qB135859
10/01768
Department Generated Correspondence (Y)

NSW GOVERNMENT | Planning

ASSESSMENT REPORT

Section 75W Modification
Chemsal St Marys – Chemical Storage and Treatment Facility

---

1. BACKGROUND

On 22 December 2006, the Minister approved a project application from Chemsal Pty Ltd (Chemsal), for the establishment of a chemical waste storage and treatment facility at 40 Christie Street, St Marys, in the Penrith local government area (refer to Figure 1).

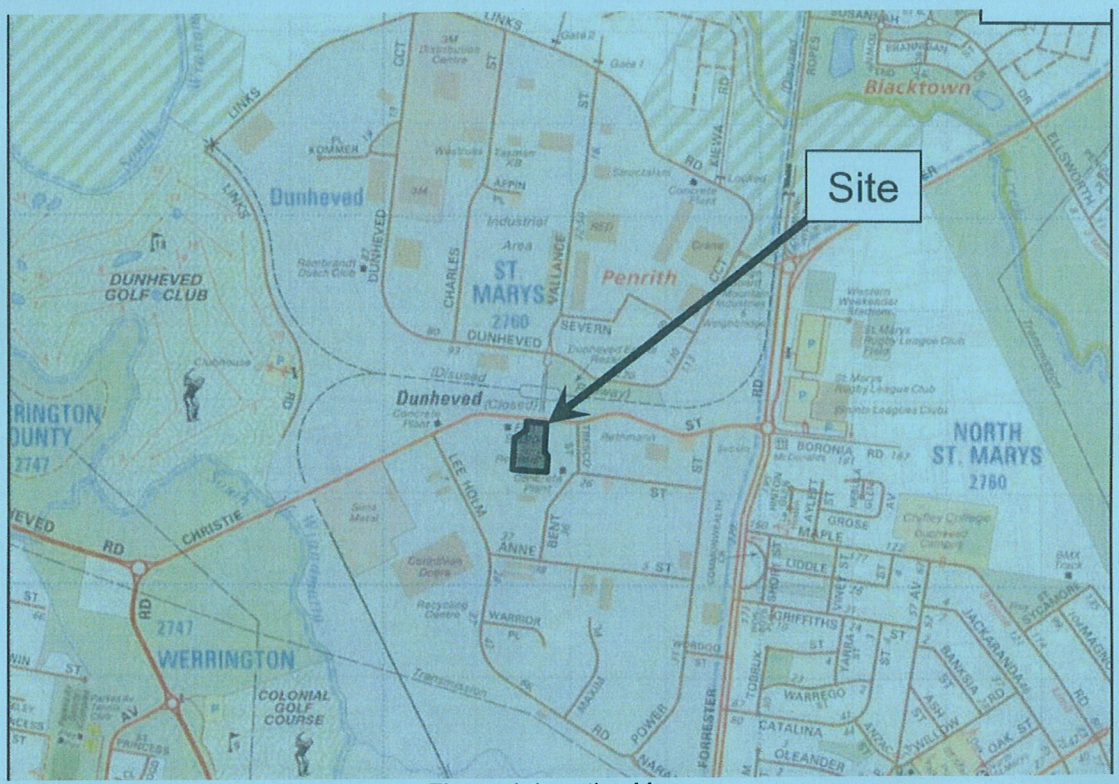

***Figure 1**: Location Map*

Under the Minister's approval, Chemsal is allowed to collect, treat and store up to 5000 tonnes of chemical waste a year from industries, households, schools, laboratories and hospitals. This waste would include chemicals from a broad array of classes under the Australian Dangerous Goods Code (ADGC).

The main components of the approved facility include:

- a Class 3 flammable processing and storage area;
- a Class 8 fluorescent lamp resource recovery unit;

- a Class C2 combustible liquids storage area;
- a shredder located adjacent to the truck unloading area;
- a security store; and
- separate storage areas for other classes of wastes.

