



Regulatory Assessment Report

Regulation 51 Change

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| Date received | Wednesday, 24 October 2018 |
| Licence holder | CSIRO Business Infrastructure Services |
| Licence number: | S0013 |
| File No. | R18/12955 |
| Documents assessed | R18/12951 Regulation 51 Application R18/12950 Site Activities, Radiation Protection Plan and Radiation Risk Control Plan |
| Contact details of person making the request: | Jen Baxter |
| Assessor(s) | Loch Castle |

1. Summary of the proposed change

As part of continuing to assess and pre-characterise the radiological contents at Woomera Hangar 5, CSIRO intend to conduct an upgrade to the hangar access doors, install active radon monitoring, recover passive radon monitors and continue further robotics assessments of the waste contents. In particular, a 3D Lidar mapping task is intended to be performed on this occasion.

2. Background on the proposed change

CSIRO provided a R51 application on the 24th October, consistent with a previous R51 which was approved in early 2018. ARPANSA requested additional information ARPANSA attended the most recent activities in early 2018 in order to monitor their activities in accordance with their plans. ARPANSA regulatory officers were satisfied with CSIRO's management and performance of those activities and they were conducted safely.

3. Scope of the assessment

The assessment includes the R51 application itself, the proposed site activities, the radiation protection plan, and considering the remote nature of the location, the adverse environmental conditions which could impact the performance of staff and reduce their alertness and energy/concentration levels, the normal WHS considerations are also in scope as they have the potential to cause accidents.

4. Arrangements for maintaining safety and security

The following criteria have been considered:

Safety Analysis Report

Not applicable as this is a source licence.

Effective Control

Effective control is maintained by CSIRO for the inventory. Access control is maintained by the Australian Defence Organisation. Technical control is maintained by CH2M and Jacobs contractors, under the supervision of CSIRO BIS.

Safety Management Plan

The analysis activities generally do not have the potential alter the safety of the site. Most of the activities involve passive data collection techniques which are unlikely to introduce safety concerns. However, one activity to upgrade the hangar access door is a positive action. CSIRO's Risk Management Plan has considered this risk, and has introduced a number of measures to the satisfaction of the assessor, to mitigate their likelihood and consequences.

Radiation Protection Plan

The contents being analysed are of very low hazard. Nevertheless, the supplied Radiation Protection Plan demonstrates a range of measures, including spill kits, decontamination arrangements and PPE use, which are appropriate for this activity. The assessor is satisfied that radiation protection is adequately addressed.

Radioactive Waste Management Plan

Generally not applicable. However, CSIRO have described arrangements for containing, collecting and removing any generated waste, which may occur through either contaminated robots/components or through the toppling/damaging a drum. The assessor considers these arrangements to be adequate.

Security Plan

Security is managed by the Australian Defence Organisation and the assessor is confident that the arrangements are adequate.

Emergency Plan

Emergency management arrangements are coordinated with the Australian Defence Organisation. Specific emergency and notification arrangements have been developed for this particular activity. Spill kits, decontamination equipment, PPE, radiation detection equipment, waste collection tools, HEPA-filtered vacuums and heavy plant equipment are available in the event of an emergency. The assessor is satisfied with the arrangements in place.

5. Additional matters taken into account

The following criteria have been considered:

Whether the application includes all the information asked for

The applicant has supplied all of the information required to make an assessment.

Whether the information establishes that the proposed change will not result in undue risk to the health and safety of people, and to the environment

The proposed activity is unlikely to result in any undue risk and is similar in nature to a previous activity that was undertaken in early 2018. The assessor is satisfied that people and the environment will be protected.

Whether the applicant has shown that the change has a net benefit

The proposed activity has demonstrated that additional characterisation information will provide a net benefit to CSIRO's future activities and that doses are expected to be negligible.

Whether additional doses are likely

Additional doses are highly unlikely due to the risk control measures in place.

Whether the change will affect the applicant's capacity to comply

The applicant has demonstrated their capacity to perform similar tasks which were observed by the assessor in early 2018, and without event.

Whether the application has been signed by an office or holder or authorised person or other appropriate person

Jen Baxter has signed the application and is authorised to do so.

Whether the applicant has shown the proposed change is consistent with international best practice

By conducting risk assessments, apply a risk control plan and a radiation protection plan across all planned and unplanned activities, the applicant has demonstrated international best practice to the assessor.

6. Summary of recommendations and conclusions

I recommend:

That the R521 application be approved without delay.