

31 May 2011

 Sydney Ports Corporation
 PO Box 25
MILLERS POINT NSW 2000

Attn: Ms Daniela Vujic

**RE: P&O TRANS AUSTRALIA – PROPOSED NEW WASHBAY AND SITE LAYOUT MODIFICATIONS
 PART 5 APPLICATION - ADDITIONAL INFORMATION**

Dear Daniela,

Further to our meeting on 28 April 2011 to discuss the POTA Facility Layout Modifications Application, we provide the following additional information.

- **Traffic Movements:**

The following traffic movement figures are provided for clarification.

Item		Current (Dec 2010)	Projected (6 high stacking - terminal max. capacity)
Max. Daily Truck Movements		2,103	2,667
Peak Hourly Truck Movements	AM	158	202
	PM	191	210

Data for *current* truck movements are taken from the Traffic & Parking Report prepared by Halcrow in December 2010 and provided with the Part 5 Application REF.

Data for *projected* truck movements are derived from the attached calculations based on industry standard formulas, and using a maximum number of ground slots of 1,000 TEU. The projected maximum daily value was provided to Halcrow to distribute over the observed current trends and create projected hourly AM and PM peak movement values.

Halcrow has confirmed that the site access will continue to operate at a satisfactory level with projected maximum figures.

The above figures have not been reduced to reflect projected empty containers moving through the access gate to the DP World shipping terminal, which are anticipated to be approximately 5,000 TEU (or 3,333) truck movements per year.

▪ **Dangerous Goods**

An initial review of Dangerous Goods handled at the site has confirmed that annual volumes of DGs received and dispatched through the site do not exceed Schedule 5 of the OH & S Regulation 2001.

An updated Site Layout Drawing (JRC Drawing No. 133-L1-01 Rev B) is attached, depicting designated DG storage and packing areas onsite. In addition to stormwater protection measures detailed in Section 6.6 of the Review of Environmental Factors (REF) submitted with the application, POTA propose to utilise the following mitigation measures specifically related to environmental management for outdoor DG operations: -

- Utilisation of "Drain Seals" to cover all stormwater inlet pits in the catchment area where DG handling activities occur. The Drain Seal is a polyurethane plastic sheet which is placed over the inlet grate to temporarily block any liquids from entering the drain. POTA staff will be trained in the proposed new procedure, which will involve placing the seals over all drains to the south and west of the DG handling area at the commencement of each shift, and collection of the seals at the end of the shift. DG handling will not occur in the event of rain.
- In the event of a leak from a container, if safe, the container will be promptly moved to the proposed new washbay facility where the spill will be contained until clean up occurs.
- POTA employees will continue to be trained and updated in the safe handling of DGs and procedures to be followed in the event of an incident.

▪ **POTA / DP World Gate Operation**

Operation at the POTA / DP World gate will involve the direct transfer of empty containers into the DP World terminal, eliminating a portion of local road truck movements (approximately 5,000 TEU per year). The process specifically involves the transfer of empty containers via container forklift to POTA's rear gate. The container is loaded onto a DP World Inter-terminal Vehicle (ITV) for transfer directly into the DP World facility. This activity occurs at the gate in specifically line marked areas to ensure that the POTA forklift does not enter the DP World facility.

POTA have conducted risk analysis for the rear gate operations, which are attached for reference. DP World have also conducted their own risk analysis for the operation, which may be able to provided upon liaison with DP World. The key risk management feature for preventing any collision between moving trains on the DP World siding and forklifts / ITVs involved in the transfer operations, is the gate interlock system. The interlock ensures that only either one the DP World Rail Gate OR the POTA / DP World Gate is open at any one time.

We trust the above and attached information is sufficient, however should you have any queries, or require additional information, please do not hesitate to contact the undersigned at your convenience.

Yours faithfully,

James Rose Consulting

A handwritten signature in blue ink that reads 'Catherine Blaine'.

