

## **Basing US Nuclear Subs at Stirling on Garden Island makes WA a nuclear target, while risking “catastrophic conditions” in a N-Sub reactor accident**

*Briefer by David Noonan, Independent Environment Campaigner, 07 Sept 2024*

What price should West Australian's pay for AUKUS ? see “[AUKUS: The worst defence and foreign policy decision our country has made](#)” by ex-FA Minister Gareth Evans (17 August 2024):

*“... the price now being demanded by the US for giving us access to its nuclear propulsion technology is, it is now becoming ever more clear, extraordinarily high.*

*Not only the now open-ended expansion of Tindal as a US B52 base; not only **the conversion of Stirling into a major base for a US Indian Ocean fleet, making Perth now join Pine Gap and the North West Cape – and increasingly likely, Tindal – as a nuclear target ...**”*

### **No Emergency capability exists to respond to a nuclear weapons strike on Stirling off Freo.**

Nor can Federal and WA Labor claim to have a ‘**social license**’ for a US N-Sub Base at Stirling while failing to inform affected community of the nuclear Health & Safety risks they could face.

Community has a basic ‘**Right to Know**’, a right to full disclosure of nuclear risks *in advance* of decisions. A Labor Bill to declare Stirling a “**Designated Nuclear Zone**” is before Parliament after a [Senate Report](#). Now 3 yrs into AUKUS, it is long past time for Labor to inform community.

Federal & WA Labor Ministers [Joint Ministerial Statement on Nuclear Reactors on Agricultural Land](#) (18 July 2024) have [tackled](#) Dutton over his crazy nuclear ‘power’ reactors at Muja, citing accident impacts out to 80 km, but Labor fails to be transparent on nuclear risks they impose.

### **Federal and WA Labor have failed to make public required Health Impact Studies and Nuclear Accident Scenario Modelling for US N-Sub visits and for a N-Sub Base at Stirling.**

The [WA State Hazard Plan](#) “HAZMAT Annex A Radiation Escape from a Nuclear Powered Warship” (update 20 Nov 2023) provides only scant over-view information to the public.

Federal Emergency provisions apply in event of a US N-Sub reactor accident at Stirling. The federal civilian nuclear safety regulator [ARPANSA](#) sets out required Health Impact Studies, Emergency response measures and Zones that are to be put in place (see “[Guide for Radiation Protection in Emergency Exposure Situations](#), Part 1 & 2, 2019).

A Defence Operations Manual “[OPSMAN 1](#)” (update 2023) is supposed to ‘operationalise’ the Emergency measures for US N-Sub nuclear reactor accidents in Australian Ports and waters.

An “**Urgent Protective Action Zone**” of up to 2.8 km radius around the site of a US N-Sub accident requires an **Evacuation Plan** for workers and affected residents. An “**Extended Planning Distance**”, where “*the surrounding population may be subject to hazards*”, is set at ‘several kms’ around an accident site. This can extend to 5 km in UK N-Sub Emergency Zones.

**ARPANSA and Defence also require studies of a local population out to 15 km from a US N-Sub mooring - as you can't tell how far a radioactive pollution plume will spread by wind...**

## **Children are at untenable Health risk in a nuclear strike OR in a US N-Sub reactor accident:**

In a military nuclear reactor accident at Stirling the [ARPANSA Guide Part 2](#) (p.18-19 & Table 3.1) 'authorises' ionising radiation health exposures to affected civilian workers AND to residents and their **children** at a high dose of up to 50 mSv (milli-Sievert). Fifty times more than Health Authorities recommended maximum allowed dose of 1 mSv per year for members of the public.

Exposed residents and especially **children** need to be able to take stable iodine tablets ASAP to try to reduce the radiological health risk of contracting thyroid cancer. Evacuees could have to undergo '**decontamination**' and need **medical treatment**, care which may have to be ongoing.

[The Impact of Nuclear Weapons on Children](#) (ICAN Report, August 2024) "*shows in compelling and often gut-wrenching detail, it is children who would suffer the most in the event of a nuclear attack against a city today*". The Report is a dire warning that urgent action is needed to rid the world of nuclear weapons. Australia must Sign & Ratify the Nuclear Weapons [Ban Treaty](#).

## **WA Emergency workers could face "catastrophic conditions" at a N-Sub reactor accident:**

In event of a severe US N-Sub reactor accident at Stirling the ARPANSA "[Guide for Radiation Protection in Emergency Exposure Situations](#) (The Guide Part 2, p.18-19 & Table 3.1) authorises "**actions to prevent the development of catastrophic conditions**" by designated WA workers.

'Category 1 Emergency workers' could "**receive a dose of up to 500 mSv**", a dangerously high ionising radiation dose exposure that is up to 500 times the public's max allowed annual dose:

*"Emergency workers may include workers employed by an operating organisation, as well as personnel of response organisations, such as police officers, firefighters, medical personnel, and drivers and crews of vehicles used for **evacuation**. ...*

*• Category 1: Emergency workers undertaking mitigatory actions and **urgent protective actions on-site, including lifesaving actions**, actions to prevent serious injury, actions to prevent the development of catastrophic conditions that could significantly affect people and the environment, and actions to prevent severe tissue reactions. ... **They may also receive a dose of up to 500 mSv for life saving actions, to prevent the development of catastrophic conditions and to prevent severe tissue reactions.**"*

The [ARPANSA Guide Part 1](#) (Annex A, p.64 Table A.1, 2019) states in stark terms that Emergency workers can be called upon to '**volunteer**' for actions "*to prevent the development of catastrophic conditions*" in event of a severe US N-Sub nuclear reactor accident:

*"... **under circumstances in which the expected benefits to others clearly outweigh the emergency worker's own health risks**".*

As evidence of the extent of nuclear risks to the health of Emergency workers, the ARPANSA Guide Part 1 (Annex A, p.63) requires female workers to be excluded from these roles:

*"...**female workers** who might be pregnant **need to be excluded** from taking actions that might result in an equivalent dose exceeding 50 mSv".*

**Note:** the 'safety' of N-Subs in UK Ports has been found seriously wanting, see a [Report](#) (2009) by Large and Associates Consulting Engineers on UK off-site Emergency Planning Measures.