Complete List of Changes
Incorporated into CalEEMod version 2016.3.1

1. CARB's OFFROAD 2011and EMFAC 2014 updates were incorporated. Also, the methodology in calculating running loss emissions for reactive organic gases (ROG) was modified from grams/trip (g/trip) to grams per vehicle miles traveled (g/VMT).

2. The 2013 update to Title 24, Part 6 standard (building efficiency % reduction) was incorporated.

3. The trip rates from Institute of Transportation Engineers (ITE) 9th edition of the Trip Generation Manual were incorporated.

4. A new fleet mix tab was created to allow projects with multiple land uses to override default fleet mixes and trip lengths during the operation phase in a single model run.

5. A new Start of Construction box was added to the Project Characteristics screen to trigger the construction schedule with a rolling calendar that keys off of the project start date.

6. The global warming potentials (GWPs) were updated to reflect the Fourth Assessment Intergovernmental Panel on Climate Change (IPCC) 2007 Report (referred to as AR4) in order to be consistent with GWPs used in CARB's Scoping Plan Update (2014).

7. A new screen was added to calculate operational emissions from certain types of stationary equipment (e.g., engines, boilers, and generators) based on user input (e.g., equipment type, number of equipment, hours of operation).

8. The calculation methodologies for GHG mitigation measures LUT-1, LUT-4, LUT-6, LUT-9, and WSW-1 have been corrected. Also, the model has been revised so that the mitigation measures, when applied, will recognize when the user changes the defaults.

9. The consumer products and architectural coating calculations for city parks, golf courses, recreational swimming pools, and parking lots/garages have been modified so that they no longer include the open spaces.

10. A new default option has been added for projects located in San Luis Obispo County APCD or Sacramento Metropolitan AQMD to be able to use CARB's 2.0 lbs PM_{10}/VMT and 0.2 lbs $PM_{2.5}$/VMT as the unmitigated fugitive dust emission factor for unpaved roads during the operational phase.

11. The default horsepower (hp) determination based on weighted average of statewide operating activity for each off-road equipment type has been modified.

12. A new screen reminder has been added to the fleet mix screen to alert the user that the total is in fractions if fleet mix exceeds 100%.

13. The solid waste landfill capture gas flare has been updated to 100% for Santa Barbara County APCD.

14. A new electrical option has been added as an alternative to fuel on the mitigation screen.

15. The NOx emissions calculation for when biodiesel B20 is selected as a fuel has been corrected.

16. The Total Acres Disturbed column (Dust from Material Movement screen) has been re-labeled to Total Acres Graded.

17. The units on the Consumer Products screen has been changed from # ROG/sq ft/year to # ROG/sq ft/day.

Complete List of Changes
Incorporated into CalEEMod version 2016.3.1 (concluded)

18. The calculation of solid waste (landfill) GHG emissions when applying energy recovery has been corrected.

19. The calculation of non-residential architectural coating ROG emissions when the user changes the exterior area to be painted has been corrected.

20. The area source natural gas emission factors for CO, SO_x, NO_x and lead have been updated to align with EPA's AP-42.

21. The Arena trip type (%) has been corrected so that it adds up to 100%.

22. The regional default data provided by the air districts/local MPOs (e.g., architectural coating ROG content limits, percentage of wastewater treatment (septic tanks/aerobic/anaerobic), MPO information, number of snow days vs. summer days, waste treatment plant specific effluent nitrogen, etc.) has been incorporated.

23. The GHG energy usage calculation for single family housing has been corrected.

24. The City of Vernon has been added to the drop down list of utilities.

25. The CO2 intensity value for Southern California Edison utility has been updated.

26. The box for entering a number next to the NEV network mitigation box has been deleted.

27. The names of two air districts have been changed (e.g., El Dorado County APCD to El Dorado County AQMD and Monterey Unified APCD name to Monterey Bay Air Resources District).

28. New output summary reports have been created that present the peak daily emissions on the Summer and Winter reports and present the GHG summary on the Annual report instead of displaying the sum of maximum daily emissions over the years.

29. The Paving Acres Disturbed in the reports has been corrected so that the value no longer defaults to zero.

30. The formatting problem in the report that locates Section 4.4 (Fleet Mix) below the Fleet Mix table and atop the title in Section 5.0 has been corrected.

31. The highest quarterly value of ROG + NO_x during construction has been added to the Annual report for projects located in the San Luis Obispo APCD.

32. Mini-headers and/or footers have been added to each page of the Winter/Summer/Annual reports to indicate the name of the project and the type of report.

33. A new output summary report has been created that presents the peak daily emissions on the Summer and Winter reports and presents the GHG summary on the Annual report.

34. Typos and spelling errors have been corrected.