Catherine Blaine

Director

Attached:

1. Projected Traffic Movement Calculations
2. Updated Proposed Site Layout Drawing (JRC Drawing No. 133-L1-01 Rev B)
3. Drain Seal Product Brochure
4. POTA Risk Analysis for Rear Gate Operations

Projected Maximum Truck Movement Calculations
POTA Facility
4 Bumborah Point Road, Port Botany NSW



POTA Site Statistics

No. Of Ground Slots	1000	TEU
Maximum Stack Height	6	
Working Days	315	Working 6 days per week 52 weeks per year
Dwell Time (days)	3	

Terminal Capacity*

630000

 TEU

2000	TEU per working day
1	20'/40' ratio
1.5	TEU per truck
1333	Trucks per day
2667	Movements per day (in and out combined)

***Terminal Capacity Formula**

$$\text{Annualised Capacity} = \frac{\text{Stack Height} \times \text{Working Days} \times \text{No. of Ground Slots}}{\text{Dwell Time}}$$

Note: No allowance for Peaking Factor or Two Way Trade

STORMWATER DRAIN SEAL



- Temporarily seals drains to contain spills
- High chemical resistance
- Reusable - wash down with soapy water
- Provided in a sealable bag



Risk Assessment on; POTA / DP World Access Gate

Task – Receiving Containers and ready for Quarantine Inspection through POTA / DP World Access

Risk Assessment Team

Name and Position	1	Gavin Dobbs	5	Yard Manager
	2	John Fletcher	6	OH&S manager
	3	Wayne Blackwell	7	Yard Supervisor
	4		8	

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Risk Assessment

Introduction

Not ready for Quarantine Inspection This risk assessment is being conducted to identify hazards associated with the **receiving Containers through DP World Access** and identify risk control measures to ensure the **safe handling of containers ready for Quarantine Inspection**.

The assessment was conducted in consultation with persons with varying roles within P&O (as listed in Section 4) to ensure a thorough and immediately useful assessment was produced.

The risk associated with the hazards shall be quantified utilising the P&O ANZSE 1075 Formal Risk Assessment Instruction and risk control measures shall be implemented for each of those hazards according to the Hierarchy of Control.

1. Objectives

The objectives of this assessment were to:

- ❑ Identify the hazards associated with high risk when receiving Containers through DP World Access and safe handling of containers ready for Quarantine Inspection
- ❑ Conduct a risk assessment on those high risk hazards by assigning a consequence, likelihood and overall risk rating to each risk; and
- ❑ Develop and document risk control recommendations in accordance with the hierarchy of control.

2. Methodology

The hazard identification and risk assessment was undertaken drawing on the P&O ANZSE 1075 Formal Risk Assessment Instruction.

2.1 Hazard Identification

The P&O Representatives, listed as the Risk Assessment Team, undertook a workshop session. (Refer to page 1 – Title Page).

2.2 Risk Assessment

Following the identification and documentation each hazard and its associated risk, a risk assessment was conducted which considered the consequence and likelihood of each risk in accordance with the risk assessment criteria attached.

Recommended control actions were discussed and developed; they are presented in this risk assessment. Control actions were considered in accordance with the hierarchy of control to reduce the exposure of personnel to the identified hazards. The hierarchy of control stipulates that control mechanisms should be implemented, wherever practicable, in the following order:

1. **Elimination** of the hazard;
2. **Substitution** of the hazard;
3. **Isolation** of the hazard;
4. Design and implementation of **engineering** controls;
5. Development and implementation of **administrative** controls;
6. Provision of **personal protective equipment**.

3. Findings and Recommendations

- The risk assessment for the receiving Containers through DP World Access and safe handling of containers ready for Quarantine Inspection including Risk Control Measures are presented in Section 4.

