

Diesel Aftertreatment Accelerated Aging Cycle

SwRI Symposium

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DAAAC CONSORTIUM PROPOSAL

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INDUSTRY CONSORTIUM (1)

- **Why SwRI is Proposing an Industry Consortium Operated and Managed by SwRI**
 - A significant consortium effort adds weight & validity to the developed DAAAC and benefits all members
 - SwRI is experienced in accelerated aging of emissions system components & aging cycle development
 - SwRI is experienced in operating and managing consortia
 - ULEE, 1990 – 1993
 - Clean Diesel I – V, 1991 – 2012
 - GasRail USA, 1992 - 1998
 - DASL/N-TCD, 2000 – 2002
 - HEDGE, 2005 - 2009



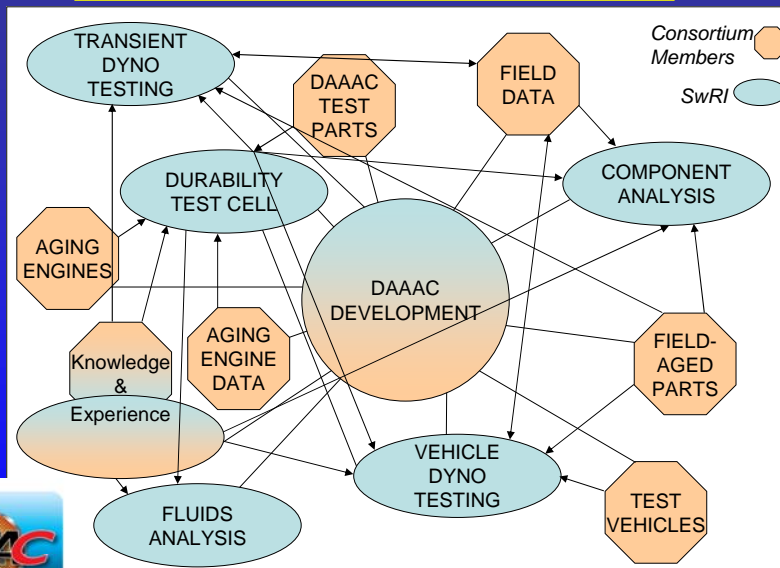
INDUSTRY CONSORTIUM (2)

- Industry has
 - real world experience
 - vehicles
 - engines
 - emission system components
 - field aged components
 - field data



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CONSORTIUM PLAN (1)



PROCESS CHART

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CONSORTIUM PLAN (2)

- SwRI will Commit up to Two Durability Test Cells, and Seven Months per Year of Transient and/or Chassis Dynamometer Testing
- Member Companies will be Asked to Supply
 - Engines for the aging development work
 - Field data
 - Emission system components compatible with the field data
 - Field aged components for comparative testing
 - Vehicles for chassis dynamometer testing



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CONSORTIUM PLAN (3)

- Emission System Components Included in the Program Will Likely be:
 - Diesel Oxidation Catalysts
 - HC/CO, NO₂ generation, & clean up formulations
 - Lean NOx Traps
 - Diesel Particulate Filters
 - Urea Selective Catalytic Reduction catalysts
 - urea injection systems
 - Lean NOx Catalysts
 - hydrocarbon dosing systems
 - Sensors
 - O₂, NOx, NH₃, temperature, pressure, ??, ??



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PRICE AND TIME

- The DAAAC Consortium will Utilize a Two Year Contract
 - This term may be sufficient for DAAAC development, but does not include potentially extensive validations
 - Option to withdraw at end of Year 1 requires notification at least 60 days before the end of Year 1
- Membership Fees will be \$98,000 per year per Member
 - Additional \$10,000 after May 8, 2008 kick-off meeting
- Minimum Membership Required to Initiate Consortium will be 14. Membership for Full SwRI Committed Resources will be 26.
 - Additional resources allocated at SwRI's discretion if membership exceeds 26.
- Kick-Off Meeting May 8, 2008 in San Antonio



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BENEFITS OF MEMBERSHIP

- DAAAC Cycle Procedures Available to Members, Whether or Not EPA Approves for Regulation
 - Not released to public without Consortium approval
- Urgent Need for Industry Standard Aging Procedures
 - Procedures immediately available to members
- Only Members Will be Able to Influence DAAAC Procedures
- Lessons Learned During Program Benefit Companies With Access to Data
- Insufficient Members = NO DAAAC



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THANK YOU FOR YOUR INTEREST AND SUPPORT