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BHP BMA Coal Australia
Canadian Natural Resources Ltd.
Cliffs Natural Resources
De Beers Canada Inc.
Foundation Coal West Inc.
Freeport McMoRan Copper & Gold
Iron Ore Co. of Canada
Kinross Fort Knox Mine
KMC Mining Corporation
Ledcor CMI
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SMART Surface Mining Association
For Research & Technology

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Teck Resources Limited
Thiess Pty Ltd
TransAlta Corporation
University of Alberta
University of Arizona
University of British Columbia
URS Corporation, Washington Div.

April 2009

To whom it may concern:

Subject: Diesel Emissions Related to the Operation of Large Mobile Equipment in Surface Mining Operations.

This memorandum outlines the position of SMART with respect to diesel emissions related to the operation of large mobile equipment in surface mining operations. SMART is a non-profit organization set up to promote research, information sharing, learning and collaboration among 27 member companies and 4 universities.

SMART is aware that a report entitled "Evaluation of Vehicle Emissions Reduction Options for the Oilsands Mining Fleet" has been provided to the "Oil, Gas and Alternative Energy Division, Environment Canada" as a reference on the subject of heavy surface mining equipment emissions. The body of the report surveys the many emissions control technologies being considered, in addition to their stage of development and application to improve engine emission performance. The executive summary in the report, however, alternately represents that many of these technologies can be readily applied to reduce emissions from larger class mining equipment now and into the future.

SMART observes that many of the technologies referenced in the cited report are not proven or developed to a degree or scale that makes them imminently feasible for retrofit or practical to install on large mining equipment. SMART also supports that incorporation of emissions technologies must proceed in a diligent manner to ensure that potential reliability and performance impacts do not substantively reduce productivity, which acts to increase emissions per tonne as additional equipment is brought on to meet production requirements.

This area of endeavor is not new to the SMART organization. In support of responsible resource development, SMART has commissioned studies on emissions performance improvement over time demonstrating a 30% reduction in emissions per horsepower over 3 decades in an unregulated environment. The effort to responsibly design larger and higher efficiency equipment provides lower emissions per unit of material moved while improving productivity and cost performance.

Additionally SMART is in the business of mining and material handling, and understands that engine development and environmental performance improvements are within the core business of engine suppliers to deliver. SMART has encouraged this development, and as an industry working group continues to support testing programs at mines on behalf of industry. The approach will ensure continued reductions in diesel emissions while enabling industry and engine manufacturers to focus on their individual responsibilities and expertise.

SMART endorses an approach that will see the mining industry use the latest proven technology available when purchasing equipment, which occurs on a regular basis as units are retired from service when end-of-life criteria are met. On existing equipment, SMART will maintain equipment as per manufacturers design and evaluate upgrades that are proven and practical.

The SMART organization will also add diesel emissions performance on mining equipment as a standing agenda item to its biannual meetings in support of accelerating continuous improvement and coordinating the efforts of operators, suppliers and researchers in advancing this important work. Conversely, SMART is concerned that the current state of many of the recently reported emission reduction technologies does not warrant their immediate application to large mining equipment.

Respectfully,

Gord Winkel
Chairperson, SMART