

EQUATE WORKING GROUP MEETING #7

EMISSIONS QUANTIFICATION AND TESTING EVALUATION

JULY 1, 2021

Overview

- Status of Source Test Tracking System (STTS)
- Update on Statewide Efforts for Default Toxic Emission Factors
- Revised Draft Guidelines for Use of Approved Source Test Results in AERs
- CTR Implementation
- Next Steps

STATUS OF SOURCE TEST TRACKING SYSTEM

SOURCE TEST TRACKING SYSTEM (STTS) PORTAL

- Current source test document submittal process
 - Current system has multiple routes of submittal for source test protocols and reports
 - Different review and approval procedures are required for protocols and reports, depending on the source test purpose
 - Transitioning to electronic documents and integration with historical paper documents
 - No centralized tracking and verification system
- Upcoming improvements
 - The Source Test Tracking System (STTS) portal will serve as a single point to submit source test protocols and reports electronically
 - The STTS portal will allow for facilities, authorized consultants, and test contractors to submit and track
 the progress of test protocols and reports as they are reviewed

STTS PORTAL DEVELOPMENT

- Phase I: Discovery and scoping
 - Started April 2020
 - Completed August 2020
- Phase II: Portal Development
 - Started November 2020
 - Development Completed May 2021
 - Testing in progress

PHASE I DETAILS

- Understanding of Current Workflow Process
- Met with representatives from all Divisions:
 - Source Test Engineering
 - Engineering and Permitting
 - Compliance and Enforcement
 - Planning, Rule Development, and Area Sources (AER & AB 2588)
- Prepared Business Process Model for Proposed Automated Workflow
- Prepared Screen Design to reflect proposed workflow
- All Source Test Protocols and/or Reports to be Submitted via Portal

PHASE II DETAILS

- Eight (8) Development Sprints (each 3-4 weeks) including:
 - Submittal Process
 - Workflow process for each Division
 - Source Test Engineering review and approval
 - Workflow Portal
 - Source Test Dashboard
 - User Testing
- Application and Database deployment to Production

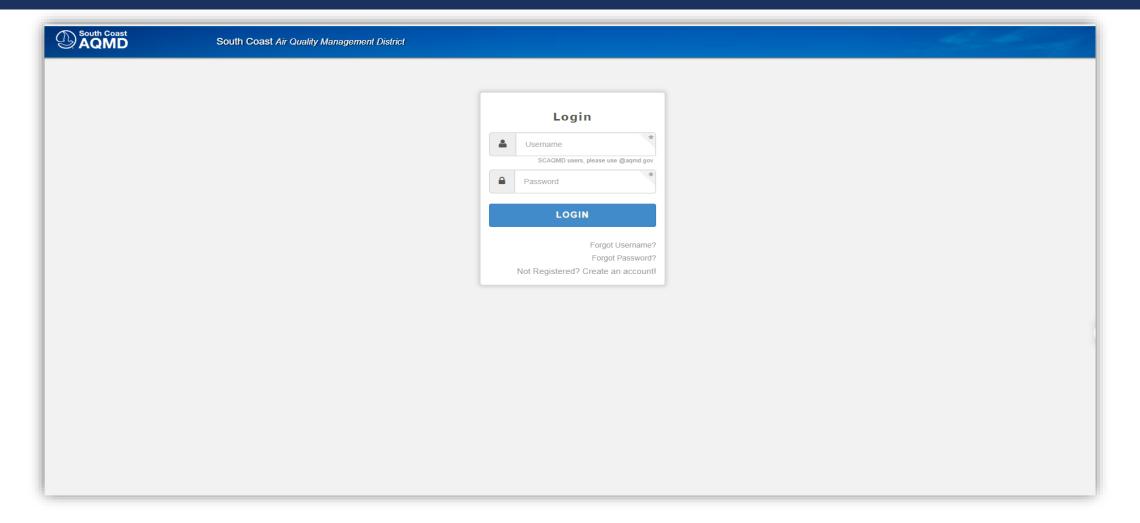
DEVELOPMENT STATUS

- Development completed May 28, 2021
 - Over 50 User Stories written, reviewed, and approved
 - All requirements identified during Discovery completed
 - Additional requirements identified during User Stories review continue under development
 - Internal testing by IM Division began in May 2021
 - Stakeholder acceptance testing to begin shortly
 - Expected project completion August 2021

