1. Terms of Reference

Members endorsed the Terms of Reference membership of the Nano Diesel Particulate Matter Working Group as presented, subject to the following revisions:

- the addition of a named member of the Chamber of Minerals and Energy (CME), once nominated; and
- ChemCentre representation to be Dr Silvia Black with Dr Steve Wilkinson as an alternate.

2. Kalgoorlie presentation

Members noted that the Department of Mines and Petroleum had earlier delivered a presentation to members of the CME in Kalgoorlie to encourage participation in a proposed nDPM research project. The Chair will meet with Perth based senior members of the CME in January 2017 to further discuss participation.

3. Research options

Members noted that the research and development members of the nDPM Working Group had recently discussed proposed research with the Minerals Research Institute of Western Australia (MRIWA). Since MRIWA legislation excludes medical/health projects, two parallel research studies are proposed. One will focus on mining operational aspects of nDPM to meet MRIWA funding application requirements and the other will cover the medical/health research.

Members discussed that consideration should be given to the depth of mine sites used in the research. Data collected of the effects of nDPM at different atmospheric pressures may be used to predict the effects of matter in deeper mines of the future. Members also discussed the possibility of using one mine site in a pilot study rather than collecting less data from multiple sites.

4. Funding

Members noted that Treasury funding has been secured to facilitate the two parallel research studies proposed and it is hoped this will be supplemented with additional funds from MRIWA upon submission of a successful research funding application. Members agreed that the research and development members of the nDPM Working Group would prepare a draft research proposal, and once endorsed by the nDPM Working Group, would submit the proposal to MRIWA for consideration at the next board meeting in February 2017.

5. Other Business

Tier 4 engines

Tier 4 refers to a generation of air emission standards administered by the Environmental Protection Authority that apply to the manufacture of new diesel engines used in off-road equipment in the United States. Essentially, it is part of a government plan to improve air
quality and requires manufacturers to reduce the levels of particulate matter and nitrous oxides emitted by existing generation diesel engines.

Members discussed that no research has yet been conducted into the nDPM emissions of Tier 4 engines. This is despite some industry stakeholder held belief that they may potentially be more harmful than that of older engines. This is due to their design for primarily on land use rather than underground use.

6. **Next meeting: late March 2017, date to be confirmed.**

For further information on the Nano Diesel Particulate Matter Working Group, please email RSDCommittees@dmp.wa.gov.au.