SECTION 6
ENVIRONMENTAL MANAGEMENT AND MITIGATION MEASURES

This section identifies the environmental management measures and practices to be undertaken on the site for all aspects of the proposed RDC. An outline of the proposed Environmental Management System and associated site Environmental Management Plan is provided.

6.1 INTRODUCTION

This section provides a summary of the environmental management measures and practices to be implemented during construction and operation of the proposed RDC. A Site EMP would be developed for the management of activities on the site. The EMP would be a 'living document' which would be updated periodically in the light of monitoring results, site audits and the requirements of the Readymix Safety, Health and Environmental (SHE) Management System.

6.2 READYMIX ENVIRONMENTAL MANAGEMENT SYSTEM

The Readymix SHE Management System includes the following components:

- SHE Policy;
- SHE Guiding Principles;
- SHE Management Directives; and
- SHE Manual (includes Risk Management - Environment which specifies minimum environmental management requirements).

The Readymix Environmental Management System (EMS) is currently being implemented as part of the overall SHE Management System. The EMS has been developed in accordance with the requirements of ISO 14001. Under the system each Readymix site would have regular assessment of its environmental performance. A site EMP would be prepared for the proposed RDC as part of this system.

The RDC Site Manager would be responsible for implementing the management strategies as outlined in the EMP. All personnel working at the RDC site would be informed of the requirements of the EMP during a mandatory site induction and would be trained accordingly.

6.3 RDC ENVIRONMENTAL MANAGEMENT PLAN

The RDC EMP would identify the processes and actions causing, or that have the potential to cause, disturbance to, and degradation of, the environmental quality of the RDC site and its surrounds. The EMP would be prepared to address both the construction and operational phases of the project. It would include measures to be undertaken in order to minimise or mitigate these potential impacts. A monitoring programme would be undertaken as part of the EMP.

The EMP would be updated periodically in light of ongoing monitoring results, site audits, Licence requirements and Conditions of Consent. The EMP would incorporate the requirements of the SHE management system.

The EMP would include the:

- Environmental goals for key environmental issues including air, noise, traffic, water and vegetation management;
- Management strategies and objectives for the components of the RDC;
- Performance indicators/targets;
- Monitoring programs which are required to identify changes which may require modification to management regimes;
- Responsibilities for implementation of the EMP;
- Reporting and review requirements;
- Protocols for dealing with environmental incidents;
- Protocols for handling complaints; and
- Resource Implications.

6.4 MANAGEMENT ZONES

The RDC EMP would be implemented over the entire development site. Management of the site would be in terms of four management zones:

- Angus Creek Corridor Zone – This zone comprises Angus Creek and the adjoining riparian vegetation corridor;
- Southern Zone – This zone includes the rail siding, rail receival facilities, the southern section of the conveyor system and North Parade;
- Northern Zone- This zone incudes the storage, handling and distribution area including the Concrete Batching Plant; and
- Office and Laboratory Zone – The office and laboratory are to be located on the existing car park area on the Humes site.

The zones have been developed to ensure that all areas on the site would be managed in terms of the environmental management goals identified in the EMP.

There would be signage placed on the RDC entrance describing ownership of the site and requirements for access to the site. Visitors to the site would be directed to the visitor car park and visitor reception facilities.

6.5 ENVIRONMENTAL ISSUES

The EMP would identify measures to be undertaken in order to ensure that the environmental values of the RDC site are maintained and where possible enhanced, and that any potential

impacts resulting from the proposed development are either minimised or mitigated. A number of key environmental issues have been identified and are discussed below.

6.5.1 Air Quality

Due to the proximity of the development to the Nurragingy Reserve, Blacktown Olympic Centre, residential areas and surrounding industry a number of controls must be adhered to when undertaking construction works and operational activities. Dust control on site is aimed at prevention of air pollution and prevention of the degradation of local amenity.

Dust controls on the site would aim to comply with all relevant NSW DEC guidelines and the licence to be issued under the *POEO Act 1997* for the RDC.

