CAL-VIS ACCOMPLISHMENTS AND FORECAST

PAUL HEDGLIN
SENIOR AIR QUALITY ENGINEER
BAR ADVISORY GROUP MEETING
APRIL 22, 2021
ONCORE ACCOMPLISHMENTS 10/1/20 – 3/31/21

• Completed quarterly Cal-VIS enhancement and defect releases for 2020 Q3 & Q4.
• Completed quarterly server patching for 2020 Q3 & Q4 to maintain system performance and stability.
• Completed overall Quality Assurance & Continual Service Improvement (CSI) Assessment for 2020 Q3 & Q4.
• Completed integration of cybersecurity toolset with issue ticketing system to enhance security monitoring for physical and virtual on-premise Cal-VIS infrastructure.
ONCORE ACCOMPLISHMENTS 10/1/20 – 3/31/21 (CONTINUED)

• Completed BAR-OIS database work to feed DMV reporting to support efforts to reduce Smog Check bypass.

• Complete proof of concept integrating Biometric devices with the BAR-OIS and built supporting services.

• Began collaborative effort with BAR for enhancing the Software Development Life Cycle (SDLC) for different types of releases (e.g., DAD Vendor product technical updates, etc.).
ONCORE ACCOMPLISHMENTS 10/1/20 – 3/31/21 (CONTINUED)

• Improve the overall security posture of the environment.
  • Completed the remediation of a critical security advisory by upgrading the firewall clusters with minimal impact to industry.
  • Implemented a Vulnerability Management Triage Program where critical and high vulnerabilities are assessed by the security team and assigned.

• Performed annual updates for the project level management plans (e.g., quality management, security management, service level management, etc.) to ensure these formal deliverables accurately represent the current processes in place for the maintenance and operation of Cal-VIS.
ONCORE ACCOMPLISHMENTS 10/1/20 – 3/31/21 (CONTINUED)

• Performed an Annual Contract Review and Alignment process to align process improvements and modifications with contract level obligations.

• Completed Annual Customer Satisfaction Survey effort to help inform the quality and enhancement of the maintenance and operation of Cal-VIS.

• Conducted Annual Operational Recovery Plan Testing to confirm the infrastructure, processes, and procedures are in place to maintain system integrity and continuous operation to meet service level agreements.

• Completed End of Service Year 1 Summary Reporting and Budget Reconciliation.

• Conducted retrospective for Releases 20.3 and 20.4.
FORECASTED ONCORE ACCOMPLISHMENTS
4/1/21 – 9/30/21

• Complete the production upgrade of the Oracle database management system to the latest supported version along with comprehensive validation against all BAR applications to ensure updated for compatibility.

• Complete additional quarterly Cal-VIS enhancement and defect releases for 2021 Q1 & Q2.

• Deploy BAR-OIS biometric functionality to support the Smog Check stations who have installed the biometric hardware and have enrolled their inspectors for voluntary early use.
FORECASTED ONCORE ACCOMPLISHMENTS 4/1/21 – 9/30/21 (CONTINUED)

- Complete overall Quality Assurance & Continual Service Improvement (CSI) Assessments for 2021 Q1 & Q2.
- Incorporate new tooling into Cal-VIS monitoring suite to support application performance monitoring and log aggregation, enhancing the Maintenance and Operations team visibility of system health, while making troubleshooting and root cause analysis activities easier and more efficient.
- Revise the billing invoice to improve readability in response to station questions.
FORECASTED ONCORE ACCOMPLISHMENTS 4/1/21 – 9/30/21 (CONTINUED)

• Conduct Annual Operational Recovery Plan Testing to confirm the infrastructure, processes, and procedures are in place to ensure system integrity and continuous operation to meet service level agreements.

• Begin Design Phase for major DAD 2.0 enhancement which will culminate in technical requirements and a testing environment to share with the DAD Vendors.

• Continue collaboration between the BAR and the DMV to leverage data.
BAR-OIS CHANGES 10/1/20 – 3/31/21

• August 14, 2020, 20.2.1 updated Worldwide DAD software.

• October 8, 2020, 20.3 improved usability and modified vehicles receiving the dynamic test mode.

• January 7, 2021, 20.4 changed the RPM gauge within the dynamic OBD test, fixed a vehicle recall data display issue and Vehicle Inspection Report (VIR) printing for some Mercedes-Benz Sprinter 1500 trucks.

• February 22, 2021, 20.4.1201.0 added a new “DA” series DAD from Drew Technologies for certification testing beginning in March in select Beta stations.

• March 16, 2021, 20.4.1225.0 updates Worldwide DAD software. Followed by DAD firmware update.
BAR-OIS CHANGES 4/1/21 – 9/30/21

• Update vehicle emissions control system warranty message on VIR to include TZEV vehicles.

• Prevent unexpected characters in recall data from interrupting inspection, no longer allows lower case letter entry for Test Group, and adds capability to fail vehicles when data does not match what is expected
  • CALID/CVN and unsupported monitor failures to begin July 2021

• Permit use of biometric device with BAR-OIS.
BIOMETRIC AND REMOTE ACCESS REGULATIONS UPDATE

• Public workshop held on October 22, 2020.
  • Comments about legitimate business need for electronic device possession resulted in a revision to focus on data manipulation that could affect OBD data collected during a Smog Check inspection.
  • BAR revising regulation package from emergency to non-emergency, including an Initial Statement of Reasons explaining the need for proposed regulation in greater detail.
BIOMETRIC AND REMOTE ACCESS TECHNICAL UPDATE

• BAR developing a Biometric Enrollment Program software application for BAR field office and BAR field auditor use when collecting initial inspector enrollment scans.

• Equipping BAR field offices, mobile field representatives, and gas auditors with computers and biometric scanners to support future enrollment of licensed inspectors.

• Integrating biometric scanners with the BAR-OIS software.
  • Inspectors will be required to scan their palm instead of entering a password at the beginning and end of every inspection.

• Equipment availability, usage, and inspector enrollment start dates to be announced in the future.
BAR-OIS CHANGES 4/1/21 – 9/30/21

• Prevent certificate ordering when station license cancelled and expand OBD data collection from 2013 and newer model-year vehicles.

• Improve monitoring of Carfax vehicle recall data service.

• Update analyzer computers to supported version of Microsoft operating system software.

• Upgrade biometric to allow exemption of individual inspectors and change password to 15 characters per State requirements.

• Add automatic certificate reorder popup warning message.
FUTURE CHANGES – NEXT GENERATION DAD

• Prepare regulations and specifications for new BAR-OIS Data Acquisition Device (DAD).

• Prepare tools and a separate test environment to support product development by DAD Vendors.

• The DAD will collect data from future model year vehicles using the Unified Diagnostic Services (UDS) OBD protocol.

• The DAD will have enhanced fraud detection capability.
BAR-97 CHANGES 10/1/20 – 3/31/21

• BAR-97 analyzers not compliant with the BAR-97 Emission Inspection System (EIS) 2017 Specification (OPUS software version 1905 and Worldwide Environmental Products software version 1908) were locked out from performing Smog Check inspections.
BAR-97 CHANGES 4/1/21 – 9/30/21

• Developing enhanced fraud detection capability.
QUESTIONS AND COMMENTS

Submit questions and/or comments to:

Paul Hedglin
Bureau of Automotive Repair
10949 N. Mather Boulevard
Rancho Cordova, CA 95670
Phone: 916-403-0223
Email: paul.hedglin@dca.ca.gov