In July 2007, the Minister approved an application to modify the project approval, which included changes to the site layout (see Figure 2), the types of dangerous goods stored onsite, including the storage of up to 10L of Class 6.1 Packaging Group I classed under the ADGC, as well as changes to the facility's gas detection system to include the detection of cyanide.

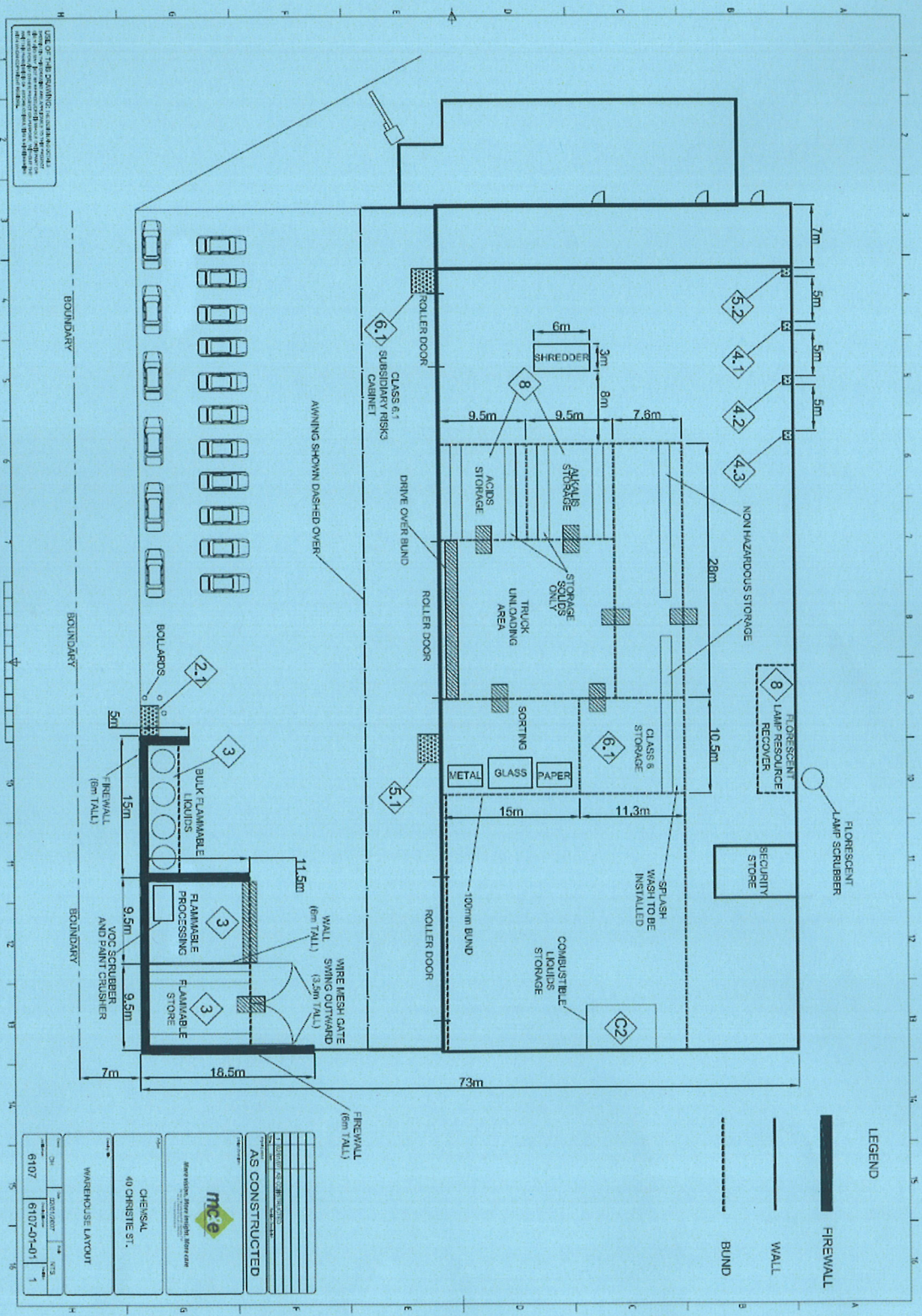

Figure 2: *Site layout*

Currently, Chemsal collects and stores untreated hazardous wastes onsite, before transferring these chemicals to other offsite treatment facilities, often interstate, for processing. In order to allow some treatment to occur at the facility, Chemsal propose to install a pre-treatment system to enable certain hazardous wastes on site to be treated. This will allow Chemsal to render these chemicals non-hazardous, thereby enabling these chemicals to be transported directly to landfill.

