

14 April 2010

Commercial-in-Confidence

Mr Andrzej Masztac

Commercial & Industrial Property Pty Ltd
Level 32
60 Margaret Street
Sydney NSW 2000

Subject: SEPP33 Review of the Proposed Volkswagen Facility

Dear Andrzej,

Please find the enclosed State Environmental Planning Policy No.33, Hazardous and Offensive Development, review for the proposed Volkswagen warehouse at Muir Road, Chollura, NSW.

The study is fairly self explanatory and, in summary, the results indicate that SEPP33 does not apply to this facility.

Should you require any further information regarding this subject please contact me on the mobile (0411 659 309). Thank you again for the opportunity to assist you with this project.

Yours sincerely,

AECOM Australia Pty Ltd



Steve Sylvester

Experience of the Assessor

Mr. Sylvester is a mechanical engineer with over 40 years experience in general engineering, including over 20 years in risk and safety engineering management. He is a member of the Australasian Institute of Dangerous Goods consultants and, as a member of this organisation, is recognised by WorkCover NSW as having the qualifications, training and experience to conduct Dangerous Goods assessments and prepare Dangerous Goods Documentation in accordance with the NSW OH&S (Dangerous Goods Amendment) Regulation- 2005. Mr. Sylvester is also a recognised hazard and operability study leader and Hazard Auditor with the Department of Planning, NSW, the publisher of SEPP33. He has significant experience in a wide range of industries, all using dangerous goods in a wide variety of quantities. Experience has been gained in the petrochemical industry, oil and gas (on and offshore), mining and mineral processing, nuclear, marine, aerospace and warehousing. He is also an internationally accredited Functional Safety Engineer with the ISA (www.isa.org/ISA84certificate) and TÜV (TUV 2203/10) organisations.

A full resume can be provided on request.

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PROPOSED VOLKSWAGEN SPARE PARTS WAREHOUSE CHULLORA, NSW

SEPP 33 APPLICATION REVIEW

1. Introduction

Volkswagen proposes to construct a spare parts storage and distribution facility at Chullora NSW. The facility will store spare parts and other goods including a quantity of Dangerous Goods (DGs) such as fuels, paints, corrosives and pyrotechnics. As Dangerous Goods would be stored and handled at the proposed site, there is a potential for the application of State Environmental Planning Policy No.33 (SEPP33), "Hazardous and Offensive Developments" to the facility.

Volkswagen has approached AECOM to assist in the assessment of the warehouse for the application SEPP33 to the site, this document reports on the outcome of the review of the application of SEPP33 to the proposed Volkswagen facility at Chullora, NSW.

2. Objectives

The objective of the study is to determine whether SEPP33 applies to the proposed Volkswagen facility, at Chullora, NSW, and whether a Preliminary Hazard Analysis (PHA) is required for the facility.

3. Scope of Work

The scope of work is for a review of the proposed Volkswagen warehouse facility, Chullora, NSW, for the application of SEPP33. The review is for the application of SEPP33 alone, the scope does not include the application of any other SEPPs associated with the facility nor the development of Dangerous Goods documentation, this will be provided in a separate document.

However, notwithstanding this, a preliminary review of the proposed Dangerous Goods storage facilities, conducted as part of the SEPP33 assessment indicates that these facilities would comply with the requirements of the NSW Occupational Health and Safety (OH&S) Dangerous Goods Amendment Regulation 2005. A full assessment will be conducted for the Volkswagen facility as part of the site development, along with the development of the applicable documentation for the site. A letter of compliance for the Dangerous Goods facilities, with the Regulation, will be provided as part of the final documents submitted to the Regulator (i.e. Council) prior to occupancy.

4. Methodology

The review of the proposed Volkswagen facility, at Chullora, NSW, involved comparison of the DGs stored at the proposed site with the Department of Planning Publication "Applying SEPP33 – Hazardous and Offensive Developments Application Guideline" (1994).

This publication lists threshold quantities, stored at a facility, above which the SEPP applies. Those facilities where the storage quantities are below the application guideline thresholds are not subject to SEPP33.

