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Developing Guidelines for the Clean Energy Partnership Academies

Cal/EPA Comments on Draft Guidelines (dated 9/30/11)

Docket No. 11-OII-01

Upon reviewing the latest draft guidelines for the Clean Energy Partnership Academies, the California Environmental Protection Agency, Office of Education and the Environment, offers the following comments:

- Page 8 contains a reference to the California Environmental Principles and Concepts (EP&Cs). Currently, the text reads: “In appropriate courses, the curriculum should substantially align to [the EP&Cs].…” While we strongly support the intent to encourage the academies to align their curricula to the EP&Cs, we recommend the text be amended as follows:
 1. Replace the above text with: “Whenever feasible, the curriculum should substantially align to [the EP&Cs].…” In the current context it is unclear what “in appropriate courses” means, and the proposed revision would clarify this ambiguity with language that implies the State’s intent that the EP&Cs undergird not only future textbook adoptions, but also materials that may be developed/used between now and the next round of adoptions. We note that nothing in either the current text or our suggested revision *requires* the academies to use EP&C-aligned curricula.
 2. Add an Appendix containing the EP&Cs (or at least the environmental principles), as many educators are not yet familiar with them. The environmental principles, in particular, are directly applicable to the subject of the related bullet point—i.e., developing student awareness and leadership on environmental issues facing California.
- Page 14 contains a brief description of the Education and the Environment Initiative (EEI) at the end of a long list of California energy and climate policies. This is an awkward fit and a bit of a non sequitur. We note concern that the intended audience will either overlook the EEI, or fail to grasp its relevance to the partnership academies (as it does not bear the same relationship as the other policies listed). As an alternative we suggest creating two separate sections, one entitled “State Energy Policies and Priorities” (which would contain each of the currently listed policies), and one entitled “State Environmental Education Policies and Priorities.” This latter section would be the appropriate place to discuss the EEI as well as the EP&Cs.
- The text on page 14 referencing the EEI is currently incomplete and inaccurate. The body of that text should more appropriately read as follows:

*Under the California Education and the Environment Initiative (EEI) legislation, California created, and the State Board of Education approved, a set of Environmental Principles and Concepts (EP&Cs) that broadly describe the type of environmental awareness the State wants each student to attain. By law, future textbooks must incorporate these EP&Cs, and a model curriculum that teaches the EP&Cs, the **EEI Curriculum**, is currently available online, free of charge, through the California Environmental Protection Agency.*

The EEI Curriculum increases environmental literacy for California's K-12 students through hundreds of lessons that teach select science and history social science standards to mastery through an environmental lens (California's EP&Cs). In addition, the EEI Curriculum builds 21st century workforce skills including critical decision making, collaboration, and presentation skills. Each EEI Curriculum unit explores relevant real world case studies in industries including energy, agriculture, green chemistry, and other green technologies.

[Note: As the above is only a very brief thumbnail sketch, Cal/EPA is happy to provide any additional detail desired, particularly with respect to EEI units with specific applicability to the clean energy partnership academies.]

- Based on the revisions proposed in the previous bullet, we would also suggest including a bit more description on how EEI can be used as support (or even a foundation) to “green” CTE. For example, the report referenced on page 25, conducted by the Donald Vial Center (at UC Berkeley), contains the following quote (on page 237; page 119 at http://www.irle.berkeley.edu/vial/publications/WE&T_Part2.pdf):

[EEI] may provide an opportunity to insert energy education into a broader effort to integrate environmental education into the state approved standards. While the EEI curriculum has support from governing boards, such as the California Department of Education, its implementation is optional for schools and teachers and, therefore, requires significant teacher engagement and effort across the state. Continued support for an initiative of this kind may help to make programs of this nature more common throughout the state. The efforts of EEI, however, are primarily focused on environmental literacy, focusing on changing behavior much like the energy awareness programs. This initiative would benefit from developing and incorporating career awareness, exploration, and preparation into programs. While the EEI curriculum is considered complete and is unlikely to be changed, the IOUs and other program sponsors can work with the organization as a reference when developing new programs. The IOUs in California are well positioned to collaborate with the EEI on these efforts, since utility programs have recently started incorporating career awareness into their current cycle of programming.

As the above quote indicates, there can be a strong, reciprocal relationship between EEI and “green” CTE. EEI can serve as a powerful link between “green” CTE and traditional instruction on state approved standards. We note that, as currently drafted, this point does not come through clearly in the guidelines. Therefore, we propose the following addition to the section proposed above (for inclusion on “page 14”):

As the first standards-aligned, environment-based curriculum to receive State Board of Education approval, the EEI can be used to help: (1) seamlessly integrate CTE coursework with explicit science and history/social science instruction; and (2) provide added context and meaning to green career paths in ways that will increase engagement with students.