### Statement of Principles concerning

# MALIGNANT NEOPLASM OF THE LUNG No. 17 of 2006

for the purposes of the

Veterans' Entitlements Act 1986 and Military Rehabilitation and Compensation Act 2004

#### **Title**

1. This Instrument may be cited as Statement of Principles concerning malignant neoplasm of the lung No. 17 of 2006.

#### **Determination**

- 2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
  - (a) revokes Instrument No. 35 of 2001 and
  - (b) determines in its place this Statement of Principles.

#### Kind of injury, disease or death

- 3. (a) This Statement of Principles is about malignant neoplasm of the lung and death from malignant neoplasm of the lung.
  - (b) For the purposes of this Statement of Principles, "malignant neoplasm of the lung" means a primary malignant neoplasm arising from the cells of the trachea, bronchus, or lung. This definition excludes soft tissue sarcoma, non-Hodgkin's lymphoma, Hodgkin's lymphoma, carcinoid tumour and malignant neoplasm of the pleura.
  - (c) Malignant neoplasm of the lung attracts ICD-10-AM codes C33, C34.

(d) In the application of this Statement of Principles, the definition of "malignant neoplasm of the lung" is that given at paragraph 3(b) above.

#### **Basis for determining the factors**

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that malignant neoplasm of the lung and death from malignant neoplasm of the lung can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces under the VEA, or members under the *Military Rehabilitation and Compensation Act* 2004 (the MRCA).

#### Factors that must be related to service

5. Subject to clause 7, at least one of the factors set out in clause 6 must be related to the relevant service rendered by the person.

#### **Factors**

- 6. The factor that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting malignant neoplasm of the lung or death from malignant neoplasm of the lung with the circumstances of a person's relevant service is:
  - (a) being:
    - (i) on land in Vietnam, or
    - (ii) at sea in Vietnamese waters, or
    - (iii) on board a vessel and consuming potable water supplied on that vessel, when the water supply had been produced by evaporative distillation of estuarine Vietnamese waters,

for a cumulative period of at least thirty days, at least five years before the clinical onset of malignant neoplasm of the lung; or

- (b) for each of the following types of malignant neoplasm of the lung:
  - (i) squamous cell carcinoma,
  - (ii) small cell carcinoma,
  - (iii) malignant neoplasm of undetermined histology,
  - (iv) large cell carcinoma, or
  - (v) carcinosarcoma;

smoking at least one half of a pack year of cigarettes or the equivalent thereof in other tobacco products, before the clinical onset of malignant neoplasm of the lung, where smoking

- commenced at least five years before the clinical onset of malignant neoplasm of the lung; or
- (c) for adenocarcinoma of the lung only, smoking at least three pack years of cigarettes or the equivalent thereof in other tobacco products, before the clinical onset of malignant neoplasm of the lung, where smoking commenced at least five years before the clinical onset of malignant neoplasm of the lung; or
- (d) being in an atmosphere with a visible tobacco smoke haze in an enclosed space for at least 5000 hours, before the clinical onset of malignant neoplasm of the lung, where the first exposure to a visible tobacco smoke haze commenced at least five years before the clinical onset of malignant neoplasm of the lung; or
- (e) inhaling respirable asbestos fibres in an enclosed space at the time material containing asbestos fibres was being applied, removed, dislodged, cut or drilled, at least five years before the clinical onset of malignant neoplasm of the lung; or
- (f) inhaling respirable asbestos fibres in an open environment for a cumulative period of at least 1000 hours before the clinical onset of malignant neoplasm of the lung:
  - (i) at the time material containing asbestos fibres was being applied, removed, dislodged, cut or drilled; and
  - (ii) the first inhalation of asbestos occurred at least five years before the clinical onset of malignant neoplasm of the lung; or
- (g) having asbestosis at the time of the clinical onset of malignant neoplasm of the lung; or
- (h) being within 100 metres of an industrial coke oven for a cumulative period of at least 4500 hours at least five years before the clinical onset of malignant neoplasm of the lung; or
- (i) being heavily exposed to diesel engine exhaust for a cumulative period of at least 10 000 hours, at least five years before the clinical onset of malignant neoplasm of the lung; or
- inhaling, ingesting or having cutaneous contact with a chemical agent contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD) for a cumulative period of at least thirty days, at least five years before the clinical onset of malignant neoplasm of the lung; or

