



Resolution of comments from stakeholder submissions on Document Title: *Guide for Radiation Protection in Emergency Exposure Situations (RPS G-3)*

Consultation period: 20 April 2018 – 16 July 2018

This Guide for Radiation Protection in Emergency Exposure Situations describes objectives for protection of human health and of the environment, drawing upon international best practice in relation to planning, preparedness, response and transition in nuclear or radiological emergencies. The Guide includes:

- relevant safety requirements from the IAEA *Preparedness and Response for a Nuclear or Radiological Emergency. General Safety Requirements No. GSR Part 7, 2015* within Part 1 of the Guide known as The Framework
- additional guidance within Part 2 – Planning, Preparedness, Response and Transition of the Guide in relation to the Australian context.

When responding to comments on the draft Guide for Radiation Protection in Emergency Exposure Situations, the following terms have been used:

| Term | Definition |
|-----------------------------|--|
| Accepted | The proposed change has been made to the text. |
| Accepted with modifications | Either: <ul style="list-style-type: none"> • the proposed change has been made, however the suggested text was modified • the proposed change is accepted but the text has been modified in a different clause/section or <ul style="list-style-type: none"> • part of the proposed change was accepted and/or Accepted with modifications and part was Not accepted. |
| Not accepted | No changes were made to the text based on this comment. |
| Noted | Either: <ul style="list-style-type: none"> • no proposed change to the text was required to address the comment • the comment was outside the scope of the document or <ul style="list-style-type: none"> • noting a comment does not imply that ARPANSA endorses the comment. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|--------------------|---------|-------------|---|--|--------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 1 | Monica Schlesinger | 1 | line 9 | Management & avoidance of radiation risks | I added avoidance – also referred further in the doc | Not accepted | Management is a broad term. The term reduce or avoid undesirable consequences is used in the Forward. |
| 2 | Monica Schlesinger | 1 | line 100 | Pls define off-site jurisdictions | | Accepted | This term has been added to the glossary under the term 'site area'. |
| 3 | Monica Schlesinger | 1 | line 103 | Such security events include, but are not limited to | Add are | Accepted | |
| 4 | Monica Schlesinger | 1 | line 126 | Add "and other members of the public" | | Not accepted | Annex A provides guidance values for restricting exposure of emergency workers only |
| 5 | Monica Schlesinger | 1 | line 204 | Add: Evaluate/undertake an investigation to evaluate the damage & causes | The assessment is mentioned on the next page line 215, but it's not enough; you need to add another dot point | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. 3.2.102-105 of Part 1 address this comment. |
| 6 | Monica Schlesinger | 1 | line 237 | "regulatory control" You need to add the cyber attacks – see Stuxnet and the nuclear plant in Iran | Obvious – many controllers are IoT devices (internet of things) which were not designed with security in mind, hence they are prone to attacks | Not accepted | Cyber attacks are implicitly covered by the term 'nuclear security event', specific guidance on this is outside the scope of G3 Generic reference to this type of initiating event is mentioned on page 8 in Part 1, "A nuclear security event such as, the sabotage of a nuclear facility (either physically, electronically or both)..." |
| 7 | Monica Schlesinger | 1 | line 248 | Add cyber | | Not accepted | See comment resolution 6 |
| 8 | Monica Schlesinger | 1 | table 2.1 | Add unknown type – you cannot always calculate & predict | | Not accepted | This table is based on the Australian Clinical Guidelines for Radiological Emergencies. The |

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| | | | | | | | addition of this term will not be in alignment of definitions and criteria between security and safety. |
| 9 | Monica Schlesinger | 1 | line 341 | Add phreatic water | See the Fukushima example & Chernobyl | Not accepted | This is a general overview of a hazard not present in Australia, as such this comment is too specific for RPS G-3 and is already generically address by the term water supplies in 2.5.1 Nuclear Power Plant Reactor emergencies. |
| 10 | Monica Schlesinger | 1 | line 482 | “is carried long distances by the wind & clouds” | Added clouds – remember Chernobyl | Not accepted | The transport of clouds is via wind. |
| 11 | Monica Schlesinger | 1 | figure 2.3 | There is nothing mentioning that reserves of food and water from a non-contaminated area must be made available and a total ban on products possibly contaminated should be imposed | | Not accepted | Out of scope for this figure. |
| 12 | Monica Schlesinger | 1 | line 786 | There should be a point about testing and rehearsal of the emergency plan | | Noted | Training, drills and exercises for emergency preparedness and response on page 58 addresses this comment. |
| 13 | Monica Schlesinger | 1 | line 1396 | Storage facilities for emergency cases should be identified before a disaster occurs, NOT after; as such this condition should be added | | Noted | Comment Only |

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| 14 | Monica Schlesinger | 1 | line 1476 | Long term measures after an emergency should be added in this section and they should include as an example NOT importing agricultural products into the country when they originate from an area which had a nuclear disaster | See Fukushima example http://time.com/4241443/fukushima-disaster-food-safety/ | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. Part 1 Annex B provides Generic criteria to address this comment. |
| 15 | Monica Schlesinger | 1 | line 1890 | Stronger actions, tests and audits of the food should be mandated | See example above & the fact that Australia was importing food from regions in the vicinity of Fukushima (example green tea, etc) | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. The screening criteria in this guide is best practice. |

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| 6 | Monica Schlesinger | 2 | Whole document | <p>There is detail around the emergency events and the measures that need to be taken immediately after, but there is almost nothing I could see about the long term plan.</p> <p>I see it as incumbent on a country like Australia through its government or agencies to stop imports from countries that suffered a nuclear disaster, rather than to leave it to the countries affected themselves to be honest and vigilant.</p> <p>I have seen the same product in Australia, with production dates after the Fukushima disaster.</p> | <p>Again, I give the Fukushima example: https://www.teamuse.com/article_110701.html Excerpt: The World Health Organization (WHO) and the Food and Agricultural Organization (FAO) jointly set standards for radiation in food products, called the Codex General Standard for Contaminants and Toxins in Food and Feed, which contain Codex Guideline Levels. The Codex Guideline level for food products is a maximum of 1000 Bq/kg for cesium-137 and 100 Bq/kg for iodine-131. In comparison, the U.S. Food and Drug Administration has a border intervention level of 1200 Bq/kg of cesium for imported goods.</p> <p>In early June, the Japanese government ordered a halt in shipments from the eastern prefectures of Ibaraki, Chiba, Kanagawa and Tochigi, which are not major tea producing areas of the country and decided to ban shipments of dried tea leaves containing more than 500 Bq/kg of radioactive cesium. The Japanese government exercised caution by setting</p> | Not accepted | Part 2 provides detail on Transition (section 6) and Termination (Section 7) of a nuclear or radiological emergency which addresses this comment. |

