Newcastle Coal
INFRASTRUCTURE GROUP

Spill and Pollution Incident Response

Management Plan

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KEY ELEMENTS

The Key Elements provide a brief overview of this Management Plan. However, it is essential that all personnel are familiar with the contents of the whole management plan

- NCIG is not a classified hazardous facility. However, there are substances and activities undertaken on the site that if not controlled adequately could pose a risk to the environment.

- In accordance with the Emergency Management Procedure, there are a number of key individuals responsible for enabling the pollution incident response. Contact details of key internal personnel are as follows:
    - Emergency Controller (NCIG Process Leader) – 4920 3975 (24 hours)
    - Communications Officer (NCIG Technician Coordinator) – 4920 3955 (24 hours)
    - NCIG Security Officer (main security gate) – 4920 3998
    - NCIG Security Officer (wharf security gate) – 4920 3979 (24 hours)
    - Manager HSEC – 0488 744 774
    - Environment and Sustainability Lead – 0419 436 991

- A notifiable incident is an incident which causes or threatens material harm to the environment.

- In the event of a Notifiable Pollution Incident, the Emergency Controller will instruct the Communications Officer to commence contacting the relevant agencies immediately.
    - Firstly call 000 if the incident presents an immediate threat to human health or property. If the incident does not require emergency services assistance, or once the 000 call has been made, the following authorities are to be notified in the following order:
        - NSW Port Authority (VTIC) for harbour related incidents only – 4929 3890 to assist controlling the incident
        - NSW EPA – 131 555
        - Public Health Unit – 4924 6477 (diverts to John Hunter Hospital after hours, ask for the Public Health Officer on call)
        - SafeWork NSW – 13 10 50
        - City of Newcastle – 4974 2000
        - Fire and Rescue NSW – 1300 729 579 (Note – if 000 was called in the first instance, Fire and Rescue NSW do not need to be called again)

- All environmental pollution incidents are to be managed in accordance with Emergency Management Procedure and the contain, control and clean-up principle.

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1. PURPOSE

To provide the procedures for pollution incident and spill response, including notification, control and identification of risk management controls for specific pollution hazards on the NCIG site. Specifically, guidance is also provided on the notification, containment and remediation measures to be undertaken in the event of a hydrocarbon spill that has the potential to harm the environment on or adjacent to the NCIG site.

2. SCOPE

NCIG is required to develop and implement a Pollution Incident Response Management Plan in accordance with the Protection of the Environment Legislation Amendment Act (POELA) 2011 and the Protection of the Environment Operations Act (POEO) 1997. The requirements of the plan are:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of track able waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO (G) Regulation (clause 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

The requirements for the plan have been detailed in The Guideline: Pollution Incident Response Management Plans (PIRMP Guidelines) (NSW EPA 2020). This plan has been written in accordance with the guideline and the relevant legislation.

This plan applies to all employees, contractors and visitors working on the NCIG site.

3. OBJECTIVES

The objectives of this plan are to:

- ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local council, NSW Ministry of Health, SafeWork NSW, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident such as neighbouring industry and the local community

- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks

Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

4. ROLES AND RESPONSIBILITIES

The pollution incident provisions of this plan are consistent with the Emergency Management Procedure (HSEC.PRO.14.01), and as such all respective roles and responsibilities are the same as those identified in the procedure.

The following roles and responsibilities apply to the spill response provisions of this plan.

4.1 Manager HSEC

The Manager – HSEC will ensure:

- That this Plan and any future updates are authorised.
- That adequate resources are made available for the effective implementation of the Plan.
- Provide assistance and advice to Team Leaders regarding the management and response to Pollution Incidents at NCIG.
- That appropriate training of NCIG personnel is undertaken in this Plan.

4.2 Environment and Sustainability lead

The Environment and Sustainability Lead will ensure:

- That this Plan is tested annually and within 1 month of any Incident which triggers the implementation of this Plan.
- Provide assistance to the HSEC Manager and Team Leaders regarding the management and response to Pollution Incidents at NCIG.
- Facilitate spill response training where required.
- Incident reports for spill responses are reviewed.
- Audit and monitor compliance with this Plan.
- Identify remedial corrective actions required to meet the requirements of this Plan.
- Coordinate updates of the plan for authorisation by the Manager HSEC.

4.3 Team Leaders

Team Leaders will ensure:

- Incident Reports for all spills are completed
- The currency of training for all relevant personnel is maintained
- Spill kits on the NCIG site are inspected and maintained
- Spill kits supplies are replenished after use
- Designated Technicians and/or other Operational Staff are nominated as Trained Spill Response Personnel

4.4 Stores Coordinator

Stores Coordinator will ensure:

- Spill response equipment is replenished, and spare equipment is made available in accordance with this procedure.

4.5 All Workers

Employees, contractors and visitors will:

- Comply with this procedure
- Report all spills however minor they may be.

- Notify the Process Leader in the event of an incident
- Ensure any used spill response equipment is replaced in the locations where it has been sourced from.

5. POLLUTION INCIDENT HAZARDS

NCIG is not a classified hazardous facility. However, there are substances and activities undertaken on the site that if not controlled adequately could pose a risk to the environment. Hazards on the NCIG site that may lead to pollution incidents are considered to be:

- storage of dangerous goods
- operation of hydraulic power units
- discharge of contaminated storm water or process water (including elevated suspended solids)
- diesel-powered locomotives
- fire
- spontaneous combustion
- major dust event

Details of individual hazards are detailed in the following sections, including appropriate control measures for each hazard.

5.1 NCIG Risk Matrix

The NCIG Risk Matrix has been used to classify the risks associated with each environmental pollution hazard. The risk identified is associated with a material pollution incident. The Risk Matrix is shown below.

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NCIG RISK ASSESSMENT MATRIX

CONSEQUENCES – What is the most credible event and consequences that could occur from this hazard?

	Health & Safety	Environment / Community	Loss/ Damage/ Delay
1 Low	Short-term temporary inconvenience or symptoms, no medical treatment; First Aid Treatment	Environmental nuisance, limited temporary damage to immediate, low significance environment. Public Concern restricted to local complaints	< $10, 000 < 1 day
3 Minor	Medical treatment injury, Lost Time Injury short-term reversible disablement	Minor short-term effects on local environment, or small area of limited significance. Significant pollution Minor, adverse local public or media attention and complaints	$10, 000 - $150, 000 < 1 week
10 Moderate	Serious injury with some permanent disablement to one or more persons	Moderate widespread short-term impact on local environment of limited significance. Serious Pollution Attention from media and/or heightened concern by local community	$150 ,000 - $1.5M 1 week – 1 month
30 Major	Single fatality and/or serious injury with severe permanent disablement to one or more persons	Serious widespread, medium-term environmental harm to local environment, some ecosystem impairment. Major Environmental Event Significant adverse national media/ public attention	$1.5M - $15M 1 – 3 months
100 Critical	Multiple fatalities, major irreversible health effects to > 50 people;	Major widespread, long-term environmental harm to significant environment or ecosystem. Catastrophic environmental event Serious public or media outcry (international coverage)	> $15M >3 months

LIKELIHOOD – How likely is it that this <u>event AND this consequence</u> will result from this hazard?

100 Almost certain	Event and consequence expected to occur in most circumstances
30 Likely	Will probably occur in most circumstances.
10 Possible	Should occur at some time.
3 Unlikely	Could occur at some time.
1 Rare	May occur under exceptional circumstances.