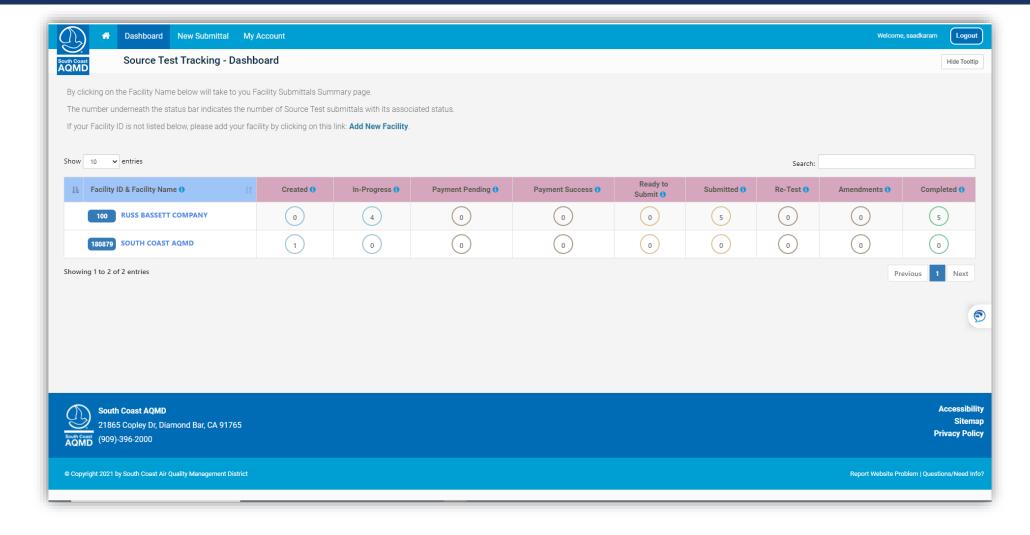
BRIEF OVERVIEW – SECURITY PORTAL

- The STTS Portal is highly Confidential and Secure
- Users will be required to register with the South Coast AQMD Security Portal and select a Role
 - External User Roles:
 - Facility Administrator (must be approved by Application Administrators)
 - Facility User (must be approved by Facility Administrators or Application Administrators)
 - Internal User Roles:
 - Application Administrator
 - Staff User

