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14 November 2012

Commercial-in-Confidence

Goodman
Level 17, 60 Castlereagh St.
SYDNEY 2000

Attention: Mr. Khalid Hourani

Dear Khalid,

Subject: Proposed Change of Dangerous Goods Storage – Metcash Distribution Centre

Thank you for your inquiry regarding the change of storage of Dangerous Goods (DGs) at the Metcash Distribution Centre, Huntingwood, NSW. I have reviewed the proposed storage and have made the following comments with respect to compliance with Section 7 of NSW Work Health and Safety Regulation – 2011 (WHS), the applicable regulation for the storage and handling of DGs.

1. Requirement for Compliance

The storage and handling of DGs requires compliance with Section 7 of the WHS. This section of the regulation requires management of the risks associated with the storage of DGs to be managed to ensure these risks are maintained within the As Low As Reasonably Practicable (ALARP) range.

The NSW WorkCover Dangerous Goods Code of Practice recommends that a DG storage comply with a relevant Australian Standard to demonstrate that the risks are within the ALARP range. As the facility proposes to store and handle mixed classes of DGs, the relevant Australian Standard for this facility would be AS3833-2007, The storage and handling of mixed classes of Dangerous Goods in Packages and Intermediate Bulk Containers, issued by SAI Global (Sydney).

Hence, AS3833 has been used for review and assessment in this study.

2. Proposed DG Storage

Figure 1 shows the proposed modification to the Metcash Distribution Centre and **Figure 2** shows the proposed storage layout for the DGs. **Table 1** lists the quantity of DGs proposed for storage in the modified area.

TABLE 1
LIST OF DGs PROPOSED FOR STORAGE AT THE MODIFIED METCASH DISTRIBUTION CENTRE

Dangerous Goods Class	Type of Dangerous Good	Quantity Stored
Class 2.1	Aerosol	7,300 kg
Class 2.2	Aerosol	
Class 3	Flammable Liquid	2,400 L
Class 4.1	Flammable Solid	130 kg
Class 8	Corrosive Liquid	1400 kg
Class 9	Environmentally Hazardous Substance	100 kg

3. Compliance Review

AS3833-2007, permits the storage of mixed classes of DGs within the same warehouse area. The following classes of DGs are permitted to be stored together as mixed storage:

- Class 2.1 & 2.2 Aerosols;
- Class 3 Flammable Liquids;
- Class 4.1 Flammable Solids;
- Class 8 Corrosive Substances; and
- Class 9 Environmentally Hazardous Substances

Hence, the DGs proposed for storage at the Metcash Distribution Centre can be stored together providing certain conditions are met. The key requirements listed in AS3833-2007 have been reviewed below.

Spill Containment

It is noted that AS3833-2007 provides for special conditions where goods are stored in retail packages and in a distribution centre. Under these circumstances, no bunding is required in the warehouse as long as spills will not be released offsite. A review of the package size (small retail packages), the distance from the storage areas to the site boundary and the provision of a first flush drainage system at the site, there is no potential for offsite release from spills in the proposed DG storage areas.

Separation of DG Stores

The DG storage areas must be separated from each other by a minimum of 3m. A review of **Figure 2** indicates that all DG stores are separated by a minimum of 3m. The requirement for separation from the storage area to the site boundary is governed by the maximum quantity of DG stored. A total quantity of 7,300 kg of aerosols is held in the storage. Hence,, based on the separation distance listed in table 6.1 od AS3833-2007, the storage areas must be a minimum of 4m from the site boundary. **Figure 1** shows that the storage area exceeds separation from the site boundary by 4m

Aerosol Storage

Aerosol storage areas, exceeding minor storage quantities (e.g. >1,000 kg), requires the area to be caged. The Metcash Distribution Centre will be provided with a cage for the storage of the aerosol cans.

Storage of Aerosol, Flammable Solids and Class 3 Flammable Liquids

The storage of aerosols, flammable solids and flammable liquids requires control of heat and ignition sources within the storage area. Discussion with the designers, indicates that there will be no heat sources close to the storage areas and lighting within the aerosol, flammable solid and flammable liquids areas will flameproof.

4. Conclusion

It is recognised that it will be necessary to comply with a number of additional requirements under the provisions of the WHSA Regulation 2011 and the standard (AS3833-2007). However, these requirements are related to documentation and management of the facility under the retail distribution provisions of the standard. At this stage of the development, it is not possible to identify the exact document details, however, there does not appear to be any impediment to the provisions of these documents as the project develops. Based on the review of the major requirements of the WHS regulation and AS3833-2007, it is concluded that based on the type of DGs proposed for storage, the proposed DG layout and quantities proposed for storage, the facility would comply with the

requirements of the WHS Regulation and AS3833-2007 and would be permissible under the regulations in the proposed location.