4. Risk Assessment Worksheet

Date:	21/9/10	Site/ Dept:	Bumborah Point Road	Item to be Assessed:	loading/unloading of containers through the POTA / DP World Access Gate onto ITV
Ref No:	BPR RA 7	Proposed Review Date:			

TABLE 1 MEASURES OF LIKELIHOOD

Level	Descriptor	Example detailed description
1	Rare	May only occur in exceptional circumstances
2	Unlikely	Could occur some time
3	Possible	Might occur some time
4	Likely	Will probably occur at some time
5	Almost certain	Is expected to occur in many circumstances

TABLE 2 MEASURES OF SEVERITY

Level	Descriptor	Example detailed description
1	Insignificant	No injuries, no environmental damage, no financial or reputation loss
2	Minor	First aid treatment, on-site release of pollutant is immediately contained, minor financial and reputation loss
3	Moderate	Medical treatment required, off-site pollutant release causing moderate environmental damage, moderate financial and reputation loss
4	Major	Extensive injuries (e.g. permanent disability), loss of production capability, off-site pollutant release causing major environmental damage, major financial and reputation loss
5	Catastrophic	Fatality, off-site pollutant release causing severe environmental damage, huge financial and reputation loss

TABLE 3 RISK ASSESSMENT MATRIX

LIKELIHOOD	SEVERITY				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost Certain 5	M (5)	H (10)	E (15)	E (20)	E (25)
Likely 4	M (4)	M (8)	H (12)	E (16)	E (20)
Possible 3	L (3)	M (6)	M (9)	H (12)	E (15)
Unlikely 2	L (2)	L (4)	M (6)	M (8)	H (10)
Rare 1	L (1)	L (2)	L (3)	M (4)	M (5)

Legend:


L Low Risk - considered acceptable. No further action of RCMs are necessary

M Moderate Risk - relatively acceptable. However, further RCMs should be considered and existing RCMs should be monitored

H High Risk - unacceptable level of risk. RCMs must be developed and implemented in short to medium term

E Extreme Risk - unacceptable level of risk. RCMs must be immediately implemented or the risk eliminated (i.e. cease activity)

Ref	Task	Hazard	Current Control	R A			Possible Risk Controls	R A		
				L	S	Risk		L	S	Risk
1	FKL Driver conduct pre-start check	Crushing, pinching, collision with other vehicles or people	Licensed FKL Operator Employee Induction Pedestrian walkways	2	3	M	FKL operator assessment. JSEA Assessment	2	2	L
1	Operator drives FKL to access gate. Driver positions FKL Spreader ready to latch onto container	Collision with site vehicles. Collision with Gate Collision with ITV	Licensed FKL operator. JSEA Assessment Road Markings Gate opened ITV stationary	2	3	M	FKL operator assessment. JSEA Assessment DP World Procedures	2	2	L
2	FKL driver checks correct container ID in stack while remaining in FKL cabin	Collision with site vehicles. FKL Operator gets out of cabin	FKL operator follows correct site procedures	2	3	M	JSEA Assessment	2	2	L
3	FKL operator latches onto container, lifts and drives away from access gate to container stack	Collision with site vehicles Container not locked onto FKL	FKL operator follows correct site procedures FKL has latch/unlatch mechanism which will not allow lift to proceed when not in locked	2	2	L	JSEA Assessment	2	2	L
4	FKL operator waits on POTA side of gate for ITV to arrive	Collision with access gate	FKL operator follows correct site procedures	2	2	L	Line Markings to show FKL operator where to stop and wait	2	2	L

5	<p>ITV Arrives and FKL loads container.</p> 	<p>Collision with gate. Collision with ITV ITV moves while being loaded. Container lifted over ITV Cabin</p>	<p>Line Markings to show FKL operator where to stop and wait.</p>	1	2	L	<p>ITV operator follows DP World SWI Gate painted with High visibility paint. FKL operator follows correct procedures</p>	1	2	L
6	<p>FKL Operator signals ITV operator that he is clear of ITV</p>	<p>ITV leaves while FKL still attached to container</p>	<p>Licensed FKL operator Toolbox talks FKL sound horn to alert ITV driver that FKL is clear of ITV</p>	2	3	M	<p>Adapt DP World warning system</p>	2	2	L

