

RICHARD CROOKES

CONSTRUCTIONS

UNIVERSITY OF NEWCASTLE BIORESOURCES FACILITY
PROJECT NO.1167

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

15 April 2019



1 CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

1.1 WORKING SITE HOURS

Monday – Friday: 7:00am – 6:00pm

Saturday: 8:00am – 1:00pm

Sundays & Public Holidays: No Work

1.2 24 HOUR SITE CONTACTS

In order of priority;

1. Site Manager: Michael Whyte, Ph: 0488 304 745, E: whytem@richardcrookes.com.au
2. Project Manager: Bear Melvey, Ph: 0434 307 810, E: melveyb@richardcrookes.com.au
3. Site Engineer: Rhys Maybury, Ph: 0437 817 927, E: mayburyr@richardcrookes.com.au

1.3 MANAGEMENT OF DUST & ODOUR

To control and limit the impact of dust and odours during construction works, RCC will heavily implement dust suppression during high risk activities. This will be completed through either of the following methods;

- Spraying hose by man
- Water cart by vehicle
- Sprinklers set up on timers

In the event that dust and odours are aggravated and continue to create disturbance to site users and surrounding University occupants the respective site users will continue to control the dust and odour through the below methods. Any works that are contributing to this disturbance will cease until deemed ok to continue.

Continuing methods to further assist with odours;

- Spraying areas with hose by man
- Water cart by vehicle
- Placing barriers over and around effected areas

If the above impacts do take place, RCC will at all times endeavour to resolve the issue as timely as possible as the health and wellbeing of site users and surrounding occupants is paramount to all stakeholders.

For further information please refer to RCC's Project Management Plan.

1.4 STORMWATER CONTROL AND DISCHARGE

Upon site establishment RCC will heavily monitor all drainage entry and discharge points. All drains are to be immediately controlled with fabric and/or silt fences to filter water entering and exiting the site.

During construction works RCC will create 2 catchment areas for heavy inclement weather, one being on the lower side of site and the holding / treatment area at the water tank location. If flocking and water treatment is required to catchment areas this will be completed in accordance with RCC's water treatment policy found within the project management plan and pumped from site upon achieving the correct turbidity reading.

These measures will be continually reviewed via weekly environmental inspections in accordance with RCC's environmental management plan.

Please refer to the Soil & Water Management Plan for further information.

1.5 CONTROLLING SEDIMENT LEAVING SITE

RCC site staff will heavily monitor the subcontractor's plant and machinery entering and leaving the construction site. When plant and machinery are leaving site with effected tyres, tracks and/or bodywork the following methods will be implemented;

- Cattle Grids installed to site exits
- Water / hose available to thoroughly clean
- Street sweeper / cleaner available to clean any sediment taken onto the roadways

Please refer to the Soil & Water Management Plan for further information.

1.6 GROUNDWATER MANAGEMENT PLAN

For all stormwater running into and exiting the construction site please refer to section 1.5.

To limit the likes of groundwater contamination during construction works RCC will enforce the following actions;

- Again, all drainage location to be covered with fabric and silt controls
- All plant and machinery to be thoroughly inspected upon arrival to site to ensure the equipment does not have any leaking fluids or the like
- Enforce daily plant inspections by the subcontractor completed within their pre-starts
- In the case of any spills of hazardous material the area is to be isolated and cleaned up in accordance with the RCC project management plan (environmental section)
- Works to be completed within contained areas barricaded from surrounding areas.

All subcontractors will be liable to maintain compliance with all RCC environmental policies.

1.7 CONTROL OF EXTERNAL LIGHTING

RCC at all times will only be operating within the specified site hour day and times and in the instance external lighting is required which may affect the surrounding occupants and/or buildings the following measures will be closely monitored;

- External lights to be faced towards the site
- In instances lighting will face beyond the site, RCC to submit a Notice of Disruption to the client for approval and comment
- Include sufficient height fencing to limit lighting impact

1.8 COMMUNITY CONSULTATION & COMPLAINTS HANDLING

1.8.1 TRAINING

Prior to the commencement of project activities, all site personnel (including sub-contractors) will attend a site induction. This will include an outline of the requirements of this EMP and the responsibilities and accountabilities of all site personnel.

The project environmental site rules will be included in the induction session.

Training records will be kept to verify who has attended the training. Refer Site Inductions Section 3.5. of PMP.

1.8.2 COMMUNITY CONSULTATION

The Supervisor shall conduct and encourage RCC employees and subcontractors to conduct toolbox meetings to address safety & environmental hazards in and around the site, community interactions & feedback, company alerts posted on Crookes net, Client raised environmental issues, safe work practices, coordination and responsibilities.

The Project Manager will advise relevant residents of the nature and scope of works.

1.8.3 COMMUNITY COMPLAINTS

Upon receiving a community complaint, site personnel are to complete [Form 18.5](#) Community Feedback.