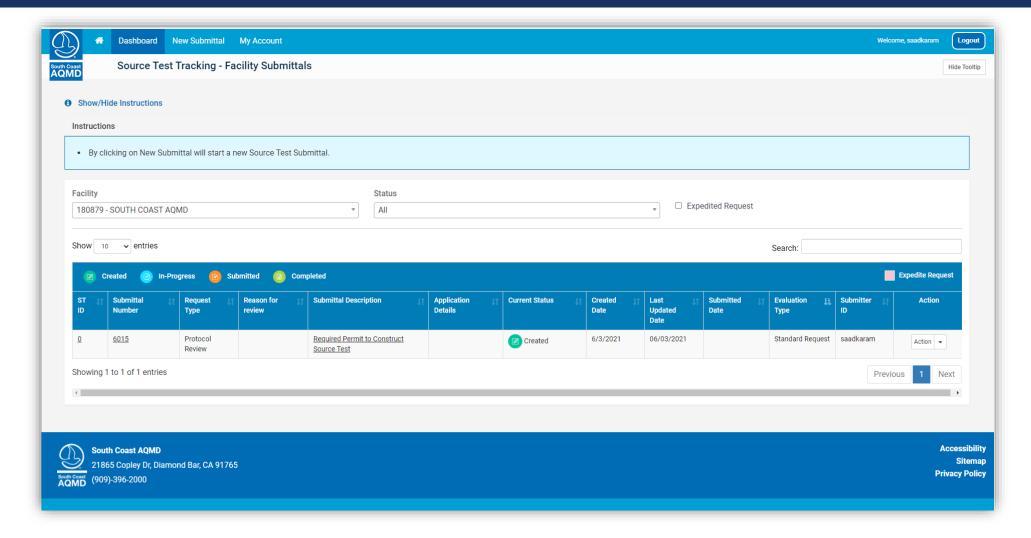
BRIEF OVERVIEW – SECURITY PORTAL LOGIN



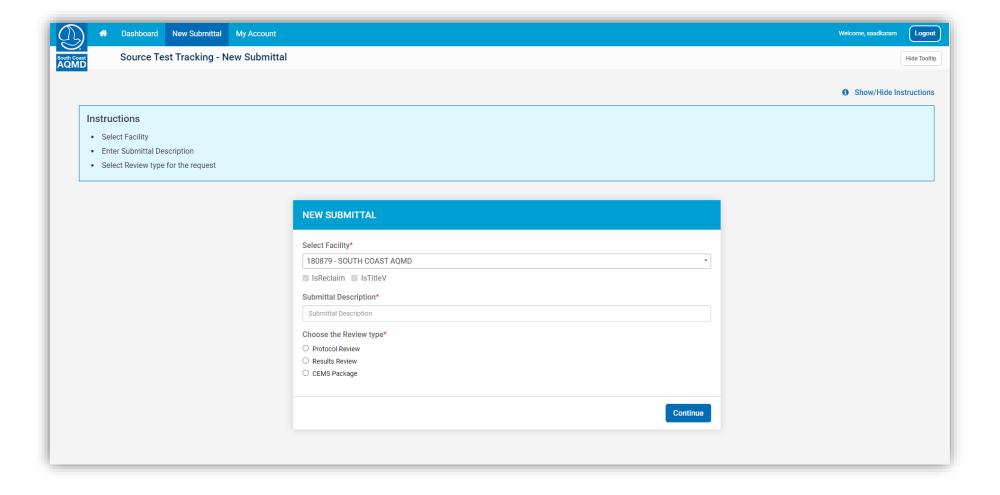
BRIEF OVERVIEW – STTS SUMMARY DASHBOARD



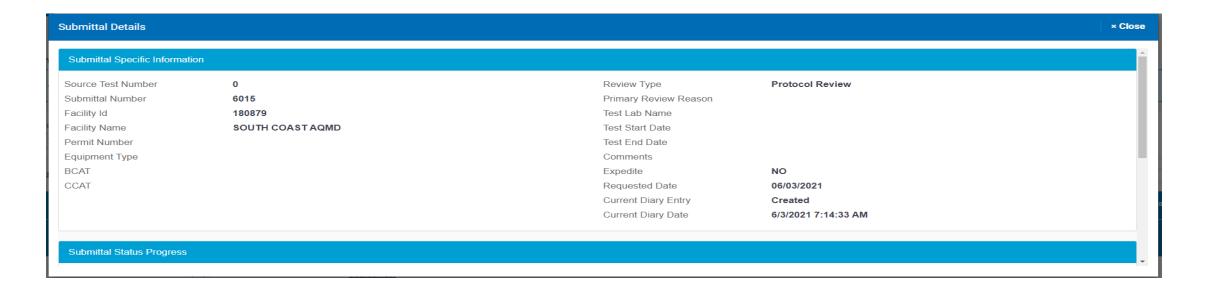
BRIEF OVERVIEW – STTS FACILITY DASHBOARD



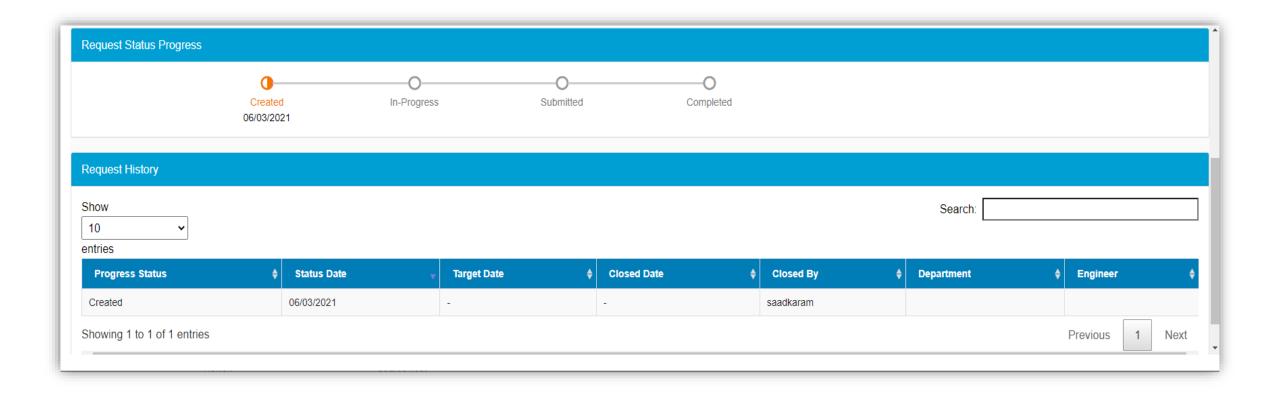
BRIEF OVERVIEW – CREATE NEW SUBMITTAL



BRIEF OVERVIEW – SUBMITTAL DETAILS



BRIEF OVERVIEW – SUBMITTAL STATUS PROGRESS



SUMMARY

- Development Complete
- Internal IM Testing in Progress
- Next Steps
 - Application staging
 - Stakeholder Acceptance Testing
 - EQUATE Working Group Demo
 - Invite External users for hands-on review
- Deployment to Production

UPDATE ON LOCAL AND STATEWIDE EFFORTS FOR DEFAULT TOXIC EMISSION FACTORS

UPDATE ON CARBAND CAPCOA EFFORTS

CARB CTR Activities

- Amendments to the Criteria and Toxics Reporting Regulation (CTR) were approved by CARB in November 2020
- CARB released proposed '15-day' changes on March 30, 2021
 - Amendments will become final once approved by Office of Administrative Law
- Reporting requirements for CTR Sector Phase I facilities in South Coast AQMD jurisdiction begin with data year
 2022 reported in 2023
- Working with CARB to conduct joint outreach and training on CTR implementation for South Coast facilities in Sector Phase I

CAPCOA Workgroup Activities

- CAPCOA Guidance on Uniform Reporting Approved by CAPCOA Board in December 2020
- Sector-specific Guidelines for Electric Generation, Landfills, and Refineries Compiling information for preliminary drafts for internal workgroup review

UPDATE ON EFFORTS TO DEVELOP DEFAULT TOXIC EMISSION FACTORS

Emission Factors

- Working with facilities to collect source test results that can be used for developing emission factors
- Supplementing where possible with historical data from South Coast AQMD records
- Seeking additional input from the working group to prioritize the equipment, process, or industry to focus on for developing emission factors
 - Availability/quality of test data, similarity of processes and process conditions, CARB and CAPCOA guidelines
 - Preliminary thought is to prioritize factor development for smaller facilities and processes that are identified in Sector Phase I & II of the CTR

Statistical Analysis