5. Review Results

5.1 Dangerous Goods Stored and Handled at the Volkswagen Facility

Volkswagen has issued a list of the types and quantities of Dangerous Goods that would be stored at the site. The list is provided at **Table 1**.

TABLE 1: LIST OF DANGEROUS GOODS STORED AND HANDLED AT THE VOLKSWAGEN FACILITY

Description of Goods	Type of Storage & Location	Class	Packaging Group	Quantity Stored
Gasoline or Petrol	Above Ground Tank	3	II	10,000 L
Diesel Fuel	Above Ground Tank	C1	-	10,000 L
Touch up Paint, adhesives, epoxy, primer – Paint or paint related products	Small containers <50 ml	3	III	250 L
Seat belts (tensioners) – Articles, Pyrotechnics	Shelving - Warehouse	1.4	-	20kg *
Lithium Batteries	Shelving - Warehouse	9	II	2,000 kg
Corrosives – Batteries, wet filled with acid	Shelving - Warehouse	8	III	7,206 kg
Air bag modules – Pyrotechnics	Shelving - Warehouse	9	III	20kg *
Dampers, struts, shock absorbers – Articles, Pressurised, Pneumatic	Shelving - Warehouse	2.2	-	1,605 kg
Aerosols	Caged area within warehouse	2.1	-	1,000 L (1m ³)*

* Estimated quantity of Dangerous Goods material in the product

A review of the proposed DGs in Table 1 indicates that a number of these are exempt from SEPP33 application, these include:

- Class 1.4 – Explosives;
- Class C1 Combustible Liquids;
- Class C2 Combustible Liquids;
- Class 2.1 Liquefied Petroleum Gas (LPG);
- Class 2.2 gases; and
- Class 9 Miscellaneous Dangerous Goods.

5.2 Exempt Dangerous Goods

The extract from SEPP33 (at **Attachment 1**) demonstrates that explosives (Class 1.4) and non-toxic/non-flammable gases (Class 2.2) and miscellaneous Dangerous Goods (Class 9) are not subject to the SEPP. Hence, Class 1.4 explosives, Class 2.2 gases and Class 9 miscellaneous Dangerous Goods have not been considered further in this review.

It is also noted that diesel fuel, where stored separately to flammable liquids is also not considered subject to the SEPP (see **Attachment 2**). The diesel fuel at the proposed Volkswagen facility will be stored in a separate tank with its own spill containment system, separate from that of the flammable liquid. Hence, under the provisions of AS1940-2004, The storage and handling of flammable and combustible liquids (Standards Association of Australia, Sydney), the petrol and diesel would be considered separate depots and therefore the diesel fuel storage would not be considered in the SEPP33 assessment.

In summary, the following Dangerous Goods would be subject to the SEPP33 assessment to determine whether these exceed the threshold quantities and therefore deeming the site subject to SEPP33:

- Class 2.1 – LPG
- Class 3 – Flammable Liquids (Petrol and Paints); and
- Class 8 – Corrosives (Batteries).

