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Dear Mr Jones,

**Review of Site Characterisation Reports for the Proposed Commonwealth
Radioactive Waste Management Facility, Northern Territory**

CH2M HILL is pleased to have been commissioned by the Commonwealth Department of Resources, Energy and Tourism (DRET) to conduct a desktop review of site characterization reports prepared for the proposed Commonwealth Radioactive Waste Management Facility (CRWWMF).

Eight (8) technical reports were prepared by Parsons Brinckerhoff (PB) and Kellogg, Brown & Root (KBR) in July 2008, outlining the preliminary site characterization investigations and findings in the following documents (the Reports):

- Synthesis Report
- Geology and Geotechnical Investigation Report
- Hydrogeology and Hydrology Report
- Biological Environment Report
- Mineral Prospectivity Report
- Meteorological Analysis Report
- Land Use and Demographic Analysis Report
- Transport Assessment Report

The aim of this desktop review is to assess and validate the methodologies and findings used to characterize four potential sites in the Northern Territory for the proposed radioactive waste disposal facility. Four potential sites, all located in the Northern Territory, were assessed, including:

- Mount Everard
- Harts Range
- Fishers Ridge
- Muckaty Station

The proposed facility includes a co-located waste facility for low-level and intermediate-level radioactive wastes. Such wastes require separate disposal methods including repository (sub-surface) and a store (surface) to ensure sufficient time for radioactive decay and buffering from the biosphere.

The Reports outline the preliminary investigation methods and findings of site characteristics, and this desktop review examines the content against relevant criteria detailed in International and National siting guidelines (the Guidelines). These include:

- International Atomic Energy Agency (IAEA) Safety Standards Series publication no. NS-R-3, *Site Evaluation for Nuclear Installations*;
- International Atomic Energy Agency (IAEA) Safety Standards Series publication no. 111-G-3.1, *Siting of Near Surface Disposal Facilities*; and
- National Health and Medical Research Council Radiation Health Series publication No. 35, *Code of Practice for the Near-surface Disposal of Radioactive Waste in Australia*.

The verification assessment has included:

- Reviewing and commenting on the field work conducted to support the objectives of the site studies;
- Reviewing presented data, analysis, and commenting on the conclusions in the reports; and
- Reviewing and commenting on the analysis of collected data with respect to accepted practice in the relevant discipline.

It should be noted that CH2M HILL undertook this review on the basis of the above criteria, some of which may have either been outside of the scope of engagement for Parsons Brinkerhoff/KBR or components or outcomes of intended studies for subsequent stages of project development. Any identified outstanding requirements should be read in this context.

Summary

The Reports include seven (7) technical reports and one (1) associated summary document prepared by PB and KBR. These provide details of site characteristics and conditions at four potential radioactive waste management facility sites in the Northern Territory. The scope of the works was to conduct a preliminary characterization investigation into the nominated sites and their natural ability to isolate radioactive waste from the biosphere. The reports document background information, methodologies, data collected, analyses conducted, findings, and conclusions for each site. The information was also used to test concept facility designs and to highlight possible engineering design enhancements, and subsequent costs, to assist natural buffering. Such information would be used by the Commonwealth to consider the merit of each potential site, identify further investigations which may be required, and subsequently identify a preferred site, or sites, to progress to a more detailed evaluation stage.

The overall approach to the investigation was considered to be standard practice including:

- a desktop study of various available data
- site tour and stakeholder discussions
- determination of target zones within the nominated site areas
- stakeholder consultations to confirm target zones

- field investigations
- an analysis of data collected
- modelling of site suitability considering concept design elements

The site characterization investigation was also undertaken in accordance with themes outlined in the noted international and national Guidelines. The Reports also considers learnings of similar facilities in the US as well as issues raised by the public in 1992 on the national discussion paper for the proposed store facility. The most appropriate and general guide for a co-located facility in Australia is the national guidance note: *Regulatory Guidance for Radioactive Waste Management Facilities: Near Surface Disposal Facilities; and Storage Facilities*, Australian Radiation Protection and Nuclear Safety Agency, December 2006. Although this draws on many of the technical aspects of the nominated international and national Guidelines, it provides a direction for the requirements that must be satisfied for gaining relevant approvals. This guidance note was published shortly after the work had been completed by PB and was not included in the original scope of works. Therefore it will be a key reference document during the next phase of work.