USE THE RISK MATRIX BELOW TO DETERMINE THE RISK CATERGORY						
LIKELIHOOD		CONSEQUENCE				
		Low 1	Minor 3	Moderate 10	Major 30	Critical 100
Almost Certain	100	High 100	High 100	Extreme 1000	Extreme 3000	Extreme 10000
Likely	30	Moderate 30	High 90	High 300	Extreme 900	Extreme 3000
Possible	10	Low 10	Moderate 30	High 100	Extreme 300	Extreme 1000
Unlikely	3	Low 3	Low 9	Moderate 30	High 90	Extreme 300
Rare	1	Low 1	Low 3	Moderate 10	High 30	High 100

5.2 Dangerous Good Storage

The Dangerous Goods Storage Area (DGSA) is located to the immediate west of the workshop. This is a bunded storage area with dedicated roofing and brick containment walls. A 1000L pump-out sump is located beneath the bunded area to contain the volume of stored oils and greases. Oils and greases are stored in individual containers ranging in volume from 10-240L and are positioned on bunded pallets, in bunded lockers or shelves. The total amount of material stored in this area at any one time is in the order of 6000-8000L. There is also a 4000L waste oil tank and an 11,000 L diesel tank located adjacent the DGSA, which is also contained within a bunded area and has dedicated roofing (see Figure 2). Negligible volumes of oils and grease are appropriately stored in contractor containers from time to time.

The DGSA is located approximately 50m from the nearest NCIG boundary and land between these two points' slopes towards the storage area. Therefore there is considered to be negligible risk of dangerous goods reaching the NCIG boundary from the DGSA.

Notwithstanding, there is considered to be a low risk associated with transport of dangerous goods to the point of use, and similarly from the delivery of goods to the site. Oils and greases are transported to and from the DGSA to other locations onsite by vehicles. There is a rare likelihood of a spill from vehicles and the consequence is minor due to transport of only small volumes. If this type of incident occurred near the NCIG boundary and extended to neighbouring properties sensitive environments, this may result in material environmental harm.

		CONSEQUENCE
LIKELIHOOD		Minor 3
Rare	1	Residual Risk - Low 3

5.3 Oils and Grease

The most significant hydraulic oil risk to the environment on the NCIG site is from ship loading infrastructure. Both Shiploader 1 (SL01) and Shiploader 2 (SL02) have hydraulic powered systems installed. These systems extend across the machines and are used to power numerous movements including spout slew rotation. Hydraulic lines extend from the hydraulic reservoir to the coal delivery

end of the shiploader. Each hydraulic system contains up to 300L of hydraulic fluid. There are also small amounts of oils and grease contained on SL01 and SL02. These are used to lubricate drive systems, pulleys and bogies and are contained in significantly smaller volumes than the hydraulic power unit.

There is a risk that oil or grease could fall into the harbour (Hunter River) from a failure from either a hydraulic line, drive or grease reservoir. There is also a risk that a similar failure will result in oil or grease falling onto the NCIG Wharf. There is the potential that a significant amount of hydraulic oil (approx. 300L) may result in material environmental harm, although this volume of lost oil would be rare. An incident involving the release of any hydraulic fluid into the Hunter River is considered to be unlikely, and the consequence would be moderate.

		CONSEQUENCE
LIKELIHOOD		Moderate 10
Unlikely	3	Residual Risk - Moderate 30

5.4 Contaminated stormwater or Process Water

Due to the nature of NCIG's operations, storm water and process water captured onsite is likely only to be contaminated by suspended solids, effluent or hydrocarbons. Waste effluent from NCIG's surface facilities is either captured in designated collection tanks for offsite disposal or pumped via a rising main from NCIG's administration area into the local sewer system operated by Hunter Water. Effluent storage tanks have high level alarms installed and the areas that are serviced by these systems are generally only for small to medium sized work groups. As a result it is anticipated that any spills of effluent would not be considered substantial.

Due to the relatively small volumes of hydrocarbons used onsite, these would be significantly diluted in the event of an incident prior to release beyond the NCIG boundary or pumping to the storage tanks for reuse onsite (onsite receiving waters are either collection sumps or the NCIG settling pond system). Therefore, the major contaminant associated with storm water or process water is suspended solids (i.e. turbidity).

Highly turbid waters are captured on the NCIG site in collection sumps, positioned adjacent conveyors and transfer houses at a number of locations around site (see Figure 1). These sumps collect water primarily from conveyors systems, and secondarily from the immediate catchment area. There is a risk that highly turbid water from collection sumps may discharge beyond the NCIG boundary (including into the Hunter River), particularly during periods of heavy rainfall. Such an incident is unlikely and would only cause minor environmental damage. The risk is considered to be low.

There is the potential for coal fines washdown water to enter the Hunter River from the Shiploader and Wharf, particularly during washdown activities. Although the Shiploaders have been designed to capture process water in the under pan and launder, there remains a risk that spillage can occur. Such an incident would cause a minor environmental consequence and is unlikely as controls are required to be implemented to prevent such events from occurring.

Water is pumped from the sumps via underground pipes and V-drains to the settling pond system. Suspended solids are allowed to settle in the first and second settling ponds, prior to water discharging into the third settling pond and Clearwater Pond. Water in the Clearwater Pond is consistently low in suspended solids and is pumped direct from the pond into storage tanks for reuse

onsite. There is an overflow point from the Clearwater Pond which leads to a storm water drain flowing into the Hunter River.

Discharge of water from the Clearwater Pond is possible and occurs on occasion during significant rain events, however, water in the Clearwater Pond is diluted and the receiving water body (Hunter River) is typically highly turbid due to other discharge sources and runoff. The environmental outcome of such an event is minor.

		CONSEQUENCE
LIKELIHOOD		Minor 3
Possible	10	Residual Risk - Moderate 30

5.5 Diesel-powered Locomotives

Coal is delivered to the NCIG site via rail. Coal trains are typically powered by 2 diesel-powered locomotives. Locomotives hold up to 8000L of diesel at any one time. There are also smaller volumes of oil contained within the locomotives. Coal trains travel along the NCIG rail spur (see Figure 1). There are a number of water bodies surrounding the rail spur including Deep Pond and Blue-billed Duck Pond.

Train operators are accountable for the operation and maintenance of locomotives, and therefore are also responsible for any environmental pollution incident caused by their locomotives. Notwithstanding, NCIG recognises there are potential risks from locomotives and manages accordingly.

There is potential for a pollution incident from the locomotives accessing the NCIG rail, with the highest risk from a diesel spill. The incident would be rare and the worst case consequence would be moderate, although the majority of spills would not reach a sensitive receiving body and as such the consequence would be minor. NCIG does however have emergency spill kits located at its dump station area which can be used to assist with managing any pollution incident response should it be required.

The worst case risk would be moderate and could result in material environmental harm.

		CONSEQUENCE
LIKELIHOOD		Moderate 10
Rare	1	Residual Risk - Moderate 10

5.6 Fire

There are a number of hazards across the NCIG site that have the potential to cause fire. These are electrical infrastructure such as switch rooms, and mechanical infrastructure such as conveyors and transfer houses. It should be noted that locations around the NCIG site with fire risk are fitted with smoke/heat detectors and fire suppression systems or have other firefighting equipment such as fire extinguishers.

The smoke caused by fire has the potential to cross the NCIG boundary and create a nuisance for neighbouring properties and the community. The chance of such a pollution incident is rare and the environmental impact from this smoke is considered minor. The resulting risk is therefore low.

