

I feel that fermentation of sugar waste products (desugarized molasses) in coal seams is an artificially-induced chemical synthesis process that produces substantial amounts of methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>), and this process has implications for commercial production of CH<sub>4</sub> and recapture of CO<sub>2</sub> (Barnhardt et al., 2017). The methane is produced as renewal natural gas that is used in electricity generation and transportation, and the CO<sub>2</sub> produced remains sequestered in the coal as it has a higher affinity for CO<sub>2</sub> than CH<sub>4</sub> does (Shi and Durucan, 2005). This process of generating CO<sub>2</sub> through fermentation of desugarized molasses and then sequestering the CO<sub>2</sub> in the same coal should be eligible for the 45Q tax credit. Do we need to follow-up with the Department of Energy to make our case or can we deal directly with the IRS to get this insitu CO<sub>2</sub> generation (from chemical synthesis of desugarized molassess) and CO<sub>2</sub> sequestration process included in the language of 45Q, to allow for tax credits to the taxpayer that operates this process? Please let me know how I can pursue this.

Best regards,

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