## Labor *imposes* AUKUS nuclear submarines while *failing to inform* the affected SA community of the health risks they face in a potential reactor accident.

Briefer by David Noonan, Independent Environment Campaigner, 29 July 2024.

Federal Labor has failed to inform the SA community of the health risks they face in imposed N-Subs at Port Adelaide and failed to carry out required nuclear accident health impact studies.

Federal AUKUS <u>legislation</u> to declare Osborne a "Designated Nuclear Zone" is about to return to Parliament for review after a <u>Senate Inquiry Report</u>. Now is the time for Labor to inform on risks.

**South Australian community have so far been denied their 'Right to Know'** the extent of health and socio-economic impacts they face in a N-Sub reactor accident at Port Adelaide.

The public have a right to full disclosure of health impacts *in advance* of Federal decisions and legislation and process to impose N-Sub nuclear accident risks onto our community.

Federal Minister for Health the Hon Mark Butler MP has a 'duty of care' to order required health impact studies and to inform SA community of the extent of radiological health risks they face. Minister Butler has over-sight of the federal agency <u>ARPANSA</u>, a civilian nuclear regulator, that is responsible for preparing health impacts studies on potential nuclear submarine accidents.

SA Emergency Services workers, first responders, the police, fire, ambulance and hospital personnel, also have a 'Right to Know' what risks they are being signed up to by Labor Gov's.

Federal Emergency provisions apply in event of a military N-Sub reactor accident at Port Adelaide. The ARPANSA "Guide for Radiation Protection in Emergency Exposure Situations (Part 1 & 2, 2019) and "Nuclear powered vessel visit planning" (2023) set out the studies, 'standards', zones, procedures and measures that are to be put in place.

The <u>ARPANSA Guide Part 2</u> (p.18-19 & Table 3.1) authorises very high ionising radiation dose exposures to Emergency workers, and to exposed Osborne N-Sub Shipyard workers, in tasking them to undertake "*urgent protective actions*" on site, at a dose of up to 50 mSv (milli-Sievert).

That is 50 times far in excess of the recommended civilian max allowed dose of 1 mSv per year.

Federal and SA Labor have failed to inform community that affected members of the public within a cited "Urgent Protective Action Zone" of 2.8 km radius from the site of a N-Sub accident also face authorised high ionising radiation dose exposure of up to 50 mSv. In a "Reference Accident" the local population may face evacuation and may require 'decontamination'.

Further, in an even more severe military N-Sub nuclear accident federal provisions provide for civilian SA Emergency workers to face "the development of catastrophic conditions".

Male SA Emergency workers and designated Shipyard workers are then to be **called upon to** 'volunteer' to risk dangerously high ionising radiation dose exposures of up to 500 mSv. Female Emergency workers are to be excluded given the potential health risks they may face.

SA State Labor has a responsibility to prepare and resource a required "Emergency Response Plan' for N-Sub nuclear accidents, and to fully inform community *in advance* of any decisions.

Federal and SA Labor can-not claim to have a '**social license**' for N-Subs while failing to inform affected workers and affected community of the ionising radiation health risks they may face.

Imposition of AUKUS nuclear submarine reactor accident risks is clearly undemocratic.

## Emergency workers may face "catastrophic conditions" at a N-Sub accident:

In event of a military N-Sub nuclear reactor accident 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 civilian workers.

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

"Emergency workers may include workers employed, both directly and indirectly, 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." (my emphasis in bold)

The <u>ARPANSA</u> Guide <u>Part 1</u> (Annex A, p.64 Table A.1, 2019) states in stark terms that civilian Emergency workers can be called upon to '**volunteer**' for actions "to prevent the development of catastrophic conditions" in event of a severe military N-Sub 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 military nuclear risks to the health of civilian workers, the ARPANSA Guide Part 1 (Annex A, p.63) states female Emergency & Shipyard workers are to be excluded:

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

Given the level of uncritical promotion of AUKUS N-Subs by Federal and State Labor it is farcical one has to find & search obscure complex documentation, Appendices and Tables to find clear statements of fact on the extent of health impacts workers may face in N-Sub accidents.

The 'safety' of N-Subs in UK ports has been critiqued, see a key <u>Report</u> by Large and Associates Consulting Engineers: "A BRIEF REVIEW Of The OFF-SITE EMERGENCY PLANNING MEASURES".

A Defence Operations Manual "OPSMAN 1" (2023) sets Zones of Emergency measures for N-Sub accidents. A "Precautionary Action Zone" of 600 m radius & an "Urgent Protective Action Zone" of up to 2.8 km radius require an Evacuation Plan and stable iodine tablets for workers & the local population - who may require 'decontamination' and medical treatment. A third Zone "Extended Planning Distance", where "the surrounding population may be subject to hazards", is described as of several kms radius. In UK Emergency N-Sub measures this extends to 5 km.

ARPANSA and Defence require studies of a local population out to 15 km from a N-Sub mooring.

One can't know in advance how far a radioactive pollution plume may spread on the wind...

As Background: see David Noonan Submission No.8 (Jan 2024, 12 p) to AUKUS Senate Inquiry.