		CONSEQUENCE
LIKELIHOOD		Minor 3
Rare	1	Residual Risk - Low 3

5.7 Spontaneous Combustion

Coal stockpiles have the potential to generate conditions that lead to spontaneous combustion, in particular in coal with long residency times. Similar to other forms of fire, spontaneous combustion leads to the generation of smoke, which has the potential to cause nuisance to neighbouring properties and the community. NCIG closely monitors the residency time of all coal stockpiled on the site to reduce the risk of a spontaneous combustion event. There is also a chance of odour generation. The risk rating associated with spontaneous combustion is low, similar to fire.

LIKELIHOOD		CONSEQUENCE
		Minor 3
Rare	1	Residual Risk - Low 3

5.8 Major Dust Event

The NCIG site has a number of dust risks, including coal stockpiles, transfer points, conveyors and construction areas. There is a comprehensive dust management system employed onsite which includes stockyard sprays, conveyor transfer point sprays, forecasting systems and knowledge of coal characteristics to condition coal with moisture and suppress dust. This system has been designed to manage all dust risk conditions at NCIG. Notwithstanding, NCIG recognises there is a low chance that major dust events may result from the failure of dust management controls during high to extreme dust risk conditions.

A pollution incident from a major dust event would be unlikely and the consequence would be moderate. Consequence is based on local community concern and local media attention, which partly relates to perception of health impacts rather than material environmental impact. The resulting risk is moderate. Actual environmental impact would relate primarily to visual dust nuisance (there is not considered to be significant environmental harm or potential harm to human health, as such an event would be only of a short duration). There is considered to be no material environmental harm from such an incident.

		CONSEQUENCE
LIKELIHOOD		Moderate 10
Unlikely	3	Residual Risk - Moderate 30

5.9 Sensitive Environments

NCIG is located within an industrial area and as such there are no densely populated areas, schools or hospitals which would likely be directly impacted by a potential pollution incident. There are a

number of water bodies surrounding the site, including the Hunter River, Blue-billed Duck Pond, Deep Pond and Black Swan Pond. Such environments may be impacted by some potential environmental hazards on the NCIG site, such as contaminated storm water and hydrocarbons.

5.10 Neighbouring Operations

There are other operations on Kooragang Island that carry potential moderate or major pollution risks (e.g. Gas Handling Facilities, Chemical Production Plants). Despite the close vicinity of some neighbouring operations such as gas storage and handling, NCIG operations would not adversely impact on these leading to a major pollution incident

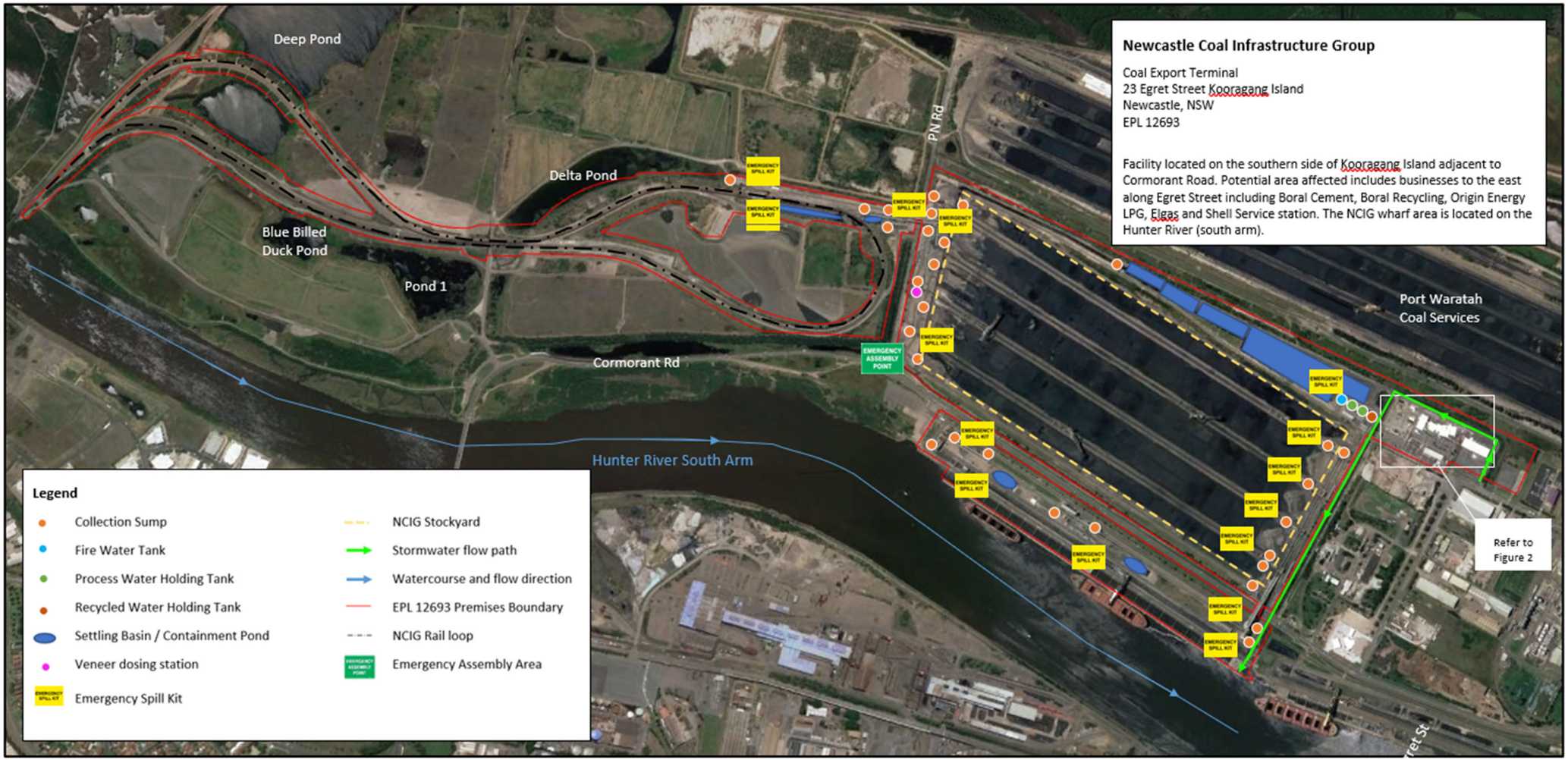

Figure 1 - NCIG Site Layout and EPL Premises Boundary

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Figure 2 - NCIG Administration Area layout

6. PRE-EMPTIVE ACTIONS

There are a number of pre-emptive actions employed for each potential environmental pollution risk. These are detailed in the following sections.

6.1 Dangerous Goods Storage

- Appropriate Bunding
- Shelter and containment walls
- 1000L pump-out sump
- Spill Kits

6.2 Grease and Oil Systems

- Regular maintenance and inspections
- Drainage chutes and launders
- Positioning of major oil risks away from water
- Spill kits

6.2.1 Spill Kit Storage and Associated Equipment

6.2.1.1 Spill Kits

A review of locations of hydraulic power units, lubricating systems, coolers and hydraulic brake systems has been undertaken to identify oil spill/leakage risks. These have been rated based on potential harm to the neighbouring environment and sensitive receivers (eg. Hunter River, wetland areas). This process has identified 23 locations where spill kits are to be stored throughout the operational site as listed below. In addition to the below, the store has a pallet of spare material (i.e drysorb etc) and hydrocarbon booms available should further material be required to remedy a spill.