2. PROPOSED MODIFICATION

On 2 November 2009, Chemsal lodged an application with the Department which seeks to modify the project approval under Section 75W of the EP&A Act to:

a) include a Chemical Immobilisation and Solidification (CIS) process for the treatment of selected hazardous wastes received at the site; and
b) allow some minor internal layout changes of the waste facility.

The CIS process involves the addition of chemical reagents to the waste stream in order to immobilise the contaminant in a non-leachable form and to solidify the material into a rigid mass. The treatment would involve the conveying of material into a mixing device to blend the waste material with the reagents, then for the material to be sent to a curing area. In general, the majority of waste to be treated would be sourced from existing waste streams received at the facility. However, the following additional types of waste would also be received and treated at the facility:

- inorganic fluoride compounds (excluding calcium fluoride),
- nickel compounds,
- selenium and selenium compounds,
- barium compounds (excluding barium sulphate),
- non-toxic salts,
- filter cake, and
- inert sludges or slurries.

Despite additional material proposed to be treated at the facility, the overall type and volume of dangerous goods to be received and treated would not be changing from that which is already approved.

The CIS process is expected to treat and dispose of between 500 to 1000 tonnes of waste per year. Treated wastes would be stored onsite until confirmation of treatment success and waste classification, before being transported to a suitably licenced landfill. It is estimated that approximately 1200 tonnes per year of 'general solid' waste would be generated by the process.

Also since the previous modification application, Chemsal has finalised the construction of the waste facility which differs in a number of respects to the previously approved site layout (see Figure 3). As such, Chemsal are seeking to have the final layout approved under the project approval. The changes include:

A) removal of the part of the Class 3 flammable liquids storage area;
B) relocation of the Class 4, 5.1, 6.1 and C2 oil decanting storage areas;
C) removal of the Class 8 Florescent Lamp resource recover area;
D) installation of a rainwater tank; and
E) installation of a CIS processing area.

3. STATUTORY CONTEXT

The Minister was the approval authority for the original project approval and is consequently the approval authority for this application. However, on 25 January 2010, the Minister powers and functions as an approval authority to modify certain project approvals under section 75W of the EP&A Act were delegated to the Director – Mining and Industry. This modification application meets the terms of this delegation. Under these circumstances, the Director of Mining and Industry may determine the application under delegated authority.

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within section 75W.

The Department notes that:

- the proposed modification does not seek approval for a new and different project and would not change the essential function of the project, for which approval was granted;
- the CIS facility would allow an additional process in the handling of chemical wastes to be undertaken, rather than the material being stored, handled, and then transported for further treatment; and
- the internal changes are not significant and do not change the function of the project.

It is therefore recommended that the Director of Mining and Industry, as delegate of the Minister, agree that the modification request falls within section 75W and the request can be determined.

4. CONSULTATION

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Following a review of the application, the Department sought comments from the Penrith City Council (Council); and the Department of Environment, Climate Change and Water (DECCW).

In summary, DECCW raised no objection to the proposed modification, however recommended a number of conditions.

Council raised no objection.

The Department has considered comments received from DECCW in the assessment provided below. A copy of the submission is provided in Appendix C.

