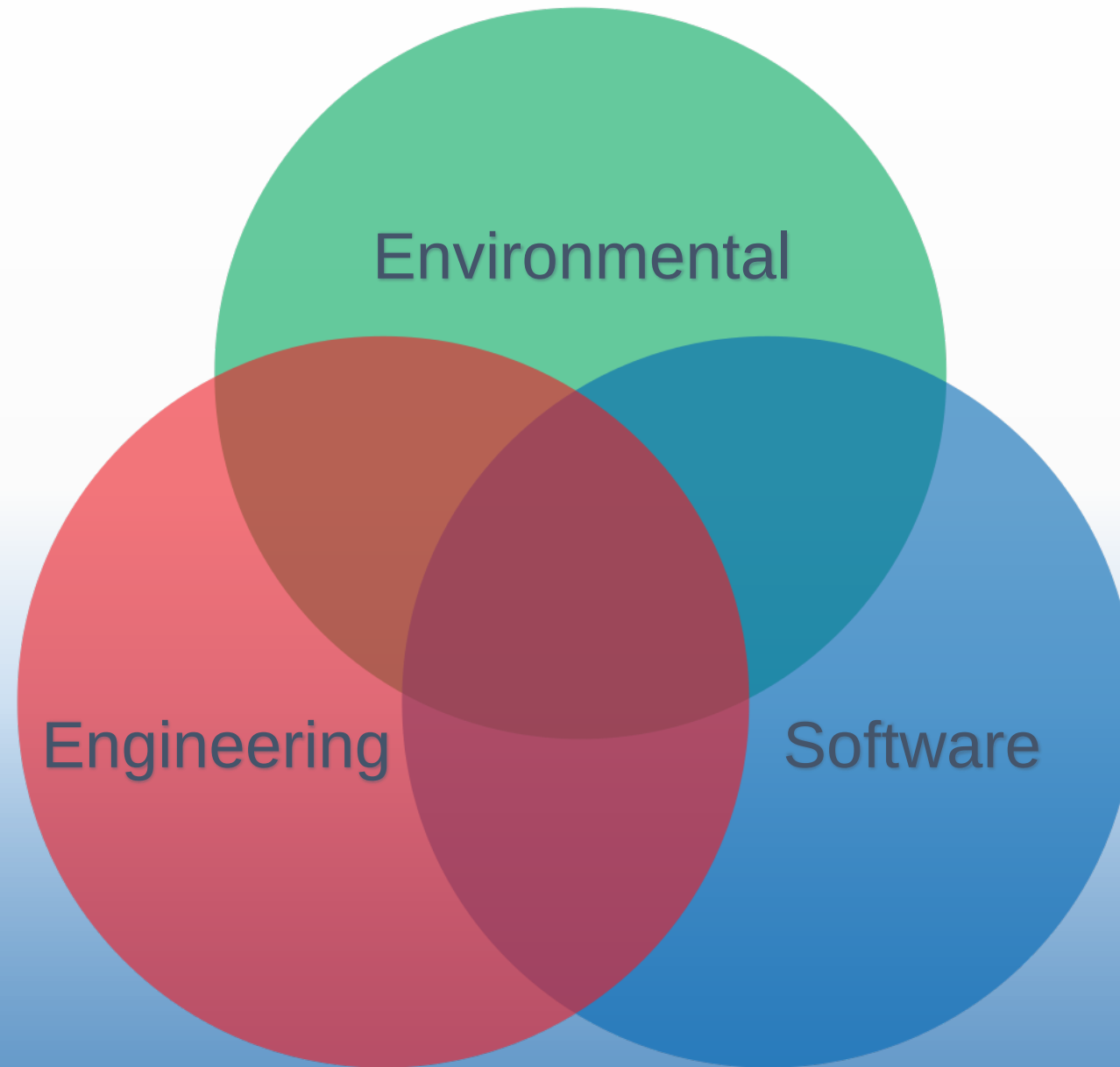


Engineering, Environmental, and Software FAQs

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What happens to my data if I fail a 40 CFR 60 calibration out-of-control?

- Data is invalidated BACKWARD to previous passing calibration when a calibration exceeds the PS x4. Data remains invalid until a passing calibration is performed (40CFR60 Appendix F Section 4.3.1)
- Guidance from EPA:
 - Ultimately, up to local agency
 - Does not normally invalidate RATAs or other tests although...
 - Specific circumstances matter
 - Again, local agency's discretion
- Failing at 2x PS for 5 days invalidates data forward only, not backwards.
- CeDAR shows 2x PS for the “drift limit” for 40CFR60 cals



If I failed a quarterly audit, what happens to my data?