1. Dump Station 01 Hydraulic Power Unit
2. Dump Station 02 Hydraulic Power Unit
3. CV01 Drive Station
4. Transfer House 01
5. Transfer House 02
6. Transfer House 06
7. Transfer House 07
8. Transfer House 08
9. Transfer House 09
10. Transfer House 11
11. Conveyor 12 Drive Station
12. Buffer Bin 01
13. K8 Maintenance Bay – general and marine spill kit
14. K9 Maintenance Bay – general and marine spill kit
15. K10 Maintenance Bay – general and marine spill kit
16. Pump house
17. Clearwater Pond Pump Station
18. Workshop (x3)
19. Eye Wash Station in Dangerous Goods Storage Area (DGSA)

Fuel bowser adjacent to workshop

20. Admin Security Gatehouse
21. Store (3x spare spill kits)

Spill kits are to be maintained and stored in these locations during the operational life of NCIG. Spare spill kits are stored in the Dangerous Good Storage Area (DGSA).

6.2.1.2 Signage

Areas of oil spill/leakage risk where there is no spill kit will have signage erected to identify the nearest spill kit. These locations are specifically:

1. Transfer House 03
2. Transfer House 04
3. Transfer House 05
4. CV02 Drive Station
5. CV13 Drive Station
6. Buffer Bin 02
7. Conveyor 15/16 Drive Station
8. Conveyor 17/18 Drive Station
9. Conveyor 21/22 Drive Station

Signage is to be maintained and stored in these locations during the operational life of NCIG.

Oil spill/leakage risks on mobile machinery, such as the Stacker/Reclaimers and the Shiploaders, have not been fitted with spill response equipment due to the safety risk of installing and retrieving spill kit bins. Spills in these areas can be serviced by kits located at the nearest Transfer House.

6.3 Contaminated Stormwater or Process Water

- Levels sensors controlling pump activation and raising alarms
- Flood mode logic
- Design of controls to settle out solids
- Design of controls to manage high rainfall events
- Regular sump cleanout
- Regular maintenance and inspection of pumps
- Water quality monitoring

6.4 Diesel-powered Locomotives

- Spill kits
- Train operator spill response

6.5 Fire

- Dedicated fire suppression systems including sprinkler systems, water deluge, gas suppression and fire extinguishers
- Smoke alarms
- 2ML storage tank reserved for fire fighting
- Emergency management training

6.6 Spontaneous Combustion

- Limited coal residency periods
- Stockpile residency monitoring
- Coal moisture conditioning
- Stockyard spray application
- 2ML storage tank reserved for fire fighting
- Temperature monitoring

6.7 Major Dust Event

- NCIG Integrated Dust Management System
- Dust monitoring
- Moisture application
- Weather forecasting systems
- Design of NCIG Plant to contain coal stream
- Dust Management Trigger Action Response Plan (TARP)

7. INVENTORY OF POLLUTANTS

The following provides a list of contaminant types kept on the NCIG site at any one time, including maximum quantities:

- Stored oils – no greater than 5000L, contained in the DGSA and contractor containers
- Stored greases – no greater than 5000L, contained in the DGSA and contractor containers
- Waste oil and greases – no greater than 4000L, contained in the waste oil area
- Gas Cylinders – no greater than 20 x 50L gas storage tanks stored in the laydown storage area and contractor container area.
- Effluents – approximately 4000L potentially contained in holding sumps (see Figure 2)
- Domestic Cleaning Products – small volumes (approximately 50L) contained in the Administration Cleaning Store Room
- Paints – small volumes (approximately 200L) contained in bunded shelving in the store area and some contractor containers
- Hydraulic oil – Approximately 300L stored in each machine, Up to 1000L for feeder hydraulic power units at the Dump Station and the Buffer Bins
- Lubricating oil – Approximately 200L stored in multiple drives in each machine. Approximately 200L per locomotive.
- Greases – Approximately 200L stored in multiple reservoirs in each machine
- Contaminated storm water – each collection sump contains approximately 50kL. There are eighteen (18) collection sumps located around site. Settling Ponds also contain potentially contaminated storm water. The combined volume of all settling pond controls and ponds onsite is approximately 100ML. The main pollutant associated with site stormwater is suspended solids, although low levels of hydrocarbons may be found in site stormwater depending on proximity to lubrication sources and hydraulic power units.
- Diesel – the majority of diesel is stored in locomotives. Each locomotive contains approximately 8000L of diesel. No greater than 5 trains (i.e. 10 locomotives) will occupy the NCIG network at any one time. Diesel is also stored in multiple light vehicles (approximately 40 vehicles, 70L each). The sole refuelling facility at NCIG is an 8000L double-lined aboveground tank located to the immediate west of the Workshop (see Figure 2).
- Dust and particulates – the site may contribute to local ambient dust load depending on environmental conditions. Sources of dust can be categorised into coal and hardstand areas. Stockpile volumes of coal onsite are typically around 1 M tonnes, but the stockyard has capacity for up to 4 M tonnes.

- Recycled water – NCIG receives recycled water from the Kooragang Industrial Water Scheme (KIWS) to reduce the reliance on potable water for industrial use. The water is received through a pipeline which enters the premises at the corner of Raven and Egret Streets and is managed in accordance with the *NCIG Recycled Water Management Plan (HSEC.MP.12.14)*. Recycled water is stored in a 0.1 ML tank and is located northeast of the stockyard.

These quantities are to be supplied to emergency services in the event that they are called to site and one of the above potential pollutants contributes to a pollution incident.

8. SAFETY EQUIPMENT AND HARM MINIMISATION

Hydrocarbon spills will be contained primarily using spill kits and associated contents such as booms and absorbent pads and drisorb. Spill kits also contain protective disposable suits and gloves for occupational protection during clean up works. In the event of a spill, appropriate barricading and hazard information will be displayed at the spill site to prevent contact with site users.

In the event of a marine hydrocarbon spill or spill in onsite or adjacent water bodies, floating booms are to be deployed to contain spills at the surface. These are available from the NCIG marine spill kits located on each wharf maintenance bay and will typically be tied off at shore to prevent further spreading of the spill.

For major chemical or hydrocarbon spills, a risk based approach will be followed prior to conducting containment and clean up work. Hazards associated with the spilled substance will be assessed and managed so that the safety of individuals is not compromised, including consultation with the relevant Safety Data Sheet (SDS). ChemAlert should be used to access up to date SDS information for chemicals stored on site.

For detection of potential major dust events, there are four (4) real-time TSP Dust Monitors located at the boundaries of the NCIG site and a meteorological station located adjacent to the Clearwater Pond (WT30). These units inform the NCIG control system on-going and provide an early notification of adverse weather conditions which have the potential to create major dust events.

Regular temperature observations and measurements are taken from coal stockpiles, as an early warning system for spontaneous combustion. Coal stockpiles with long residency time are monitored closely to manage this risk.

Where pollution incidents have the potential to impact on people accessing or working onsite, people will be evacuated from the affected area in accordance with Emergency Management Procedure, including utilisation of muster points. Depending on the severity of the incident, an appropriate consultative professional (e.g. medical, toxicological, and environmental) will be engaged to assess the area and any potential on-going impact.

9. CONTACT DETAILS

In accordance with the Emergency Management Procedure, there are a number of key individuals responsible for enabling the pollution incident response. The details of implementing pollution incident response are contained in the Appendix of the Procedure (Environmental Pollution Incident) and in the sections below. Contact details of key internal personnel are as follows:

- Emergency Controller (NCIG Process Leader) – 4920 3975 (24 hours)
- Communications Officer (NCIG Technician Coordinator) – 4920 3955 (24 hours)
- NCIG Security Officer (main security gate) – 4920 3998
- NCIG Security Officer (wharf security gate) – 4920 3979 (24 hours)
- Manager HSEC – 0488 744 774
- Environment and Sustainability Lead – 0419 436 991

Contact details and a locality plan of neighbouring properties are contained in the Appendix of this management plan and the Emergency Management Procedure. These organisations will be contacted in accordance with **Section 11** in the event a pollution incident will or may impact on their premises. This contact will be initiated as soon as the incident has the potential to impact their property, i.e. prior to any potential impact. In the event that the incident is of a prolonged nature, regular updates will be provided to the potentially affected neighbour.