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| | | | | | <p>the level at half the Codex accepted maximum, which should be reassuring to tea drinkers.</p> <p>Spread to Shizuoka</p> <p>Tea connoisseurs' concern began when radioactive cesium was detected in tea from the Shizuoka prefecture, 350 km from the Daiichi nuclear power plant. Shizuoka produces 40% of Japan's green tea, and had initially declared its teas safe; most people thought it was far enough away to avoid the impacts of the Daiichi disaster. A recall of dried tea had to be initiated after leaves from a tea factory in the city of Shizuoka measured about 179 Bq/kg over the government's limit, officials said. Although the cesium was at a level unlikely to affect human health according to Codex guidelines, Shizuoka prefecture decided to carry out sampling tests at nearly 100 other tea factories in the area. As of June 15th, five processing plants of the 20 tested thus far were asked to stop shipping tea due to cesium levels above the limit.</p> | | |

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| | | | | | <p>There have been unsubstantiated rumors that the Japanese government has tried to censor the release of unfavorable test results.</p> <p>On June 17th, the French press reported that Shizuoka tea with double the accepted level of cesium was intercepted in Paris. EU rules on acceptable levels of radiation are the same as Japan's for cesium-137. The official government statement indicated the tea would be destroyed.</p> | | |
| 17 | Monica Schlesinger | 3 | line 230 | <p>There should be more consideration given to cyber attacks on facilities and equipment; everything refers to containing and mitigating an event that occurred, not events that can re-occur. The document deals with older types of causes, which triggered a one-off only event.</p> | <p>See Stuxnet and the Iranian plant (relentless attacks): http://www.abc.net.au/news/2015-10-07/four-corners-internet-of-hacked-things/7778954</p> | Not accepted | See comment resolution 6 |

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| 18 | Monica Schlesinger | | Overall | The responsibilities are also not clear – or the communication between various agencies is not defined. (Table A.1 on page 29 is a good start, but not enough) | I dealt with Incident response methodologies and I probably expect to see something more along the lines of ISO 20000 (ITIL) and RASCI (responsible, accountable, support, consulted and informed) models | Not accepted | Outside of scope, Specific responsibilities and communication channels should be included in other plans and arrangements. |
| 19 | Monica Schlesinger | | 8. Communication | More guidance should be given here; in particular how to engage other stakeholders, not only the public | | Accepted with modifications | Text has been modified to expand the scope to the public and relevant stakeholders |
| 20 | South Australian Metropolitan Fire Service | 1, 2 & 3 | Phases of an Emergency Exposure Situation (Diagram) | Training, drills and exercises for emergency response (involving the local emergency services) | We find that if it is not written in a Guide/Act/Regs etc to involve emergency services in the training, then we are not invited/involved. We need to be involved to improve our response, training and safety to the community. | Accepted with modifications | This suggestion has been included to the figure under 'training, drills and exercises for emergency response. The text that has been added is '(involving from local emergency services)'. |
| 21 | South Australian Metropolitan Fire Service | 1, 2 & 3 | Phases of an Emergency Exposure Situation (Diagram) | Declaration of the emergency - Managing radioactive waste safely and effectively in a nuclear or radiological emergency – to be removed | This probably isn't an issue during the declaration | Accepted | |
| 22 | South Australian Metropolitan Fire Service | 1 | 3.1.25 | No change to the text, comment only | The review of the hazard assessment should be given to the emergency services, just like a dangerous goods | Noted | Comment only, for jurisdictions to consider during implementation of the guide once published. |

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| | | | | | emergency plan is now under the WHS Act. | | |
| 23 | South Australian Metropolitan Fire Service | 1 | 2013 | <p>Control definition The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency plan and carries with it the responsibility for tasking other organisations in accordance with the needs of the situation. Control relates to situations and operates horizontally across organisations.</p> | The control definition given in the SA State Emergency Management Plan is specified in the previous column. Keep the definition you have for control and regulatory control and add this definition in for Emergency Management Control. | Accepted with modifications | <p>Review consistent accepted definition across Australia (AFAC or ICCS+ or AIIMS). The following definition has been included in the glossary as a sub set of the definition of 'Control': Emergency Management Control: The overall direction of response activities in an emergency, operating horizontally across agencies. Authority for control is established in legislation or in an emergency response plan, and carries with it the responsibility for tasking other agencies in accordance with the needs of the situation.</p> |
| 24 | South Australian Metropolitan Fire Service | 1 | 2063, 2067, 2084 and 2237 | No change to the text, comment only | <p>These three definitions could be further defined. Emergency Services and Response Organisation seem to cross over in their definition. It may be useful to give an example of a response organisation that is different from an emergency service. Does emergency worker and first responders include emergency service workers? Or just the trained radiation workers on site?</p> | Accepted with modifications | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. See comment resolution 65 for clarification of definitions. |

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| 25 | South Australian Metropolitan Fire Service | 2 | 421, 425, 442 and 595 | No change to the text, comment only | <p>These three definitions could be further defined. Emergency Services and Response Organisation seem to cross over in their definition. It may be useful to give an example of a response organisation that is different from an emergency service.</p> <p>Does emergency worker and first responders include emergency service workers? Or just the trained radiation workers on site?</p> | Accepted with modifications | See Comment Resolution 65 |
| 26 | South Australian Metropolitan Fire Service | 3 | 942, 946, 963 and 1119 | No change to the text, comment only | <p>These three definitions could be further defined. Emergency Services and Response Organisation seem to cross over in their definition. It may be useful to give an example of a response organisation that is different from an emergency service.</p> <p>Does emergency worker and first responders include emergency service workers? Or just the trained radiation workers on site?</p> | Accepted with modifications | See Comment Resolution 65 |
| 27 | Western Australia Police Force | All | Various | Change references to 'nuclear or radiological' to 'radiological' | The hazard is radiation release or escape, whether associated with a nuclear facility, nuclear powered vessel, satellite or other | Not accepted | Point is valid when viewing from Western Australian specific hazards, however this guidance applies across all jurisdictions in Australia, where the national hazard assessment (Section 2 of Part 1) has identified relevant nuclear emergencies. |

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| | | | | | <p>means and regardless of intent (accidental, security incident, etc). E.g. for our hazard for NPW, the hazard is the radiation escape from the NPW and not the NPW itself.</p> <p>The documents also specifically exclude any other type of nuclear security incident from the scope. The documents would therefore be better to refer only to 'radiological' and not 'nuclear or radiological'.</p> <p>Nuclear attack is an act of war, a Defence responsibility and out of scope of State arrangements.</p> | | See Comment Resolution 116 where a glossary term has been added for Nuclear Material. |
| 28 | Western Australia Police Force | All | Various | Use of the term 'police and emergency services' where emergency services is used in content (instead of 'emergency services', and removal of 'police' from definition for emergency service. | <p>Police are specifically referred to in the documents within the definition of emergency services: "The local off-site response organisations that are generally available and that perform emergency response functions. These may include police, firefighters and rescue brigades, ambulance services and control teams for hazardous materials".</p> <p>Police are not normally defined as an emergency service due to the independence of the office of constable and the definition of the agency as a force;</p> | Accepted with modifications | See Comment Resolution 65 |

