1. **Introduction**
   1.1 Manufacturer and product identification
   1.2 Selection of specific engine family and application for verification
      1.2.1 Emission control system design *(model, catalyst, loading, size, etc.)*
      1.2.2 Claim of emission reduction
   1.3 Status of Vehicle Code 27156 exemption

2. **Emission Control System (ECS) Information**
   2.1 General description of the ECS
      2.1.1 Discussion of principles of operation
      2.1.2 Schematics depicting operation
   2.2 Description of regeneration method
      2.2.1 Operating condition requirements for regeneration *(temperature, etc.)*
      2.2.2 Thresholds and control logic integrated into the ECS to activate regeneration
   2.3 Favorable operating conditions
   2.4 Unfavorable operating conditions and associated reduction in performance
   2.5 Fuel requirements and misfueling considerations
   2.6 ECS installation requirements
   2.7 ECS maintenance requirements

3. **Testing Background**
   3.1 Identification of specific engine family and application for verification
   3.2 Emission reduction test information
      3.2.1 Test facility description
      3.2.2 Test procedure description *(de-greening period, test cycle, etc.)*
      3.2.3 Quality assurance and quality control
   3.3 Durability test information
      3.3.1 Test facility/field application description
      3.3.2 Test procedure description *(field or bench, test cycle, etc.)*
      3.3.3 Quality assurance and quality control

4. **Test Results**
   4.1 Emission reduction test results and comments
   4.2 Durability test results and comments

5. **Discussion**
   5.1 Compatibility of the ECS with the engine
      5.1.1 Effects of ECS on overall engine performance
      5.1.2 Effects of ECS on engine back-pressure
      5.1.3 Relationship of control logic with engine operation
5.1.4  Additional load on engine (*magnitude, frequency, etc.*)
5.1.5  Effect of ECS on fuel consumption
5.1.6  Engine oil consumption considerations
5.2  Compatibility of the ECS with the application
   5.2.1  Typical temperature profiles, duty cycles and other relevant
          parameters from field-collected data for the intended application
   5.2.2  Comparison of operating conditions suitable for the ECS with those
          expected in the application
5.3  Safety
   5.3.1  Discussion on uncontrolled regeneration
   5.3.2  ECS behavior during extended periods of idling
   5.3.3  ECS effects on particle size and number
   5.3.4  Ash removal considerations

6.  References

7.  Appendices
A.  Test reports
B.  Quality assurance and quality control documentation
C.  ECS label
D.  Owner’s manual
   D.1  Installation
   D.2  Maintenance requirements
   D.3  Safety
   D.4  Fuel requirements
   D.5  Fuel penalty
   D.6  Durability statement
   D.7  Warranty and liability policy
E.  Other supporting documentation