10. NOTIFIABLE POLLUTION INCIDENT

In accordance with Section 147 of the POEO Act a pollution incident is notifiable is it causes or has the potential to cause material environmental harm to the environment. Harm to the environment is determined to be material if:

i) It involves actual or potential harm to the health and safety of human beings or to ecosystems that not trivial; or

ii) It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (loss includes reasonable costs and expenses that would be incurred in taking all reasonable and practical measures to prevent, mitigate or make good harm to the environment.

As a guide, a pollution incident is notifiable if it is an uncontrolled release or movement of a pollutant across the NCIG boundary or an incident that requires external emergency services assistance to manage. Examples of such incidents could be:

- A significant oil spill into the Hunter River.
- A significant oil, fuel or effluent onto the ground or into NCIG's stormwater management system.
- Hazardous chemicals spill.
- Major fire event.
- Major dust event.
- Major spontaneous combustion event.

In the event the Emergency Controller is unable to immediately establish whether the incident is a Notifiable Pollution Incident, assistance should be sought immediately from appropriate NCIG personnel, e.g. Operations Superintendent, Manager HSEC or Environment and Sustainability Lead.

11. NOTIFICATION

As detailed in the site Emergency Management Procedure, the following agencies and government bodies are to be notified in the event of a notifiable pollution incident:

Firstly, call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:

- NSW Port Authority (VTIC) for harbour related incidents only – 4929 3890 to assist controlling the incident

- NSW EPA – 131 555
- Public Health Unit – 4924 6477 (diverts to John Hunter Hospital after hours, ask for the Public Health Officer on call)
- SafeWork NSW – 13 10 50
- City of Newcastle – 4974 2000
- Fire and Rescue NSW – 1300 729 579 (Note – if 000 was called in the first instance, Fire and Rescue NSW do not need to be called again)

The environmental pollution risks associated with NCIG operations have little or negligible potential impact on the surrounding community. In the event that a pollution incident has the potential to cause nuisance to or impact neighbouring industrial operations, the Emergency Controller will make direct contact with neighbours. This will be carried out in accordance with Appendix 3 of the Emergency Management Procedure (Neighbourhood Industry Emergency Alerting Communication). The contact details and locality plan are also included in Appendix 1 of this plan.

Notwithstanding the low risk to surrounding communities from potential pollution from the NCIG site, it is recognised that there is heightened community concern regarding pollution from industry in the Newcastle area. NCIG, in coordination with other industry on Kooragang Island, will utilise the services of HAZMAT and the Police Emergency Services, should it be decided that community notification is necessary following a pollution incident. As such, details of the incident are to be provided to Fire and Rescue NSW, who will decide if HAZMAT is to coordinate any necessary community notifications. Details of the nature of the incident will be provided, so that information can be relayed to community members to control exposure pathways.

Additionally, in the event that communication with the local community or neighbours is required, the following mechanisms are available to be used by NCIG where appropriate:

- Emails or phone calls to community contacts and industrial neighbours
- Use of the NCIG 24-hour enquiries line
- Media releases
- Community information sessions
- Community newsletters or letterbox drop

In accordance with Condition 8.1, Schedule 2, of the NCIG Project Approval (06_0009), the Director-General (now Secretary) will be notified of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. This notification will be made by the site HSEC Department. The Secretary will be provided with written details of the incident within seven days of the date on which the incident occurred.

12. ACTIONS DURING AND AFTER THE INCIDENT

The following are the steps to be followed during and after an environmental pollution incident (detailed on the following page of the Procedure):

If an environmental pollution incident occurs, follow the below procedure:

If a spill is of hazardous material that has the potential to impact the health and safety of yourself or others, follow the evacuation procedure until it is safe to contain, control and clean-up. For all spill or pollution incidents follow the below procedure:

- **Notify the Emergency Controller** of the incident immediately and take any immediate actions to control the incident if safe to do so (e.g locate the nearest spill kit to control and contain the spill).
- The **Emergency Controller** is to consult the relevant SDS, assess the incident and take control.
- The **Emergency Controller** is to determine if the pollution incident causes or threatens material harm to the environment (i.e a Notifiable Pollution Incident).
- In the event of a Notifiable Pollution Incident, the **Emergency Controller** will instruct the **Communications Officer** to commence contacting the relevant agencies immediately.
    - Firstly call 000 if the incident presents an immediate threat to human health or property. If the incident does not require emergency services assistance, or once the 000 call has been made, the following authorities are to be notified in the following order:
        - NSW Port Authority (VTIC) for harbour related incidents only – 4929 3890 to assist controlling the incident
        - NSW EPA – 131 555
        - Public Health Unit – 4924 6477 (diverts to John Hunter Hospital after hours, ask for the Public Health Officer on call)
        - SafeWork NSW – 13 10 50
        - City of Newcastle – 4974 2000
        - Fire and Rescue NSW – 1300 729 579 (Note – if 000 was called in the first instance, Fire and Rescue NSW do not need to be called again)

- For all spills in the harbour, the Communications Officer is to notify VTIC (4929 3890) immediately, even if the incident hasn't been deemed as a Notifiable Pollution Incident.
- Neighbouring facilities must be notified if there is the potential that the incident could impact them.
- Details of the incident are to be provided to Fire and Rescue NSW, who will decide if HAZMAT is to coordinate any necessary community notification.

Actions to be followed during and after notification:

- The **Communications Officer** is to advise the **Emergency Controller** if any of the notified authorities are to arrive at site, and when and where they are to meet.
- The **Emergency Controller** is to send a **Team Member** to the Emergency Services Meeting Point to meet the Emergency Services.
- In the event of a spill, the **Team Member** will pick up a copy of the relevant SDS on the way to the meeting point from the SDS register outside the main site security hut or the wharf security hut.
- The **Team Member** is to notify the **Communications Officer** that the Emergency Services have arrived on site.
- The **Team Member** is to escorts Emergency Services as directed by the **Emergency Controller** to the incident and, in the event of a spill, provide the copy of the relevant SDS.
- Emergency Services, with assistance from **Emergency Controller**, is to make the area safe and contains the spill or environmental incident.
- For spills, all contaminated products used to absorb the spill are to be placed in sealed containers and labelled for appropriate disposal
- Following emergency response, the **Emergency Controller** is to ensure that any incident scene is secured using all methods available, including evacuation, barricading and/or communication. The scene is to be kept secure and undisturbed for any potential statutory investigation as required

12.1 Spill Response

12.1.1 General Spill Response Requirements

It is important that you ensure your own safety by analysing the situation, and taking into account any fire or health hazards before commencing any spill response.

All spills regardless of their size must be controlled and contained immediately. The five main steps in any spill are as follows:

- Identify
- Control
- Contain
- Clean Up
- Report

12.1.1.1 Identify

Identify the substance that has been spilled (i.e hydrocarbons, process water etc), and locate the SDS (if applicable) for this substance for any specific clean-up requirements. The following criteria applies to spills on the NCIG site:

- For spills less than 20 litres:
  - report and investigate
  - control, contain and clean up as soon as possible
- For spills greater than 20 litres or hazardous material spillage:
  - report spillage details immediately to the HSEC Department
  - control, contain and clean up as soon as possible
- For spills in marine waters:
  - report spillage details immediately to Process Leader who will assess the situation and contact VTIC and other relevant agencies in line with the above process
  - Notify HSEC Department as soon as practical
  - control, contain and clean up as soon as possible

PPE should be worn at all times when cleaning a spill. If the spill cannot be identified, assume it is harmful and seek assistance to identify the material before commencing clean-up.

