

Table 4. Overview of indirect impacts from transport of LNG by rail or truck.

Effect	Alternative 1: LNG by Motor Vehicle	Alternative 2: LNG by Rail
Methane Production	Viable delivery options facilitates marketing and incentivizes production	Less costly/more efficient rail facilitates marketing and further incentivizes production
Manufacture	Fabrication by existing manufacturing plants of new MC-338s (3x more needed than DOT-113s); operational impacts of existing plants would be regulated by permits or existing laws	Fabrication by existing manufacturing plants of new DOT-113s; operational impacts of existing plants would be regulated by permits or existing laws
Quantity of tanks	3x more cargo tanks to transport LNG	Fewer tanks to transport LNG
Wear of highway	Increased wear on highway and roads (cost to taxpayers)	n/a
Wear of rails	n/a	Increased wear on rails (cost to railroads)
Congestion	Increased road congestion due to increased quantity of vehicle	Possible increased road congestion at railroad crossings with grade crossings
Noise/Vibration	Increased noise and vibration along route	Increased noise and vibration along rail right of way with increased rail traffic <sup>31</sup>
Construction of road/rail	Construction of new access roads or reconstruction of existing roads to tolerate increased loads/traffic	Construction of new spur lines to facilities (impacts to be addressed by existing regulatory approval requirements)

Although indirect effects and cumulative impacts associated with the approval of this special permit may present themselves (e.g., construction of ancillary loading and unloading equipment), these activities are generally driven by numerous market forces and regulated by local/state/federal entities which may require environmental assessments and permitting. Because this special permit would allow ETS to add a new use to an existing set of infrastructure (rail lines) and may require minor modifications to existing or new infrastructure to accommodate new rail loading or receiving facilities, it is hard to identify any reasonably foreseeable future actions that might result in cumulative impacts from the issuance of the special permit. The special permit would only approve an additional packaging for the transport of LNG, thereby providing an additional option of transport.

<sup>31</sup> Wolfe, Steven L. "Rail Transit Noise and Vibration Impacts—Why Environmental Planning Doesn't Always Work." Proceedings of ACOUSTICS 2011, November 2-4, 2011.