As can reasonably be ascertained through a desktop review of the documentation and accepting the validity of presented data and results, the reports documenting the preliminary investigation details provide a reasonable but inconclusive overview of the conditions at each of the four sites. Given possible limitations in project timing, budget and scope (preliminary) of the investigation, the methodologies used were generally in line with standard practices and processes mostly fulfil the objectives of the study.

The investigation techniques, data collected and analyses were varied, and although supportive of noted conclusions, were not necessarily representative of seasonal conditions. Where sufficient data could not be obtained, some assumptions were made. In parts, this approach was suitable for this preliminary level of investigation, however, further investigation would be required to verify such assumptions and be confident in the findings. From the investigations undertaken, key issues, constraints and considerations were also identified. Given some of the technical investigations are limited and some findings are based on unrepresentative data, additional information would be required to enable a detailed comparison between sites. This is further discussed in each of the technical sections.

Included in the technical reports were exclusions from the scope of this work and considerations for further investigation. Additional investigative work would give rise to a greater level of confidence of the localized conditions and provide greater certainty for decision-making purposes. There is adequate data presented, analysed and summarized to enable an initial discrimination between the nominated sites. There are limitations to the information in providing a full address of the nominated criteria in the Guidelines.

In considering the Guidelines, an indication of the adequacy of each report is noted below:

- Synthesis Report – suitable preliminary overview, however, requires further reconciliation with details of the technical reports
- Geology and Geotechnical Investigation Report – suitable preliminary investigation
- Hydrogeology and Hydrology Report – suitable preliminary investigation
- Biological Environment Report – requires further data collection and analysis

- Mineral Prospectivity Report – suitable preliminary investigation
- Meteorological Analysis Report – suitable preliminary investigation some additional information required to fully address criteria
- Land Use and Demographic Analysis Report – requires further information
- Transport Assessment Report – suitable preliminary investigation

Synthesis Report

The Synthesis Report provides an overview of the background to the project, scope of the investigation and exclusions, details considerations, summarises the methodologies and findings from the technical reports, and discusses the process undertaken with testing the concept design against the characteristics of each site. Although detailed, the Synthesis Report is, in parts, inconsistent with some details contained within the technical reports.

It is acknowledged that the scope of this work was of a preliminary nature. The methodology was generally consistent in assessing each site against the themes outlined in the international and national Guidelines. Although investigative techniques were reflective of the broad objectives yet limited, the subsequent accuracy of the findings were also inhibited. Therefore there is reduced confidence surrounding the full identification of constraints in the:

- Hydrology and Hydrogeology Report (interpretation of results)
- Biological Environment Report (methodology of data collection and field monitoring)
- Mineral Prospectivity (scope of this investigation)
- Meteorological Analysis Report (methodology for extreme events)
- Land Use and Demographic Analysis Report (methodology of data collection and analysis)
- Transport Assessment Report (methodology of data sources)

The site suitability assessment provides a comprehensive reconciliation and comparison of site characteristics against factors derived from the Guideline themes. This is a fair and reasonable indication of the sites' natural and enhanced abilities to provide an effective isolation barrier to the biosphere. The criteria in the matrix is derived from the Guidelines, however, the scoring used is not a direct translation from the technical reports, but rather an interpretation of potential risk derived from information presented in the technical reports. Having also considered the types of wastes requiring disposal and the most appropriate disposal facility type, the assessment is detailed and provides a good framework/model for addressing the interaction between the natural and engineered environments. As noted, further investigations are required to clarify outstanding unknowns, confirm assumptions and validate data interpretation, and any such changes to the site factors will need to be reflected in this model.

Assessment of technical reports

Assessments of the technical reports were undertaken in accordance with the applicable criteria outlined in the nominated Guidelines.

Geology and Geotechnical Investigation Report

The Geology and Geotechnical Report provides a satisfactory level of assessment for a preliminary overview of the sub-surface conditions at each site. The methodology used to conduct a preliminary investigation of the four potential sites is considered to be suitable for an initial site characterisation. The approach was consistent with accepted industry practices and addresses criteria outlined in international and national Guidelines for the siting of radioactive waste facilities.

Data collection and analysis comprised both a desktop study followed by site and regional investigations. The desktop review identified existing information and gaps to be investigated, whilst on-site drilling and excavations were undertaken to obtain more site-specific information on the sub-surface conditions for each location nominated. The methods used to gain information, the data collected, the various analyses conducted and assumptions made, are appropriate and in accordance with standard practices. The process and results have been comprehensively documented and provide a suitable level of confidence for the sub-surface characteristics at each site.