- Cylinder Gas Audit
 - Not addressed in the regulations, up to the local authority
- Linearity
 - Data is OOC forward until a new, passing linearity is done
 - Grace Period:
 - 168 hours into the new quarter
 - Missed the grace period? Data is invalid from the expiration of the grace period until a linearity is performed
 - Grace period linearities do **not** count for the current quarter
- CeDAR alarms now indicate that manual data invalidation is required

CGAs/Audits

- What gases do I need to use? What concentrations?
 - Oxygen (O₂)
 - 40 CFR 60, Appendix F
 - Low: 4-6%
 - Mid: 8-12%
 - 40 CFR 60, Subparts GG/KKKK/KKKKa
 - Part 75 allowance changed
 - Pollutants
 - Low: 20-30% of span
 - Mid: 50-60% of span
- Keep in mind the gas mixtures the system was designed for. We try to minimize the number of cylinders needed by mixing constituents together, such as NO & CO span gases. If the combination/mixture doesn't match what the system is expecting it could result in failed calibrations.



What does it mean to be “like-kind”?

- What are they?
 - Uses the same method of sample collection (dilution-extractive, dry extractive, or in-situ) and analysis (for example, pulsed fluorescence, UV fluorescence, chemiluminescence) as the analyzer that it replaced. (Part 75)
 - Local jurisdictions (like SCAQMD) may have different definitions
- Temporary
 - Must also use the same probe and interface as the primary system and have the same span value (Policy Manual, Question 7.13)
 - Limited to 720 hour usage per calendar year
 - More than 720 hours needs to certify

What are the requirements if I change my analyzer range/span?

- The Range/Span needs to be updated in the analyzer and software (PLC and CeDAR Data Editor)
- Documentation updates: Drawings, I/O List, DAHS Spec, etc.
- Part 75:
 - Pollutant analyzer: If the cylinders used are no longer sufficient for linearity/daily calibration, run a new linearity
 - Flow monitor: Calibration error test
 - Create a new ECMPS span/range record → Must be updated within 45 days of the end of the quarter
- Part 60:
 - Run a new calibration



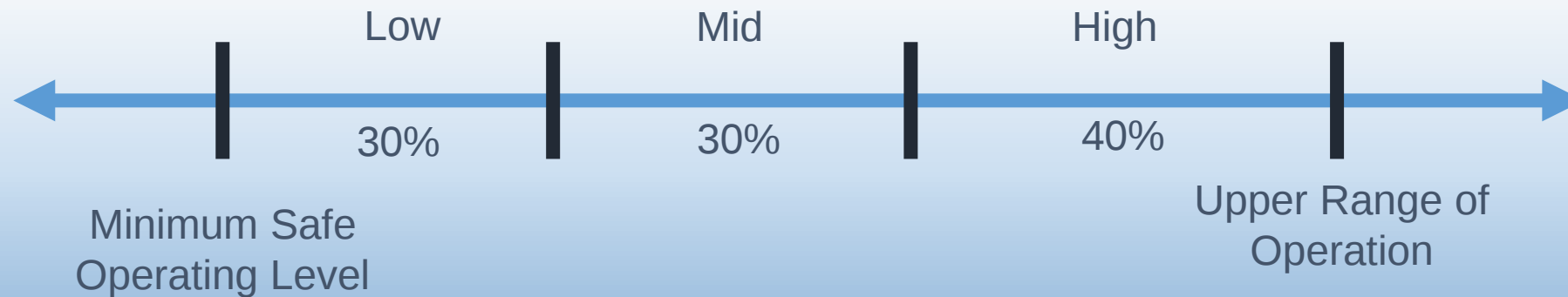
What do I need to do if I change my Heated Sample Line?

- Parallel construction vs. series construction for the heater element
- Controlled line vs. uncontrolled line (self-limiting)
 - If your existing line is self-limiting and the replacement line will be controlled, the controller and relays will need to be added.
- Part 75:
 - Calibration error test, RATA, cycle time test (alternative system response check conditionally allowed), submit an event record in ECMPS
- Part 60:
 - Run a new calibration



What load do I need to operate at during my RATA?

- Part 60 → RATAs performed at >50% normal load
- Part 75 → 3 load levels, can operate at the normal or second normal level



Operating Time vs Operating Hours



- As defined in 40 CFR 72.2:
 - Unit operating time
 - The portion of a clock hour during which a unit combusts any fuel. The unit operating time, in hours, is expressed as a decimal fraction, with valid values ranging from 0.00 to 1.00.
 - Unit operating hour
 - Is a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.
- Operating Time is typically shown on CeDAR Daily, Monthly, and Quarterly Reports
- Operating Hours are shown on CeDAR Exceedance and Downtime Reports and in the Data Editor – Operating Hours Utility

My CEMS is super old, what should I do?

- Permit review
 - Have limits changed?
 - Has hardware been added or removed?
 - Does your software match your permit?
- New analyzers, HSL, PLCs, DAHS computer
 - Is your DAHS computer 20 years old?
 - Is your HSL on borrowed time?
 - Are your analyzers still supported by the manufacturer?
 - Is your PLC obsolete?
- Monitoring & QAQC plans
 - Do your plans match your hardware and permit?



Questions?

