

## Nano Diesel Particulate Matter Working Group

### Revised Terms of Reference

#### Introduction

The Mining Industry Advisory Committee (MIAC) was established in April 2005 under section 14A of the *Occupational Safety and Health Act 1984* (the OSH Act), as an advisory body to the Minister responsible for administration of the OSH Act and the Minister responsible for administration of the *Mines Safety and Inspection Act 1994* (MSIA Act), on matters relating to occupational safety and health in the mining industry.

Diesel particulates are a known hazard for mining operations, especially in underground mines where widespread use of diesel vehicles and equipment emphasises that ventilation is critical.

Monitoring of elemental carbon (EC) has been a convenient measure of diesel emissions, but it appears to be inadequate in regard to indicating nano diesel particulate matter (nDPM). In addition, EC is easily contaminated by dust and other particles in the underground mining environment, and can absorb undetected hydrocarbon liquids through its surface.

Research around the world suggests nDPM is a harmful carcinogenic component of exhaust emissions that can be absorbed through the lungs into the bloodstream. An evaluation of nDPM would assist the development of control measures to protect workers in underground mines and other environments where nDPM is generated.

The Department of Mines and Petroleum (DMP) conducted a preliminary mass-based evaluation of exposure in Western Australian underground mines. This research demonstrated to mine operators the need to develop Diesel Emission Management Plans, based on DMP's Management of diesel emissions in Western Australian mining operations guideline to reduce emissions. However, DMP has not carried out any study of nDPM exposure to workers in underground mines.

To assist the MIAC to gain a better understanding of the exposure effects of nDPM on workers, it was agreed by MIAC early in 2016 to establish a Nano Diesel Particulate Matter Working Group.

#### 1. Role of the Working Group

- 1.1 The role of the Working Group is to provide information through the MIAC to government and industry on:
  - (a) a more meaningful marker for the measurement of nDPM;
  - (b) the sizing of particulates and occurrence of other contaminants;
  - (c) the health effects of exposure to nDPM on workers;
  - (d) the possibility of developing after-treatment devices capable of removing carcinogenic/mutagenic diesel exhaust products; and
  - (e) other mitigation initiatives to reduce the risks of exposure to nDPM.

- 1.2 In addition, the Working Group will coordinate applications for funding for research initiatives into nano diesel particulate matter and make recommendations to the MIAC.
- 1.3 The Working Group **will not** become involved in the day-to-day operations of the MIAC or the Department of Mines and Petroleum.
- 1.4 The Working Group is to provide regular reports on its progress to the MIAC.
- 1.5 A final report of the Working Group is to be submitted to the MIAC on or before 30 July 2018.

## 2. Membership

- 2.1 The Working Group will comprise the following as a minimum:
  - (a) at least **one** member of MIAC as identified in section 4(1) of the *Mines Safety and Inspection Act 1994*, nominated by the Minister responsible for the administration of that Act, **or** the State Mining Engineer as defined in section 6(1) of the *Mines Safety and Inspection Act 1994* as the government member;
  - (b) at least **one** member of those MIAC members appointed on the nomination of the Chamber of Minerals and Energy of Western Australia and the Association of Mining and Exploration Companies Inc; and
  - (c) other academic and technical experts who have knowledge of or experience in nano diesel particulate matter, as deemed necessary and appropriate by the MIAC.
- 2.2 The chairperson of the Working Group is to be one of the members appointed to the MIAC under 2.1(a).
- 2.3 The Working Group may choose to allow its members to nominate a designated proxy in the event the member is unable to attend, other than for a member appointed under 2.1(a).

## 3. Term

The Working Group will operate until such time as the MIAC determines it has completed its objectives, but will cease on 30 July 2018.

## 4. Quorum

A meeting of the Working Group requires a quorum of **half** its membership, **and one of the members** appointed under 2.1(a).

## 5. Frequency of meetings

Meetings of the Working Group will be as agreed by the members.

A special meeting of the Working Group may be convened by the chairperson at any time.

Where the chairperson considers it necessary, an out of session decision may be made by the members, in writing, and that decision will be presented to the next meeting for ratification.

## **6. Decision Making**

The Working Group's advice and/or recommendations, which are to be presented to the MIAC, will be made by consensus.

Where consensus cannot be reached, the dissenting views of the member/s will be recorded in the minutes and those views will also be presented to the MIAC by the chairperson.

## **7. Declaration of Interests**

A member who has a material interest in a matter being considered or about to be considered by the Working Group must, as soon as possible after the relevant facts have come to the member's knowledge, disclose the nature of the interest at a meeting of the Working Group.