The following management strategies would be adopted in relation to dust control on the site:

Construction

- Implement erosion and sediment control plan during construction;
- Minimise the area to be disturbed;
- Maintaining earthworks stockpiles in a condition that minimises wind blown dust;
- Progressively rehabilitate disturbed areas as soon as practicable;
- Restrict vehicle movements to specified routes;
- Ensure vehicles adhere to speed limits;
- Dust suppression using water sprays;
- Commence landscaping as soon as practicable; and
- Install dust gauges to monitor dust levels at sensitive receptors. A minimum of 3 locations are proposed.

Operation

- Seal all roads;
- Enclose all transfer, load-out and unloading points;
- Cover/enclose all conveyors;
- Cover/enclose all storage bins;
- Use water sprays periodically on open stockpile areas;
- Load cementitious products to silos pneumatically using proven technology;
- Implement a dry-dust collection system to control dust at the point where transit trucks are loaded in the Concrete Batching Plant. This area would be enclosed on three sides;
- Implement dust suppression measures on a daily basis including road sweeping;

- Sweep all areas susceptible to wind erosion as required to minimise wind erosion dust. A street sweeper would be permanently located on site; and

- Tarp (cover) all loads exiting the site prior to departure.

6.5.2 Noise

Noise control on the site would aim to comply with all relevant NSW DEC guidelines and the licence to be issued under the *POEO Act 1997*.

Due to the proximity of the works to the Nurragingy Reserve, Blacktown Olympic Centre, residential areas and surrounding industry a number of controls must be adhered to when undertaking construction works and operational activities. Noise control would be aimed at minimising noise emissions and preventing degradation of local amenity.

Design of the RDC and management of site operations including truck traffic would minimise noise emissions from the site.

The following management strategies would be adopted in relation to noise control on the site:

Construction

- Maintain all machinery and equipment in working order;

- Construction activities would be restricted to 7.00 am to 6.00 p.m. Monday to Friday and 8.00 am to 1.00 pm on Saturdays;

- Where possible locate noisy site equipment behind structures that act as barriers or at the greatest distance from noise sensitive areas;

- Orient equipment so that noise emissions are directed away from noise sensitive areas;

- Noise barriers would be constructed as soon as possible during the construction phase; and

- Give prior notification to the community and adjoining property holders when noisy operations are to be conducted.

Operation

Noise barriers and enclosures

- Fully enclose all conveyor drives and elevated conveyors;

- Design conveyors proposed for use on the site as follows:
  - Conveyor CV-01 would be designed to achieve a sound power level of 97 dBA/100 m;
  - All other conveyors excluding the radial stacker would be designed to achieve a sound power level of 92 dBA/100 m;

- Enclose both dust collector units located south of Angus Creek and those located on the top of the main storage bins and truck load-out bins. The other two dust collector units would be mitigated as follows:
  - Air pulse unit and clean air chamber are to be enclosed;
  - Units to be located to obtain maximum shielding from other items on site.

- Erect a wing-wall on the south-west corner of the Concrete Batching Plant slump enclosure which would be at least the same height as the opening of the enclosure and extend a minimum of 3 m from the end of the enclosure;

- Erect a wing-wall on either corner of the south side of the rail unloading station which would extend a minimum of 25 m from either end of the rail unloading enclosure and be the same height as the opening of the enclosure;

- Erect a continuous noise wall, minimum of 4 m in height, along the eastern side of the subject site; from the north eastern corner of the site to conveyor CV-02, running along the proposed truck route and continuing as near as possible to conveyor CV-02;

- Erect a continuous noise wall as near as possible to the eastern end of the rail siding that runs along the Nurragingy Reserve to a minimum height of 3 m above the rail level. This wall would begin at the dead-end buffer stop at Eastern Creek (wrap around the end or extend approximately 10 m east of the dead-end) and extend west to the rail unloading station (refer Figure 1.3);

- Erect a noise wall as near as possible in the northern side of the rail siding from the extremity at the western end (wrap around the dead-end buffer stop) and extend east to the M7 overpass at a minimum height of 3 m above rail level;

- Erect a continuous noise wall as near as possible on the southern side of the main rail line from the M7 overpass extending for approximately 150 m towards Rooty Hill station at a minimum height of 2 m above rail level; and

- Construct the noise walls adjacent to the rail siding from either timber or an aerated concrete product.

Equipment Treatment

- Line rail unloading bins and the cone section of the main storage bins with noise mitigating material to reduce impact noise. Only storage bins that receive aggregate would be required to be lined. It would not be necessary for those receiving sand.