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| | | | | | responding to emergencies is only part of our legislated function (primary roles relating to criminality and public order). | | |
| 29 | Western Australia Police Force | 1 | 595-596 | Delete this sentence | This sentence makes commitments regarding compensation which are believed to be out of scope for this document and are unlikely to be achievable in WA for all hazards (e.g. WANDRRA is for natural hazards and terrorist act only). | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. |
| 30 | Western Australia Police Force | 1 | 1136-1145 | Change 'should' to 'may' or clarify that this refers to fixed facilities. | This section refers to public information being provided to permanent population and transient and special groups and special facilities in the emergency planning zones/distances of any 'category i or ii facilities' to be informed about the potential for a radiological emergency prior to any emergency occurring. It is believed that the locations for NPW visits would be included in category ii but public | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. The term 'should' is a word that implies 'may'. |

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| | | | | | notification is risk based and situation specific. | | |
| 31 | Western Australia Police Force | 1 | 1549-1567 | Addition of 'as far as is practicable' and change 'qualified' to 'trained'. | <p>References to training here and elsewhere in the documents refer to 'qualified' personnel, 'appropriate or sufficient' numbers and requiring assessments for fitness (initial and continuing).</p> <p>The extent to which this applies to Police (and others, e.g. Radiation Health), in terms of requiring a formal qualification and assessment rather than in house training or deployment experience (and also for specialist skills/wearing radiation suits with breathing apparatus, etc) is unclear and could be of concern.</p> | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. It should be noted that guidance on training, drills and exercise has been strengthened throughout Part 2. |

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| 32 | Western Australia Police Force | 2 | Various (81 and other locations) | Recommend that references to 'declaration of emergency' are changed to 'determined to be an emergency' or other more neutral phrase. | This line (and a number of figures in the documents) refer to 'the declaration of an emergency' as occurring at any activation of response arrangements for a radiation escape; however, the legislated framework in WA requires the use of Part 6 powers of the EM Act to be needed before any declaration of an emergency situation or state of emergency. At policy level, there is now an agreement in WA that a determination of a level 2 incident may be taken as meaning an incident is an emergency (i.e. EM framework arrangements are applicable). | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. This guidance applies across all jurisdictions in Australia and should be adjusted as required when defining an emergency. |
| 33 | Western Australia Police Force | 3 | 179 & figure 3.1 | Recommend that references to 'declaration of emergency' are changed to 'determined to be an emergency' or other more neutral phrase. | This line (and a number of figures in the documents) refer to 'the declaration of an emergency' as occurring at any activation of response arrangements for a radiation escape; however, the legislated framework in WA requires the use of Part 6 powers of the EM Act to be needed before any declaration of an emergency situation or state of emergency. At policy level, there is now an agreement in | Not accepted | See Comment Resolution 32. |

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| | | | | | WA that a determination of a level 2 incident may be taken as meaning an incident is an emergency (i.e. EM framework arrangements are applicable). | | |
| 34 | Western Australia Police Force | 3 | 814-820 & table A5 | The table needs to be revisited to reflect what is feasible for Australia, particularly in consideration of more regional areas of WA. | This appendix and table are based on USA capabilities (with this reference repeated in 2 places in the section). Whilst these timeframes might be feasible in the context of established facilities or locations of planned NPW visits, in the context of a SPRED emergency or air/traffic crash leading to radiation escape in a remote area this is less likely (e.g. establishing an incident command post and establishing environmental monitoring on scene in less than an hour). | Accepted with modifications | SPRED is an EPC IV and is therefore not expected to be covered under the same Response Time Objective. This has been clarified in the text. |
| 35 | Western Australia Police Force | 3 | Appendices | Change 'incident' and 'accident' to 'emergency' for consistency or define the other terms to clarify difference intended. | Use of 'incident' and 'accident' in labels for figures, whereas the rest of the documents refer to 'emergencies. | Accepted with modifications | Terminology has been harmonised. |
| 36 | Dr George Koperski, Canberra | 1, 2 & 3 | Title | Guide for Radiation Protection from Ionising Radiation in Emergency Exposure Situations | To make the title explicit., differentiating it from a guide that would relate to exposures to non-ionising radiation | Not accepted | This title was approved by the Radiation Health Committee. |

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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 37 | Dr George Koperski, Canberra | 2 | 13 | This Guide for Radiation Protection in Emergency Exposure Situations – Part 2 – Planning and Preparedness (201Y) sets out the framework and guidance in Australia for the protection of occupationally exposed persons, the public and the environment in emergency exposure situations. | <ul style="list-style-type: none"> - To correct erroneous wording, and - To make this paragraph consistent with the corresponding paragraph in the Foreword to Part 1 | Noted | This forward is written by the CEO as an introduction to the guide, we will pass on for consideration. |
| 38 | Dr George Koperski, Canberra | 3 | 13 | This Guide for Radiation Protection in Emergency Exposure Situations – Part 3 – Response and Transition (201Y) sets out the framework and guidance in Australia for the protection of occupationally exposed persons, the public and the environment in emergency exposure situations. | <ul style="list-style-type: none"> - To correct erroneous wording, and - To make this paragraph consistent with the corresponding paragraph in the Forewords to Part 1 and Part 2 | Noted | This forward is written by the CEO as an introduction to the guide, we will pass on for consideration. |
| 39 | Dr George Koperski, Canberra | 1 | 100 | Replace the word 'who' by 'which' | Grammar | Accepted | |
| 40 | Dr George Koperski, Canberra | 1 | 483 | Replace the word 'have' by 'has' | Grammar | Accepted | |
| 41 | Dr George Koperski, Canberra | 1 | 494 | Replace 'Table 2.1' by 'Table 2.2' | Typographical error | Accepted | Numbering will be updated in final editorial |

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| 42 | Dr George Koperski, Canberra | 1 | 494 | In column 7 'conventional trauma' and column 10 'combined trauma' replace all three 'No' by 'Possible' | From the fact that for these three types of radiation emergencies the classification in columns 2,3,6,9 and 12 is 'Possible' it logically transpires that the three current terns 'No' (column 7) should be replaced by the term 'Possible' | Accepted with modifications | Table style has been modified for clarity. |
| 43 | Australian Government Department of Health | 1 | 63 | Comment: The beginning of this document is a lot harder to read than the rest. Sentences are quite long and choice is made for more complex language, e.g. is of importance vs is important. Rest of doc and other parts are quite easy to follow. | | Accepted with modifications | Final editorial review will make the document easier to read and understand. |
| 44 | Australian Government Department of Health | 1 | 261 | Comment: Annex c of Part 3 provides the easy interpretation of deterministic as early affects and stochastic as late. This is an easy to understand definition and could be added here. | | Accepted with modifications | The addition to refer to Annex C in Table 2.1 has been included. |
| 45 | Australian Government Department of Health | 1 | 322 | Comment: I really like this breakdown into different types of emergencies. It is practical and explains the differences well. Entries in this area are easy to follow. | | Noted | Comment only. |

