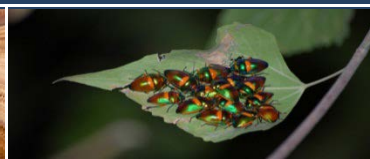




Chapter 6 Glossary & Acronyms



Sherwin Iron (NT) Pty Ltd
Sherwin Creek Iron Ore Project
Environmental Impact Statement



2013



Document Control Record

Document Code:	EZ13503-C0301-EIA-R-0001
Catalogue Number:	32783
Project Manager:	Justine Shailes
Author(s):	Narelle Walkom and Justine Shailes
Approved by:	Justine Shailes
	
Approval date:	20 November 2013

DOCUMENT HISTORY

Version	Issue Date	Brief Description	Reviewer/Approver
1.A	20 September 2013	Document preparation	N. Walkom
1.A	25 September 2013	EcOz review	J. Shailes
1.0	20 November 2013	Final	J. Shailes

Recipients are responsible for eliminating all superseded documents in their possession.

EcOz Pty Ltd.
ABN: 81 143 989 039
Winlow House, 3rd Floor
75 Woods Street
DARWIN NT 0800
GPO Box 381, Darwin NT 0800

Telephone: +61 8 8981 1100
Facsimile: +61 8 8981 1102
Email: ecoz@ecoz.com.au
Internet: www.ecoz.com.au



RELIANCE, USES and LIMITATIONS

This report is copyright and is to be used only for its intended purpose by the intended recipient, and is not to be copied or used in any other way. The report may be relied upon for its intended purpose within the limits of the following disclaimer.

This study, report and analyses have been based on the information available to EcOz Environmental Services at the time of preparation. EcOz Environmental Services accepts responsibility for the report and its conclusions to the extent that the information was sufficient and accurate at the time of preparation. EcOz Environmental Services does not take responsibility for errors and omissions due to incorrect information or information not available to EcOz Environmental Services at the time of preparation of the study, report or analyses.

Table of Contents

6	Glossary & Acronyms.....	6-1
6.1	Glossary.....	6-1
6.2	Acronyms.....	6-4

6 Glossary & Acronyms

6.1 Glossary

Arbovirus	Arthropod borne virus.
Aquifer	An aquifer is an underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted.
Archaeology	The study of human history and prehistory through the excavation of sites and the analysis of artefacts.
Biodiversity	Biodiversity is the variety of all life forms on earth - the different plants, animals and micro-organisms and the ecosystems of which they are a part.
Biological hazards	Biological hazards, also known as biohazards, refer to biological substances that pose a threat to the health of living organisms, primarily that of humans. This can include medical waste or samples of a microorganism, virus or toxin (from a biological source) that can affect human health.
Borefield	Area where bores are located and used as the main water source for the mine site/project.
Bulk sample	Exploration program whereby direct shipping iron ore is being mined and transported via road to the Port of Darwin for export to China. This program allows steel mills to test the ore in their furnaces and ensures that Sherwin has a desirable and therefore marketable product prior to full mining.
Crushing and screening	The crusher crushes the ore to resize and pulverize it into millimetre size particles. Screening is carried out at various stages in the crushing process. Screens are basically box frames into which sheets of screen meshes of the required apertures are inserted, clamped and tensioned. Screens are made to vibrate by a rotating transverse shaft.
Dewatering	Dewatering is the removal of water from solid material or soil. In this case, it describes the removal or draining of groundwater or surface water from the mining area, by pumping or evaporation. This dewatering may be implemented before subsurface excavation to lower the water table.
Erosion	Erosion is the process by which soil and rock are removed from the Earth's surface by wind or water flow, and then transported and deposited in other locations.
Friable	The ability of a solid substance to be reduced to smaller pieces with little effort.
Geological	of or relating to or based on geology.
Geotechnical	Geotechnical engineering is the branch of civil engineering concerned with the engineering behaviour of earth materials.
Hematitic/Hematite	Hematite is the mineral form of iron(III) oxide (Fe ₂ O ₃). Huge deposits of hematite are found in banded iron formations.
Hydrocarbons	A compound of hydrogen and carbon, such as any of those that are the main components of petroleum and natural gas.
Hydrogeology	The scientific study of the occurrence, distribution, and effects of groundwater.
Hydrology	Hydrology is the study of the movement, distribution, and quality of water on Earth including the hydrologic cycle, water resources and environmental watershed sustainability.
Indigenous	Indigenous peoples are peoples defined in international or national legislation as having a set of specific rights based on their historical ties to a particular territory, and their cultural or historical distinctiveness from other populations that are often politically dominant.
Infrastructure	Generally defined as the set of interconnected structural elements that provide framework supporting an entire structure of development.
Lacustrine	Lacustrine means "of a lake" or "relating to a lake".