A majority of spill kits on the NCIG site are for hydrocarbons. If the spill is a chemical spill, immediate notification must be given to the HSEC Department or Process Leader, followed by actions detailed in the following sections to minimise environmental impacts.

12.1.1.2 Control

Isolate the source of the spill immediately if safe to do so. This may involve closing bund valves, shutting down equipment, closing pipe valves, etc, to prevent further spillage.

If the spill has the potential to impact on people or their work area, remove these people from the area if it is safe to do so. Eliminate all possible ignition sources.

12.1.1.3 Contain

No person or machinery can be allowed to undertake normal operations in the vicinity of a spill while containment processes are taking place. Spills must be contained before any substance can leak into sensitive locations. In the event that the spill will impact more than one type of sensitive receiver then protection of these should be prioritised accordingly:

1. Offsite watercourses;
2. The natural environment adjacent the site;
3. Onsite drainage systems.

Spill kits contain the necessary items to control oil spills:

- Oil spill/leakage risks have been identified throughout the site, rated and required locations of spill kits identified accordingly. Spill kits are to be stored at the locations identified in Section 6.2.1. In locations of oil spill/leakage risk where there is no spill kit, signage indicating the nearest spill kit is to be displayed (refer to Section 6.2.1).
- Spill kits contain absorbent mats, booms and other control materials (e.g. Spillsorb) that help to appropriately contain a spill. These are outlined in the 'clean-up' section below.
- The use of sufficiently sized containment materials are of paramount importance when employing spill kits to ensure effective containment of a hydrocarbon spill. While care should be taken to ensure the practical use of spill kits, there should be no hesitation in employing whatever resources are needed from any spill kit to ensure rapid and effective containment.

Any ponding of spills should be transferred or pumped to containers as quickly as possible, as long as it is safe to do so. No spill should be re-directed to other areas on the NCIG site, or down drainage areas.

12.1.1.4 Clean Up

- Spill Kits – contain the necessary equipment (booms, mats, absorbent material) to contain, control and clean up hydrocarbon spills. A shovel and stiff-bristled broom may also be of use in certain circumstances.
- Booms – are flexible long 'socks' filled with absorbent material designed to be placed around a spill to contain it to an area. Booms are to be used when the spill is large enough to 'run' away from the initial spill area. Aquatic floating booms (located in the marine spill kits) can be used to control spills in water.
- Mats – are generally used for spills that develop under drums, or for small leak containment. The mat area should always be larger than the spill it aims to contain. Booms can be placed around a mat if you are unsure. Mats can also be placed on a spill that has been contained by a boom.
- Absorbent material (e.g. Spillsorb) - loose material that can be placed/poured over a hydrocarbon spill to absorb excess oil/fuel. This can be used on spills of various sizes. It is important that this absorbent material is removed and disposed of appropriately as soon as the spill is contained, to ensure this material cannot spread to other areas (eg. all over the floor in a workshop where an oil leak has been contained).

Drain seal covers are used for quick sealing of drain entrances and minimise the chance of spills entering the drainage system.

12.1.2 Treatment of Spill Types

12.1.2.1 Sealed Surface Area

1. Block inlets to any nearby surface water drains and sewers with a physical barrier such as:
    - absorbent boom or sock;
    - drain seal covers;
    - a mound of absorbent material (e.g. Spillsorb).
2. Where possible, isolate the source of the spillage;
3. Wearing PPE, scoop or pump as much pooled substance as possible into a container or containment area for either re-use or appropriate disposal.
4. Label container as 'Hazardous waste'.
5. Upon removal of the majority of the spill, apply the particulate absorbent product (land-spill) from the spill kit onto the contaminated area.
6. With a stiff-bristled broom, mix the particulate material into the spill until all spillage is absorbed.
7. Once all oil/fuel/hazardous substance spillage has been absorbed, immediately scoop or shovel the saturated absorbent material into a heavy duty plastic bag and label as 'Contaminated waste'.
8. Do not hose down contaminants or excess absorbents into drains.
9. Contact the Manager HSEC and/or Environment and Sustainability Lead for advice on appropriate disposal.
10. Report spill.

12.1.2.2 Unsealed Surface Area

To remove any substance that is absorbed into the soil and to prevent further contamination, the following steps are to be undertaken:

1. Block inlets to any nearby surface water drains and sewers with a physical barrier such as:
    - absorbent boom or sock;
    - drain seal covers;
    - a mound of absorbent material (e.g. Spillsorb).
2. Where possible, isolate the source of the spillage;
3. Wearing PPE, scoop or pump as much pooled substance as possible into a container or containment area for either re-use or appropriate disposal.
4. Excavate the oil/fuel/hazardous substance contaminated soil. Any excavations are to be carried out in accordance with the NCIG HSEC FRM 10.12.01 Excavation & Penetration Clearance Form.
5. Store oil/fuel contaminated soil in a contained area on site until arrangements are made for appropriate disposal. The contained area should be either concrete- or plastic-lined
6. Contact the Manager HSEC and/or Environment and Sustainability Lead for advice on appropriate disposal.
7. If spill is deemed significant by the Manager HSEC, soil samples should be collected from the walls and base of the excavated area and analysed to determine whether all contaminants have been removed.
8. Backfill excavated area with clean-fill material.
9. Report spill.

12.1.2.3 Spill in Settling Ponds

1. Where possible, isolate the source of the spillage..

2. Place absorbent/containment boom downstream of the spill
3. Identify and protect drainage systems if possible (e.g. sumps) to prevent spreading contamination.
4. If the event is deemed a large spill by the Manager HSEC, consider the hire of a suction truck to remove the majority of the oil/fuel.
5. Concentrate/contain the spillage in one area by manoeuvring the booms, and then apply particulate and absorbent mats over the spillage.
6. Contain spill on surface water by manoeuvring aquatic boom.
7. Pump out spill contained by aquatic boom.
8. Report spill.

12.1.2.4 Spill on Shiploader Area

1. Immediately cease all activities. Notify the Environment and Sustainability Lead or Manager HSEC.
2. Where possible, isolate the source of the spillage.
3. Place absorbent boom around the spill.
4. Identify and protect drainage systems if possible (e.g. sumps) to prevent spreading contamination with a physical barrier such as:
    - absorbent boom or sock;
    - drain seal covers;
    - a mound of absorbent material (e.g. Spillsorb).

12.1.2.5 Spill into the Hunter River

1. Immediately cease all activities. Notify the Process Leader as outlined in the preceding sections of this plan.
2. Where possible, isolate the source of the spillage.
3. Where possible, for a hydrocarbon or oil spill, lower absorbent boom from a safe place onto affected areas of water. Consideration should be made of the tide direction at the time so that floating oil booms are deployed down-tide of where the spill has occurred.
4. If the event is deemed a large spill by the Manager HSEC, consider the hire of a suction truck to remove the majority of the oil/fuel. Refer to NSW State Waters Marine Oil and Chemical Spill Contingency Plan. This is to be organised in conjunction with VTIC. VTIC have control of a for purpose marine boom is positioned at NCIG's Wharf (western end) that can be deployed by VTIC if the spill is significant enough to warrant it.
5. NB/ NCIG currently do not have the capability to respond to large spills in the harbour (i.e. large aquatic booms across the harbour). Therefore, communication with VTIC is required as outlined in preceding sections of this plan.

