JOHNSON MATTHEY INC.

456 DEVON PARK DRIVE WAYNE PA 19087 USA **T** +1 610 341 8300 **F** +1 610 341 8258 www.jmcatalysts.com



April 15, 2014

VIA ELECTRONIC FILING

California Air Resources Board 1001 I Street Sacramento, CA 95812

Re: Johnson Matthey, Inc. Comments on the Proposed Amendments to the Regulation to

Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria

Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles

Dear Board Members,

Johnson Matthey, Inc. ("JM") is a specialty chemicals company that, among other things, is a world leading catalyst manufacturer for mobile and stationary exhaust emission control systems. JM has been a participant California Air Resources Board's ("Board") Truck & Bus Regulation (the "Program") since its adoption in 2008 providing emission control systems to heavy-duty trucks operating in California. JM appreciates the opportunity to provide the Board with comments in response to Staff's March 7, 2014 proposed amendments to the Program. As explained below, changes to the existing rule should be minimized as much as possible. However, in light of the current economic pressures on fleet owners, JM supports Staff's proposed amendments to the Program as we agree that the revisions strike a reasonable balance between providing regulatory flexibility while preserving much of the Program's benefits. JM would have grave concerns if the Board decided to further revise the program beyond Staff's recommendations now or in the future as there are serious ramifications which could not only irrevocably destabilize the Program, but undermine other Board-related air emission programs going forward.

Further Changes beyond Staff's Recommendations Could Undermine the Program

Any Board decision that provides revisions to the Program beyond Staff's recommendations would inject significant regulatory uncertainty into the market and result in serious, negative consequences. First, considering that the Program is rapidly approaching major compliance milestones, further modification of requirements in the program would be unfair to those fleet owners that have already come into compliance. By continuing to delay deadlines for those fleet owners who have not complied with Program requirements, the Board will put those compliant fleet owners at a serious competitive commercial disadvantage.

¹ Set forth in Staff's March 7, 2014 Report ("Staff Report").



Second, regulatory uncertainty puts significant strain on those market participants that provide the emission control systems (e.g., emission control manufacturers, distributors and installers). From the point of view of an emission control manufacturer, there is significant business and manufacturing planning involved in participating in California's retrofit market. Over the last several months, we have heard of an inordinate amount of order cancellations by fleet owners. We are attributing this development to fleet owners who are not yet compliant deciding to delay installations until a Board determination is finalized in this proceeding. Order fluctuations wreak havoc on our manufacturing planning activities and puts considerable strain on our ability to adequately stock distributors to enable them to meet last minute customer demand.

Additionally, emission control manufacturers, including JM, have invested significant capital (research and development; commercial and technical services; and certification and compliance costs) to be able to participate in the California retrofit market. An ongoing possibility of multiple Program revisions with the potential to substantially reduce demand would create enormous challenges for emission control manufacturers attempting to recoup their capital investments. In fact, major changes that reduce the overall market opportunity could actually increase the costs for those fleet owners who have not yet complied with the Program. Emission control manufacturers, not immune to normal business demands, price systems as a function of their overhead costs. If the number of systems demanded by the market is dramatically reduced, manufacturers may have to raise their price per system to compensate for that lost cost recovery opportunity. Further, several manufacturers and installers rely heavily on retrofit system sales to allow them to continue business operations. A sharp decline in demand would likely cause these manufacturers and installers to cease operations. This could ultimately impact the ability of owners of many of the 30,000 retrofits to access parts and service, which is necessary for the devices to continue to provide emission benefits.

Moreover, regulatory uncertainty can also raise the costs to fleet owners. As with any marketplace, California's retrofit market will reach an equilibrium that balances risk and returns. Multiple Program revisions inject a great deal of regulatory uncertainty for all market participants, including emission control manufacturers. Increased regulatory uncertainty results in increased risk for manufacturers that they may not recover their capital investment. As such, manufacturers' cost structure will need to incorporate increased premiums to hedge against this increased market risk, which will obviously put upward pressure on the price of retrofit systems to fleet owners. Otherwise, if the returns are not commensurate with the risk associated with their investment, market participants will shift capital and resources to other business opportunities that better align risk and returns.