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| 46 | Australian Government Department of Health | 1 | 365 | Do we only receive Allied warships? | | Accepted with modifications | The term allied will be removed. Sentence now read: "Australia receives visits by nuclear powered warships to a number of approved ports around the country, these include submarines and aircraft carriers." |
| 47 | Australian Government Department of Health | 1 | 365 | Comment: Good information | | Noted | Comment only. |
| 48 | Australian Government Department of Health | 1 | 375 | So when would a criticality emergency occur? | | Accepted with modifications | Paragraph reworded and a new section has been included in Part 2 in section 3.4. |
| 49 | Australian Government Department of Health | 1 | 381 | So is it possible this will ever happen in Australia? | | Accepted with modifications | Yes it can. See comment 48. |
| 50 | Australian Government Department of Health | 1 | 494 | Comment: useful table | | Noted | Comment only. |
| 51 | Australian Government | 1 | 496 | It's not really clear here what the national protection strategy is. Is | | Accepted with modifications | This section has been re-worded for clarity. |

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| | Department of Health | | | that this document? If not this, where is it found? | | | |
| 52 | Australian Government Department of Health | 1 | 529 | This diagram is visually very pleasing. Set out well and helpful overview. Just a couple of points: 2 point 1 seems more like 3. 3.1 seems more like 2. 3.3 seems the same as 3.8. Is there any way we can link this to the stages used in the Health and EMA plans? ie. Preparedness, Standby, Response or Action, and Standdown? | | Accepted with modifications | Text associated with each phase has been strengthened. Phases are now aligned to other national plans which have been included in the diagram. |
| 53 | Australian Government Department of Health | 1 | 570 | Who is the intended user of this framework? Is the following information the framework itself, or is the following from the GSR? In which case, what is the framework exactly? | | Accepted with modifications | Additional text to address these questions will be added to Section 3 preamble. |
| 54 | Australian Government Department of Health | 2 | 36 | Not sure what off-site jurisdictions means. | | Accepted with modifications | This term has been added to the glossary under the term 'site area'. |
| 55 | Australian Government Department of Health | 3 | 2 | I think this is exactly the same as the Part 2 intro | | Noted | Comment Only See Comment resolution 118 |

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| 56 | Australian Government Department of Health | 3 | 184 | This is very hard to read | | Accepted with modifications | Graphic has been edited for clarity. |
| 57 | Australian Government Department of Health | 3 | 444 | Second dot point seems unfinished. Box 3 seems to have some repetition | | Accepted with modifications | Box 1 bullet 2 amended to include 'occurred?' Repetition has been removed from box 3. |
| 58 | Australian Government Department of Health | 3 | 658 | Would you like to add the address for the plan: http://www.health.gov.au/internet/publications/publishing.nsf/Content/ohp-radiological-toc | | Accepted | Reference list has been amended to include this reference and Url. |
| 59 | Australian Government Department of Health | 3 | 770 | Which programmes are we talking about? | | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |

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| 60 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | 407 | In Australia there have been serious injuries reported from industrial accidents, for example the 2014 borehole logging operation incident in Queensland | Industrial radiography is different to borehole logging. | Accepted with modifications | New line, to emphasise the example from explanatory text. |
| 61 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | 1794 | QUERY: "severe deterministic effects" | What is a "severe deterministic effect"? As per latest ICRP recommendations, should this be referred to as "tissue reaction"? Are all deterministic effects severe, or are some deterministic effects (eg temporary sterility, or depression of haematopoiesis) deemed non-severe – should there be examples of severe and non-severe effects? | Accepted | The definition of tissue reaction from the ARPANSA Fundamentals (RPS F-1) has been placed in the glossary. All mention of severe deterministic effect has been replaced with severe tissue reactions. |
| 62 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | 1794 | COMMENT: "(a) For doses for which protective actions and other response actions are expected to be undertaken under any circumstances in a nuclear or radiological emergency to avoid or to minimise severe deterministic effects" | Concern with wording of "under any circumstances" | Noted | |