12.1.2.6 Spill on Coal Stockpile

1. If the spill has occurred onto the coal stockpile area, determine if it is on the sacrificial coal, the coal body, or has entered the soil.
2. In any of the above cases the contaminated material will need to be removed, as per the unsealed area requirements listed in 14.1.1.2.
3. Contaminated soil should be treated and disposed as per unsealed area requirements listed in 14.1.1.2. Any excavations are to be carried out in accordance with the NCIG HSEC FRM 10.12.01 Excavation & Penetration Clearance Form.

4. Contaminated coal may need to be segregated and decontaminated according to client conditions and regulative requirements. Consult the Manager HSEC or the site Environment and Sustainability Lead for advice in this scenario.
5. Report spill.

12.1.3 Spill Kits

12.1.3.1 Contents

Spill kit contents can change between suppliers, however each land spill kit should contain at minimum:

- Small and large booms for spill containment/diversion
- Absorbent mats to absorb spills
- Absorbent material (e.g. Spillsorb) to absorb spills
- Disposal heavy duty plastic bags that used clean-up material can be placed into, prior to disposal
- Disposable PVC gloves for personal protection
- Disposable overalls for personal protection

Marine spill kits should contain the following:

- Large 30m floating boom with at least 10m of rope on either side to allow the boom to be tied off to wharf structure
- Floating absorbent pads
- Disposable PVC gloves for personal protection
- Disposable overalls for personal protection

12.1.3.2 Replenishment

Clean-up and spill kit materials must be replenished immediately after the spill incident is resolved. The following procedure applies to the replenishment of land spill kits:

1. Take used spill kit to the store.
2. Notify Supply Superintendent that spill kit requires replenishment. Supply Superintendent is responsible for ensuring all spare kits in the store are replenished through the spill kit provider.
3. Spare spill kit from the store is to be taken to location where original spill kit was used.

Due to the size of marine spill kits, they are unable to be easily replaced. The Supply Superintendent should be notified immediately if any contents are used, to allow the marine spill kit to be restocked as soon as possible.

Spill kits around sit are inspected routinely by a maintenance contractor and should be replenished where required.

12.1.3.4 Disposal

Used booms, mats and absorbent material, and any contaminated soil is to be placed into heavy duty plastic bags and marked clearly as ‘Hazardous Waste’ or ‘Contaminated Waste’, depending on the contents. NCIG has appropriate disposal locations for used oil absorbent material. All waste disposals associated with hydrocarbon spills are to be carried out in accordance with NCIG HSEC PRO 12.01 Waste Management Procedure.

13. SKILLS AND COMPETENCE

Department Managers are accountable for the maintenance of skills and competency of individuals who fill Emergency Management Team Roles. This includes Warden and First Responder training for the Emergency Controller and Communications Officer. Initial and refresher training will be provided for each relevant role as specified in the NCIG Emergency Management Procedure.

Additionally, all staff and contractors are advised of their requirements as outlined in this plan through site inductions and environmental awareness training packages.

14. ROUTINE TESTING OF THE SPIRMP

Testing of the SPIRMP is to occur every 12 months, typically coordinated by the HSEC Team.

Testing will be carried out in such a manner to ensure that the information included in this plan is accurate and up to date, and is capable of being implemented in a workable and effective manner. Methods for testing could be undertaking desktop simulations or practical exercises or drills. Testing will cover all components of the plan, including the effectiveness of training. Outcomes and updates of the testing shall be kept and recorded.

Plans will also be tested within one month of any pollution incident occurring to assess whether the information included in the plan is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner. This testing can include a review of a previous notifiable incident to check effectiveness of the plan implementation.

Future testing of this plan will look to address relevant information and the accuracy of information herein. This includes:

- relevant pollution hazards
- inventory of pollutants
- relevant site contacts,
- notification procedures
- actions during and after the incident
- safety and harm minimisation
- early warnings and regular updates
- skills and competence.

Dates of Pollution Incident Response drills to date include:

- 6 August 2013 – This was also an emergency evacuation drill which was intended to address the external notification procedure for a pollution incident, specifically a fire at the site Administration Building with the potential to impact neighbouring premises with smoke. The notification procedure was poorly implemented and this was recognised in a post-drill debrief.
- 24 February 2014 – This was also an emergency evacuation drill which was intended to address the external notification procedure for a pollution incident, specifically a fire at the site Administration Building with the potential to impact neighbouring premises with smoke. The notification procedure was implemented, however this was not considered immediate and contact with neighbouring premises was not simulated. This was recognised in a post-drill debrief.
- 9 March 2015 – A pollution incident response drill was conducted at the NCIG Rail Flyover Construction site, as the PIRMP was initiated in response to a land slip adjacent to the construction into the neighbouring water body (Deep Pond) in the month prior. The drill included a mock oil spill into Deep Pond, and focussed on control, contain, clean up, and internal/external notifications
- 25 November 2015 – A pollution incident response drill was practiced with the NSW Port Authority. NCIG played the role of notifier and the Port Authority responded including deployment of marine boom from dedicated container at the NCIG Wharf.

This drill also satisfied the requirement to test the SPIRMP within 1 month of activating the SPIRMP (activated on 17th October, 2015, discharge from ship at berth).

- 1 November 2016 – an emergency response drill was enacted for the Stacker/Reclaimer 3 switchroom. Consideration was made of hazmat response due to potential for acid generation as a result of a switchroom fire. However, notifications to appropriate authorities were not simulated or considered as a result of potential smoke crossing the NCIG boundary.
- Feb 2018 (1st, 8th, 15th, 22nd) – Tested by Hayley Ardagh (Graduate – Environment and Sustainability) and Duncan Hislop (Workplace Safety Advisor): A drill was conducted with each of the four crews to exercise the SPIRMP content for a major spill in the harbour. Each crew deployed the marine spill kit and contacted the Port Authority as part of the notification process.
- 28 February 2019 – Tested by Hayley Ardagh (Graduate – Environment and Sustainability), Phil Reid (Environmental Advisor) and Duncan Hislop (Workplace Safety Advisor): A drill was enacted with A Crew for a major spontaneous combustion event. The content of the SPIRMP was exercised and NCIG played the role of the notifiable authorities.
- 5 March 2020 – Tested by Hayley Ardagh (Graduate – Environment and Sustainability) and Duncan Hislop (Workplace Safety Advisor): A pollution incident response drill was enacted with D Crew for a major spill in the Hunter River. The content of the SPIRMP was exercised including the notification process internally and externally. NCIG played the role of notifiable authorities, although VTIC was notified of the drill. The new marine spill kits were deployed and tested.
- 14 December 2020 – Tested by Wade Covey (Environment and Sustainability Lead), Hayley Ardagh (Environmental Officer) and Travis Smith (Process Leader): A desktop scenario was undertaken within one month of the activation of the SPIRMP in response to an incident involving NCIG's shiploader on 18 November 2020. The desktop exercise tested the provisions of the NCIG SPIRMP to ensure the information is accurate and up to date, and able to be practically and effectively implemented. The desktop scenario was related to an oil spill in the Hunter River.
- 20 April 2021 – Tested by Hayley Ardagh (Environmental Officer) and involved an NCIG Process Leader and three Technicians. The drill was undertaken within one month of the activation of the SPIRMP in response to a flood event that occurred on 21 March 2021. The drill scenario was related to an oil spill contaminating NCIG's water management system. The purpose of the drill was to identify any areas for improvement, particularly in regard to the suitability of spill response equipment on site.
- 14 April 2022 – Tested by Hayley Ardagh (Environmental Officer). The SPIRMP was tested to ensure the content was accurate and up to date. This involved multiple verbal scenarios with the control room and other relevant personnel to ensure contact details are accurate and the notification process worked effectively. The content of the PIRMP was found to be accurate and up to date, with a few improvement recommendations noted.
- 18 April 2023 – Tested by Wade Covey (Environment and Sustainability Lead) and Peter Madden (Environment and Sustainability Officer). Two Process Leaders also participated in the test. The SPIRMP test was a desktop exercise. The scenario was a spontaneous combustion event which had potential to cause harm to humans onsite and at neighbouring operations. The information included in the SPIRMP proved to be accurate and up to date and is capable of being implemented in a workable and effective way. One improvement was identified.

