From: Craig Richardson
To: Jeff Hofman
Subject: Fwd: KGH Meagher 14-2H CPW Well Location Consultation
Date: Tuesday, April 23, 2013 12:33:41 PM

Great job!

Sent from my iPhone

Begin forwarded message:

> **From:** "Davidson - DNR, Jacob" <jacob.davidson@state.co.us>
> **Date:** April 23, 2013, 11:55:34 AM MDT
> **To:** Jeff Hofman <jhofman@olssonassociates.com>, crichardson@olssonassociates.com
> **Cc:** "Warren, Michael" <michael.warren@state.co.us>, Terry Wygant <Terry.Wygant@state.co.us>
> **Subject: Re: KGH Meagher 14-2H CPW Well Location Consultation**
>
> Jeff,
> Sorry for the delay in getting back to you. Things were a bit busy over here.
>
> After reviewing the KGH responses and plat package, it appears that it is necessary to space these 2 (possibly 3) locations apart from one another. It was helpful to understand the small size of each of these pads, and hopefully the reclamation of these disturbances will be aided by the undisturbed adjacent plant communities.
>
> CPW agrees that the same recommended BMPs from the KGH Meagher 14-1H location would also be appropriate for the Meagher 14-2H location.
>
> Thanks for your time,
>
> **Jacob Davidson**
> Land Use Specialist
> Colorado Parks and Wildlife
> jacob.davidson@state.co.us
> Office: (970) 878-6069
> Cell: (970) 756-5226
>
> On Thu, Apr 11, 2013 at 5:15 PM, Davidson - DNR, Jacob <jacob.davidson@state.co.us> wrote:
>
> > Thanks for the reply Jeff.
> > I'll take a look at these materials and get back to you as soon as I can (probably next week sometime).

Jacob Davidson
Land Use Specialist
Colorado Parks and Wildlife
jacob.davidson@state.co.us
Office: (970) 878-6069
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On Thu, Apr 11, 2013 at 4:52 PM, Jeff Hofman <jhofman@olssonassociates.com> wrote:

> Jacob,
>
> Here is the response from your comments:
>
> *KGH will use common surface facilities whenever possible to limit surface disturbance and produce economic efficiencies. The Meagher wells are located on property where the mineral owners are also the surface owners and KGH works with them to develop their minerals in a responsible manner.*
>
> *The surface locations will be off-set to provide effective reservoir drainage. The horizontal portions of the wells will be nearly parallel to each other and separated by approximately 250 feet. Horizontal legs that are any closer will create overlapping and inefficient drainage of the reservoir. KGH plans on providing separate pads for each well instead of one large pad. Each horizontal well can effectively replace 6 to 10 non-directional, non-horizontal wells. The total planned surface disturbance is relatively small considering the potential amount of minerals that can be developed using horizontal techniques. The total land disturbance associated with this pad and access road is 1.235 acres. The size of the pad cannot be reduced any further.*
>
> *The Meagher 14-1H well spud next month. The Meagher 14-2H will spud once the first well's production is evaluated.*
>
> I have also attached a copy of the 14-2H plat packet for your review. The

direction of the well will be more of a east-northeast direction than the due east direction of the 14-1H well (see page P4).

Please let me know if you have any other questions.

Thanks

Jeff Hofman, AICP | Olsson Associates

760 Horizon Drive, Suite 102| Grand Junction, CO 81506 | jhofman@olssonassociates.com

TEL 970.263.7800|DIRECT 970.263.6016 | FAX 970.263.7456

Please consider the environment before printing this e-mail.

From: Davidson - DNR, Jacob [mailto:jacob.davidson@state.co.us]
Sent: Friday, April 05, 2013 1:14 PM

To: Jeff Hofman
Cc: Warren, Michael; Terry Wygant
Subject: Re: KGH Meagher 14-2H CPW Well Location Consultation

Thanks for your response Jeff. Is KGH also planning to head due east with the 14-2H horizontal, similar to the 14-1H?

Do you have any plats for this location that you can share? I'm wondering if the 14-2H pad location will be similar to the 14-1H.