Plant Management

- Not loading the main storage bins from an empty state during the evening, night-time or morning shoulder period;

- Limit the Concrete Batching Plant to one truck being loaded and one truck slumping at any one time during the evening and night-time period. The concrete plant would not be limited to this scenario during the morning shoulder period. Operation of the front end loader and raw material/tanker deliveries would still be permissible during all periods; and

- Not operating the Blending Plant/Pug Mill during the evening or night-time periods.

6.5.3 Water

The construction and operation of the proposed RDC would result in the need for effective surface water management of the site. Without proper management, run-off from the site could be polluted with sediment or other fine particles including cementitious materials.

A water management system has been designed for the site that includes:

- Separation of clean and dirty water;
- Management and control of stormwater flows;
- Minimisation of sediment generation, soil erosion and transport off site;
- Recycling of water where possible minimising demand for potable water; and
- Provision of water for fire fighting.

Avoidance of pollution of receiving waters is a high priority for the site because of the proximity of the proposed works to Angus Creek, a tributary of Eastern Creek which drains through the Nurragingy Reserve.

Accordingly a Surface Water Management Plan would be prepared to minimise the impact on the environment. The major goals of that Plan would be to:

- Comply with all relevant NSW DEC guidelines and the licence to be issued under the *Protection of the Environment Operations Act 1997*;
- Minimise the amount of water consumed; and
- Prevent the contamination of clean surface water run-off from potentially polluted process run-off water.

The surface water management system for the site would be based on the following principles:

Construction

- Minimise all disturbed areas and stabilise as soon as practicable;
- Erect sediment fences and basins downslope of the proposed development in order to stop sediment from entering the Angus Creek corridor;
- Regular inspection and clearance of sediment fences and review operation after rainfall events;
- Wherever practicable, establish earthen “clean” water drains along the boundary of the construction so clean water runoff would be diverted around the disturbed areas, to minimise the volume of sediment-laden water and allow it to discharge off site; and
- Construct all temporary drains as earthen drains at grades no steeper than 1% to minimise scouring. Where steeper grades are required, which result in flow velocities that may cause scour, the drains would be provided with appropriate scour protection, e.g. rubble etc. Notwithstanding this, all drains would be grassed to minimise erosion.

Operation

- Division of the site into designated separate “clean” and “dirty” areas;
- Minimise demand for fresh water supply by recycling of water collected on the site;
- Store recycled water on site to reduce water consumption during operation of the proposed development;

- Design drainage and sediment control for the operation in accordance with the Landcom (2004) Managing Urban Stormwater : Soils and Construction; *Department of Housing Guidelines* (1998) and *Department of Land and Water Conservation Urban Erosion and Sediment Control Guidelines* (1992);

- Provide a water supply for fire fighting and provision for containment of firewater;

- Use of a first flush system to ensure "dirty" water is captured in accordance with DEC guidelines; and

- Pass "clean" stormwater through sediment traps and Humeceptors before entering open drains and swales.

6.5.4 Visual Amenity

The proposed development site is adjacent to the Nurragingy Reserve, Blacktown Olympic Centre, and the Main Western Railway line. North Parade passes through the southern section of the development site. Elements of the development would be visible from these and other areas within the view catchment. It is proposed to undertake landscaping to both restrict views into the site and enhance the visual quality of the site following development.

In order to ameliorate the visual impacts of the proposed development upon the existing environment, the following management strategies would be adopted:

- Implement landscaping in accordance with the objectives of the Site Landscape Plan which includes plantings of the native species along the new North Parade, adjacent to noise barriers, along the site boundary in particular the area adjacent to the Nurragingy Reserve, areas adjacent to the Angus Creek Corridor and the site entrance. Native ornamental ground covers, shrub and tree species would be used (refer Technical Report No 7);

- Design night lighting to minimise light emission from the RDC; and

- Use a sympathetic colour scheme for the proposed development so that it blends into the surrounding environment. Storage bins, silos and the unloading station would be painted in a colour sympathetic to the native vegetation on the site.