15. AVAILABILITY OF THE SPIRMP

This SPIRMP, and the Emergency Response Procedure, will be available on SharePoint for all Site Users. In addition, a hard copy of the Plan is available in the Process Leaders office for quick reference or for use during a power outage. A copy of the Plan will be produced to any EPA Inspector/Officer on request.

This Management Plan will also be available publicly on the NCIG website (www.ncig.com.au).

16. REFERENCES

- Protection of the Environment Legislation Amendment Act (POELA) 2011;
- Protection of the Environment Operations Act (POEO) 1997;
- Protection of the Environment Operations Regulation (General) 2009; and
- The Guideline: Pollution Incident Response Management Plans (PIRMP Guidelines (NSW EPA 2020).
- Environmental Compliance Report: Requirements for Preparing and Implementing Pollution Incident Response Management Plans (NSW EPA 2013).
- NCIG HSEC.PRO.14.01 Emergency Management Procedure
- NCIG HSEC PRO 10.13 Hazardous Substances and Dangerous Goods Procedure.
- NCIG HSEC PRO 12.01 Waste Management Procedure
- NCIG HSEC.MP.12.14 NCIG Recycled Water Management Plan

17. DEFINITIONS

ABSORBENT MATERIAL	Materials that recover oil spills through absorption (oil enters the material) or adsorption (oil clings to the surface of the material).
COMMUNICATIONS OFFICER	Operations Control Room, Technician, will take control of internal/external communications and dispatching of appropriate resources as required under the direction of the process leader.
EMERGENCY	A sudden unforeseen thing or event needing prompt action; a difficult situation, crisis, Including, but not limited to: a serious accident or medical emergency; major plant damage; fire; electrical incident.
EMERGENCY RESPONSE	The action that takes place following the raising of an emergency.
EMERGENCY MANAGEMENT TEAM (EMT)	Controls the initial response to an emergency on the NCIG site includes the Emergency Controller, Communications Officer, Area Wardens, Security Officer and the First Aider.
EMERGENCY CONTROLLER	Shall be the NCIG Process Leader. This role will maintain control over the emergency.
HYDROCARBON	All fuels, oils and a majority of lubricants are classified as hydrocarbons.
HYDROCARBON SPILL / OIL SPILL	Any spill of fuel, lubricant, hydraulic fluid, waste oil, solcenic oil, cutting fluids, and cleaning solvents, regardless of the spill size.

MATERIAL HARM TO THE ENVIRONMENT	Material harm is defined in section 147 of the POEO Act as: (a) harm to the environment is material if: (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.
NOTIFIABLE POLLUTION INCIDENT	Notification to external agencies (as outlined in this plan) is required if a pollution incident causes or threatens to cause 'material harm to the environment' (as defined above). Notification is required even where material harm to the environment is caused only on the premises.
OTHER EMERGENCY RESPONSE ORGANISATIONS - E.G:	External emergency services (Police, Ambulance, Fire and SES) Internal emergency support services (Security)
POLLUTION INCIDENT	An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.
PROCEDURE	Procedure refers to the Emergency Management Procedure (HSEC.PRO.14.01)
SPILL KIT	An assortment of absorbents, drain seals, spill booms, mats and other control measures that help you respond to spills quickly and effectively.

REVISION HISTORY

DATE	REVISION NO.	DESCRIPTION OF CHANGE	PERSONS INVOLVED
21/08/12	1st Draft	Review of draft document	Phil Reid Nathan Juchau
31/01/14	Review 1	Update of document	Phil Reid

16/04/14	Review 2	Update of document to address findings of EPA PIRMP Audit Report	Phil Reid
30/04/15	Review 3	Update for review of Emergency Management Procedure. Includes changes to only notify once material environmental harm has been established (notifiable pollution incident) and learnings from construction PIRMP drill	Phil Reid
1/12/15	Review 4	Combine Spill Response Management Procedure and Pollution Incident Response Management Plan	Phil Reid
10/11/17	Review 5	Changes made to the Shiploader hydraulic risk, Clearwater Pond discharge risk, response to spills into the harbour based on tide and the 2016 emergency drill	Phil Reid
12/12/18	Review 6	General update and update of VTIC Emergency Number and internal contacts	Hayley Ardagh Phil Reid
01/03/19	Review 7	Update based on drill findings – inclusion of drill summary, neighbouring contacts and update of notifiable authorities contact details.	Hayley Ardagh Phil Reid
27/11/19	Review 8	Update to include coal fines spillage as a risk and general review of shiploader hydrocarbon spill risks to confirm gearbox oil risks are accurate. Harbour related pollution response drill to be included in next test of the SPRIMP.	Hayley Ardagh Scott Grunsell
30/03/20	Review 9	SPIRMP merged to new template. Neighbouring contact details updated. Addition of community notification details. Inclusion of latest drill summary. Minor updates to be consistent with the 2020 PIRMP Guidelines.	Hayley Ardagh
15/12/21	Review 10	General SPIRMP updates. Added in additional SPIRMP testing undertaken in 2021. Added new details for site contacts and updated accountabilities.	Wade Covey
17/05/22	Review 11	Update to include the latest test and to ensure the SPIRMP is consistent with the Emergency Management Procedure.	Hayley Ardagh
26/04/23	Review 12	Update to include recycled water in the inventory of pollutants, updated site plans and latest SPIRMP test details.	Peter Madden

18. APPENDIX 1 NEIGHBOURHOOD INDUSTRY CONTACTS

NEIGHBOURHOOD INDUSTRY CONTACT DETAILS

Newcastle Coal Infrastructure Group advises that the emergency contact telephone number for any incident alert is **4920 3999**.

COMPANY	PHONE NO
Port Waratah Coal Services - Kooragang	4907 2000
ARTC (Train Transit Manager)	4902 9410
Aurizon	4962 1666 / 0402428716
Ausgrid	13 13 88
Boral Cement	4928 1922
Boral Recycling	4920 1030
BOC	4907 1100
Cargill	4920 0100
Cleanaway Industrial Services	4015 6400
Cleanaway Liquid Waste Services	4908 9500
EDI Rail	1300 787 544
Elgas	131161
Hi Fert (Plant Manager)	1800 884 488
Hunter & Central Coast Development Corporation	4904 2750
HVCCC	4910 3500
Incitec	4923 5454
Pacific National	0418 447 325 / 02 8484 8000
Port Hunter Commodities	4920 1577
Orica Kooragang Island	49089 300
Origin Energy	133574
John Holland (Plant Yard)	4928 0100
KFC	4968 4474
Kooragang Bulk Facilities	4928 2577
LINX	4923 4555
Med-X	4928 4499
National Parks and Wildlife Service	4946 4100 / 0490128640
Port of Newcastle	4908 8200
Rig Installations	4908 9222
Shell Service Station	9883 0658
Sims Metal Recyclers	4033 7100
SSR Rail	1300 669 847
VTIC	4985 8222/4929 3890 (24 hours)
Wengfu	1300 936 438

Figure A1: Neighbourhood Industry Locality Plan