

Analysis of the carbon pollution and social cost of carbon of the Spruce Stomp coal lease sale

The Bureau of Land Management (BLM) announced¹ that it had accepted the \$2.9 million bid for the Spruce Stomp coal lease sale held on July 30, 2014. Containing 8.02 million tons of coal, that amounts to \$0.36 per ton of coal. As with nearly all Lease by Application (LBA) bids for publicly owned coal, the only company to offer a bid for the lease was the company that applied for it; in this case Bowie Resource Partners, to expand its Bowie #2 mine in Delta County, Colorado. The lease sale was held despite concerns that Bowie intends to export much of the coal.²

BLM fails to consider the carbon pollution unlocked by federal coal leases, as documented in our recent report³ - this analysis uses the same methodology as that report to calculate the carbon pollution and social cost of carbon damages from the Spruce Stomp coal lease.

According to the federal register notice,⁴ the Spruce Stomp coal lease contains “an estimated 8.02 million tons of recoverable coal reserves” with 12,896 BTU/lb bituminous coal. Using that BTU/lb figure and the Energy Information Administration’s estimate of the CO2 coefficient of bituminous coal⁵ shows that the 8,020,000 short tons of coal in the Spruce Stomp lease will emit 19,296,163 metric tons of CO2 when burned. Note that this does not include the carbon and methane pollution associated with the mining, processing, and transporting of the coal, just the carbon pollution emitted when the coal is burned.

To estimate the damages that these emissions will cause, we use the federal government’s social cost of carbon figures for 2015, assuming that the coal from the Spruce Stomp coal lease will be mined and burned in a period around that year. Social cost of carbon figures increase each year, so this is a conservative estimate; using 2020 figures or an average of 2015 and 2020 would show higher damages.

Total social cost of carbon damages from 19,296,163 metric tons CO2 emitted in 2015

| | |
|-------------------------------------|-----------------|
| 5.0% discount rate, average | \$231,553,956 |
| 3.0% discount rate, average | \$733,254,194 |
| 2.5% discount rate, average | \$1,119,177,454 |
| 3.0% discount rate, 95th percentile | \$2,103,281,767 |

Social cost of carbon damages per ton of coal from Spruce Stomp coal lease

| | |
|-------------------------------------|----------|
| 5.0% discount rate, average | \$28.87 |
| 3.0% discount rate, average | \$91.42 |
| 2.5% discount rate, average | \$139.54 |
| 3.0% discount rate, 95th percentile | \$262.25 |

In contrast, the Bureau of Land Management received \$2,887,200 for the Spruce Stomp coal lease sale, or just \$0.36 per ton.

Contact jsmyth@greenpeace.org or visit <http://www.greenpeace.org/usa/coalleasing/> for more.

¹ http://www.blm.gov/co/st/en/BLM_Information/newsroom/2014/blm_competitive_coal.html

² www.sightline.org/research/unfair-market-value/

³ <http://www.greenpeace.org/usa/coalleasing/>

⁴ <https://www.federalregister.gov/articles/2014/07/01/2014-15496/notice-of-competitive-coal-lease-sale-coc-75916-co>

⁵ <http://www.eia.gov/tools/faqs/faq.cfm?id=73&t=11>