- (k) inhaling mustard gas at least five years before the clinical onset of malignant neoplasm of the lung; or
- (l) drinking at least 350 kilograms of alcohol within a continuous 25 year period before the clinical onset of malignant neoplasm of the lung; or
- (m) having received a cumulative equivalent dose of 0.05 Sievert of atomic radiation to the lung, where this dose was accumulated at least five years before the clinical onset of malignant neoplasm of the lung; or
- (n) having received a course of therapeutic radiation to the thorax before the clinical onset of malignant neoplasm of the lung, where the first exposure occurred at least five years before the clinical onset of malignant neoplasm of the lung; or
- (o) having asthma, chronic bronchitis or emphysema at least five years before the clinical onset of malignant neoplasm of the lung; or
- (p) being exposed to at least 120 Working Level Months (WLM) of radon in an enclosed space, before the clinical onset of malignant neoplasm of the lung, where the first exposure to radon occurred at least five years before the clinical onset of malignant neoplasm of the lung; or
- (q) having silicosis at the time of the clinical onset of malignant neoplasm of the lung; or
- (r) inhaling respirable crystalline silica dust:
  - (i) for at least four hours per day on more days than not for at least two years or for a cumulative period of at least 1500 hours:
  - (ii) in an environment where material containing crystalline silica was being removed, dislodged, cut or drilled; and
  - (iii) the first inhalation of crystalline silica occurred at least five years

before the clinical onset of malignant neoplasm of the lung; or

- (s) inhaling fumes of a substance from the specified list:
  - (i) for at least four hours per day on more days than not for at least two years or for a cumulative period of at least 1500 hours, before the clinical onset of malignant neoplasm of the lung; and
  - (ii) the first inhalation of fumes occurred at least five years before the clinical onset of malignant neoplasm of the lung; or
- (t) having berylliosis at the time of the clinical onset of malignant neoplasm of the lung; or
- (u) inability to obtain appropriate clinical management for malignant neoplasm of the lung.

#### Factors that apply only to material contribution or aggravation

7. Paragraph **6(u)** applies only to material contribution to, or aggravation of, malignant neoplasm of the lung where the person's malignant neoplasm of the lung was suffered or contracted before or during (but not arising out of) the person's relevant service.

#### **Inclusion of Statements of Principles**

8. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

#### Other definitions

**9.** For the purposes of this Statement of Principles:

"a course of therapeutic radiation" means one or more fractions (treatment portions) of ionising radiation administered with the aim of achieving palliation or cure with gamma rays, x-rays, alpha particles or beta particles;

#### "a substance from the specified list" means:

- (i) inorganic arsenic;
- (ii) cadmium;
- (iii) nickel;
- (iv) hexavalent chromate;
- (v) beryllium;
- (vi) bis(chloromethyl)ether; or
- (vii) chloromethyl methyl ether;

"alcohol" is measured by the alcohol consumption calculations utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink;

"an enclosed space" means a substantially enclosed area, for example the interior of a building, ship or aircraft, a covered workshop or factory;

#### "atomic radiation" means ionising radiation excluding;

- (i) natural background radiation;
- (ii) therapeutic radiation; and
- (iii) radiation from diagnostic procedures;

#### "being:

- (i) on land in Vietnam, or
- (ii) at sea in Vietnamese waters," means service in at least one of the areas and at the times described in Items 4 and 8 of Schedule 2 of the VEA;

