DOCKETED

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Description:	Conversation between Gerry Bemis, Tao Jiang and Wenjun Qian with CH2MHill/Jerry Salamy
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CALIFORNIA ENERGY COMMISSION

REPORT OF CONVERSATION

Energy Facilities Siting Division
Compliance Unit

FILE: 12-AFC-03

PROJECT TITLE: Redondo Beach Energy Project

☐ **Telephone**	916-286-0207	☐ **Meeting Location:** Phone	
NAMES:	Gerry Bemis, Tao Jiang and Wenjun Qian	**DATE:** 11/14/13	**TIME:** 2 pm
WITH:	Jerry Salamy, CH2MHill		
SUBJECT:	Possible Errors in Computing Construction Emissions and Impacts		

Background:

The discussion below focused upon the Huntington Beach Energy Project, including data responses for that project. However, the analyses for both Huntington Beach and Redondo Beach Energy Projects were both done by CH2MHill, and we found similar errors in the Redondo Beach emission factors, so we are docketing this Report of Conversation to both projects. Discussion Item 1 below applies to the Huntington Beach Energy Project but no longer applies to the Redondo Beach Energy Project as the applicant made the correction in Data Response Set 1A, Attachment DR2-1 (TN 201167). Note that the table and attachment references listed below differ for the Redondo Beach Energy Project.

While reviewing HBEP data responses titled "Resubmission of Data Responses, Set 1B, 4, and 5" dated November 4, 2013, staff identified possible errors in the computation of the emissions factors used to compute fugitive dust emissions, which were resulting in modeled significant adverse impacts. These were discussed with Mr. Salamy. Energy Commission staff's call was to explain the errors and get CH2MHill to correct the emissions and air quality impact modeling, or have CH2MHill justify their emissions factors as correct.

Discussion:

1. Attachment DR 104-5, Revised Appendix 5.1A, Construction Emission Calculation, Table 5.1 A.21R, Onsite Construction Fugitive Dust Emission, page 2 of 2. At the bottom of page 2, in the sub-table titled Fugitive Dust Emission Factors for Bulldozing, Footnote "a" denotes that parameter "C" is from Appendix A of the CalEEMod User's Guide. From the User's Guide, the correct PM10 value for "C" is 1, and not the 5.7 value listed in the sub-table. The 5.7 value is for PM2.5, and is correctly identified in the sub-table. See page 9 of Appendix A of the CalEEMod User's Guide.

2. Also in the same sub-table, the value for M (%) is listed as 7.9% for both PM10 and PM2.5. The equation that uses M was derived such that M should be used in numeric form as a percentage, not in arithmetic form (i.e., the correct input is "7.9," not "0.079"). Correspondingly, the value for S (%) is listed as 6.9% for both PM10 and PM2.5. This also needs to be input as "6.9" and not as "0.069." This is just one example of what we think is a systematic error in input. We recommended checking all construction emission factors for this error.

3. Also in Attachment DR 104-5, Table 5.1A.3R, in the sub-table titled "Fugitive Dust Emission Factors for Dismemberment" the emissions factor for PM10 should be "0.0011" and not

"0.243." Our result is derived from the EPA document EPA-450/4-88-003 prepared by Midwest Research Institute (see footnote 11 in Appendix A of the CalEEMod's User's Guide), which is the original source of the equation used in Appendix A of the CalEEMod User's Guide on pages 11 & 12. The numerator in the scaling factor for wind is "wind speed/5" in miles per hour (mph), so the proper input here is mph, not meters per second (stated incorrectly in the Appendix A of the CalEEMod User's Guide). The correct emissions factor values for PM10 and PM2.5 are listed near the bottom of page 11 in the Appendix A of the CalEEMod User's Guide. The corresponding correct emissions factor for PM2.5 is "0.00017" not "0.037." Staff found similar errors in Table 5.1A-30R and Table 5.1A-51R where the Onsite Demolition Fugitive Dust Emissions were estimated.

Actions:

Mr. Salamy indicated that he would review our comments and then get back to us with whether or not he agreed with our conclusions and whether or not they need to redo construction impact modeling. The current modeling results indicate a very high adverse impact during construction and the changes staff recommends would reduce these modeled impacts, at least for the specific equations staff identified. Energy Commission staff encouraged Mr. Salamy to review our comments and redo the construction modeling. This will affect PM10, PM2.5 and public health impacts.

cc:	**Signed: /s/ Gerry Bemis**
	Name: Gerry Bemis