



**Australian Government**  
**Repatriation Medical Authority**

**Statement of Principles**  
concerning

**MYELOMA**

**No. 69 of 2012**

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 myeloma No. 69 of 2012.

**Determination**

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
  - (a) revokes Instrument No. 55 of 2003 concerning myeloma; and
  - (b) determines in its place this Statement of Principles.

**Kind of injury, disease or death**

3.
  - (a) This Statement of Principles is about **myeloma** and **death from myeloma**.
  - (b) For the purposes of this Statement of Principles, "**myeloma**" means a malignant disease of plasma cells, in which a single line of plasma cells accumulates and produces a monoclonal immunoglobulin. This definition includes plasma cell leukaemia, multiple myeloma and solitary plasmacytoma of bone or extramedullary plasmacytoma, but excludes monoclonal gammopathy of undetermined significance.
  - (c) Myeloma attracts ICD-10-AM code C90.

- (d) In the application of this Statement of Principles, the definition of "**myeloma**" 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 **myeloma** and **death from myeloma** 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 **myeloma** or **death from myeloma** with the circumstances of a person's relevant service is:
- (a) having received a cumulative equivalent dose of at least 0.1 sievert of ionising radiation to the bone marrow at least five years before the clinical onset of myeloma; or
  - (b) working as a painter for a cumulative period of at least 5000 hours before the clinical onset of myeloma, where the first exposure occurred at least ten years before the clinical onset of myeloma, and where exposure has ceased, the clinical onset of myeloma occurred within 30 years of cessation; or
  - (c) inhaling, ingesting or having cutaneous contact with a phenoxy acid herbicide from the specified list, for a cumulative period of at least 1000 hours, within a consecutive period of ten years before the clinical onset of myeloma, where the first exposure occurred at least five years before the clinical onset of myeloma; or
  - (d) 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 1000 hours, within a consecutive period of ten years before the clinical onset of myeloma, where the first exposure occurred at least five years before the clinical onset of myeloma; or
  - (e) 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 30 days, at least five years before the clinical onset of myeloma; or

- (f) being infected with human immunodeficiency virus at the time of the clinical onset of myeloma; or
- (g) having received a solid organ transplant before the clinical onset of myeloma; or
- (h) being exposed to benzene on at least 600 days within a continuous period of five years before the clinical onset of myeloma, where the first exposure occurred at least five years before the clinical onset of myeloma; or
- (i) being obese for a continuous period of at least five years within the ten years before the clinical onset of myeloma; or
- (j) inability to obtain appropriate clinical management for myeloma.

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

7. Paragraph 6(j) applies only to material contribution to, or aggravation of, myeloma where the person's myeloma 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 phenoxy acid herbicide from the specified list"** means:

- (a) 2,4-dichlorophenoxyacetic acid (2,4-D); or
- (b) 2,4,5-trichlorophenoxyacetic acid (2,4,5-T);

**"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 *Veterans' Entitlements Act 1986*;

**"being exposed to benzene"** means:

- (a) having cutaneous contact with liquids containing benzene greater than 5% by volume;
- (b) ingesting liquids containing benzene greater than 5% by volume; or
- (c) inhaling benzene vapour where such exposure occurs at an ambient 8-hour time-weighted average benzene concentration exceeding five parts per million;

**"being obese"** means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of 30 or greater.

The  $BMI = W/H^2$  and where:

W is the person's weight in kilograms; and

H is the person's height in metres;

**"cumulative equivalent dose"** means the total dose of ionising radiation received by the particular organ or tissue. The formula used to calculate the cumulative equivalent dose allows doses from multiple types of ionising radiation to be combined, by accounting for their differing biological effect. The unit of equivalent dose is the sievert. For the purposes of this Statement of Principles, the calculation of cumulative equivalent dose excludes doses received from normal background radiation, but includes therapeutic radiation, diagnostic radiation, cosmic radiation at high altitude, radiation from occupation related sources and radiation from nuclear explosions or accidents;

**"death from myeloma"** in relation to a person includes death from a terminal event or condition that was contributed to by the person's myeloma;

**"8-hour time-weighted average (TWA)"** means the averaging of different exposure levels to benzene during an average exposure period equivalent to eight hours;

**"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 *Veterans' Entitlements Act 1986*;

**"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), Seventh Edition, effective date of 1 July 2010, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 154 5;

**"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:

- (i) 2,4,5-trichlorophenoxyacetic acid;
- (ii) 2,4,5-trichlorophenoxypropionic acid;
- (iii) 2,4,5-trichlorophenol;
- (iv) 2-(2,4,5-trichlorophenoxy)-ethyl 2,2-dichloropropionate;
- (v) o,o-dimethyl-o-(2,4,5-trichlorophenyl)-phosphorothioate;
- (vi) pentachlorophenol;
- (vii) 2,3,4,6-tetrachlorophenol;
- (viii) 2,4,6-trichlorophenol;

- (ix) 1,3,4-trichloro-2-(4-nitrophenoxy)benzene;
- (x) 2,4-dichloro-1-(4-nitrophenoxy)benzene; or
- (xi) 2,4-dichloro-1-(3-methoxy-4-nitrophenoxy)-benzene;

**"potable water"** means water used for drinking water, food preparation and beverage production;

**"relevant service"** means:

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

**"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 as a painter"** means applying paints, including solvent- or water-based conventional paints, spray paints, varnishes, enamels, lacquers, water-emulsion and solution finishes, nonaqueous dispersions or organosols, plastisols, and powder coatings, during the course of activities such as building, maintenance and construction, interior and exterior decoration, artistic painting, and wood and metal painting. This definition includes mixed activities in which application of paints occurs with other tasks such as wallpapering and plastering. This definition includes activities that are preparatory to painting, such as mixing paints, maintaining painting equipment, and background preparation of surfaces for application of paint.

**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 31 October 2012.

Dated this *twenty-second* day of *October* 2012

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

PROFESSOR NICHOLAS SAUNDERS AO  
 CHAIRPERSON