Where an actual or perceived conflict of interest is declared, the declaration will be recorded in the minutes of that meeting and entered in a Conflict of Interest Register.

Members will represent the interests of their constituents and should refrain from raising issues of a personal nature at meetings. Such issues can be raised through the usual government and/or departmental channels.

## **8. Minutes of meetings**

Minutes of each meeting are to be recorded and maintained as an official record.

The minutes will be in the form of summarised meeting notes and will provide evidence of the Working Group's decisions and actions, including the delegation of tasks arising from its meetings.

The draft minutes will be circulated within one week of the meeting, as far as is practicable, for members' information only.

The draft minutes will be presented in the agenda papers for ratification at the next meeting of the Working Group.

## **9. Confidentiality**

It is important for members to feel free to contribute honestly and openly, and that there is a level of trust between the members.

All electronic and written documents are provided to Working Group members with the expectation that members will distribute these documents responsibly and only for obtaining feedback from the groups they represent.

No views, documents or information presented during, or outside of, the Working Group's meetings are to be made available to the media without the explicit agreement of the Chair of the Mining Industry Advisory Committee.

## **10. Code of Conduct**

Members appointed to the Working Group are to act in accordance with the Code of Conduct established by the Commission for Occupational Safety and Health, which is based on the *Western Australian Public Sector Code of Ethics*.

## 11. Communication Protocol

Public comment includes comment made in circumstances where it is reasonable to expect that the comment may reach the wider community. This may include comments made on the internet, in speeches, on the radio, or in the press.

Working Group members will not be required to make public comments concerning the Group, MIAC or the department. This role is likely to be fulfilled by the relevant Ministers or the Directors General.

Members who receive requests or queries from the media are to advise the chairperson of the Working Group of the request. The chairperson will then discuss the request with the chairperson of MIAC before any decision is made as to making a public comment and by whom.

## 12. Secretariat Support

Executive and administrative support will be provided to the chairperson and the Working Group by the Department of Mines and Petroleum, including:

- (a) advising members of the meeting date by way of a meeting request;
- (b) calling for agenda items four weeks in advance;
- (c) preparing and distributing the agenda and supporting papers for each meeting at least two week priors to the meeting;
- (d) taking minutes of each meeting; and
- (e) coordinating any follow up action as determined in that meeting.

This secretariat support may comprise one or both of the following:

- (i) a senior level Executive Officer – to provide advice on policy and governance matters to the Working Group and to follow up on actions arising from meetings; and
- (ii) a Minute Secretary – to manage the administrative tasks associated with arranging meetings, preparing agenda papers and recording the minutes of meetings.

The meetings may be audio-recorded for the purpose of producing accurate written minutes of the meeting. The recordings will be deleted once the minutes are confirmed as the official record of the meeting.

## 13. Queries

Any queries in relation to the Working Group should be directed to the Chairperson or the Secretariat in the first instance.

## NANO DIESEL PARTICULATE MATTER WORKING GROUP MEMBERSHIP

Role	Name	Current position
<b>Chairperson</b> <small>(MIAC member as identified in section 4(1) of the <i>Mines Safety and Inspection Act 1994</i>, nominated by the Minister responsible for the administration of that Act, or the State Mining Engineer as defined in section 6(1) of the <i>Mines Safety and Inspection Act 1994</i> as the government member)</small>	<b>Mr Simon Ridge</b>	Executive Director Department of Mines and Petroleum
<b>Government members</b>	<b>Dr Silvia Black</b>	ChemCentre
	<b>Mr Andrew Chaplyn</b>	State Mining Engineer Department of Mines and Petroleum
	<b>Mr Junior Oding</b>	Inspector Of Mines Department of Mines and Petroleum
	<b>Dr Steve Wilkinson</b>	ChemCentre
<b>Expert members</b>	<b>Mr Chris Davis</b>	Mining Consultant
	<b>Emeritus Professor Odwyn Jones</b>	Retired
	<b>Professor Ben Mullins</b>	School of Public Health Curtin University
	<b>Professor Bill Musk</b>	School of Population Health University of Western Australia
	<b>Dr Susan Peters</b>	School of Population Health University of Western Australia
	<b>Dr Alison Reid</b>	School of Public Health Curtin University
	<b>Professor Sam Spearing</b>	WA School of Mines Curtin University (Kalgoorlie)
<b>Secretariat – Executive Officer</b>	<b>Mr David Eyre</b> <b>Mr Peter Payne</b>	Resources Safety Division Department of Mines and Petroleum