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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 63 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | 1819 | COMMENT: Table B1 | It seems logical that all the actions in column 3 should be taken if any of the column 1 & 2 values are exceeded. Should the table be formatted differently so that column 3 actions are grouped together? | Accepted with modifications | Styling error. Table has been reformatted to reflect GSR Part 7. |
| 64 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | Various | COMMENT: Defined areas around an incident: - Emergency planning distance (EPD and ICPD) - Emergency planning zones (PAZ and UPZ) - Extended planning distance (EPD) - Ingestion and commodities planning distance (ICPD) - Inner cordoned off area - Precautionary action zone (PAZ) - Urgent protective zone (UPZ) - Site Area (On-site area / Off site area) - Facility / Special facility | These terms are used throughout the document – can there be any consolidation of these multiple terms to avoid potential confusion? | Not accepted | Part 1 introduces these terms, provides definitions in the glossary and consolidates their descriptions in Section 3.2.38 Additionally, Part 2 Figure 3.3 provides a graphical representation of all these zones to aid in the understanding of their spatial relationship. |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 65 | Department of Fire and Emergency Services (DFES), Western Australia | 1 | Various | <p>COMMENT: Emergency responders: - Emergency responder - Emergency services (defined) - Emergency worker (defined) - First responder (defined) - Helper - Rescue services (appears to be just description rather than entity)</p> | These terms are used throughout the document – can there be any consolidation of these multiple terms to avoid potential confusion? | Accepted with modifications | Terminology has been harmonised, and glossary amended to minimise confusion. Additional section added to Part 2 Section 4.2 titled "Designation of organisations and personnel" which further clarifies these terms and their relationship. |
| 66 | Department of Fire and Emergency Services (DFES), Western Australia | 3 | 296 | Should this read "RPS G-3 – Part 1, Table B.2 in Annex B" | Existing text implies that Table B.2 is in Part 3. | Accepted | |
| 67 | Department of Fire and Emergency Services (DFES), Western Australia | 3 | 812 | Table A.4 last line "Package" | The word/line "Package" doesn't appear to have any associated advice. | Accepted | Publication error, table has been modified. |
| 68 | Department of Fire and Emergency Services (DFES), Western Australia | 3 | 843 | <p>COMMENT: "Doses off site approaching the urgent protective action intervention levels."</p> | To help the context of "urgent protective action intervention level", should OILs (Operational Intervention Levels) be referenced here? | Accepted with modifications | Reworded to "Doses off-site that may warrant implementing urgent protective actions" |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 69 | Department of Fire and Emergency Services (DFES), Western Australia | | 861 | COMMENT: “high doses on site approaching the urgent protective action intervention levels” | To help the context of “urgent protective action intervention level”, should OILs (Operational Intervention Levels) be referenced here? | Accepted with modifications | Reworded to "Doses on-site that may warrant implementing urgent protective actions" |
| 70 | Department of Fire and Emergency Services (DFES), Western Australia | 3 | 884 | COMMENT: Figure shows threshold for deterministic effects as 1Sv/1Gy. | As per ICRP recommendations, deterministic effects are expected below this level. | Accepted with modifications | Figure has been reformatted to reflect UNSCEAR’s Radiation Effects and Sources (2016). |
| 71 | Queensland Health | 1 | 25 | | Planned and existing exposure situations are dealt with by other publications – omit the words “expected to be”. | Accepted | |
| 72 | Queensland Health | 1 | 209 | | Stochastic/deterministic effects are such a fundamental concept which may be somewhat alien to many people. I wonder if this should be defined in the text as well as the glossary? | Not accepted | Inconsistent with document style and other glossary terms. |
| 73 | Queensland Health | 1 | 232 | | The words “whether for commercial, or energy generation” do not make sense. We suggest their removal. | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 74 | Queensland Health | 1 | 258 | | For clarity say “The consequences of a release of radioactive material are independent of the initiating event”. | Accepted | |
| 75 | Queensland Health | 1 | 261 | | For consistency with the terms mentioned in lines 256 – 257, say “Unacceptable radiological consequences” rather than “Unacceptable exposure levels. | Accepted with modifications | Text at lines 256-257 will be modified to reflect terminology in table. |
| 76 | Queensland Health | 1 | 291 | | Figure 2.3 is on page 19 – it should be moved closer to Section 2.3. | Accepted | |
| 77 | Queensland Health | 1 | 388 | | The hazard assessment for other types of events have, at the end of the assessment, some statement related to the likelihood or severity of the events happening in Australia. Is there a general conclusion from ARPANSA’s 2008 assessment about the likelihood or severity of debris re-entry? | Accepted with modifications | For consistency with the other hazard, text has been modified and a likelihood statement has been included. |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 78 | Queensland Health | 1 | 400 | | <p>I'm not sure "misuse" is the best word here – it implies some level of deliberation although the event may be due to accident or negligence. Also, do not focus on industrial uses – emergencies can happen with medical sources as well (Lines 420 – 421 could be included in this section).</p> <p>I think what is meant to be described here is emergencies involving radioactive material in planned practices – so the title should reflect that.</p> | Not accepted | Title is consistent with "Australian Government – Department of Health 2012. Australian Clinical Guidelines for Radiological Emergencies." |
| 79 | Queensland Health | 1 | 401 | | Removing "industrial radiography" will broaden the scope of this section. | Accepted with modifications | Text will be reworded to reflect the broader scope of the sub-section. |
| 80 | Queensland Health | 1 | 407 | | The Queensland incident was a borehole logging accident. | Accepted | The word 'incident' to be changed to 'accident'. |
| 81 | Queensland Health | 1 | 409 | | This section should just be about transport emergencies. | Accepted | Create 2 sub-sections (Transport and laboratory). |
| 82 | Queensland Health | 1 | 410-411 | Many thousands of transport operations involving radioactive material occur daily in Australia. | The use of radiation and radioactive material does not occur with transport. I suggest the first sentence be "Many thousands of transport operations | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|---|-----------------------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | involving radioactive material occur daily in Australia.” | | |
| 83 | Queensland Health | 1 | 420 -421 | | I suggest moving this up to 2.4.7. | Accepted with modifications | See Comments Resolution # 81:Create 2 sub-sections (Transport and laboratory). |
| 84 | Queensland Health | 1 | 437 | | There is no need to say that the division is for convenience and clarity. | Accepted | |
| 85 | Queensland Health | 1 | 443 | | Need consistent terminology - in lines 428 and 474, the device is called a radiation exposure device, not a radiological exposure device. | Accepted | Text has been modified to reflect comment. |
| 86 | Queensland Health | 1 | 444 - 445 | | <p>The Guidance for Medical Management (ARPANSA Technical Report 131) indicates that immediate adverse health effects are most likely for a high level of whole body exposure (acute radiation syndrome). Exposure to a localised source might only result in a localised injury which would seldom show the signs of acute radiation syndrome.</p> <p>Using the word “immediate” here may imply an effect within seconds or minutes. Note that erythema, or a radiation burn, could be a</p> | Accepted | Text has been modified to reflect comment |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | <p>reasonably immediate adverse effect.</p> <p>It may be preferable to say that people exposed to high levels of radiation to the whole body could develop acute adverse health effects (e.g. vomiting, nausea, diarrhoea or erythema) and that the effects of lower doses or localised exposures may only become apparent after some time.</p> | | |
| 87 | Queensland Health | 1 | 446 - 449 | | <p>The introduction of radioactive material to a water supply or dispersed into the air means the source is not localised - it is widely dispersed, and is likely to be more widely dispersed than the fragments of an RDD.</p> <p>Perhaps this should be in the next section.</p> | Accepted | |
| 88 | Queensland Health | 1 | 452 | | <p>Need consistent terminology - in lines 427 and 474, the device is called a radiation dispersal device, not a radiological dispersal device.</p> | Accepted | Text has been modified to reflect comment. |
| 89 | Queensland Health | 1 | 467 | | <p>May be worth mentioning that radiation induced trauma and conventional</p> | Accepted with modifications | Text has been modified to reflect comment. |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | trauma act synergistically with reference to mortality | | |
| 90 | Queensland Health | 1 | 489 - 490 | | This last sentence about protection is more appropriate for a public information sheet, not this guide. | Accepted | Last sentence has been deleted. |
| 91 | Queensland Health | 1 | 494 | | This should be "Table 2.2" | Accepted | Numbering will be updated in final editorial. |
| 92 | Queensland Health | 1 | 503 | | The "should" in this sentence would indicate that a national strategy is yet to be developed. If there is a national strategy and this guide is part of it (lines 527 – 528), the sentence should begin with "The national protection strategy covers the period". | Accepted with modifications | See comment 51 |
| 93 | Queensland Health | 1 | 523 | | The national reference level, generic criteria and operational criteria are not likely to be used for declaring an emergency. Rather, the emergency is declared in response to an event that is identified to be radiological (considering the emergency action levels or other observable conditions mentioned in RPS G-3 Part 2 Section 4.1). The application of reference levels and | Accepted with modifications | See comment 51 |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | <p>criteria follow on from that.</p> <p>It would make more sense to remove the words “declaring an emergency and”.</p> | | |
| 94 | Queensland Health | 1 | 686 | | RDD vs RED has already been defined. Note f is probably unnecessary | Accepted | |
| 95 | Queensland Health | 1 | 739 | | A clinician is unlikely to understand this paragraph due to the terminology and level of detail in it | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. Additionally this paragraph is intended for the development of a protection strategy for completeness and not necessarily to be interpreted by a clinician directly. |
