



# Crushing and Screening Management Procedure

## Environment

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### 1 Purpose and Scope

This procedure specifies the operational environmental requirements relating to crushing and screening management at the Roy Hill Project. This procedure applies to all personnel involved in activities at the Mine, Rail and Port operations that affect crushing and screening management.

### 2 Procedure

#### 2.1 Management Actions


##### 2.1.1 General Requirements

1. Construct all crushing and screening facilities in compliance with the applicable works approval.
2. Operate all crushing and screening facilities in accordance with the relevant operating licence.
3. Conduct all crushing and screening activities in accordance with the *Environmental Protection (Noise) Regulations 1997*.
4. Conduct all crushing and screening activities in accordance with the Australian Standard 2436-1981: 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'.
5. Operate crushing and screening plants at the Port in accordance with the approved Roy Hill Port Infrastructure Dust Management Plan (100RH-4000-EN-PLN-2001).
6. Operate crushing and screening plants in accordance with the Roy Hill Dust Management Procedure (OP-PRO-00180).

##### 2.1.2 Fugitive Dust Management

1. Locate water sprays above the sizer, cone crusher, above and below the cone crusher and on the conveyor to the screen to minimise dust.
2. Fit bag house and dust collection systems to fixed dry screening facilities.
3. Fit all lump-bin, vibrating feeders and screens with covers that enclose any potential dust within them and connect to the dust extraction and collection filtering system.
4. Conduct all crushing and blending of iron ore product at the Mine.
5. Undertake moisture conditioning of stockpiles and plant feed to reduce dust emissions.
6. Maintain high ore moisture levels to ensure that all ore will arrive at the Port with a moisture content of 7.5-10%.
7. Avoid crushing and screening during high winds (>50 km/hr), where possible.
8. Interpret the data from Project dust monitoring units and meteorological station, and implement dust mitigation measures as required in accordance with Dust Management Plans – this is the responsibility of the Site operators.

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### 2.1.3 Noise Management

1. Inspect, maintain and replace mobile equipment so that noise levels are minimised during the equipment life.

### 2.1.4 Surface Water Management

1. Construct surface water diversion structures where required to enable non-contaminated water to be directed around disturbed and stockpile areas to ensure no ponding or flooding adjacent to or within the plant.
2. Use crushed product where required to create temporary structures to divert the limited volume of water that enters the construction area.

### 2.1.5 Hydrocarbon Management

1. Store and manage hydrocarbons in accordance with the 'Hazardous Material Management Procedure' (OP-PRO-00289).
2. Service mobile crushing and screening plants using a mobile fuel tanker and service truck.
3. Place a spill tray under a crusher's fuel inlet point when refuelling to capture spills or leaks.

## 2.2 Training and Awareness

1. Familiarise all personnel associated with crushing and screening management activities with the requirements of this procedure.
2. Include information on crushing and screening management requirements in site inductions or site communications where relevant.
3. Conduct toolbox talks and develop environmental site notices and environmental awareness posters periodically highlighting crushing and screening management requirements – this is the responsibility of the Superintendent Environment Mine or Port and Rail (or delegate where required).
4. Display relevant environmental site notices and environmental awareness posters at prominent workplace locations.
5. Update the training records of personnel in the Learning Management System once registered training has been completed (with the exception of toolbox talks).
6. Maintain records of toolbox training attendance onsite for audit and inspection purposes.

## 2.3 Monitoring Actions

1. Undertake monitoring in accordance with approval conditions and commitments, and ensure that all data required for regulatory reporting is captured.
2. Store all monitoring records within the Roy Hill Document Management System.
3. Ensure dust monitoring is undertaken in accordance with 'Port Infrastructure Dust Management Plan' (OP-PLN-00204) and Operating Licence – this is the responsibility of the Superintendent Environment Port (or delegate).
4. Monitor weather forecasts to determine where weather conditions will increase dust generation – this is the responsibility of the Superintendent Environment Port (or delegate).

## 2.4 Incidents, Audits and Inspections

1. Undertake regular inspections of the active work area against the requirements of this procedure.

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2. Undertake regular compliance audits against the requirements of this procedure in accordance with the 'Environmental Audit Procedure' (OP-PRO-00018).
3. Schedule inspections and audits against the requirements of this procedure in accordance with the approved HSE Integrated Inspection and Audit Schedule.
4. Store copies of all audits and inspections within the Roy Hill Document Management System.
5. Undertake an investigation into the cause(s) of incidents reportable to regulators in accordance with the 'Incident Investigation Specification' (OP-SPC-00156) and develop actions to prevent recurrence of the incident.
6. Enter corrective and preventative actions from incidents, audits and inspections into the Roy Hill Incident Management System.
7. Undertake daily visual inspections for dust emissions.
8. Undertake inspections, maintenance and replacement of equipment to reduce noise and dust levels.
9. Undertake compliance audits at the completion of construction of a crushing and screening facility in accordance with the appropriate works approval.
10. Undertake compliance audits of the performance of the crushing and screening facility in accordance with the conditions of the appropriate operating licence.

