Australian Government
Repatriation Medical Authority

Statement of Principles
concerning

GOITRE

No. 23 of 2013

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 goitre No. 23 of 2013.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):

(a) revokes Instrument No. 21 of 2000 concerning goitre; and

(b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3. (a) This Statement of Principles is about **goitre** and **death from goitre**.

(b) For the purposes of this Statement of Principles, **"goitre"** means an enlarged thyroid gland, which can be a diffuse enlargement, a solitary nodule or multiple nodules of the thyroid gland, and which persists for at least two weeks. Goitre causes a palpable or visible swelling in the front of the neck, or is identified by imaging assessment. The diagnosis is not dependent on abnormal thryoid hormone levels.

This definition excludes congenital goitre, acute radiation thyroiditis, acute suppurative thyroiditis, Hashimoto's thyroiditis, dyshormogenetic goitre, Graves' disease, haemorrhage or infarction of the thyroid gland and malignant neoplasm of the thyroid gland.

Basis for determining the factors

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **goitre** and **death from goitre** 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 **goitre** or **death from goitre** with the circumstances of a person's relevant service is:

(a) being iodine deficient within the six months before the clinical onset of goitre; or

(b) having iodine excess from consuming foods, dietary supplements or medications with a high content of iodine, within the six months before the clinical onset of goitre; or

(c) being treated with a drug or a drug from a class of drugs from the specified list, for a continuous period of at least six weeks, within the six months before the clinical onset of goitre; or

(d) being treated with amiodarone for a continuous period of at least four weeks, within the six months before the clinical onset of goitre; or

(e) being administered an iodine-containing radiographic contrast agent within the six months before the clinical onset of goitre; or

(f) smoking at least three pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of goitre, and where smoking has ceased, the clinical onset of goitre has occurred within three years of cessation; or

(g) having a specified form of thyroiditis at the time of the clinical onset of goitre; or

(h) having a chronic infiltrative or infectious disease of the thyroid gland at the time of the clinical onset of goitre; or

(i) for non-toxic thyroid adenoma and non-toxic multinodular goitre only,

(i) having received a cumulative equivalent dose of at least 0.2 sieverts of ionising radiation to the thyroid gland (excluding radioiodine therapy) at least one year before the clinical onset of goitre; or

(ii) undergoing a course of therapeutic radiation for cancer, where the thyroid gland was in the field of radiation, at least one year before the clinical onset of goitre; or

(j) having chronic renal disease requiring renal transplantation or dialysis at the time of the clinical onset of goitre; or

(k) being iodine deficient within the six months before the clinical worsening of goitre; or

(l) having iodine excess from consuming foods, dietary supplements or medications with a high content of iodine, within the six months before the clinical worsening of goitre; or

(m) being treated with a drug or a drug from a class of drugs from the specified list, for a continuous period of at least six weeks, within the six months before the clinical worsening of goitre; or

(n) being treated with amiodarone for a continuous period of at least four weeks, within the six months before the clinical worsening of goitre; or

(o) being administered an iodine-containing radiographic contrast agent within the six months before the clinical worsening of goitre; or

(p) smoking at least three pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical worsening of goitre, and where smoking has ceased, the clinical worsening of goitre has occurred within three years of cessation; or

(q) having a specified form of thyroiditis at the time of the clinical worsening of goitre; or

(r) having a chronic infiltrative or infectious disease of the thyroid gland at the time of the clinical worsening of goitre; or

(s) for non-toxic thyroid adenoma and non-toxic multinodular goitre only,

(i) having received a cumulative equivalent dose of at least 0.2 sieverts of ionising radiation to the thyroid gland (excluding radioiodine therapy) at least one year before the clinical worsening of goitre; or

(ii) undergoing a course of therapeutic radiation for cancer, where the thyroid gland was in the field of radiation, at least one year before the clinical worsening of goitre; or

(t) having chronic renal disease requiring renal transplantation or dialysis at the time of the clinical worsening of goitre; or

(u) inability to obtain appropriate clinical management for goitre.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(k) to 6(u)** apply only to material contribution to, or aggravation of, goitre where the person's goitre 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 chronic infiltrative or infectious disease" means:

(a) amyloidosis;
(b) haemochromatosis;
(c) *Pneumocystis carinii* infection;
(d) sarcoidosis;
(e) scleroderma;
(f) systemic lupus erythematosus; or
(g) tuberculosis;

"a drug or a drug from a class of drugs from the specified list" means:

(a) a medication containing iodine;
(b) carbamazepine;
(c) interferon alpha;
(d) interleukin-2;
(e) lithium carbonate;
(f) phenytoin;
(g) sorafenib;
(h) sunitinib; or
(i) valproic acid;

"a specified form of thyroiditis" means:

(a) Riedel's thyroiditis;
(b) silent thyroiditis; or
(c) subacute thyroiditis (de Quervain's thyroiditis, granulomatous thyroiditis or viral thyroiditis);

"being iodine deficient" means having an average intake of iodine of less than the recommended iodine intake for a continuous period of 30 days, or having a urinary iodine concentration of less than 100 micrograms per litre;

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

"having iodine excess" means having an average dietary intake of more than 1500 micrograms of iodine per day for a continuous period of three months, or

having a urinary iodine excretion rate of greater than 800 micrograms per 24 hours;

"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 7.3 kilograms 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) 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;

"the recommended iodine intake" means 150 micrograms of iodine per day, or 220 micrograms per day for pregnant or lactating women.

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 8 May 2013.

Dated this twenty-ninth day of April 2013

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

PROFESSOR NICHOLAS SAUNDERS AO

CHAIRPERSON