It is noted that the Metcash Distribution Centre currently stores and handles the listed quantities in Table 1 and therefore there will be no increase in DG storage at the site and, hence, no requirement to conduct a preliminary hazard analysis (PHA) under the requirements of State Environmental Planning Policy No.33, Hazardous and Offensive Development.

5. Details of the Assessor

This assessment was conducted by Mr. Steve Sylvester, Associate Director – Risk Engineering at AECOM. Steve is a mechanical engineer (BEng, mech.hons) with over 42 years engineering experience. Steve has conducted over 100 Dangerous Goods Assessment, SEPP33 reviews and PHA studies for a range of facilities over a 20 year period. He is a founding member of the Australasian Institute of Dangerous Goods Consultants (www.aidgc.org.au), an internationally accredited Functional Safety Engineer with TÜV Rhineland (TÜV 2203/10) and has completed the competency training for assessment of Hazardous Areas (CT05984a&b). He is also an accredited HAZOP leader and Hazard Auditor with the NSW Department of Planning. A full resume can be provided on request.

Should you have any queries regarding this assessment, please call me on the mobile (0411 659 309).

Yours sincerely,

Steve Sylvester
Associate Director – Risk Engineering
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Encl:

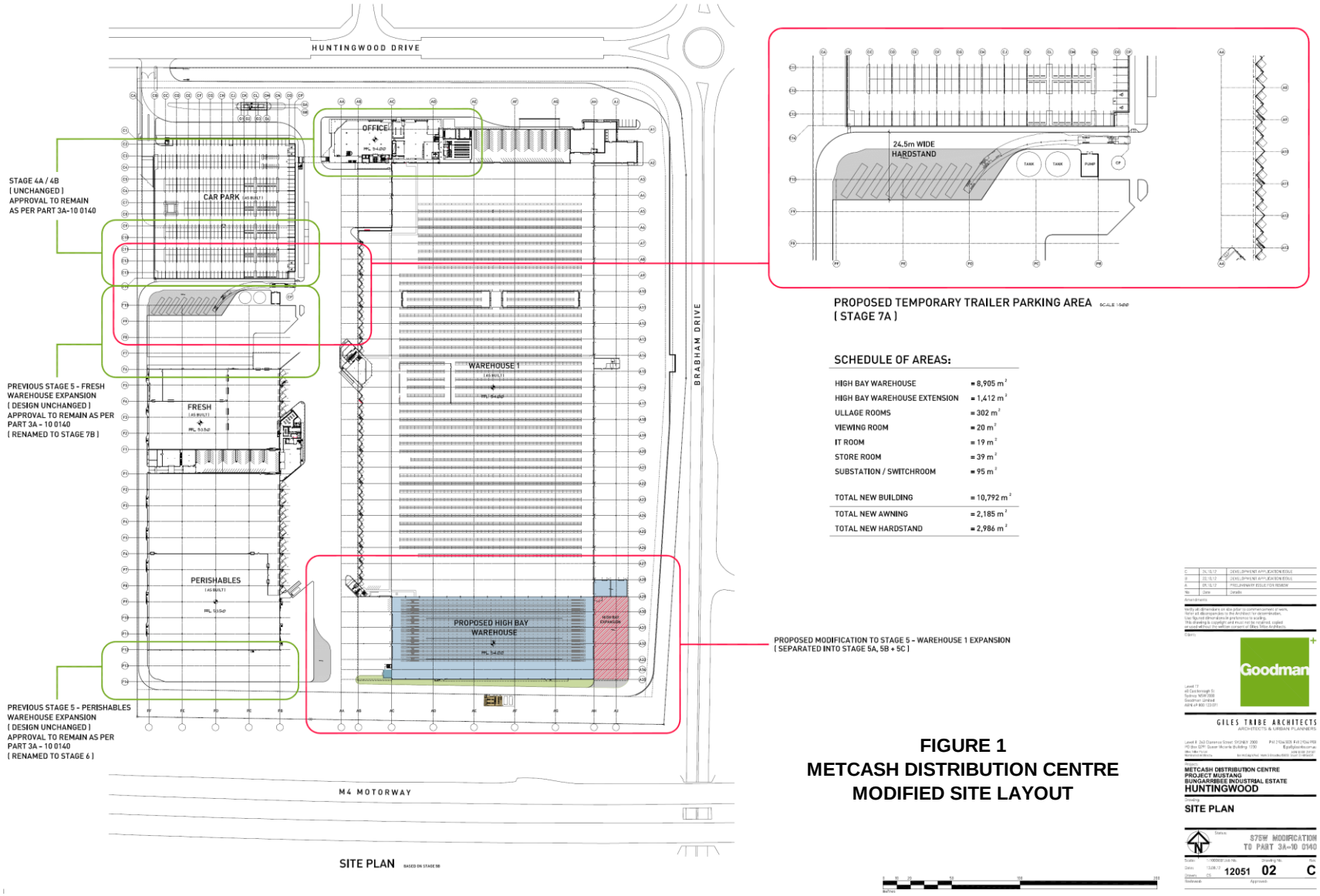

FIGURE 1
METCASH DISTRIBUTION CENTRE
MODIFIED SITE LAYOUT

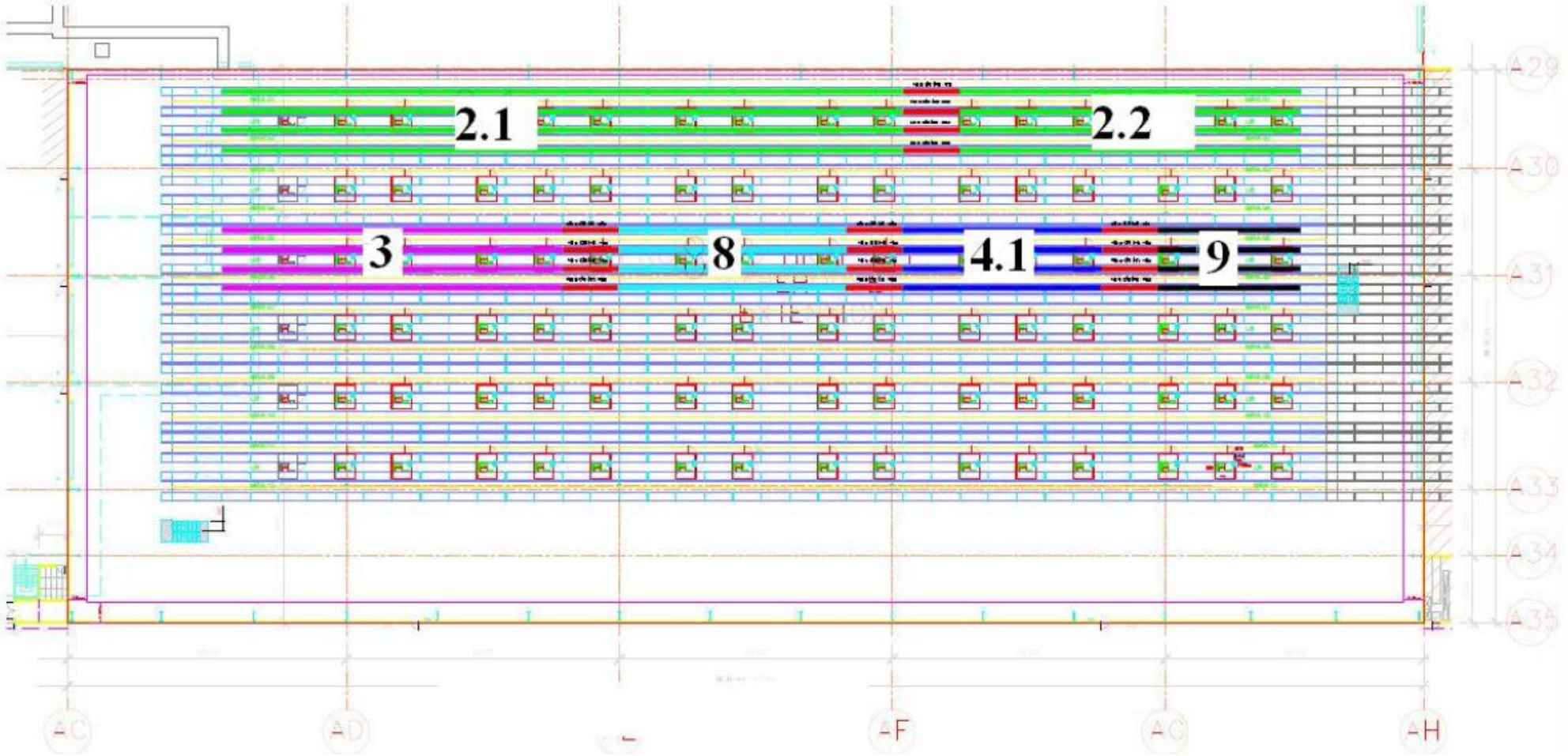

FIGURE 2
PROPOSED DANGEROUS GOODS STORAGE LAYOUT – METCASH MODIFIED STORAGE

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