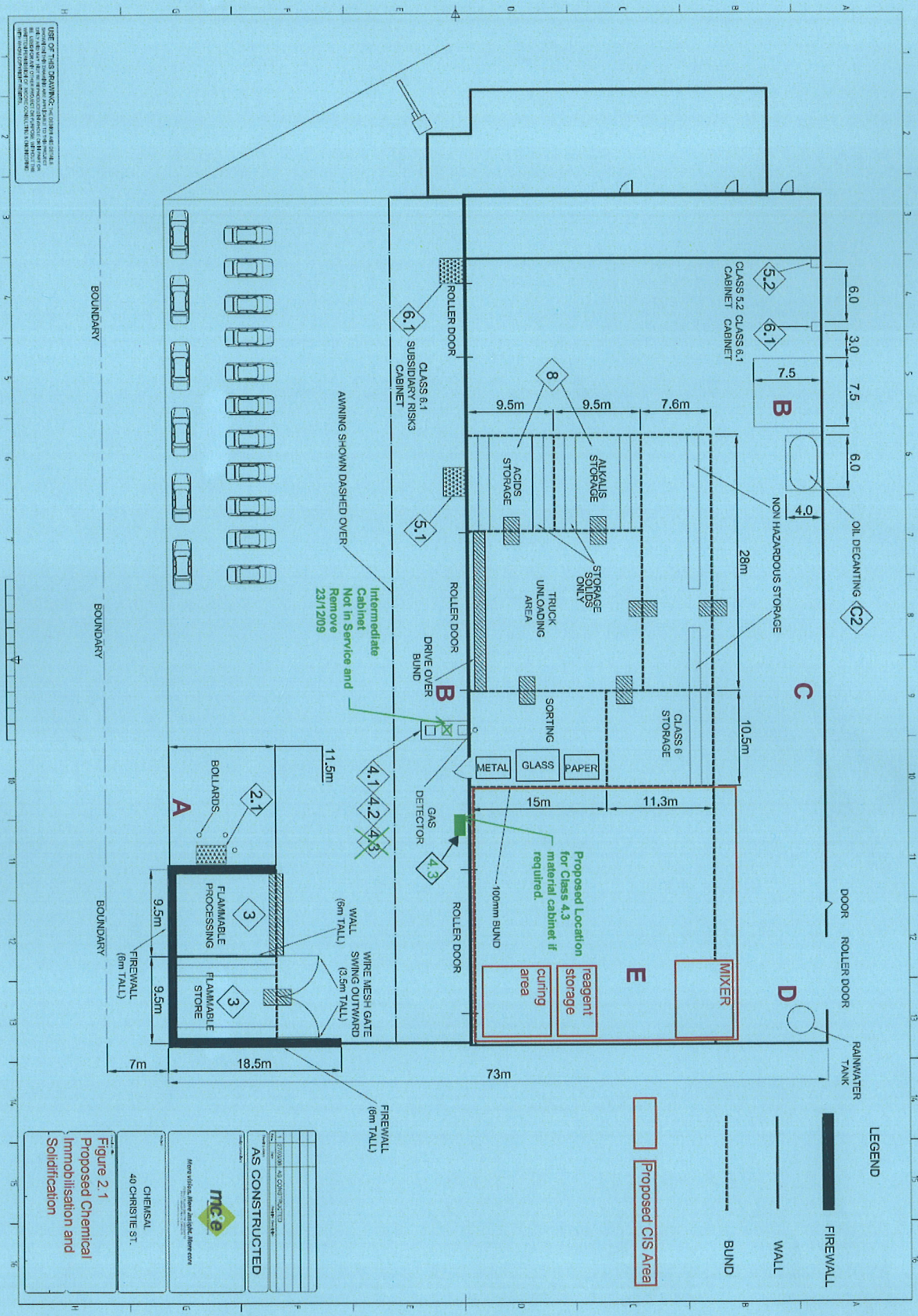

Figure 3: *Proposed Site Layout*

5. CONSIDERATION

The Department has assessed the environmental impacts of the proposed modification and considers the key issues to be:

Hazards and Risk Assessment

The types and volume of dangerous goods received and stored on site would not change as a result of the proposed modification. Also, the transportation of dangerous goods to and from the site would not vary from the previous approval.