Action Plan

Action Item	Hazard Ref	Risk Rating	Action	Timeframe	Responsibility	Response / Outcome	Status
1							
2							

3							
4							
5							
6							
7							
8							
9							
10							



Risk Assessment on; POTA / DP World Access Gate

Task – Loading / Unloading Containers through POTA / DP World Access gate onto ITV

Risk Assessment Team

Name and Position	1	Gavin Dobbs	5	
	2	John Fletcher	6	
	3	Jim Gerrard	7	
	4	James Jones	8	

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Risk Assessment

Introduction

This risk assessment is being conducted to identify hazards associated with the **POTA / DP World Access Gate** and identify risk control measures to ensure the safe **loading/unloading of containers through the POTA / DP World Access Gate onto ITV**

The assessment was conducted in consultation with persons with varying roles within P&O (as listed in Section 4) to ensure a thorough and immediately useful assessment was produced.

The risk associated with the hazards shall be quantified utilising the P&O ANZSE 1075 Formal Risk Assessment Instruction and risk control measures shall be implemented for each of those hazards according to the Hierarchy of Control.

1. Objectives

The objectives of this assessment were to:

- ❑ Identify the hazards associated with high risk when Loading/unloading Containers onto ITV at the POTA / DP World Access Gate
- ❑ Conduct a risk assessment on those high risk hazards by assigning a consequence, likelihood and overall risk rating to each risk; and
- ❑ Develop and document risk control recommendations in accordance with the hierarchy of control.

2. Methodology

The hazard identification and risk assessment was undertaken drawing on the P&O ANZSE 1075 Formal Risk Assessment Instruction.

2.1 Hazard Identification

The P&O Representatives, listed as the Risk Assessment Team, undertook a workshop session. (Refer to page 1 – Title Page).

2.2 Risk Assessment

Following the identification and documentation each hazard and its associated risk, a risk assessment was conducted which considered the consequence and likelihood of each risk in accordance with the risk assessment criteria attached.

Recommended control actions were discussed and developed; they are presented in this risk assessment. Control actions were considered in accordance with the hierarchy of control to reduce the exposure of personnel to the identified hazards. The hierarchy of control stipulates that control mechanisms should be implemented, wherever practicable, in the following order:

1. **Elimination** of the hazard;
2. **Substitution** of the hazard;
3. **Isolation** of the hazard;
4. Design and implementation of **engineering** controls;
5. Development and implementation of **administrative** controls;
6. Provision of **personal protective equipment**.

3. Findings and Recommendations

The risk assessment for the **loading/unloading of containers through the POTA / DP World Access Gate onto ITV** including Risk Control Measures are presented in Section 4.

4. Risk Assessment Worksheet

Date:	21/9/10	Site/ Dept:	Bumborah Point Road	Item to be Assessed:	loading/unloading of containers through the POTA / DP World Access Gate onto ITV
Ref No:	BPR RA 6	Proposed Review Date:			

TABLE 1 MEASURES OF LIKELIHOOD

Level	Descriptor	Example detailed description
1	Rare	May only occur in exceptional circumstances
2	Unlikely	Could occur some time
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TABLE 3 RISK ASSESSMENT MATRIX

LIKELIHOOD	SEVERITY				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost Certain 5	M (5)	H (10)	E (15)	E (20)	E (25)
Likely 4	M (4)	M (8)	H (12)	E (16)	E (20)
Possible 3	L (3)	M (6)	M (9)	H (12)	E (15)
Unlikely 2	L (2)	L (4)	M (6)	M (8)	H (10)
Rare 1	L (1)	L (2)	L (3)	M (4)	M (5)

Legend:

