

Bill Pfanner - Fwd: Article on ammonia re:Eastshore

From: Rachel Henderson
To:
Date: 9/14/2007 4:49 PM
Subject: Fwd: Article on ammonia re:Eastshore

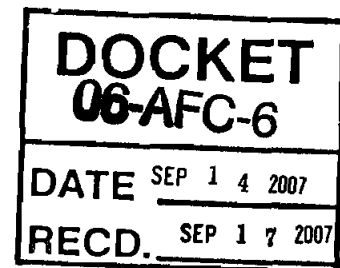
Dear Mr. Pfanner,

I sent you the message below last week but realized that your email address was incorrect so it got bounced. Please enter this into the record for Eastshore.

Did you know that your email address on the CEC website for Eastshore is incorrect? <http://www.energy.ca.gov/sitingcases/eastshore/>. It has bfaner instead of bpfanner. I hope the public has been able to reach you to enter their comments on this project given this typo.

Sincerely,
 Rachel Henderson

Date: Thu, 06 Sep 2007 20:42:03 -0700
 To: mlayton@energy.state.ca.us
 From: Rachel Henderson <rhenderson@stanfordalumni.org>
 Subject: Article on ammonia re:Eastshore
 Cc: bfaner@energy.state.ca.us, Cholmes@energy.state.ca.us
 Bcc: mike Toth <mike@spiralcraft.com>



Dear Matt,

Thank you for talking to me today at the CEC meeting in Hayward regarding the Eastshore Energy project. As we discussed earlier, I raised a question about the direct effects of ammonia emissions on vegetation and the plant ecosystem with Rick York, who is in charge of the Biology section, and he said that that aspect is actually covered under Air Quality. Since you are in charge of Air Quality and were unfamiliar with the article I was citing, I am sending you a link to the abstract:

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=12713921&query_hl=2&itool=pubme

[Environ Pollut. 2003;124\(2\):179-221.](#)

Effects of atmospheric ammonia (NH₃) on terrestrial vegetation: a review.

Krupa SV.

This article was cited in the Biology section of Eastshore's PSA for other reasons, so I assume the CEC finds it rigorous enough. Note that it does mention fossil fuel burning as one of the sources of atmospheric ammonia.

Quoting from the abstract: "In addition to direct foliar injury, adverse effects of NH₃ on higher plants include alterations in: growth and productivity, tissue content of nutrients and toxic elements, drought and frost tolerance, responses to insect pests and disease causing microorganisms (pathogens), development of beneficial root symbiotic or mycorrhizal associations and inter species competition or biodiversity."

Although the CEC's biology staff is looking into the effects of emitted nitrogen on the soil and therefore the indirect downstream effects on plants, I would also like to see an analysis of the direct effect of ammonia on vegetation and the ecosystem, given this data. If this is outside the scope of the Air Quality section, perhaps Mr. Pfanner would see fit to assign it to Biology staff. Either way, I feel that it must be addressed directly, given the potentially significant effects on the local ecosystem.

Thank you very much for your time and help.

Sincerely,

Rachel Henderson, Ph.D.