A Landscape Master Plan has been prepared for the RDC. Key elements include:

- Screen plantings along the western and southern edge of the site adjacent to Nurragingy Reserve using native species;

- Native ornamental shrub and groundcover screen planting along the noise wall adjacent to the storage bin facilities;

- Native ornamental planting in the proposed car park and along site boundary;

- Ornamental feature planting in the vicinity of the Kellogg Road entrance;

- Reinforcement of native vegetation with the site;

- Native ornamental shrub and groundcover planting between the rail siding and North Parade;

- Screen planting to the noise wall adjacent to Rooty Hill Station; and

- Native ornamental planting at frontage of the proposed office and laboratory building.

6.5.5 Waste

Safe waste disposal practices of materials such as concrete slurry, toilet effluent, cleared vegetation and garbage, would be applied. The *POEO Act 1997* makes it an offence to allow any of the above materials to leak, spill or escape from the site where it might harm the environment.

Blacktown City Council Site Waste Management & Minimisation DCP identifies waste management performance criteria for a number of development categories including "commercial and industrial" which would include the proposed RDC. Waste management on site would be in accordance with these requirements which include preparation of a Waste Management Plan.

Waste management on site including litter control would be aimed at prevention the degradation of local amenity.

Waste management on site would also include the following controls:

Construction

- Inform all contractors and sub-contractors working on the site prior to the commencement of work, of their responsibility to reduce waste where possible. All personnel would receive instructions on what waste materials can be recycled and where the appropriate bins/hoppers would be located;
- Fit secure lids to bins for food waste to prevent scavenging from birds and animals or infestation; and
- Conduct regular litter patrols to ensure litter is effectively controlled on site.

Operation

- As part of Site Induction inform all contractors and sub-contractors working on the site prior to the commencement of work, of their responsibility to reduce waste. All personnel would receive instructions on what waste materials can be recycled and where the appropriate bins/hoppers would be located;
- Use normal Council collections for disposal of this waste;
- Conduct regular litter patrols to ensure litter is effectively controlled on site;
- Store all potential pollutant materials in a covered, designated area. Containment bunds would be constructed around these storage areas so as to trap any spilt materials;
- Collection of oils and greases;
- Recycling of waste produced by the batching process within the Concrete Batching Plant operations;
- Regular cleaning of Humeceptors;
- Regular cleaning of silt traps with recycling of materials within the Concrete Batching Plant; and
- Material collected by the road sweeper to be recycled within the Concrete Batching Plant.

6.5.6 Traffic

The traffic entering the RDC site would comprise cars associated with staff and visitors, trucks for distribution of materials, concrete agitators and delivery vehicles (trucks and cars).

The management strategies for traffic on the RDC site would include:

- Ensure maximum safety for pedestrians and drivers;
- Separation of heavy and light vehicles;
- Site design incorporates one way traffic flow and minimises the number of intersections on site;
- Ensure adequate room for vehicles to manoeuvre on the site;
- Prevent traffic from entering restricted areas;
- Provide adequate parking;
- Monitor traffic movements on the site;
- Check road conditions;
- Check road signage; and
- Prevent truck queuing in Kellogg Road.

A traffic management plan would be developed for the site to ensure that there would be no loss of service to the surrounding road network and to address all traffic issues in the construction and operational phases of the project. It would include:

- Accident monitoring;
- Assessment of road pavement condition;
- Road traffic protocols (transport code of conduct for the RDC site); and
- Driver training on use of routes.

Site Access

Site access would primarily be via Kellogg Road. Access to the site would continue to be available from North Parade and Woodstock Avenue. Emergency access would be available via Woodstock Avenue, North Parade and potentially the OneSteel site if access via Kellogg Road was restricted for any reason.

To ensure traffic management on site would be of a high standard, the following measures would be undertaken:

Construction

- During the initial phase of construction when access it required to the southern section of the site via North Parade, install signage on the Knox Rd approaches to the intersection warning motorists of the possibility of construction traffic entering the roadway (eg. ‘Construction traffic ahead’, or ‘Construction trucks entering’);

- Undertake a condition survey of North Parade prior to, and upon completion of, RDC construction works to ensure that it remains at the same level of amenity following its limited use for construction access. It is proposed that this would be undertaken in conjunction with Blacktown City Council officers;

- Install signage along North Parade (primarily at the entry points), outlining the presence of heavy vehicles to other motorists in the Reserve;

- To maintain continued public access and for security/public safety reasons fence North Parade in the initial phase of the construction programme;

- Monitor key intersections during the construction phase to ensure that the construction-related traffic does not create any unexpected safety or efficiency problems in the surrounding road network;

- Liaison with Blacktown City Council, the RTA and adjoining property holders; and

- Implement Traffic Management Plan.