| 96 | Queensland Health | 1 | 746 | | I think “(Section2.4)” should be “(Section 2.5)”. | Accepted | Numbering will be updated in final editorial. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|--------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 97 | Queensland Health | 1 | 749 - 754 | | <p>It is noted that the text in Section 3 is based on the IAEA GSR Part 3. This section is taken from Section 4.28 of GSR Part 3 which requires that national generic criteria be developed based on the proposed generic criteria in GSR Part 3 Appendix II.</p> <p>I had presumed that we had put some thought into these generic criteria and had decided that our generic criteria should be the same as, or lower than, those proposed in GSR Part 3. That is, that we have already developed 'national' generic criteria.</p> <p>Or are we (States, Territories and Commonwealth) yet to go through a process of considering whether the generic criteria proposed in Annex B are suitable for adoption as Australian national generic criteria?</p> <p>If we have not already been through a process of considering the generic criteria proposed in GSR Part 3 and deciding what is suitable for Australia, then why are the generic criteria in</p> | Not accepted | <p>See Comment Resolution 107</p> <p>RHSAC issued a statement (May 2017) on the adoption of a 50 mSv Reference level, which outlined the rationale for its adoption. This document is referenced in the Guide, Section 2.6.1.</p> <p>Explanatory text has been added to section 2.6.2 to clarify the difference between GSR Part 3/7 and RPS G-3.</p> |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | Annex B not the same as those in GSR Part 3.? | | |
| 98 | Queensland Health | 1 | 751 | | If the generic criteria in Annex B are to be regarded as national generic criteria, then replace “should be developed with account taken of the generic criteria in Annex B” by “have been developed and are in Annex B”. | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 99 | Queensland Health | 1 | 755 - 761 | | <p>If the generic criteria in Annex B are to be regarded as 'national' generic criteria, then surely we have already developed EALs and OILs (Annex A and B of RPS G-3 Part 3)?</p> <p>If this is the case, then this paragraph needs to be reworded to indicate so.</p> | Accepted with modifications | Text has been modified to reflect comment. |
| 100 | Queensland Health | 1 | 863 | | Would this information be better presented in a table? | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. Figure 3.2 from Part 2 presents this information graphically. |
| 101 | Queensland Health | 1 | 1031 -1035 | | This is essential advice. | Noted | Comment only |
| 102 | Queensland Health | 1 | 1234 | individual with clinical symptoms | Replace "individual of clinical symptoms" by "individual with clinical symptoms". | Accepted | |
| 103 | Queensland Health | 1 | 1238 | | <p>For medical staff this is key. The advice should be pre prepared, best practice advice distributed via a pre-agreed mechanism with standardised case definitions etc for consistent reporting, not something just cobbled together on the day.</p> <p>Clinicians will also require a mechanism to access specialist management</p> | Noted | Comment Only |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|--------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | advice for individual patients, so probably a phone number like Poisons Info etc. | | |
| 104 | Queensland Health | 1 | 1245 | | <p>The instructions should also include the necessity for, and means of decontamination.</p> <p>PPE & Decontamination are the two areas which cause the most anxiety amongst clinicians, and staff may require significant reassurance around the logic, process and effectiveness of both of these.</p> | Noted | Comment Only |
| 105 | Queensland Health | 1 | 1376 | | Does effluent water from any decontamination count as radioactive waste? If so, it should probably be made clear that it does. | Not accepted | <p>This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee.</p> <p>Paragraph below already makes this clear: 3.2.85. The protection strategy (see clauses 3.1.27-3.1.31) should take into account radioactive waste that might arise from protective actions and other response actions that are to be taken.</p> |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|-----------------------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 106 | Queensland Health | 1 | 1787 | | Can some guidance be given about what “a large collective dose” means (either as a footnote or in the glossary). | Accepted with modifications | A large collective dose has been deleted. |
| 107 | Queensland Health | 1 | 1791 | | <p>Since there is some variation between the generic criteria in Annex B and those in GSR Part 3, it would be beneficial for the reasons for the variation to be documented (preferably in this Guide).</p> <p>The minutes of the Radiation Health and Safety Advisory Council meeting on 17-18 November 2016 indicate that the original rationale for the use of 50mSv as a reference level for emergency exposure situations was not known.</p> <p>It would be unfortunate if the rationale for the choice of the generic criteria in Annex B were also to become uncertain.</p> | Accepted with modifications | <p>RHSAC issued a statement (May 2017) on the adoption of a 50mSv Reference level which outlined the rationale for its adoption. This document is referenced in the Guide, Section 2.5.1.</p> <p>There are no differences between the generic criteria in GSR Part 3 and GSR Part 7. However, additional tables have been added to the generic criteria in GSR Part 7. Due to the adoption of a 50 mSv reference level, generic criteria has been adapted to reflect this level as all generic criteria in GSR Part 3 and Part 7 are calculated at 100 mSv. Explanatory text has been added to section 2.6.2 to clarify the difference between GSR Part 3/7 and RPS G-3.</p> |
| 108 | Queensland Health | 1 | 1819 | | <p>For ADskin “cm2” should be “cm²”</p> <p>For AD(D')fetus footnote b should be a superscript</p> | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|-----------------------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 109 | Queensland Health | 1 | 1819 | | <p>Please compare Table B.1 to Table II.1 in GSR Part 3. The horizontal dividing lines of Table B.1 are a problem and need to be removed.</p> <p>The protective actions on the right side of the table are dot points that apply to all of the exposure parameters to the left. Table B.1 reads as though, for example, the provision of public information and warnings would only be taken if external exposure to tissue were above 25Gy, but not taken at all for other exposures.</p> | Accepted with modifications | Styling error. Reformatting has occurred in final editorial. |
| 110 | Queensland Health | 1 | 1839 | | Misspelling of "commodities" in the title. | Accepted | |
| 111 | Queensland Health | 1 | 1880 - 1889 | | <p>If our trading partners adopt the generic criteria of GSR Part 3, they will have generic criteria that are greater than those in Table B.2 and Table B.3 but the same as in Table B.5.</p> <p>Consequently, although the trade needs to be approved with the receiving country (Line 1884) there will be differing expectations in regard to exceedance of the</p> | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|--------------------|---------|--|-----------------------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | <p>generic criteria for protective and other actions (Table B.2) and for food, milk, water and other commodities (Table B.3) depending on whether Australia is the importer or exporter.</p> <p>Perhaps this paragraph needs to be reworded to clarify the guidance for Australia as an importer and as an exporter.</p> | | |
| 112 | Queensland Health | 1 | 1903 | | <p>This paragraph is dot point (a) under lines 1901-1902.</p> <p>Lines 1906, 1908, 1909, and 1911 need to be relettered.</p> | Accepted | |
| 113 | Queensland Health | 1 | 1919, 1935, & 1954 | | These should be numbered as C.1, C.2 & C.4 | Accepted | Numbering will be updated in final editorial. |
| 114 | Queensland Health | 1 | 1931, 1937, & 1943 | | Is there a reason for 'event' being in quotation marks? | Accepted with modifications | Quotation marks have been removed. |
| 115 | Queensland Health | 1 | 2149 | | <p>The term "nuclear or radiological emergency" is used in many places throughout the guide. Given that a nuclear emergency has radiological consequences (i.e. radiation exposure); that the general principle of planning and response, and the generic criteria and OILs seem not to be dependent on whether the emergency is</p> | Accepted with modifications | Terminology in the Guide has been harmonised. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | <p>nuclear or radiological; and that a consistent approach across security and safety related emergencies are recommended (line 258), we suggest that the term “radiological emergency” is sufficient.</p> <p>Where it does make sense to discriminate between nuclear and radiological is in the details of a response (see lines 316 – 318 for example).</p> <p>Note that the term “radiological” is used elsewhere in the guide without the “nuclear” being attached to it.</p> | | |
| 116 | Queensland Health | 1 | 2155 | | Since “nuclear” is a special term, can we have a glossary entry for the term “nuclear material” and how it is different to radioactive material | Accepted | Nuclear material and Radioactive material have been added to the glossary. Glossary terms are from the IAEA Safety Glossary. |
| 117 | Queensland Health | 2 | 25 | | Planned and existing exposure situations are dealt with by other publications – omit the words “expected to be”. | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------------------|----------|--|------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 118 | Queensland Health | 2 | 66 | | Since this Part 2 of the Guide is meant to be used in conjunction with RPS G-3 Part 1, which already has a section on the Arrangements for emergencies involving potential radiation exposure, is there any need (other than making Part2 more of a stand-alone document) to include it in Part 2? | Noted | Structuring each part of the guide in this manner allows the reader to be given a holistic overview of EPR. |
| 119 | Queensland Health | 2 | 213 | | For clarity, remove "(i.e. conditions leading to the declaration of a general emergency)" | Accepted | Text has been reworded to remove repetition and improve clarity. |
| 120 | Queensland Health | 2 | 214 235 – 236 237 | off-site | Replace "off the site" with "off-site". | Accepted | |
| 121 | Queensland Health | 2 | 215 - 216 | | This sentence could be removed – it is similar to lines 210 -213. | Accepted | |