There could be Long-Reaching Negative Effects if the Program is Destabilized

Confronted with possibly the most severe public health concerns stemming from air pollution in the country, the Board has routinely been at the forefront of air emission policy managing robust and cost-effective emission reduction initiatives, including the Program at issue here. While there is no doubt that the Board has made tremendous strides, California's continuing air emission challenges will require the Board to continue its successful pursuit of pollution reductions. But, dramatic changes could





destabilize the Program and set a dangerous precedent that triggers a "domino effect" of perverse incentives that will hamstring future Board initiatives. Going forward, we may not see a steady stream of compliance-driven activities from targeted industries. Instead, targeted industries, motivated by a desire not to be commercially disadvantaged, will be incented to delay engaging in compliance activities right up until the deadlines approach anticipating the possibility that the Board will provide regulatory flexibility at the eleventh hour. First and foremost, such action could jeopardize the emission benefits originally anticipated by the Board. Moreover, incentives for delayed compliance actions will place significant burdens on emission control manufacturers' manufacturing planning by back loading an overwhelming share of orders. Delayed compliance will create a disincentive for research and development investment to bring innovative technologies and the most cost-effective solutions to market because there will not be a clear picture of the overall market opportunity. In the end, such a paradigm may discourage many emission control manufacturers from participating in the market at all. All of these factors will put upward pressure on the costs for the emission control equipment, increase the costs of compliance for targeted market participants, and ultimately increase prices for California consumers.

Retrofit Emission Control Systems Have Proven to be Effective

As explained in the Staff Report,² during the October 24, 2013 Board hearing, stakeholders expressed concern regarding the ability of some small fleets, lower mileage fleets, and rural area fleets, to make the upgrades needed to comply with the Program. Underlying the debate on whether the Program should undergo changes to address these fleet owners' concerns, there were allegations that the retrofit emission control systems are not effective and come at an improperly high cost.

The experience gained from the Program's operation to date – as well as more than 300,000 installed worldwide – clearly demonstrates that both claims are meritless. First, JM, as one of largest catalyst manufacturers in the world, has a proven track record of over thirty years in the emission control business, in both original and retrofit applications. In bringing that substantial experience to California, JM has provided diesel particulate filter systems since the advent of the Program and currently has Board-verified systems that are being sold in the market at great success.³ The warranty data aggregated by the Manufacturers of Emission Controls Association ("MECA") for passive Level 3 VDECS sales from 2010-2012 shows that total valid warranty claims was 5.5% of sales with the number of valid filter claims at only 1%.⁴ A 1% claim rate is actually on par or better than warranty claim rates for filters in original equipment applications. In an overwhelming majority of the circumstances where there are DPF system failures, it is due to system issues upstream of the DPF. This data is consistent with the ARB Staff's review of warranty reports. As such, it is crucial that fleet owners have certified technicians to properly install the emission control systems, and routinely engage in preventative

³ Johnson Matthey CRT Filter® and A_{dv}CCRTTM system

² Staff Report at 9.

⁴ See Statement of the Manufacturers of Emission Controls Association on the Air Resources Board's Proposed Amendments to the Truck and Bus Regulation, dated April 21, 2014 ("MECA Comments").



maintenance and bring trucks in for maintenance when their OBD systems signal that there is a system malfunction.⁵

Additionally, there are 25 manufacturers with systems verified by the Board and currently out in the market. This figure significantly trumps the amount of those manufacturers that sell in the original equipment marketplace. This robust competition places significant downward pressure on price to the benefit of fleet owners.

JM Supports Staff's Recommendations with Minor Revisions

JM supports Staff's proposed revisions since, in our view, they strike a reasonable balance between increasing regulatory flexibility without undermining the ultimate goals of the Program. However, JM respectfully requests that the Board consider additional provisions to provide necessary clarity and avoid the potential for gaming. For instance, one of Staff's recommendations is to provide additional time for small fleets and economically challenged fleet owners to comply with the rationale that additional time could allow these fleet owners to receive public incentive funding. In its November 13, 2013 advisory, the Board described how fleet owners who made good faith efforts to comply could receive additional time to meet the 2014 PM requirements. One such good faith effort was unsuccessful application for a loan or other financing for a PM filter or replacement truck. While JM understands the spirit of the provision, the Board should delineate more specific standards to guide Staff's review of such requests to ensure that loan/financing institution is credible and had the means to support the loan/financing request. Otherwise, the loan/financing provision could be manipulated to be used as an improper delay tactic to avoid completing retrofit installations. Finally, JM also supports Board efforts to bolster its retrofit enforcement program to ensure a level playing field for compliant fleet owners.

⁸ *Id*.



⁵ See *id*.

⁶ Staff Report at 12.

⁷ *Id*.



JM sincerely appreciates the opportunity to provide its comments in the proposed rulemaking and welcomes any opportunity to collaborate with the Board, Staff and stakeholders to ensure that the Program continues to provide Californians with the anticipated emission benefits at the lowest possible cost.

Respectfully submitted, JOHNSON MATTHEY, INC.

Ajay Joshi Retrofit Commercial Manager Ajay.Joshi@jmusa.com Tel: (484) 320-2225