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STATE OF COLORADO

EnviroScan - DNR, OGCC <dnr_ogcc.enviroscan@state.co.us>

Re: Oliver Warren #1 Skim Pit Remediation, Remediation #8209

1 message

Axelson - DNR, John <john.axelson@state.co.us> Fri, Jan 16, 2015 at 11:26 AM
To: James Hix <jhix@olssonassociates.com>
Cc: "rob.young@state.co.us" <rob.young@state.co.us>, "Curtis Ditzell (curtisd@cmproductionllc.com)" <curtisd@cmproductionllc.com>, "Jeremy.Ferrin@state.co.us" <Jeremy.Ferrin@state.co.us>, "Kirk.mueller@dgslaw.com" <Kirk.mueller@dgslaw.com>, "greg.deranleau@state.co.us" <greg.deranleau@state.co.us>, OGCC EnviroScan - DNR <ogcc.enviroscan@state.co.us>

James,

Thank you for the update. I appreciate the information regarding the PAHs. COGCC doesn't currently have a risk based cleanup approach and is required to enforce the Table 910-1 Contaminant of Concern Concentration Levels. The plan to finish delineation is still the right approach, and CM can propose a remedial alternative after the final delineation is complete.
Thank you,

John E. Axelson, P.G.
East Environmental Supervisor

COLORADO
Oil & Gas Conservation Commission
Department of Natural Resources

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Rem #8209 - Correspondence

On Wed, Jan 14, 2015 at 9:07 AM, James Hix <jhix@olssonassociates.com> wrote:

> John and Rob,
>
> Attached is a letter that we received from Rodney Dunker – Operations Manager with Y-W Electric regarding the power pole at the Oliver Warren #1 site. He indicates that removing the guy wires/anchors will impact the Petron Development Company to the west of the site.
>
> Olsson and CM will finish delineating the impacts on the northwest corner of the former skim pit at the Oliver Warren #1 site in accordance with Rule 909.b.(2) We will hand auger down at locations to the north and below the depth of the side wall sample, CMOW-PC-7 N/W 1/2, which was collected at a depth of 7 feet below ground surface where impacted soil remains in place. The DRO result for this sample was reported at 7,940 mg/kg and the only PAH that was above the Table 910-1 concentration was an estimated concentration of benzo(a)pyrene reported at 0.441 (J) mg/kg. The total concentration of all PAH reportedly detected in this sample was approximately 10.55 mg/kg. The results for the other six soil samples showed that PAHs were not detected.
>
> Attached are some tables from a 2006 USGS study of PAHs from parking lot seal coat products. Unsealed asphalt has PAH concentrations that range from 10 mg/kg to 100 mg/kg, and seal coat products add many more PAH compounds in much higher concentrations depending on whether it is derived from petroleum products or coal tar. The USGS provides a probable effect concentration (PEC) of 23 mg/kg. My point in providing this information is that PAH are ubiquitous in the environment, and occur in much higher

concentrations at the ground surface in urban settings. The public has the potential to be routinely exposed through inhalation and ingestion of PAH from a multitude of sources, and while those sources should be minimized, it would seem that if PAH impacted soils are buried they pose less risk.

It is widely accepted that PAHs are immobile in the environment and typically do not leach to groundwater. According to the division of water resources the static water levels for wells in the area of the Oliver Warren site are approximately 170 feet to more than 200 feet bgs. There are no surface water bodies located near the Oliver Warren site. CM has excavated the majority of the impacted soils from the former skim pits at the Oliver Warren site and will remediate these impacted soils to meet the Table 910-1 concentrations. It may not be practicable to excavate all of the impacted soil at this location, but we will delineate the extent of the impacts, assess the volume remaining, and see if there is an acceptable alternative to excavation by treating these soils in place.

James

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