## 2.5 Contingency Actions

1. Implement contingency actions in accordance with this procedure where deficiencies are identified during inspections, audits and incident reporting.
2. Implement the 'Management of External Complaints Procedure' (EA-PRO-00002), where relevant.
3. Conduct a risk assessment to determine the most effective mitigation measures should additional contingency actions be required, and follow the change management process.
4. Implement measures such as stop work, increase in spraying and wetting, installation of additional spray heads, if visible dust is escaping from the crushing and screening facility and/or has the potential to escape the project boundary.
5. Where community complaints are received regarding dust emissions, Roy Hill may be required to implement additional dust management measures.

## 2.6 Reporting Requirements

1. Report all non-compliances (e.g. excessive dust emissions, community complaints) with this procedure, all regulatory exceedances and all community complaints as an incident in the Roy Hill Incident Management System.
2. Close out all incidents and corrective actions in accordance with the 'Incident, Non-Conformance and Action Management Procedure' (OP-PRO-00702).
3. Complete all reporting required within the relevant EnviroSys data entry forms or in the 'Contractor Environmental Report' (CER) (OP-FRM-00305).

## 3 Accountabilities

Unless otherwise specified, the following roles are accountable or responsible for the activities outlined in this procedure.

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Role	Responsibility
General Managers	Accountable for ensuring that resources are available to support the implementation of this procedure where it is relevant to their area of responsibility
Managers	Accountable for the implementation of this procedure where it is relevant to their area of responsibility
Superintendents	Responsible for the implementation of this procedure where it is relevant to their area of responsibility
Environment Team	Responsible for review and update of this procedure

Table 1: Accountabilities

## 4 Abbreviations

Abbreviation	Definition
AER	Annual Environment Report
CER	Contractor Environmental Report
DER	Department of Environment Regulation
EP Act	<i>Environmental Protection Act 1986</i>
EP Regs	<i>Environmental Protection Regulations 1987</i>

Table 2: Abbreviations

## 5 Definitions

Term	Definition
Commissioning	The process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application
Environment Team	The Roy Hill Environment Team
Manager Environment and Approvals	The Roy Hill Manager for Environment and Approvals
Sensitive Receptors	A location where people are likely to reside or congregate; this may include a dwelling, school, hospital, nursing home, child care facility or public recreation area or land zoned residential that is either developed or undeveloped. Locations of cultural or environmental significance, including 'environmentally sensitive areas' declared under the <i>Environmental Protection Act 1986</i> , may also be recognised as sensitive receptors and determined on a case-by-case basis.
Operating Licence	A licence is required under <i>Environmental Protection Act 1986</i> (EP Act) to permit the operation of a facility prescribed in Schedule 1 of the <i>Environmental Protection Regulations 1987</i> (EP Regs). Works approvals are assessed and approved by the DER
Operational Environmental Requirements	A plan, procedure or work instruction that must be complied with.
Operator	Personnel who drives and is qualified and deemed competent to operate a machine or vehicle
Shall	It must be undertaken and is not negotiable

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Should	It must be undertaken, however if it cannot be undertaken or will significantly impact on time or cost then modification to the requirement may be considered by Manager Environment and Approvals
Site Environment Advisor	Roy Hill Site Environment Advisor
Superintendent Environment	The Superintendent of The Roy Hill Environment Team
Superintendent Rehabilitation	The Superintendent of The Roy Hill Rehabilitation Team
Works Approval	An approval required under the EP Act to permit construction of a facility prescribed in Schedule 1 of the EP Regs. Works approvals are assessed and approved by the DER.

Table 3: Definitions

## 6 References

Document number	Title
OP-PRO-00180	Dust Management Procedure
OP-PRO-00289	Hazardous Materials Management Procedure
EA-PRO-00002	Management of External Complaints Procedure
OP-PRO-00018	Environmental Audit Procedure
OP-PRO-00702	Incident, Non-Conformance and Action Management Procedure and
OP-PLN-00204	Port Dust Management Plan

Table 4: References

Note that up-to-date environmental documents should be accessed from the e-Care Roy Hill intranet portal to ensure that the current version is being used.

## 7 Review

This Procedure is to be reviewed as follows:

- Following the grant of or modification to relevant approvals;
- Annually; or
- As a result of findings or actions identified through inspections, audits and incident reporting.

Reviews are to examine the appropriateness of the procedure, taking into consideration corporate, system and compliance requirements and legislative changes since the last review was undertaken.

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