Remedial action must be taken as soon as practical Note it is an RCC objective to have all complaints actioned with 24hours. Any action taken must be recorded on the form.

The Supervisor is to include the completed [Form 18.5](#) in the site files.

All complaints are to be discussed and reviewed with the clients representative as soon as possible. Refer to the PMP for further information regarding complaints and consultation.

1.9 CONSTRUCTION TRAFFIC AND PEDESTRIAN MANAGEMENT PLAN

Upon all subcontractor and site visitor inductions the current site construction traffic & pedestrian management plan will be discussed in detail. The plan will provide all required information for the below items;

- Location of works
- Haulage and vehicle routes
- Working hours
- Estimated vehicle movements
- Access and control measures
- Delivery areas, site entry and exits etc.
- Construction parking locations
- Any applicable impacts to traffic and pedestrians
- Mitigation measures

Refer to the project management plan for further information.

1.10 NOISE & VIBRATION MANAGEMENT

Before works commence on site RCC will have an acoustic consultant prepare a noise and vibration management plan that will essentially be discussed with all site user inductions notifying all site users of RCC's requirements.

Upon completing the noise and vibration management plan RCC will then have the respective noise and vibration monitors installed for the construction works in accordance with the completed noise and vibration management plan.

The noise and vibration thresholds will be closely managed by the site personnel and the following control methods will be utilised;

- Noise and vibration monitors installed for high risk activities
- Monitors linked to site staff phones for live readings if thresholds are breached
- If breaches take place RCC site staff to implement further controls
- Upon completion of high risk activities continue to measure levels to determine monitor requirements

1.11 CONSTRUCTION WASTE MANAGEMENT

RCC is to achieve a minimum of 80% recycled waste throughout the construction works which will be done so via the following methodology;

- Include construction waste plan and targets in all inductions
- Separate waste via allocated bins (including signage) throughout site i.e. steel, concrete, masonry, gyprock, mixed waste etc.
- Maintain all waste reports, dockets and supporting information.
- Waste contractor to provide monthly report as to what percentage of waste is being recycled
- Return all over ordering to suppliers

All supporting information is to be held within the RCC site office and available for viewing upon request.

Regarding soil wastage, RCC will dispose of all soil waste in accordance with the NSW EPA waste classification guidelines. Again, all soil that is removed from site will be recorded and documents will be held within the site office.

Further waste management policies and protocols can be viewed within the project management plan.

1.12 UNEXPECTED FINDS PROTOCOL

1.12.1 ASBESTOS & CONTAMINATED MATERIALS

In the instance that either asbestos or contaminated materials are encountered RCC will comply with all relevant workcover and safework guidelines.

The following methodology is to be followed at all times;

- Demolition & Earthworks subcontractors to have approved asbestos management plans which are to be followed immediately

- Affected area is to be barricaded and isolated immediately
- If the material is deemed to be asbestos, air monitors to be installed immediately
- Qualified geotechnical expert is to attend site to gather samples for testing
- Notify workcover for asbestos removal permit
- Licenced asbestos removalists to remove asbestos and/or contaminated materials in accordance with respective guidelines
- Coordinate disposal with waste company
- Qualified geotechnical expert to attend site and issue clearance certificate
- Removal of air monitors

1.12.2 ABORIGINAL & NON-ABORIGINAL HERTIAGE

RCC ensure that any items of anthropological and archaeological interest are uncovered during the course of the works, works will cease immediately in the area and the Principal is to be notified.

In the event of an item of Aboriginal heritage significance being uncovered during the works, works will cease in the vicinity of the find and both the Principal and Office of Environment and Heritage (OEH) is to be contacted immediately. Works will not recommence until an investigation has been completed by a suitably qualified persons in accordance with OEH guidelines. If suspected human remains are identified during the works, works must immediately cease. The area must be secured and the NSW Police and the Principal and OEH notified immediately.

Contractors undertaking sub surface disturbance works associated with the proposed development are to review the specific Cultural Heritage Awareness Induction document prior to commencement of works.



SYDNEY

LEVEL 3, 4 BROADCAST WAY
ARTARMON NSW 2064

PO BOX 1024
CROWS NEST NSW 1585

PHONE: +61 2 9902 4700
FAX: +61 2 9439 1114

NEWCASTLE

LEVEL 1, 118A BELFORD ST
BROADMEADOW NSW 2292

PO BOX 835
HAMILTON NSW 2303

PHONE: +61 2 9902 4700
FAX: +61 2 6766 3022

TAMWORTH

SUITE 1, 493 PEEL ST
TAMWORTH NSW 2340

PO BOX 576
TAMWORTH NSW 2340

PHONE: +61 2 6766 5225
FAX: +61 2 6766 3022

ACT

UNIT 1, 155 NEWCASTLE ST
FYSHWICK ACT 2609

PO BOX 771
FYSHWICK ACT 2609

PHONE: +61 2 6143 2900
FAX: +61 2 6280 8774