Factual conclusions and summaries have been appropriately derived from the investigation results. Whilst the report is comprehensive with respect to the geological and geotechnical content, confirmation of site specific conditions would require further localised investigations, a detailed safety assessment, and modelling of the final facility design, to ensure complete addressing of all criteria outlined in the guidelines.

The report addresses all important and relevant geological considerations including geological and topographical descriptions, geotechnical properties of rocks and soils, stability, tectonic and seismic environment, groundwater conditions, chemical compositions, and suitability for construction (bearing capacities, excavatability, suitability and availability), and other general hazards (landslide, liquefaction, flooding and erosion risks). No particular issues or constraints exist, however, engineering design and construction methods can be adapted according to the local conditions. Further clarification may address 'collapsing soils' and 'air explosion' noted in the report, and the behaviour of conditions over a long design life of 300 yrs proposed for the facility.

Although the ground conditions at individual sites appear to be relatively uniform, sampling density is reasonably sparse (~200m to >1000m separation). Depending upon the specific layout of the proposed disposal facility, greater density of geological investigation may be warranted to gain further information, and determine the presence or otherwise, of any localised geological variability that may present an additional site specific risk.

Hydrology and Hydrogeology Report

The hydrology and hydrogeology document addresses the identification of local and regional surface and groundwater resources in proximity to the investigation sites. The investigations undertaken are an appropriate means of determining depth of groundwater, flow rates/hydraulic conductivity and direction of flow, permeability, hydrogeochemistry and catchment sizes and influences.

Although CH2M HILL was not addressing grammar or typos, Table H4.6 has two apparent typos in the "Above ground with future development, Effective Area" column - the first two rows are believed to be intended to read 14100 and 11670 respectively. Additionally, page 4 of the document has been shifted to be between pages 9 and 10.

Seasonal fluctuations in groundwater level were not able to be defined for the Muckaty site, however, expected fluctuation range was identified.

H6.1.2 indicates the installation of data loggers to understand longer term fluctuations and two months data from these loggers are presented in table H6.2. The value of these results needs to be placed in context of the stated objective of the data loggers, i.e. while the loggers have been installed for long term trends initial short term results have been reviewed and these may not be reflective of longer term trends.

The assessment of groundwater characteristics and hydrogeochemistry is appropriate for identifying the potential for interactions between waters and host rock, however, the summary and discussion section do not highlight the outcomes of the geochemical assessment with respect to the solubility and sorption of radionuclides.

The utilization of the Langelier Saturation Index (LSI) calculations is questioned. The LSI does give somewhat of an indication of the potential for calcite scale formation but it is the undersaturation of calcium carbonate that is used to estimate the potential for corrosivity (the higher the sodium relative to the calcium carbonate saturation the more potential for corrosivity). PHREEQC and other thermodynamic equilibrium models are much more effective and accurate at estimating calcium-carbonate saturation than LSI because they take the entire major ion chemistry into account - that includes calcium complexing with sulfate and chloride and therefore unavailable for saturation considerations but ignored by the LSI calculation so the LSI calculation result over estimates calcium carbonate saturation (over estimates potential for scale formation) and underestimates the potential for corrosivity.

The LSI may typically be calculate it if specifically requested to compare it with historical LSI results but it is not considered to be usable for consideration about materials. The geochemical models are far more accurate and effective. The differences between the LSI and geochemical models are far more than theoretical, they are based on current scientific principles of aqueous geochemistry.

There is no consideration of the interaction of the results of this report with the results of other reports, i.e. surface and groundwater dependencies by local townships, flora or fauna and implications for the loss or contamination of these water sources given their local and regional dependencies and sensitivities. This aspect also seems to be absent from the synthesis report. Information on actual major water uses including abstraction rates and land use requirements could be expanded upon in order to identify any relative sensitivities of groundwater resources - i.e. human, agricultural, and/or stock dependencies. Additionally, regional flooding events are only lightly touched upon in the text with no apparent historic event referencing, and no consistency of consideration across the sites.

The potential for natural events such as subsidence, sub-surface movements, faulting or fracture or volcanic activity and the potential effects on regional hydrology and hydrogeological systems has not been addressed in the document. Similarly, consideration of

the potential impacts associated with climate change to hydrology and hydrogeology have not been considered in this document.

