Revocation and Determination

of

Statement of Principles concerning

MALIGNANT NEOPLASM OF THE LUNG

ICD-10-AM CODES: C33, C34

Veterans' Entitlements Act 1986

- 1. The Repatriation Medical Authority under subsection **196B(2)** of the *Veterans' Entitlements Act 1986* (the Act):
 - (a) revokes Instrument No.29 of 1996 and Instrument No.149 of 1996; and
 - (b) determines in their place the following Statement of Principles.

Kind of injury, disease or death

- 2. (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 of the trachea, bronchus or lung, attracting ICD-10-AM code C33 or C34, but excluding soft tissue sarcoma, non-Hodgkin's lymphoma, Hodgkin's disease and malignant neoplasm of the pleura.

Basis for determining the factors

3. 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.

Factors that must be related to service

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

Factors

- 5. The factors 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 are:
 - (a) 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
 - (A) smoking at least one half of a pack year of cigarettes or the equivalent thereof in other tobacco products, and
 - (B) smoking commenced at least five years before the clinical onset of malignant neoplasm of the lung; or
 - (b) for adenocarcinoma of the lung only:
 - (i) smoking at least three pack years of cigarettes or the equivalent thereof in other tobacco products, and
 - (ii) smoking commenced at least five years before the clinical onset of malignant neoplasm of the lung; or
 - (c) for malignant neoplasm of the lung other than typical carcinoid tumour of the lung:
 - (i) being in an atmosphere with a visible tobacco smoke haze in an enclosed space for a period or periods totalling at least 5,200 hours, and
 - (ii) 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
 - (d) inhaling respirable asbestos fibres in an enclosed space:
 - (i) at the time material containing asbestos fibres was being applied, removed, dislodged, cut or drilled, and

(ii) the first inhalation of asbestos fibres commenced at least 10 years

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

- (e) inhaling respirable asbestos fibres for a cumulative period of at least 1000 hours in an open environment:
 - (i) at the time material containing asbestos fibres was being applied, removed, dislodged, cut or drilled, and
 - (ii) the first inhalation of asbestos fibres commenced at least 10 years

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

- (f) suffering from asbestosis at the time of the clinical onset of malignant neoplasm of the lung; or
- (g) working within 100 metres of an industrial coke oven for at least 180 days, at least five years before the clinical onset of malignant neoplasm of the lung; or
- (h) being heavily exposed to diesel engine exhaust for a cumulative period of 10,000 hours at least five years before the clinical onset of malignant neoplasm of the lung; or
- (j) being on land in Vietnam or at sea in Vietnamese waters, for at least 30 days, at least five years before the clinical onset of malignant neoplasm of the lung; or
- (k) inhaling chemical agents contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD) for a cumulative period of at least 30 days, at least five years before the clinical onset of malignant neoplasm of the lung; or
- (m) inhaling mustard gas at least five years before the clinical onset of malignant neoplasm of the lung; or
- (n) having received a cumulative equivalent dose of 0.05 Sievert (Sv) 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
- (o) undergoing a course of therapeutic radiation to the thorax at least five years before the clinical onset of malignant neoplasm of the lung; or

- (p) suffering from asthma, chronic bronchitis or emphysema at least five years before the clinical onset of malignant neoplasm of the lung;
- (q) being exposed to at least 120 Working Level Month (WLM) of radon in an enclosed space and the first exposure to radon occurred at least five years before the clinical onset of malignant neoplasm of the lung; or
- (r) suffering from silicosis at the time of the clinical onset of malignant neoplasm of the lung; or
- (s) inhaling respirable crystalline silica dust:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 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 commenced at least 10 years

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

- (t) inhaling organic arsenic fumes:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 1500 hours, and
 - (ii) the first inhalation of organic arsenic fumes commenced at least 10 years

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

- (u) inhaling cadmium fumes:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 1500 hours, and
 - (ii) the first inhalation of cadmium fumes commenced at least 10 years

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

- (v) inhaling nickel fumes:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 1500 hours, and
 - (ii) the first inhalation of nickel fumes commenced at least 10 years

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

- (w) inhaling hexavalent chromate fumes:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 1500 hours, and

(ii) the first inhalation of hexavalent chromate fumes commenced at least 10 years

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

- (x) inhaling beryllium fumes:
 - (i) for at least four hours per day on more days than not for two years or for a cumulative period of 1500 hours, and
 - (ii) the first inhalation of beryllium fumes commenced at least 10 years

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

- (y) inhaling bis(chloromethyl)ether or chloromethyl methyl ether fumes:
 - (i) for at least four hours per day on more days than not for at least two years or for a cumulative period of 1500 hours, and
 - (ii) the first inhalation of bis(chloromethyl)ether or chloromethyl methyl ether fumes commenced at least 10 years

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

(z) inability to obtain appropriate clinical management for malignant neoplasm of the lung.

Factors that apply only to material contribution or aggravation

6. Paragraph **5**(**z**) 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; paragraph 8(1)(e), 9(1)(e), 70(5)(d) or 70(5A)(d) of the Act refers.

Inclusion of Statements of Principles

7. 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.

Other definitions

8. 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;

"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 heavily exposed to diesel engine exhaust" means:

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

"being on land in Vietnam or 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 *Veterans' Entitlements Act 1986*;

"chemical agents contaminated by 2,3,7,8-tetrachlorodibenzo-paradioxin (TCDD)" means:

- 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,
- 2,4-dichloro-1-(3-methoxy-4-nitrophenoxy)-benzene;

"cumulative equivalent dose" means the total equivalent dose of atomic radiation from all types of radiation (eg alpha, gamma). 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 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;

"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), Second Edition, effective date of 1 July 2000, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 1 86487 271 3;

"inhaling chemical agents contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD)" means

- (a) undertaking work involving decanting or spraying of 2,3,7,8-TCDD contaminated chemicals; or
- (b) undertaking work involving cleaning and maintenance of equipment used to apply 2,3,7,8-TCDD contaminated chemicals; or
- (c) having been sprayed with 2,3,7,8-TCDD contaminated chemicals; or
- (d) undertaking work involving the handling or sawing of timber treated with 2,3,7,8-TCDD contaminated chemicals; or
- (e) working in an environment shrouded in dust from timber treated with 2,3,7,8-TCDD contaminated chemicals;

"mustard gas" means dichlorodiethylsulphide, and is also known as sulphur mustard and yellow cross liquid;

"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 (being the "standard" cigarette pack contents) per day for a period of one calendar year, or 7 300 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; or
- (b) peacekeeping service; or
- (c) hazardous service;

"respirable asbestos fibre" means asbestos fibres less than 5 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 10⁵ million electron volts (MeV) of alpha energy during decay;

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

Application

9. This Instrument applies to all matters to which section 120A of the Act applied.

Dated this **Twenty-fourth** day of **May** 2001

The Common Seal of the)
Repatriation Medical Authority)
was affixed to this instrument)
in the presence of:)
	KEN DONALD
	CHAIRMAN