Chapter D3 _____ Health Impact

Summary of key findings:

This chapter details potential health effects associated with the additional activity enabled by the Melbourne Airport's Third Runway project.

Overall, when comparing the 2046 Build versus No Build scenarios, key conclusions are:

- Impacts due to daytime aircraft noise are expected

 particularly annoyance and interference with
 communication, such as making speech hard to
 understand. The potential health effects of high
 levels of annoyance due to daytime aircraft noise
 are projected to be of a moderate level of severity.
 Most of this effect will occur in the lower ANEC
 contour bands due to the higher numbers of people
 living within them.
- Impacts specific to night-time noise are also expected, especially sleep disruption. Although airport operating options and mitigations are available to reduce the overall impacts of sleep disturbance and noise-induced awakenings (compared to not building M3R), overall night noise impacts have been assessed as minor to moderate.
- The M3R Build scenario provides a significant benefit over the No Build scenario in permitting alternative runway operation modes. These options will allow

significant noise mitigation and noise sharing opportunities that will minimise night-time noise over the Greater Melbourne urban area.

- M3R will generate employment opportunities, both direct (at the airport) and indirect (in related industries such as tourism, hospitality, logistics etc). The health benefits attributable to employment are projected in terms of avoided mortality- and to community, family and individual health.
- The severity of the potential health effect of myocardial infarction (also known as a heart attack) arising from aircraft noise is projected to be negligible.

Overall, from a community-wide health outcome perspective, the benefits afforded through employment (thus mortality-avoidance) outweigh the less-serious negative health outcomes of sleep disturbance, annoyance and communication interference. However, it is important not to disregard the impact of these less-serious noise effects on those affected.