It is noted that the Synthesis Report documents groundwater use and the migration of nuclides and flooding in Table 10.1 and attributes a score against these for each site. The source for this scoring is not readily identifiable in the Hydrology and Hydrogeology document text or summary as would be expected.

Biological Environment Report

The Biological Environment Report provides a constrained summary assessment of the biological characteristics of the four potential sites. The investigation undertaken provides a limited understanding of the flora and fauna across each site, and limits confidence for decision-making. The methodology associated with flora and fauna data collection was restricted to one season per site and conducted within short time frames of relatively similar climatic and environmental setting. The data is not representative of year round (or longer term) conditions and comparative analysis is restricted. Such investigation limitations have not been outlined in the corresponding section of the Synthesis Report.

The flora and fauna surveys were undertaken over consecutive days that were of similar conditions. It is preferable that fauna investigations be undertaken in various conditions, where time is otherwise available, to provide a more representative sampling of the range of potential communities present based on seasonal responses (i.e. after the commencement of the wet season or during breeding seasons). This would enhance the ability for species to be confirmed as opposed to relying on hypotheses about the presence of a particular species. In turn, it will then be possible to provide more definite conclusions on the significance of each of the sites.

The Fishers Ridge site, the site considered to have the greatest biodiversity, had undergone a fuel reduction burn 6 weeks prior to the field investigation. This is expected to have had an impact on the diversity and abundance of species encountered at the time of data collection, given species of both flora and fauna may not have adequately re-colonised the area following the recent fire.

It is recommended that additional flora and fauna surveys be undertaken across the range of seasonal conditions to provide an indication of the species present at both times of year as it is likely that they will be considerably different. This is emphasised for all four sites in order to enable a better defined assessment of relative sensitivities between sites.

The species of flora and fauna at many sites were predicted to occur on the basis of suitability of habitat or the presence of co-indicative species. It is difficult to conclude that the species predicted to occur at any particular site is of any particular conservation status. The assumed lists of species present have been compiled on what is typical of each bio-region, however more detailed biological assessments of the region would be required to determine if this conclusion was correct on a site specific basis. Additionally, broader assessment during a range of climatic conditions would verify the status of species assumed to be encountered.

Mineral Prospectivity Report

Overall the Mineral Prospectivity Report is reliable, given the scope of the study was restricted to a desktop review and samples taken from drilling undertaken for geological purposes. Some minerals of interest were identified in the surrounding areas of each site as well as identifying existing mineral licences/leases. Further quantitative investigation into the economic value of a potential mineral deposit vs. extraction cost (approx. 200 m overburden), may be required to confirm if the use of the sites as a radioactive waste management facility would unreasonably sterilize the resource. This consideration would need to utilize reasonable forecast minerals pricing and consider various options for extraction.

The conclusions drawn based on the desktop investigation on mineral prospectivity around the four proposed sites are reasonable. General statements about the extraction of potential mineral deposits at the four sites being sub-economical due to the thickness of overlaying material are sound, given the desktop constraint on the study. Although there is sufficient detail on the regional prospectivity analysis, there is little information about the methodology used to analyse the local prospectivity. The Synthesis Report outlines that samples for analysis of commercial minerals were collected from drilling and test pitting program, however, there is only limited description of this in the Mineral Prospectivity technical report.

Given the restricted nature of the analysis, the suggested depth of minerals, and the limited information on potential deposits beneath the nominated sites, it is difficult to conclude that 'there are no known mineral deposits', and confidently allocate the site for the purposes of a radioactive waste management facility. Further investigation into available data, or deep drilling would be required to be fully satisfied as to the economic potential of any minerals present.

Meteorological Analysis Report

The Meteorological Report provides a satisfactory overview of weather and climatic conditions across each of the four potential waste facility sites. The report documents findings from a desktop review which addressed much of the primary requirements outlined in the international and national siting Guidelines. The review was preliminary and included the collection and analysis of comprehensive weather data (precipitation, wind speed and direction) from numerous weather stations located around each of the sites as well as discussion of extreme events (including cyclones and lightning ground flash intensity) and general air quality and the impacts on the individual sites.