5.3 Assessment of Applicability of SEPP33 to Remaining DGs

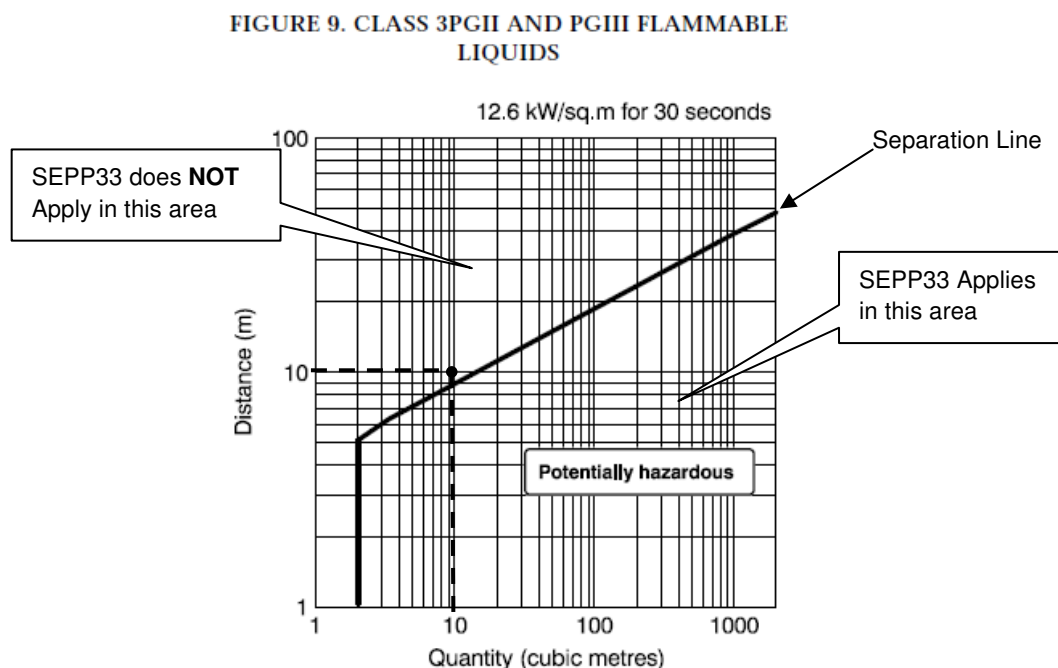
Table 2 has been established to list the proposed Dangerous Goods along with the comparative threshold level for the specific Dangerous Good stored. Note that the threshold values listed in **Table 2** have been extracted from the Applying SEPP33 Guideline.

TABLE 2: SEPP THRESHOLD QUANTITIES VS DANGEROUS GOODS STORED ON SITE

Class of DG Stored	Quantity Stored	SEPP33 Threshold	SEPP33 Applicable (YES/NO)
Class 2.1 (LPG)	1,000 L (1m ³)	16m ³	NO
Class 3 (Petrol)	10,000 L	See below & Figure 1	NO
Class 3 (Paints)	38.5 Litres	2m ³	NO
Class 8 (Corrosives)	9,206 kg	50,000 kg	NO

It is noted that the threshold quantity for Class 3 PGII & III flammable liquids is assessed using a graph detailed in the document Applying SEPP33, published by the Department of Planning. This graph has been repeated at **Figure 1**. The applicability of SEPP33 depends upon the quantity stored and the separation of the storage from the site boundary. It is proposed to separate the petrol storage tank 10m from the site boundary. The quantity of 10m³ vs a separation distance of 10m from the site boundary has been plotted on the graph in **Figure 1**. It can be seen that the corresponding point on the graph is outside the Potentially Hazardous Zone and therefore SEPP33 does not apply.

FIGURE 1: APPLICATION GRAPH – FLAMMABLE LIQUIDS (SEPP33)



6. CONCLUSION

It can be seen from the analysis in **Section 5**, that the DGs proposed to be stored on site are not subject to SEPP33 or are all below the permissible threshold levels that trigger the application of the SEPP.

Hence, it is concluded that the proposed Volkswagen warehouse at Chullora, NSW, is not subject to SEPP33 and a PHA will not be required in support of the Development Application for the facility.

ATTACHMENT 1

EXTRACT FROM SEPP33 – APPLICABILITY OF SEPP33 TO CLASS 1.4, 2.2 & 9 DANGEROUS GOODS



APPLYING SEPP 33

TABLE 1. SCREENING METHOD TO BE USED

Class	Method to Use/Minimum Quantity
1.1	Use graph at figure 5 if greater than 100 kg
1.2–1.3	table 3
2.1 — pressurised (excluding LPG)	figure 6 graph if greater than 5 m ³
2.1 — liquefied (pressure) (excluding LPG)	figure 7 graph if greater than 1 m ³
LPG (above ground)	table 3
LPG (underground)	table 3
2.3	table 3
3PGI	figure 8 graph if greater than 1 m ³
3PGII	figure 9 graph if greater than 2 m ³
3PGIII	figure 9 graph if greater than 2 m ³
4	table 3
5	table 3
6	table 3
7	table 3
8	table 3

Note: Classes 1.4, 1.5, 1.6, 2.2, 7 and 9 are excluded from the risk screening. Classes used are those referred to in the Dangerous Goods Code and are explained in appendix 6.