However, the proposal would introduce 5 new reagents to the site as part of the additional CIS process. Of the 5 additional reagents to be introduced, only sodium sulphide and ferric salts are classified as dangerous goods in the context the ADGC. These are classified as Class 8 dangerous goods and would be stored in the existing Class 8 storage area on site. The other reagents would be stored in the proposed reagent storage area. Current inventory controls would continue to be implemented to ensure that the cumulative volume of dangerous goods substances would not exceed the total storage capacity for the site.

A Preliminary Hazard Analyses (PHA) was undertaken for the proposal. The assessment demonstrates that the cumulative risk for the facility would not increase as a result of the proposed CIS process. The Department has reviewed the PHA and is satisfied that the project would not pose an unacceptable risk to human safety or the safety of the environment, provided that recommendations contained in the PHA are implemented.

The amended site layout was included in the Hazard Audit submitted to the Department for review in March 2009. The Department requested minor alterations to the layout with regard to the storage of Class 4 and Class 5 materials, which have been included in the revised layout.

The Department is satisfied that the amended site layout would not pose an unacceptable risk to human or environmental safety, subject to the replacement of the Class 5.1 cabinet to meet the requirements of AS 4326 *The Storage and Handling of Oxidising Agents*. The existing conditions of approval are considered to be sufficient managing any possible risks or hazards. Notwithstanding, the Department has included a condition to reflect the requirements for storing Class 5.1 material.

Issue	***Consideration***
Noise	The proposed CIS process has the potential to generate additional noise impacts, primarily from use of the planetary mixer, which is a large double bladed mixer used to combine the reagents and chemicals. Mixing would be undertaken on a sporadic basis for approximately 4 hours at a time and would operate inside the existing warehouse building. Due to the sufficient cladding on the western wall, predicted noise impacts are considered to be minimal. Further, the additional treatment process would increase truck movements by approximately 2 per week. This is unlikely to significantly impact on traffic generated noise levels. The existing conditions of approval, requires that the Proponent adhere to the noise criteria set out in the Environmental Protection License issued by DECCW for the development. DECCW considers this to be adequate in managing any noise related impacts associated with the proposal. The Department is satisfied that the proposed modification would have a minimal impact on noise levels in the area and that the proposal would continue to comply with DECCW noise criteria.
Air Quality	Currently volatile chemicals are captured on site and treated prior to discharge into the atmosphere. The proposal would not increase the volume of dangerous goods and therefore the capacity of the existing treatment system would continue to be sufficient.

	Dust generated by the CIS process is predicted to be minor. Also, all processing would be undertaken in the existing warehouse and therefore be fully contained. The existing conditions of approval are considered to be sufficient in mitigating any air quality impacts. However, DECCW has recommended that an appropriate air pollution control system be installed to ensure that emissions continue to be maintained at acceptable levels. The Department and DECCW are satisfied that the proposal would not result in a significant increase in air quality related impacts.
Internal Layout	The Department is satisfied that the changes to the internal layout are minor and could be deemed to be consistent with the original project approval. The potential environmental impacts and risks from the changes to the location of materials to be stored have been considered, and the Department is satisfied that the potential impacts and risks do not change. However to ensure the Proponent and Department are clear on the approved layout, the Department has recommended a condition which includes a layout plan in an appendix to the project approval.

6. CONCLUSION

The Department is satisfied that the proposed CIS process and the amended layout of the facility present no significant increase of the environmental impacts associated with the project.

The Department recommends minor amendments to the project approval (see notice of modification in Appendix A). A copy of the consolidated approval is provided in Appendix B.

7. RECOMMENDATION

It is RECOMMENDED that the Director:

- approve the proposed modification under the Minister's delegation of 25 January 2010; and
- sign the attached notice of modification (**Tag A**).

Haley Rich
9228 6516

C. Ritchie 3/3/10.

Chris Ritchie
Manager – Industry
Mining and Industry

DKitto 3/3/10

David Kitto
Director
Mining and Industry