- Objective is to assess statistical confidence in emission factors developed from data generated from a subset of a population of discreet processes/process conditions
- Single factor Analysis of Variation (ANOVA)
- Case studies underway with different processes and toxic compounds

PRIORITIZING RESOURCES FOR TOXIC FACTOR DEVELOPMENT

- Staff requested feedback from working group members at December 2020 meeting
 - Some input received since last working group meeting
 - Initial case study looking at toxics from natural gas-fired turbines
- Requesting input on staff-proposal to focus on smaller facilities/processes identified in Sector Phase I & II of CTR
- Please provide any input to Eugene Kang (ekang@aqmd.gov) by August 1, 2021

REVISED GUIDELINES FOR USE OF APPROVED SOURCE TEST RESULTS FOR ANNUAL EMISSION REPORTS (AERs)

REVISED DRAFT GUIDELINES ON THE USE OF APPROVED SOURCE TEST RESULTS FOR AER

- Staff provided draft guidelines in March 2020 outlining current and historical practices by the AER program on how source test results are approved for use in annual emissions reports
 - Comments and suggestions received by EQUATEWG members
- Draft guidelines have been revised June 2021 to provide clarifications and address stakeholder comments and suggestions
 - Additional detail added on AER staff evaluation process for source test data used in annual emissions reports
 - Removed references to annual emissions reports being "invalid" if they use unapproved source test results
 - Added examples where source test results can be used if they were verified in other South Coast
 AQMD programs (e.g., permit evaluations, compliance verification)

COMMENTS ON SOURCE TEST REQUIREMENTS FOR VARIOUS SOUTH COAST AQMD PROGRAMS

- Working group members requested that additional guidance for source testing requirements for other programs be provided
- Details on source testing requirements and uses for other programs (e.g., Compliance, Permitting, AB 2588) planned for inclusion in the STTS portal and/or associated webpage
- Criteria can vary between programs due to:
 - Purpose or end use of test results
 - South Coast AQMD, state, and federal rules and regulations governing the program
 - Specified test methods