Operations

- Implement clear and concise linemarking and signage within the site boundary to identify specific traffic routes (heavy and light);

- Enforce a 20 km/h speed limit within the site;

- Implement line marking to clearly delineate truck queuing lanes within the RDC site;

- Damage to on-site roads would immediately be reported to the Site Manager and maintenance undertaken as appropriate;

- Restrict vehicles to designated travel routes and have these routes clearly marked;

- Liaise with Blacktown City Council and the RTA in relation to the construction of a roundabout as recommended in Technical Report No 8 for the Kellogg Road / Woodstock Avenue intersection prior to the commencement of RDC operations;

- Liaison with Blacktown City Council in relation to line marking on Kellogg Road to assist in local traffic control; and

- Implement Traffic Management Plan.

6.5.7 Flora and Fauna

Within the RDC site, areas of Riparian Forest (River–flat Eucalypt Forest) occur along the banks of Angus Creek. Areas of Cumberland Plain Woodland also occur in close proximity to Angus Creek, adjoining areas of riparian forest. Two small populations of Prickly Spider-flower (*Grevillea juniperina subsp. juniperina*) were identified along the eastern boundary of the site within the vegetation associated with the Angus Creek corridor. The Cumberland Plain Land Snail (*Meridolum corneovirens*) was also recorded on the site in an area of Cumberland Plain Woodland on the north western side of the Angus Creek corridor. Both these populations are outside the development area and would be protected as part of management of the site.

An aquatic ecology assessment was undertaken on Angus Creek within the RDC site. No threatened aquatic species, populations or endangered communities were located during this

survey. The water quality, macroinvertebrate, habitat and fish assessments characterise Angus Creek as a disturbed urban creek with moderate to good quality riparian vegetation.

To ensure that the ecological value of the development site is maintained, and where possible enhanced a Vegetation Management Plan (VMP) would be prepared and implemented. This plan would outline the preservation and rehabilitation of the vegetation on the site prior to and during the construction and through the operation of the RDC. The VMP would be implemented by a suitably qualified bush regenerator and include management of weeds, revegetation, erosion control and monitoring.

The VMP would include the following activities:

- Weed removal and control would be conducted prior to and during revegetation works. Weed removal and any subsequent revegetation would commence upstream (westwards) and gradually progress downstream (eastwards). This is due to the fact that water acts as a mechanism for distributing weed seeds;

- Bush regeneration work would commence in areas that are less degraded and gradually extend towards areas that are more degraded. Vegetation existing towards the western end of Angus Creek is in general, in better condition in terms of being less degraded;

- Bank stabilisation works would take place along Angus Creek after the primary weed removal has been undertaken as slopes of the banks would be vulnerable at this time. These bank stabilisation works would also assist in the suppression of weeds and consequently aid in native plant growth;

- Seeds would be collected from locally native remnant vegetation areas and used in the revegetation works proposed for the Angus Creek Corridor;

- Newly established plants would be monitored for up to two years following planting in order to ensure against fatalities and also to ensure that the plants maintain their health. Plants would be checked regularly for signs of insect attack, disease, lack of water, weed invasion etc;

- Rubbish and debris would be removed from the Angus Creek Vegetation Corridor so as to improve the visual amenity of the remnant vegetation. If sections of this debris is providing habitat to native fauna than it is to remain untouched until such time as other suitable habitat has been provided (e.g. dead timber/logs, rocks, vegetation etc);

- Revegetation would be undertaken of Cleared/Disturbed Areas outside the development footprint and areas disturbed by the construction, using locally endemic native species;

- A 20 m woodland buffer zone would be established around the *G. juniperina ssp. juniperina* site. Enhancement of the species would be encouraged through propagation of tubestock obtained on site;

- Fencing of the native vegetation would be undertaken outside the development footprint to encourage natural vegetation regeneration. A fence would be constructed around the Angus Creek Corridor. This would prevent vehicular and human access and ensure that disturbances to these areas are decreased. Consequently, the risk of weed invasion would be reduced and the opportunity for natural regeneration would be increased;

- Native hollow bearing trees would be protected; and

- Additional sheltering habitat would be provided for the Cumberland Plain Land Snail, in the Cumberland Woodland areas.