L Low Risk - considered acceptable. No further action of RCMs are necessary

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Ref	Task	Hazard	Current Control	R A			Possible Risk Controls	R A		
				L	S	Risk		L	S	Risk
1	Operator drives FKL to container stack driver checks correct container ID in stack while remaining in FKL cabin	Collision with site vehicles	Licensed FKL operator. JSEA Assessment	2	3	M	FKL operator assessment. JSEA Assessment	2	2	L
2	FKL driver checks correct container ID in stack while remaining in FKL cabin	Collision with site vehicles. FKL Operator gets out of cabin	FKL operator follows correct site procedures	2	3	M	JSEA Assessment	2	2	L
3	FKL operator latches onto container, lifts and drives to access gate.	Collision with site vehicles Container not locked onto FKL	FKL operator follows correct site procedures FKL has latch/unlatch mechanism which will not allow lift to proceed when not in locked	2	2	L	JSEA Assessment	2	2	L
4	FKL operator waits on POTA side of gate for ITV to arrive	Collision with access gate	FKL operator follows correct site procedures	2	2	L	Line Markings to show FKL operator where to stop and wait	2	2	L
5	ITV Arrives and FKL loads container.	Collision with gate. Collision with ITV ITV moves while being loaded. Container lifted over ITV Cabin	Line Markings to show FKL operator where to stop and wait.	1	2	L	ITV operator follows DP World SWI Gate painted with High visibility paint. FKL operator follows correct procedures	1	2	L

6	FKL Operator signals ITV operator that he is clear of ITV	ITV leaves while FKL still attached to container	Licensed FKL operator Toolbox talks FKL sound horn to alert ITV driver that FKL is clear of ITV	2	3	M	Adapt DP World warning system	2	2	L
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Action Plan

Action Item	Hazard Ref	Risk Rating	Action	Timeframe	Responsibility	Response / Outcome	Status
1							
2							
3							
4							
5							
6							
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9							
10							



Job Safety Environment Analysis Worksheet– (JSEA)

Terminal / Site: 4 Bumborah Point Road	Date: 8/10/10	JSA Number: BPR 5	
Activity: Loading Container onto ITV at Stevedore Operational Area		Permit to work: Yes: <input type="checkbox"/>	No: X
JSEA Team: Steve Chesher, Jim Gerrard, Brendan Holmes, John Fletcher		Review By: OH&S Committee	Date:
		Next Review By:: 9 May 2011	Date:

Task (List the Tasks required to perform the Activity in the sequence they are carried out)	HAZARDS (Against each task list the hazards that could cause injury when the task is performed)	HAZARD CONTROLS (List the Control measures required to eliminate or minimise the identified hazard)	RISK RANK (Low, Med, High, Extreme)	ACTION BY: (Name of the person/s responsible to implement the hazard control)
Operator drives FKL to container stack	Collision with site vehicles	Licensed FKL operator. FKL Operator procedures FKL operator assessment.	Low	FKL Operator
FKL driver checks correct container ID in stack while remaining in FKL cabin	Collision with site vehicles. FKL Operator gets out of cabin	FKL operator follows correct site procedures FKL Operator procedures	Low	FKL Operator
FKL operator latches onto container, lifts and drives to access gate.	Collision with site vehicles Container not locked onto FKL	FKL operator follows correct site procedures FKL has latch/unlatch mechanism which will not allow lift to proceed when not in locked FKL Operator procedures	Low	FKL Operator
FKL operator waits on POTA side of gate for ITV to arrive	Collision with access gate FKL gets out of FKL	FKL operator follows correct site procedures Line Markings to show FKL operator where to stop and wait Wears Hard Hat	Low	FKL Operator
ITV Arrives and FKL loads container.	Collision with gate. Collision with ITV ITV moves while being loaded. Container lifted over ITV Cabin	Line Markings to show FKL operator where to stop and wait. ITV operator follows DP World SWI FKL operator follows correct procedures	Low	FKL Operator
FKL Operator signals ITV operator that he is clear of ITV	ITV leaves while FKL still attached to container	Licensed FKL operator Toolbox talks FKL sound horn to alert ITV driver that FKL is clear of ITV FKL Operator equipped with radio	Low	FKL Operator ITV Operator

NAME	SIGNATURE	COMPANY	DATE
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Job Safety Environment Analysis Worksheet– (JSEA)

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