

Internal
0070001
OK



OGMCOAL DNR <ogmcoal@utah.gov>

Reporting back on White Oak asphalt

2 messages

Priscilla Burton <priscillaburton@utah.gov>

Mon, Jan 28, 2013 at 12:46 PM

To: OGMCOAL DNR <ogmcoal@utah.gov>, James Owen <jamesowen@utah.gov>, Daron Haddock <daronhaddock@utah.gov>

Daron/James,

The DEQ cannot issue a permit by rule for a bond forfeiture site. However, they can process an application for asphalt handling using existing rules which takes 90 days and requires a public notice. The option providing the best environmental protection and least liability for the state and landowners is to remove the asphalt for recycling by a licensed operator or haul it to the closest disposal site (Carbon County land fill on airport road).

My recommendation is do not consider burial in place. Rather, evaluate the cost of asphalt removal to be used for recycling or disposed in a solid waste facility, followed by partial or full reclamation of the road.

My memo is attached.

Priscilla Burton

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Asphalt Memo 1282013.doc

59K

James Owen <jamesowen@utah.gov>

Mon, Jan 28, 2013 at 1:58 PM

To: Priscilla Burton <priscillaburton@utah.gov>

Cc: OGMCOAL DNR <ogmcoal@utah.gov>, Daron Haddock <daronhaddock@utah.gov>

Thanks Priscilla

I will evaluate the cost associated with off-site disposal of the asphalt.

James

[Quoted text hidden]

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 28, 2013

TO: Internal File

THRU: Daron Haddock, Coal Program Manager

FROM: Priscilla Burton, CPSSc, Soils Scientist

RE: Asphalt Research Summary, White Oak Mine, Permit # C0070001. Special Project

SUMMARY:

The DEQ cannot issue a permit by rule for a bond forfeiture site. However, they can process an application for asphalt handling using existing rules which takes 90 days and requires a public notice. The option providing the best environmental protection and least liability for the state and landowners is to remove the asphalt for recycling by a licensed operator or haul it to the closest disposal site (Carbon County land fill on airport road).

Do not consider burial in place. Rather, evaluate cost of asphalt removal to be used for recycling or disposed in a solid waste facility, followed by partial or full reclamation of the road

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Reclamation

Asphalt is composed of aromatic and aliphatic hydrogenated carbon compounds. Metals, nitrogen and sulphur are also incorporated into the aromatic rings.

<http://onlinepubs.trb.org/onlinepubs/shrp/SHRP-91-510.pdf>

In some states hot mix asphalt is considered inert based upon TCLP test results, see <http://www.alasphalt.com/asphalt%20facts.htm> This reference further states that asphalt is

TECHNICAL MEMO

used as liner in fish hatcheries and in drinking water storage reservoirs. However, this reference fails to acknowledge that TCLP does not analyze for oxidation products of asphalt such as pyridine (N- compound) and benzothiophene (S-compound), or ketones or carboxylic acids which may be converted to sodium salts.

Virginia DOT 2006 research indicates asphalt can be used as clean fill in some situations <http://vtrc.virginiadot.org/rsb/RSB4.pdf> , but the National Park Service views the break down products of asphalt as are toxic. <http://www.nature.nps.gov/water/ecencyclopedia/assets/contaminant-pdfs/asphalt.pdf>

Utah guidance from DEQ states that asphalt is not inert and must be disposed in an approved land fill. http://www.hazardouswaste.utah.gov/Solid_Waste_Section/Docs/SolidWaste/Asphalt_Guidance.pdf Ralph Bohn, Manager of Solid Waste at the DEQ, indicated that due to the bond forfeiture, a permit by rule could not be issued for this reclaimed mine site. DEQ would review an application from DOGM and issue a waste disposal site permit under their existing rules, which usually takes 90 days and requires a public notice. Both the State and landowner would be liable for groundwater contamination, should any result.

Alternatively, the DEQ would review an application for removal of asphalt for recycling by a licensed operator (licensed by DEQ, i.e. Nielson's asphalt plant on Hwy 10 at 4 mile hill) or for hauling to the closest disposal site (Carbon County land fill on airport road). In Mr. Bohn's opinion, recycling was the best option.

Findings:

Burial on site will require a solid waste permit from DEQ and result in long term liability. Removal from the site will also require a permit from the DEQ. Removal from the site provides the most protection for the environment and removes the liability threat to the State and landowner.

RECOMMENDATIONS:

Do not consider burial in place. Evaluate cost of asphalt removal to be used for recycling or disposed in a solid waste facility, followed by partial or full reclamation of the road