| 122 | Queensland Health | 2 | 221 | | What about critical infrastructure which may be impacted by these zones, or are they simply blanket zones with no discretion? | Noted | Comment Only This criteria falls into the regulatory decision making process and would be a site specific consideration. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---|--|-----------------------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 123 | Queensland Health | 2 | 222 - 227 | An urgent protective action planning zone (UPZ) is an area around a facility, activity, source or material for which arrangements have been made to initiate urgent protective actions and other response actions in order to reduce the risk of stochastic effects. If possible these actions should be taken before any significant release of radioactive material occurs, on the basis of conditions at the facility, activity, source or material, and after a release occurs, on the basis of monitoring and assessment of the radiological situation off-site. | This is a long sentence – suggest changing it for clarity | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 124 | Queensland Health | 2 | 236 | | For clarity, remove “, following the declaration of a general emergency to identify areas” | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 125 | Queensland Health | 2 | 250 | | For clarity, remove “following the declaration of a general emergency” | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 126 | Queensland Health | 2 | 251 | | For clarity, remove “by taking response actions” | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|--|--|-----------------------------|--|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 127 | Queensland Health | 2 | 251 - 255 | | For clarity, change items (1) and (2) to dot points. | Accepted | |
| 128 | Queensland Health | 2 | 257 - 259 | | I'm not sure what is meant here, particularly the words "determined on the purposes to prepare" and "either for domestic basis". | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 129 | Queensland Health | 2 | 268 - 270 | Effective response to a nuclear or radiological emergency requires development, establishment and maintenance of an effective emergency management system that includes preparedness, response and the transition to an existing or planned exposure situation." | Amend and combine the 2 sentences for clarity. | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 130 | Queensland Health | 2 | 272 | | For clarity, remove "parts of an effective emergency preparedness and response programme". | Accepted | |
| 131 | Queensland Health | 2 | 308 | | Change "actions" to "action". | Accepted | |
| 132 | Queensland Health | 2 | 310 | | Change "and a related to" to "and are related to". | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---|---|-----------------------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 133 | Queensland Health | 2 | 351 - 354 | Adequate logistical support and facilities should be provided to enable emergency response functions to be performed effectively during the emergency, transition and termination phases of an emergency. | Combine these sentences for clarity. | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 134 | Queensland Health | 2 | 361 | | Change “available” to “availability”. | Accepted | |
| 135 | Queensland Health | 2 | 362 - 363 | | For clarity, remove “necessary for an effective response in a nuclear or 362 radiological emergency”. | Accepted with modifications | Text has been reworded to remove repetition and improve clarity. |
| 136 | Queensland Health | 2 | 365 | | Since this Part 2 of the Guide is meant to be used in conjunction with RPS G-3 Part 1, which already has a Glossary, is there any need (other than making Part 2 more of a stand-alone document) to include it in Part 2? | Noted | Structuring each part of the guide in this manner allows the reader to be given a holistic overview of EPR. |
| 137 | Queensland Health | 3 | 25 | | Planned and existing exposure situations are dealt with by other publications – omit the words “expected to be”. | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|--|-----------------------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 138 | Queensland Health | 3 | 132 | | Since this Part 2 of the Guide is meant to be used in conjunction with RPS G-3 Part 1, which already has a section on the Arrangements for emergencies involving potential radiation exposure, is there any need (other than making Part2 more of a stand-alone document) to include it in Part 2? | Noted | Structuring each part of the guide in this manner allows the reader to be given a holistic overview of EPR. |
| 139 | Queensland Health | 3 | 176 | | Remove "That". | Accepted | |
| 140 | Queensland Health | 3 | 224 | | Perhaps add occupational exposure to the medical exposure? | Accepted with modifications | Text has been revised. |
| 141 | Queensland Health | 3 | 224 - 225 | | The words "(but not underexposure)" are not necessary. | Accepted with modifications | See Comment Resolution 140. |
| 142 | Queensland Health | 3 | 239 | | Change "threat" to "emergency preparedness". | Accepted | This has been reviewed and edited throughout the document. |
| 143 | Queensland Health | 3 | 430 | | Is there a reason for 'event' being in quotation marks? | Accepted | |
| 144 | Queensland Health | 3 | 430 | | Change "specified dose" to "generic criteria". | Accepted with modifications | Changed term to 'guidance values' which is in line with GSR Part 7. |
| 145 | Queensland Health | 3 | 593 - 594 | | The are many types of radiation practice that must comply with relevant codes. | Accepted | |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | It is not clear why the Medical Exposure Code has been picked out here – I think the Planned Exposure Code is sufficient. | | |
| 146 | Queensland Health | 3 | 623 & 628 | | Terminology issue? Is this Public Health as a specialty or government sector? | Accepted with modifications | Terminology has been reviewed. |
| 147 | Queensland Health | 3 | 644 | | This is a highly specialised medical field and would likely to be completely unfamiliar to most clinicians. Access to high quality, experienced and timely specialist advice would be vital if these patients are to be well managed. | Noted | Comment Only |
| 148 | Queensland Health | 3 | 649 - 653 | | <p>Although the IAEA 2005 generic procedures use the term “threat categories” they are now “emergency preparedness categories”.</p> <p>In lines 649, 651 and 652, change “threat” to “emergency preparedness”.</p> <p>The 2005 IAEA document is not listed in the References (page 49-50)</p> | Accepted | See comment resolution 142 |
| 149 | Queensland Health | 3 | 663 | | Should this not also include Public Health, or is that a given? | Not accepted | Addressed in the goals of medical response within Part 2, section 8. |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-------------------|---------|-------------|---------|---|------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 150 | Queensland Health | 3 | 820 | | In the headings of Table A.5 change “threat” to “emergency preparedness”. Please repeat the tables heading on each page of the table. | Accepted | See comment resolution 142 |
| 151 | Queensland Health | 3 | 855 | | Delete “threat” | Accepted | See comment resolution 142 |
| 152 | Queensland Health | 3 | 883 | | I can’t find these default actions. | Noted | See comment resolution 67 |
| 153 | Queensland Health | 3 | 886 | | Since this Part 2 of the Guide is meant to be used in conjunction with RPS G-3 Part 1, which already has a Glossary, is there any need (other than making Part 2 more of a stand-alone document) to include it in Part 2? | Noted | Structuring each part of the guide in this manner allows the reader to be given an holistic overview of EPR |
| 154 | Queensland Health | 3 | 965 | | “Fission based accident” is not in the Glossaries of RPS G-3 Part 2 or Part 3 | Noted | Reworded to nuclear emergency consistent with guides scope |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-----------|---------|-------------|---|--------|------------|--------------------------------------|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 155 | SA EPA | General | General | <p>Overall, the guides are written well and follow an “all hazards” approach. It should be noted that there would be times when this guide will be used during incidents and accidents, and which have not triggered declaration of emergency requirements. There is also considerable content that applies for nuclear emergencies, which is not relevant to a number of jurisdictions and areas such as cross country/border actions that are not relevant to the Australian context. In some areas of the guides, it refers to the USA and it is unclear whether the US situation with respect to resources is similar to Australia’s. Other points to note in Australia, is that emergency responders are classed as members of public (1 mSv) and this must be addressed if these guides are to be workable.</p> | | Noted | Comment Only |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-----------|---------|--------------------|---|--|-----------------------------|---|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 156 | SA EPA | 1,2,3 | throughout | Change “nuclear and radiological emergency” used throughout document to just “radiological emergency” | Radiation release or escape from control is the prime hazard. It does not matter if it is from a nuclear facility or any other facility. The continual use of “nuclear and radiological facility” throughout the all guides just becomes cumbersome to the reader and does not add anything. If need a definition, then add to glossary | Accepted with modifications | See comment resolution 27, 115 and 116. |
| 157 | SA EPA | 1 | 25 | Remove the words “expected to be..” so that it reads “These 24 exposure situations are dealt with by other publications in the RPS..” | Need to be more certain in the language that these matters “are” dealt with. | Accepted | |
| 158 | SA EPA | 1 | 523 and throughout | Change “declaration of emergency” to “determination of radiological emergency” or words to that effect | The use of a “declaration of emergency” is made throughout the guides and I am not sure this is the appropriate language. The declaration of an emergency is done under the powers of the Emergency Management Act and takes into account a number of factors. It is quite possible that a radiological emergency may not trigger a “declaration of an emergency” under the powers of the EM Act even if reference levels, and | Not accepted | See Comment Resolution 32 |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | operational criteria are exceeded. | | |
| 159 | SA EPA | 1 | 595 | Delete sentence | <p>In reference to the text “3.1.6. Arrangements should be in place for effectively governing the provision of prompt and adequate compensation of victims for damage due to a nuclear or radiological emergency”.</p> <p>Although I understand the intent of this clause, I am not sure that it can be mandated and I think not in the scope of this document. I am not sure who would be responsible for mandating this in SA.</p> | Not accepted | This text has been adapted from GSR Part 7 and was approved by the Radiation Health Committee. |
| 160 | SA EPA | 1 | 1238 | Comment | From my experience, most clinicians have no idea about the published Australian Clinical Guidelines for Radiological Emergencies or of the procedures required during an emergency. More | Noted | Comment Only |