In addition the following measures would be undertaken to protect the environment of the Angus Creek corridor:

- The construction of the rail siding, conveyor and bridges would be guided by DPI Fisheries Policies and Guidelines on Bridge Culverts and Causeways and designed not to impede river flow and fish passage;

- Monitoring to be undertaken would include:
  - Water quality monitoring every quarter;
  - Visual site assessment of habitat condition and aquatic vegetation (quarterly);
  - Macroinvertebrate monitoring would be undertaken in spring and autumn; and

- A riparian buffer of 40 m from the banks of Angus Creek would be maintained wherever possible except for the two creek crossings and RDC components south of Angus Creek.

6.5.8 Cultural Heritage

The RDC site falls within the boundaries of the Deerubbin Local Aboriginal Land Council, Darug Custodians Aboriginal Corporation and the Darug Tribal Aboriginal Corporation.

An archaeological assessment has indicated that no Aboriginal sites are located on the RDC site.

If any sites are located during construction and/or operation, work would cease in the area and consultation would be undertaken with the NSW DEC.

6.5.9 Site Security

The primary goals of site security would be to prevent the unauthorised entry of people into the RDC and to prevent damage to components of the RDC.

The security for the site would include:

- Lockable security gates;

- A security fence around the perimeter, 1.8 m high;

- Security lighting within the site; and

- Controlled access to the site through the site control office, visitor reception area and site management personnel.

6.6 COMMUNITY CONSULTATION AND COMPLAINT MANAGEMENT

Readymix proposes to establish a Community Liaison Committee which would meet on a regular basis to review environmental performance of the RDC. The Committee would be chaired by an Independent Facilitator and would include representatives of the local community and adjoining property holders. Representatives of the DOP, the DEC and Blacktown City Council would also be invited to participate.

Any environmental complaints received would be responded to quickly and efficiently.

The Environment Protection Licence for the RDC would require that Readymix keep a record of all complaints made in relation to pollution arising from any activity to which this Licence applies. The Licence would specify the details to be provided in the record and a complaints handling procedure.

In addition this Licence would require that a telephone complaints line be operating during the operating hours of the premises for the purpose of receiving any complaints from members of the public and that the telephone number of this line be notified to the community.

A 24 hour telephone complaints line and the phone number would be notified to the neighbouring community. Complaints received would be recorded. All information from the complainant, including the nature of the complaint would also be recorded.

The Site Manager would organise an immediate investigation into the cause of the complaint (related to environmental incidents) and would ensure that corrective action is taken as required.

The Site Manager would report back to the complainant with an explanation of the cause of any environmental incident and details of any actions taken to mitigate its effect.

If necessary, the Site Manager would initiate further corrective action, such as introducing changes in operational procedures, work instructions or modifications to equipment etc as may be required to reduce the possibility of further environmental incidents.

A record of all complaints received would be kept on site for 4 years.

6.7 ENVIRONMENTAL INCIDENTS

An Emergency Response Plan (ERP) would be developed for the operations at the site. The ERP would describe the general policy and approach to be adopted when dealing with an emergency or incident at the site.

The Site Manager would assess the situation, taking into consideration the impact(s) on the environment, in order to determine whether outside resources are required to clarify what response is required, or to assist in responding to the impacts. The Site Manager would contact an outside agency if required.

All environmental incidents would be recorded on an Environmental Incident Report form.

An Environmental Incident Folder would be maintained and would contain the following details:

- Copies of work instructions on how to deal with particular situations;
- Incident contact names/numbers; and
- Environmental Incident Report form containing all the details required in the “Notification of Environmental Harm” procedure below.

All employees working on the site would be responsible for ensuring that the Site Manager is informed of any environmental incidents. All environmental incidents would be recorded on an Environmental Incident Report form. As required by Part 5.7 of the *POEO Act* and the EPL, the Site Manager must notify the NSW DEC of incidents, or the threat of material harm to the environment, as soon as practicable after they become aware of the incident or threat of material harm.

