From: McDonald, Jeffrey
To: Jens Birkholzer
Subject: RE: AoR re-interpretation
Date: Monday, July 15, 2013 1:49:58 PM

Jens,

Thanks. Sorry I didn't reply sooner. I'll take a look and give you some feedback as soon as I can.

Jeff

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From: Jens Birkholzer <jtbirkholzer@lbl.gov>
Sent: Wednesday, July 10, 2013 2:27 PM
To: McDonald, Jeffrey
Subject: AoR re-interpretation

Dear Jeff,

I have for a while been thinking about AoR definition, as you know, and the questions whether it makes sense to treat the area of future CO2 plume extent the same as the area that may be included in the AoR because of elevated pressure. Now, with the help of Abdullah and Karl, I have written these thoughts up, and I am thinking of sending these as a discussion paper to the GHG-S&T journal. But I really want your input on this before submitting, and understand whether this would be a useful contribution for EPA (I will also send it to Molly and Bruce in DC, and to Steve Kraemer).

See attached. Hope you are doing well.

Jens

> Abstract
>
> This paper discusses the current guidance given by the United States
> Environmental Protection Agency on delineating the so-called Area of
> Review for geologic carbon sequestration (GCS) projects. In the United
> States regulation for GCS, the Area of Review refers to the region
> surrounding the CO2 injection well(s) wherein leakage of CO2 and/or
> the migration of formation fluids could possibly endanger overlying
> groundwater resources. Our evaluation of the current framework for
> delineating the size of this area finds unnecessary conservatism in
> the critical pressure definition, which could lead to a heavy burden
> on permit applicants that seek to get regulatory compliance. We
> propose a re-interpretation of the Area of Review framework,
> separating the total region into different sub-areas that are
> associated with more or less strict standards in terms of site

> characterization, monitoring, and corrective action.

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