To fully assess the sites against criteria listed in the Guidelines, further analysis would be required into extreme events which may pose significant risk and impact on the facility. The collection of data from BOM is adequate, however, the analysis of the results for extreme events has not been completed for all sites as recommended in the Guidelines where "the one extreme event for the year should be identified and tabulated for each year in order to perform the calculation of extreme statistics." There has only been one such assessment undertaken, at Fishers Ridge in relation to cyclones. Discussion surrounding the effects of rainfall and subsequent flooding has been partially identified within the Hydrology and Hydrogeological Report.

Further requirements as listed in the Guidelines that could be addressed during the next stage of the site assessment process include:

- Extreme wind/precipitation conditions from cyclone events included on a regional map
- Discussion of the potential (if any) of sandstorms occurring in the area and the implications on the design of the facility
- Transport of airborne releases to be evaluated via modelling of atmospheric dispersion of any radioactive material from the proposed waste management facility
- Discussion of the impact of meteorological conditions (including flooding) on repository design to be included in more detailed design once the site has been selected
- Address the potential effects of climate change on meteorological conditions for the sites and the implications on design of the facility
- Discussion on atmospheric stability parameters (e.g. Pasquill atmospheric stability classes) and prolonged inversions (including comment on absence)
- Once final site has been selected, onsite weather station to be installed with data (minimum 12 months) to be compared with regional weather for correlation

Land Use and Demographic Analysis Report

The Land Use and Demographics Analysis Report provided an adequate preliminary desk-top assessment of each of the four sites and surrounding areas. The selection of land-use issues and demographics topics used to conduct the preliminary investigation of the four potential sites is considered to be adequate and suitable for an initial site characterization. The investigation mostly satisfies the criteria outlined in the Guidelines to confirm buffering from populated areas and indigenous and non-indigenous cultural or heritage sensitivities.

Each of the four site sections use data collected from a reliable source to portray the social profile and land-uses of the site. No site specific data was collected and final discussions were drawn from literature information and Census data generated in 2006 and earlier. Verification in the field would lead to greater confidence in the data presented as rapid demographic changes can be experienced in these communities following economic and climatic (i.e. drought) fluctuations.

The majority of the criteria outlined in the Guidelines have been considered in the technical report, however, there are some additional aspects in the Guidelines not addressed but were also not included in the original scope of works. It is appreciated that to adequately identify the constraints, further investigation and analysis will need to be undertaken in subsequent phases of work. This may include:

- The potential hazards of the waste facility on human health and the current population has not been identified, particularly with respect to emergency response requirements. A hazard assessment should be undertaken, at least at a preliminary level for the purposes of site characterisation.
- More details are required for water characterisation; each site needs to have an outline of where their potable water is sourced from for each of the surrounding communities.
- Identification of cultural centres for all four sites that are not necessarily listed on any heritage database but may create 'a sense of place' for local residents should be considered.

- Identification of the acceptance by local residents of the facility
- Identification of requisite utility resources - water, electricity, site access, accommodation, health and medical, education, etc
- Consideration should be given to sensitive land uses such as schools, hospitals and prisons and the location of these facilities in relation to the four sites.
- Outline of required buffer zones around the facility and whether this will impact on current communities and/or land uses located around the four sites.
- Discussion should be provided regarding the availability of potable water and other utility services and infrastructure that would be required to be brought onto the site for the purpose of building a facility and the implication on local resources.
- The consideration of the local employment rates and status, including potential for workers in constructing and operating the facility and the potential impacts on community resources (e.g. hospitals, accommodation, schools).
- Identification of the applicable legislation, regulations and approvals for each site given the Commonwealth status of the project.

Some details presented in the Synthesis Report regarding land use and demographics, although relevant have not been duplicated from the technical report.

Transport Assessment Report

Overall the Transport Assessment Report provides an outline of transport infrastructure, condition and the various logistics options (and cost) available for transporting the radioactive materials. The report provides a preliminary assessment of the regional transport network and suggestions on the relocation of radioactive waste. The report focuses entirely on operation of the facility with little detail regarding potential construction issues associated with transportation, perhaps with the exception of potential upgrades to infrastructure. Whilst the scope appears to have addressed key considerations through data collection and site visits, the methodology is not clearly stated. There are some aspects within the report that require clarification and detail, particularly around the collection of data, for example traffic data details, truck breakdown information, and rail transport speed.