| Comments by reviewers | | | | | | Resolution | |
|-----------------------|-----------|---------|-------------|--|---|------------|--------------------------------------|
| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | guidance and work needs to happen in this area. | | |
| 161 | SA EPA | 1 | 1290 | Change "Arrangements should be made so that in an nuclear or radiological emergency information is.." to "Arrangements should be made so that in a nuclear or radiological emergency information is.." | Grammatical | Accepted | |
| 162 | SA EPA | 3 | 88 | comment | "This Guide also acknowledges that a graded approach..." There is no guidance on what a graded approach may look like, and therefore will likely be implemented in different ways across the jurisdictions. Guidance should be prepared on graded approaches. | Noted | Comment only |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| 163 | SA EPA | 3 | 101 | | <p>“This guide does not cover preparedness for, or response measures that are specific to, nuclear security events, such as response measures for the identification, collection, packaging and transport of evidence contaminated with radionuclides, nuclear forensics and related actions in the context of investigation into the circumstances surrounding a nuclear security event.”</p> <p>A separate guide for this should be prepared. This is one aspect of an emergency that rarely tested, and a pity to see it omitted from the scope of this document.</p> | Noted | <p>Outside Scope The IAEA Nuclear Security Series provides guidance on these aspects. A list of these publications can be found on the ARPANSA website https://www.arpansa.gov.au/regulation-and-licensing/regulation/international-best-practice/nuclear-security</p> |
| 164 | SA EPA | 3 | 445 | Figure 5.1 (first text box) should read, “Has an assessment of the non-radiological situation occurred? “ | Missing word? | Accepted | See Comment Resolution 57 |
| 165 | SA EPA | 3 | 814 | Comment | Response time Objectives published referred to US timeframes. I am not sure that these response times are attainable in Australia, especially dependent on where any incident happens. Possibly some consultation | Noted | See Comment Resolution 34 |

| Comments by reviewers | | | | | | Resolution | |
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| # | Submitter | Guide # | Para/line # | Comment | Reason | Outcome | Reason for modification/Not accepted |
| | | | | | with emergency services, and radiation subject matter experts, should be undertaken to ensure this table is achievable in the Australian context. | | |