehicles to a colder winter climate? **Four season means that the site will have summertime ambients frequently (over 20 times per year) over 90F and wintertime with snow cover for several weeks with nighttime ambients frequently below 20F. Include a plan to move vehicles to a colder climate for winter aging and provide plan for returning the vehicles to the test facility for the testing portion.**

Separate from the RFP, we are working with the local Air Quality Management District on some grant applications to expand the use of ethanol in transportation fleets. They have a concern about the effect of ethanol on evaporative emissions. Looking through the E-77 report I do not readily find a comparison of E0 and mid-level blend evaporative emissions. It seems mostly concerned with process; am I missing something? I know that for flex fuel vehicle certification the manufacturers conduct the tailpipe exhaust testing on both E0 and E85 but for evap they use E10 as a worst-case fuel. That seems to imply that E85 would not have as high an overall evaporative emission as our normal CA E6. Is that your understanding as well? **Mid-level ethanol blend permeation emissions were investigated in CRC Project E-65-3. The final report is available on the CRC web site.**

One more question if I may, while working on the technical proposal I noticed you are asking for sampling during the 2-day Diurnals at a 2 minute interval throughout the test. Does this sample rate include the Innova ethanol analyzer or just the HC FID? We had planned on proposing to share a single Innova among the SHEDs required for the test but this would limit alcohol sampling to about once an hour or so while multiple less expensive FIDs could be dedicated to each individual SHED. **The SoW is the preferred**

approach but describe in your technical approach your plan for getting as much Innova data as possible. Every 10 minute Innova data would be acceptable.

Is there any objection to running all or part of this program at altitude? ***Include in your plan a correlation process to insure altitude to sea level data.***

Will the fleet be all automatic transmissions or a mix? ***A mix is possible.***

In an attempt to provide a thorough and accurate proposal, would ask for confirmation of the following project content. Please confirm or correct the quantities of the following in support of CRC Project No. E-91.

- . 80 Vehicles (purchased by CRC) ***Yes***
- . 880 2-Day SHED Tests ***See below***
- . 880 1 Hour SHED Hot Soaks ***See below***
- . 400 2 Hour Permeation Procedure SHED Tests ***See below***
- . 800 LA-92 Drive Cycles ***Yes***
- . 3200 LA-4 Drive Cycles ***Yes***
- . 400 Running Loss Drive Cycles
- . 1,491,840 Durability Miles ***Yes***

I came up with about 1280 2 day SHED tests, 1280 1 hr Hot Soaks, 1280 2 hr (1 hr, then 30 min & 30 minutes) E-77 procedures.