I think our main issue is the redundant infrastructure, and therefore excessive habitat disturbance in this concentrated area. Is there an opportunity to utilize any of the 14-1H infrastructure (condensate tanks, water tanks, separators, flares, pigging station, etc) that the 14-2H may also need? I am wondering if this type of approach might keep the 14-2H pad as small as possible, and help to minimize habitat loss.

Another approach I have seen in the past is to utilize existing pads as staging areas for drilling and fracking activities. This can also help in reducing pad size, as these operations are taking place on a different pad, and connected through above ground pipes and other means.

These are just some quick ideas. CPW would certainly encourage KGH to utilize any other options they might have to keep the 14-2H pad as small as possible.

Jacob Davidson

Land Use Specialist

Colorado Parks and Wildlife
jacob.davidson@state.co.us
Office: (970) 878-6069
Cell: (970) 756-5226

On Fri, Apr 5, 2013 at 9:17 AM, Jeff Hofman <jhofman@olssonassociates.com> wrote:

Jacob,

The 14-1H pad will spud next month. KGH is utilizing horizontal drilling requiring a minimum 250' separation between horizontal legs to maximize reservoir drainage. Unfortunately, the 14-1H pad cannot be used for both wells.

Thanks

Jeff Hofman, AICP | Olsson Associates

760 Horizon Drive, Suite 102| Grand Junction, CO 81506 |
jhofman@olssonassociates.com

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Please consider the environment before printing this e-mail.

From: Davidson - DNR, Jacob [mailto:jacob.davidson@state.co.us]
Sent: Thursday, April 04, 2013 8:53 AM
To: Jeff Hofman
Cc: Warren, Michael; Terry Wygant
Subject: Re: KGH Meagher 14-2H CPW Well Location Consultation

Greetings Jeff,

Thanks for contacting me. I'm glad to see that KGH is thinking ahead, and willing to accept appropriate Wildlife BMPs for this new location. I do have some questions regarding this location that I am hoping you can help me understand.

Is KGH still planning on developing the Meagher 14-1H, or will this new 14-2H permit replace it? Are nearly adjacent pads necessary, or is there opportunity to combine these two disturbances? Is the 14-2H planning on being a single well pad, similar to the 14-1H (as currently permitted)?

Thanks for your time,

Jacob Davidson

Land Use Specialist

Colorado Parks and Wildlife
jacob.davidson@state.co.us
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Cell: (970) 756-5226

On Wed, Apr 3, 2013 at 3:30 PM, Jeff Hofman <jhofman@olssonassociates.com> wrote:

Jacob,

We are working on another well pad site in Rio Blanco County. This one is about 240 feet north of a site that we consulted you on last December. I have attached the plat package for you to review and will contact you in a few days after you have a chance to look at it. The new site is located on the SW ¼ of the NE ¼ , Sec 14, T1S, R104W, 6th P.M. (Lat/Long 39.964677, -109.035823)

We would like to use the same recommended BMPs from the previous location:

1. Where oil and gas activities must occur in mule deer critical winter range conduct these activities outside the time period from December 1 through April 15 (construction and drilling).
2. Restrict post development well site visitations to between the hours of 10:00 am and 3:00 pm and reduce well site visitations between December 1 and April 15 in mule deer critical winter range.
3. Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.
4. Gate single purpose roads and restrict general public access to reduce traffic disruptions to wildlife.
5. Close and immediately reclaim all roads that are redundant not used regularly or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation.
6. Avoid aggressive non native grasses and shrubs in mule deer and elk habitat restoration.
7. Reclaim mule deer habitats with native shrubs grasses and forbs appropriate to the ecological site disturbed.
8. Restore appropriate sagebrush species or subspecies on disturbed sagebrush sites. Use locally collected seed for reseeding where possible.

Please let me know if you need any additional information.

Thanks

Jeff Hofman, AICP | Olsson Associates

760 Horizon Drive, Suite 102| Grand Junction, CO 81506 | jhofman@olssonassociates.com

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