Whilst some of this investigation involves operational planning, due consideration of relevant legislation must be undertaken, i.e.. National Environmental Protection Measures (NEPM) requirements (*Movement of Controlled Wastes Between States and Territories*). Aspects related to handling and human exposure levels requires some discussion to satisfactorily address the relevant guideline criteria. Overall the report meets the requirements of the various guidelines, with further clarification required in some areas.

An additional transport-related criteria in the Guidelines refers to potential air crashes. An investigation and discussion into this aspect is required to consider the likelihood, consequence and risk associated with air flight routes on such a facility for the given four sites. This may be undertaken as part of the land use risk assessment during a later phase of the project.

Other considerations

The technical reports primarily address siting characteristics and criteria outlined in the Guidelines. The ancillary function of the current technical documents is to facilitate the

integration of the siting of the facility with the natural environment and engineering requirements, operations, and long-term performance of a radioactive waste management facility. The technical documents need to demonstrate a consideration of how their respective content will, and can, be relied upon for the following:

- Results of the Senate inquiry
- Design life of facility
- Types of radiation, human dosage levels (public and occupational)
- Types (classification and list) of wastes, conditioning/treatment/packaging & disposal requirements (during both operational and post-closure periods)
- Long-term behaviour of wastes (both solids and liquids)
- Environmental impact assessment
- Safety assessment
- Approvals, licences and permits (Australian Radiation Protection and Nuclear Safety Agency)
- Public and community and stakeholder considerations and acceptability
- Decommissioning and closure planning
- Engineering and design requirements, construction requirements, availability of materials, building materials, structural stability, standards, and techniques
- Impact of construction on determined site characteristics
- Operational and disposal plan
- Institutional requirements
- Record management
- Emergency response
- Maintenance requirements
- Contingency planning
- Monitoring requirements and benchmark conditions
- Auditing and reporting requirements
- Security

Conclusion & Recommendations

The preliminary investigation for the initial characterization and subsequent technical reports provide DRET with a reasonable overview of constraints, characteristics and conditions of the nominated sites in the Northern Territory for the proposed radioactive waste management facility.

This review process has identified areas for improvement in:

- Methodology, i.e.. desktop study, field investigations
- Data collection, i.e.. level of representative data obtained from each of the sites
- Analyses, i.e.. to determine impacts and risks to adequately characterize sites and address Guideline criteria
- Information translation, i.e.. from the technical reports to summary and assessment report (Synthesis Report)

The scope of work involved conducting investigations across four potential sites, in accordance with international and national siting Guidelines. Although the reports address and fulfil the majority of the scope outlined, there are some further investigations required to increase the certainty of sensitivities, constraints and localised conditions that will facilitate an informed decision making process. Additional works, excluded from the scope of this investigation, also need to be undertaken to integrate the nature of the facility with the characteristic findings to better determine the probable performance of the sites. This will enable DRET to exercise comprehensive judgements for site selection as well as providing additional details required for approval purposes.

To build capacity of the preliminary investigation and adequately address siting criteria in the Guidelines, as well as consider the engineered facility design, there are steps for the subsequent stages of work, including:

- Conducting a gap analysis of further preliminary information required across the four sites to confirm characteristics or assumptions before proceeding on a decision of a particular site(s)
- Reconciling against assumptions and initial findings
- Refining multi-criteria analysis model to reflect any changes in characteristics
- Confirming any changes to concept facility design and identify subsequent impacts on design requirements and constructability
- Refining cost analysis to gain understanding of overall costs
- Identifying specific information required for approval purposes and stakeholders to be engaged
- Conducting detailed site-specific investigation of preferred site(s)

It is acknowledged that there may be some constraints (time and budget) to confirming site conditions, however, some additional effort should be made to confirm assumptions that have implications for site sensitivity or site interaction with sensitivities and therefore have implications in the siting assessment.

CH2M HILL appreciates the opportunity to assist DRET with this project. Please contact me if you wish to further discuss any aspects of our response before providing comments to finalise the document. CH2M HILL is most appropriately qualified and resourced to guide DRET in subsequent stages of this project, should our assistance be requested.

Yours sincerely



Richard Johnson
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CH2M HILL Australia Pty Ltd

References

- Australian Radiation Protection and Nuclear Safety Agency, *Regulatory Guidance for Radioactive Waste Management Facilities: Near Surface Disposal Facilities; and Storage Facilities*, December 2006.
- Commonwealth Department of Education, Science and Training, *Safe Storage of Radioactive Waste, The National Store Project – A Report Responding to Public Comment*, April 2002.
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