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**TABLE 2. TR
SCREENING**

Class	Vehic. Cumul Annua
1	see no
2.1	>500
2.3	>100
3PGI	>500
3PGII	>750
3PGIII	>1000
4.1	>200
4.2	>100
4.3	>200
5	>500

Class 1.4, 2.2 & 9 not
subject to SEPP33

ATTACHMENT 2

EXTRACT FROM SEPP33 - APPLICABILITY OF SEPP33 TO CLASS C1 COMBUSTIBLE LIQUIDS



APPLYING SEPP 33

Collate Information

The following information should be obtained from the proponent:

- a list of all the hazardous materials used in the proposed development and the quantity of each present. If the proposed development is an addition or modification to an existing operation, the proponent should list all hazardous materials on the site which are in proximity to the proposed development;
- dangerous goods classification for each material, including subsidiary class(es);
- the mode of storage used (that is, bulk or packages/containers) and the maximum quantity stored or held on site;
- the distance of the stored material from the site boundary for any of the materials in dangerous goods classes 1.1, 2.1 and 3;
Note: *Where liquids are contained in a bunded area, the distance is measured from the bund wall rather than from the tank. For materials stored in underground tanks, the distance is measured from the above ground filling/dispensing point.*
- the average number of annual and weekly road movements of hazardous material to and from the facility, and the typical quantity in each load.

The following information must also be taken into account:

- LPG, as defined in *AS1596 — LP Gas Storage and Handling*, though classified as a flammable gas (2.1), it is treated separately for screening purposes and should not be grouped with the other class 2.1 flammable gases.

Note: *LPG automotive retail outlets fall within SEPP 33 but procedures for dealing with them are not covered in these guidelines. The required PHA should demonstrate to the consent authority compliance with the Department of Planning publication Hazardous Industry Locational Guidelines No 1 — Liquefied Petroleum Gas Automotive Retail Outlets.*

- If class C1 and/or class C2 are present on site and are stored in a separate bund or within a storage area where they are the only flammable liquid present they are not considered to be potentially hazardous. If, however, they are stored with other flammable liquids, that is, class 3PGI, II or

III, then they are to be treated as class 3PGIII, because under these circumstances they may contribute fuel to a fire.

Identify Hazardous Materials and the Type of Hazard

Determine the quantities of all *classes* of hazardous materials listed in the development application and, if the proposed development is part of an existing plant, any adjacent inventory. Ensure that both the main class and any subsidiary classes obtained from the Dangerous Goods Code or from information provided in the Material Safety Data Sheets are noted so that all relevant hazards are considered.

Group and Total by Class, Activity and Location

Where several hazardous materials of the same class are kept on site in the same general location, *total the quantities by class and activity* (that is, total all quantities of each class stored in bulk then separately total the quantities of each class stored in packages/containers).

Table 1 provides the basis for the grouping. *Do not add underground and above ground storage together* — these must always be treated separately. If the proposed development is an extension to an existing site, include those inventories on the existing site that are adjacent to the proposed development.

If more than one subsidiary class of a given class is stored in the same general area, assume the total of that class present is the most hazardous subsidiary class present (for example, if 3PGI and 3PGII are present, add these together and assume the equivalent total is of 3PGI).

Measure the distance of the material group to the nearest boundary. The distance is to be measured from those materials in the group located closest to the boundary.

Compare with Screening Threshold

Provided on the following page and in the foldout section is a series of tables and graphs which can be used to determine screening thresholds — quantities below which it can be assumed there is unlikely to be a significant off-site risk.

Table 1 indicates the graph and/or table to be used. Hazardous materials with more than one possible classification should be considered under each classification.