To: Mr. William E. Snyder California Deputy Director, Resource Management California Department of Forestry and Fire Protection PO Box 944246 Sacramento, CA 94244-2460

E-mail: william.snyder@fire.ca.gov

Re: Reference to Krankina and Harmon (2006) in your memo dated November 12, 2009 on the subject of "Greenhouse Gas Consideration and Evaluation" in response to the California Department of Fish and Game (CDFG).

Dear Mr. Snyder:

It came to our attention that the abovementioned memo references our publication in a statement that is completely at odds with what our paper states. On the subject of the proposed logging of 18 acres of old growth forest your memo states on p. 7: "A number of researchers have found that managed forests have been shown to sequester more carbon and have fewer emissions than unmanaged forests (Birdsey et al. 2000, Krankina and Harmon 2006)."

In fact our paper (see citation below) states that following disturbance (and clearcutting is a disturbance) "as the carbon uptake by living trees is interrupted and the emissions from decomposition increase, a disturbed forest stand shifts from sink to source of carbon relative to the atmosphere. It remains in the source phase until carbon uptake by the new generation of trees exceeds emissions from decomposing dead organic material (Figure 2)"(page 83, right column). Figure 2b (p. 82) clearly shows net carbon emissions to the atmosphere lasting several years to several decades after the timber harvest even when reforestation is successful. Therefore "conservation measures such as protecting forest from logging or clearing offer immediate {carbon} benefits via prevented emissions" (p. 84; right column). More specifically, we examine the impact of clearcutting of old-growth forest: "When the initial condition of land is a productive old-growth forest, the conversion to forest plantations with a short harvest rotation can have the opposite effect {as compared to afforestation of degraded agricultural land} lasting for many decades... 100 years of rotation forestry system do not appear long enough to offset the losses of carbon from harvesting the old-growth forest" (p. 85).

No text in our paper supports the quoted statement in your memo. Moreover, it is beside the point considering the discussion at hand. Young forests store very little carbon compared to old-growth forests and the difference in carbon stores between the two means that greater amounts of carbon are added to the atmosphere even when stores in forest products are considered.

We hope for more accurate referencing of our work in the future.

Sincerely,

Olga Krankina Mark E. Harmon

O.N. Krankina and M.E. Harmon (2006). Forest Management Strategies for Carbon Storage. In: Forests, Carbon & Climate Change - Summary of Science Findings, Oregon Forest Resources Institute, pp. 79-92. http://www.oregonforests.org/assets/uploads//For Carbon fullrpt.pdf)

Copy to:

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Public Comment file for 1-08NTMP-009 MEN (Bower NTMP) E-mail: SantaRosaPublicComment@fire.ca.gov

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