EXAMPLES OF DIFFERENCES IN CRITERIA FOR SOURCE TESTING ACROSS SOUTH COAST AQMD PROGRAMS

	AB 2588	AER	Compliance	Permitting
Purpose or Use of Results	• Estimate emissions for quadrennial and air toxics inventory report needed to characterize health risks	• Estimate emissions for annual emissions report and emissions fees	 Demonstrate compliance with permit/plan conditions, rule- specified emission limits, stipulated orders for abatement, etc. 	• Estimate potential to emit, establish permit limit(s), and verify equipment will be able to perform in compliance prior to issuing a Permit to Construct or Operate
Source Test Requirements	 H&SC Section 44300, et seq Emission Inventory Criteria and Guidelines (Appendix D) 	 Dictated by original purpose for source test (e.g., Compliance, Permitting) 	Multiple South Coast AQMD, state, and federal regulations	Multiple South Coast AQMD, state, and federal rules/regulations
Required Test Methods	 CARB test methods are required Typically multiple samples/test runs required 	 Dictated by original purpose for source test Can require multiple or single samples/runs 	 Multiple South Coast AQMD, state, and federal test methods Can require multiple or single samples/runs Performed at varying ranges 	 Multiple South Coast AQMD, state, and federal test methods Typically multiple samples/test runs required Typically performed at 80-100% of rated capacity

CTR IMPLEMENTATION

FUTURE CHANGES TO THE AER PROGRAM DUE TO CARB CTR IMPLEMENTATION

- The AER program implements CTR reporting requirements for facilities located within the jurisdiction of South Coast AQMD
- Key upcoming CTR requirements include:
 - Expanded list of applicable facilities for reporting
 - Currently ~1,500 facilities
 - Potentially over 10,000 facilities after full CTR implementation
 - Established phase-in schedules
 - Additional air toxic compounds to be reported
 - Reporting of release location data for CTR 'core' facilities that:
 - Have potential to emit > 250 tons/yr for non-attainment criteria pollutants; or
 - Is subject to Mandatory Reporting Regulation (GHG); or
 - Is an AB 2588 Elevated Toxics facility

ADDITIONAL APPLICABILITY FACILITIES

- AER program already requires CTR reporting requirements for CTR core facilities
- Expanding reporting universe to include Additional Applicability Facilities
 - Facilities identified in the CTR (Appendix A) by SIC and NAICS codes
 - Activity level considered for some industries
 - Sectors include a variety of sources (e.g., metal working, waste treatment/handling, fumigation)

PHASE-IN SCHEDULE FOR ADDITIONAL APPLICABILITY FACILITIES

- South Coast AQMD facilities designated as District Group A
- Facilities grouped into four sectors
- Phase-in approach beginning with 2022 data year
- A facility that initially reports in any of the Sector Phases does not need to report again until 2026 (except for Sector Phase 3B) unless triggering requirements to report as a core facility

District Group	Sector Phase I	Sector Phase 2	Sector Phase 3A	Sector Phase 3B
A	2022 data reported in 2023	2024 data reported in 2025	2025 data reported in 2026	2028 data reported in 2029

ADDITIONAL TOXIC COMPOUNDS TO REPORT

- Emission Data Quantification and Reporting: phase-in of hundreds of additional toxics:
 - 2022 data year Additional Substances for Initial Quantification and Reporting (CTR Table B-2)
 - 2026 data year Additional Substances with Health Values for Quantification and Reporting (CTR Table B-3)
 - 2028 data year Additional PFAS-Related Substances for Wastewater Treatment Facilities (CTR Table B-4)
- CARB requires reporting of amounts used or produced for toxics that do not have emissions quantification methods/factors

RELEASE LOCATION DATA FOR CTR CORE FACILITIES

- Release location data required beginning with 2022 data year reported in 2023 for CTR core facilities
- Examples of release location data:
 - Release location type (point, volume)
 - Geospatial coordinates for release point
 - Release parameters (height, temperature, velocity, flow rate)

NEXT STEPS

- Source Test Tracking System Portal
 - EQUATE Working Group Demo
 - Invite users for hands-on review
- Receive Stakeholder Input on Staff-Proposed Priorities for Potential Default Toxic Factor Updates by August 1, 2021

CONTACTS

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