#### "being heavily exposed to diesel engine exhaust" means:

- (i) being an occupant in an enclosed diesel powered vehicle cabin contaminated with diesel fumes; or
- (ii) working in an enclosed space where diesel powered engines or motors are being operated; or
- (iii) repairing and/or servicing diesel engines;

"berylliosis" (synonymous with chronic beryllium disease) means a granulomatous disease usually involving the lungs, but which may involve the skin or other structures, and is induced by a delayed hypersensitivity reaction to beryllium fumes;

"cumulative equivalent dose" means the total equivalent dose of radiation from all types of ionising radiation. It accounts for the differences in biological effectiveness of various types of radiation and allows doses from different radiations to be combined. Each component is calculated by multiplying the absorbed dose in a particular tissue or organ for a given type of radiation by the radiation weighting factor for that radiation. The unit of equivalent dose is the Sievert (Sv);

"death from malignant neoplasm of the lung" in relation to a person includes death from a terminal event or condition that was contributed to by the person's malignant neoplasm of the lung;

**"estuarine Vietnamese waters"** means at least one of the waterways or harbours in the relevant areas described in Items 4 and 8 of Schedule 2 of the VEA;

"fumes" means combustion products, aerosols, vapours or dust arising through industrial processes or from workplace practices that involve the refining, manufacture or use of the stated material;

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM), Fourth Edition, effective date of 1 July 2004, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 1 86487 594 1;

## "inhaling, ingesting or having cutaneous contact with a chemical agent contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD)" means:

- (a) decanting or spraying;
- (b) cleaning or maintaining equipment used to apply;
- (c) being sprayed with;
- (d) handling or sawing timber treated with;
- (e) being in an environment shrouded in dust from timber treated with; or
- (f) using cutting oils contaminated with;

one of the following chemicals:

- 2,4,5-trichlorophenoxyacetic acid;
- 2,4,5-trichlorophenoxypropionic acid;
- 2,4,5-trichlorophenol;
- 2-(2,4,5-trichlorophenoxy)-ethyl 2,2-dichloropropionate;
- *o,o*-dimethyl-*o*-(2,4,5-trichlorophenyl)-phosphorothioate;
- pentachlorophenol;
- 2,3,4,6-tetrachlorophenol;
- 2,4,6-trichlorophenol;
- 1,3,4-trichloro-2-(4-nitrophenoxy)benzene;
- 2,4-dichloro-1-(4-nitrophenoxy)benzene; or
- 2,4-dichloro-1-(3-methoxy-4-nitrophenoxy)-benzene;

"pack years of cigarettes, or the equivalent thereof in other tobacco products" means a calculation of consumption where one pack year of cigarettes equals twenty tailor made cigarettes per day for a period of one calendar year, or 7300 cigarettes. One tailor made cigarette approximates one gram of tobacco or one gram of cigar or pipe tobacco by weight. One pack year of tailor made cigarettes equates to 7 300 cigarettes, or 7.3kg of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

#### "relevant service" means:

- (a) operational service under the VEA;
- (b) peacekeeping service under the VEA;
- (c) hazardous service under the VEA;
- (d) warlike service under the MRCA; or
- (e) non-warlike service under the MRCA;

"respirable asbestos fibres" means asbestos fibres less than five micrometres in diameter;

"terminal event" means the proximate or ultimate cause of death and includes:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function:

"Working Level (WL)" is any combination of radon progeny in 1 litre of air that ultimately releases 1.3 X 10<sup>5</sup> million electron volts (MeV) of alpha energy during decay;

**"Working Level Month (WLM)"** is exposure to 1 Working Level (WL) for 170 hours.

#### **Application**

**10.** This Instrument applies to all matters to which section 120A of the VEA or section 338 of the MRCA applies.

#### **Date of effect**

11. This Instrument takes effect from 10 May 2006.

Dated this	twenty-sixth	day of	April	2006
The Common Seal of the		)		
Repatriation	Medical Authority	)		
was affixed	to this instrument	)		
in the presen	nce of:	)		
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