The management strategies for controlling incidents/emergencies would involve:

General Procedures

- Provide adequate resources including staffing and fire fighting equipment;

- Training of staff so that a high level of preparedness is maintained by all people who could be involved in an emergency;
- Provide a first aid station which would be fully equipped and maintained at the site with trained first aid staff on the site at all times; and
- Periodic review and update of emergency procedures for the site.

Fire

- Consultation has been initiated with the NSW Rural Fire Service and this would be ongoing;
- Consult with adjoining landholders;
- Undertake hazard reduction as required;
- Provide fire fighting equipment at site buildings;
- Provide clear signposting and access for all fire fighting equipment;
- Make available water for fire fighting from water holding tanks or mains; and
- Regularly inspect and maintain fire fighting equipment.

Chemicals

- Store all chemicals in appropriately bunded areas in accordance with their Material Safety Data Sheets (MSDS) and the relevant Australian Standards; and
- Store all fuels or flammable solvents in adequately ventilated areas.

Notification of Environmental Harm

As required by Part 5.7 of the *POEO Act* , the Site Manager must notify the NSW DEC of incidents which occur in the course of operations of the RDC where material harm to the environment is caused or threatened, as soon as practicable after they become aware of the incident or threatened material harm.

Initial notification may be made by telephoning the NSW DEC's Pollution Line. Under certain circumstances, the NSW DEC may require a written report regarding the incident. If so, the following information would be included in such report:

- The time, date, nature, duration and location of the incident;
- The location of the place where pollution is occurring or is likely to occur;
- The nature, the estimated quantity or volume and the concentration of any pollutants involved;
- The circumstances in which the incident occurred (including the cause of the incident, if known);

- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution; and

- Other relevant information.

6.8 ENVIRONMENTAL MONITORING

The Site Manager would be responsible for ensuring that any monitoring carried out is done so in accordance with the requirements specified by the site Environment Protection Licence (EPL) and Conditions of Consent. Implementation of the Site EMP would be the basis for compliance with monitoring requirements which would be reported to the relevant agencies as required by the EPL and Conditions of Consent.

All monitoring results would be recorded.

A number of environmental monitoring requirements have been identified in the preparation of this EAR. These monitoring requirements would be incorporated into the environmental monitoring programme, to ensure that the project has minimal impact on the physical, social and economic environments.

Components of the monitoring programme would include:

- Local Meteorological Conditions – Meteorological conditions to be monitored would include daily air temperature, solar radiation, daylight hours, daily rainfall, daily evaporation and continuous wind speed and direction. This information is currently available from local established monitoring stations;

- Angus Creek Corridor - Aquatic Ecology, water quality, flora and fauna. Monitoring of water quality, habitat and vegetation conditions, and fauna monitoring programs would be implemented over the construction and rehabilitation phases. Reviews and improvements would occur if necessary;

- Water Quality – Monitoring of water quality would be undertaken to ensure no contamination as a result of site operations. Parameters to be monitored include pH, Dissolved Oxygen, Temperature, Conductivity, Turbidity, Total Nitrogen and Total Phosphorus. Inspection and maintenance of diversion drains, basins and sediment traps would be undertaken on a regular basis;

- Air Quality - Monitoring to meet DEC requirements. This would include installation of dust gauges during construction and as required for operation;

- Noise – Monitoring would be conducted to meet DEC requirements. A suitably qualified acoustic consultant would conduct the monitoring; and

- Traffic - All traffic entering the site would be directed to the appropriate area for example delivery trucks to the weighbridge, staff and visitors to the carpark and concrete agitators to the Concrete Batching Plant. Any traffic incidents would be reported to the Site Manager.

All monitoring results would be reported on a quarterly and annual basis as required by the EPL and Conditions of Consent.

6.9 STAFFING AND TRAINING REQUIREMENTS

An Environmental Due Diligence Training Programme would be prepared and implemented by Readymix. It would be designed to provide employees with information about their environmental responsibilities:

The programme would focus on the following issues:

- Environmental legislation and the concept of due diligence;
- Environmental impacts of the operational activities;
- Readymix Safety, Health and Environmental policy;
- Reporting of pollution incidents; and
- Site environmental management.

Training would be by site induction workshops which involve exercises and discussion to promote awareness of the issues and responsibilities to manage and enforce site management procedures, both on and off site.