Land use	Land use is the human use of land. Land use involves the management and modification of natural environment or wilderness into built environment such as fields, pastures, and settlements. It also has been defined as "the arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it.
Landform	A landform in the earth sciences comprises a geomorphological unit, and is largely defined by its surface form and location in the landscape. As part of the terrain a landform is an element of topography.
Leachate	Leachate is any liquid that in passing through matter, extracts solutes, suspended solids or any other component of the material through which it has passed. Leachate is a widely used term in the environmental sciences where it has the specific meaning of a liquid that has dissolved or entrained environmentally harmful substances which may then enter the environment. It is most commonly used in the context of land-filling of putrescible or industrial waste
Lithology	The lithology of a rock unit is a description of its physical characteristics visible at outcrop, in hand or core samples or with low magnification microscopy, such as colour, texture, grain size, or composition.
Macroinvertebrate	Macroinvertebrates are organisms that are large (macro) enough to be seen with the naked eye and lack a backbone (invertebrate)
Mesa	A mesa (Spanish and Portuguese for table) is the American English term for tableland, an elevated area of land with a flat top and sides that are usually steep cliffs. Mesas are formed by weathering and erosion of horizontally layered rocks that have been uplifted by tectonic activity. Variations in the ability of different types of rock to resist weathering and erosion cause the weaker types of rocks to be eroded away, leaving the more resistant types of rocks topographically higher than their surroundings.
Mesoproterozoic	The Mesoproterozoic Era is a geologic era that occurred from 1,600 to 1,000 million years ago.
Metallurgical	The way in which science is applied to the production of metals, and the engineering of metal components for use in products for consumers and manufacturers. The production of metals involves the processing of ores to extract the metal they contain, and the mixture of metals, sometimes with other elements, to produce alloys.
Micaceous	The mica group of sheet silicate (phyllosilicate) minerals includes several closely related materials having close to perfect basal cleavage. All are monoclinic, with a tendency towards pseudohexagonal crystals, and are similar in chemical composition. The nearly perfect cleavage, which is the most prominent characteristic of mica, is explained by the hexagonal sheet-like arrangement of its atoms.
Mineralogy	Mineralogy is a subject of geology specializing in the scientific study of chemistry, crystal structure, and physical (including optical) properties of minerals. Specific studies within mineralogy include the processes of mineral origin and formation, classification of minerals, their geographical distribution, as well as their utilisation.
Payload	Payload is the carrying capacity of a vehicle, usually measured in terms of weight. Depending on the nature of the flight or mission, the payload of a vehicle may include cargo, passengers, flight crew, munitions, scientific instruments or experiments, or other equipment. Extra fuel, when optionally carried, is also considered part of the payload.
Perimeter	A perimeter is a path that surrounds a two-dimensional shape. The word comes from the Greek peri (around) and meter (measure). The term may be used either for the path or its length - it can be thought of as the length of the outline of a shape.
Perpendicular	perpendicular describes the relationship between two lines which meet at a right angle.

Physiography	Physical geography (also known as geosystems or physiography) is one of the two major subfields of geography. Physical geography is that branch of natural science which deals with the study of processes and patterns in the natural environment like the atmosphere, hydrosphere, biosphere, and geosphere, as opposed to the cultural or built environment, the domain of human geography.
Proterozoic	The Proterozoic is a geological eon representing the time just before the proliferation of complex life on Earth. The name Proterozoic comes from Greek and means "earlier life". The Proterozoic Eon extended from 2,500 Ma to 542.0±1.0 Ma (million years ago), and is the most recent part of the informally named "Precambrian" time. It is subdivided into three geologic eras (from oldest to youngest): the Paleoproterozoic, Mesoproterozoic, and Neoproterozoic.
Rehabilitation	rehabilitation is the process of returning the land in a given area to some degree of its former state, after some process (industry, natural disasters, etc.) has resulted in its damage.
Sedimentation	Sedimentation is the tendency for particles in suspension to settle out of the fluid in which they are entrained, and come to rest against a barrier. This is due to their motion through the fluid in response to the forces acting on them: these forces can be due to gravity, centrifugal acceleration or electromagnetism. In geology sedimentation is often used as the polar opposite of erosion, i.e., the terminal end of sediment transport. In that sense it includes the termination of transport by saltation or true bedload transport. Settling is the falling of suspended particles through the liquid, whereas sedimentation is the termination of the settling process.
Siliceous/Silica	Silicon dioxide, also known as silica (from the Latin silex), is a chemical compound that is a dioxide of silicon with the chemical formula SiO ₂ . It has been known since ancient times. Silica is most commonly found in nature as quartz, as well as in various living organisms.[2] Silica is one of the most complex and most abundant families of materials, existing both as several minerals and being produced synthetically.
Stockpile	A stockpile is a pile or storage location for bulk materials, forming part of the bulk material handling process.
Stratigraphy	Stratigraphy is a branch of geology which studies rock layers and layering (stratification). It is primarily used in the study of sedimentary and layered volcanic rocks.
The project area	Includes the ML, accommodation area and internal haul roads.
Topography	Topography is a field of planetary science comprising the study of surface shape and features of the Earth and other observable astronomical objects including planets, moons, and asteroids. It is also the description of such surface shapes and features (especially their depiction in maps). The topography of an area could also mean the surface shape and features themselves.
Topsoil	Topsoil is the upper, outermost layer of soil, usually the top 2 inches (5.1 cm) to 8 inches (20 cm). It has the highest concentration of organic matter and microorganisms and is where most of the Earth's biological soil activity occurs.
Wastewater	Wastewater, also written as waste water, is any water that has been adversely affected in quality by anthropogenic influence.

6.2 Acronyms

Acronyms	
AAPA	Aboriginal Areas Protection Authority
ALRA	Aboriginal Land rights Act
AMD	Acid Metalliferous Drainage
APVMA	Australian Pesticides and Veterinary Medicines
AS	Australian Standard
ASRIS	Australian Soil Resource Information System
ATR	Action Tracking Register
BCM	Bank cubic metres
BFO	Beneficiated Ore
BFV	Barmah Forest virus
CHMP	Cultural Heritage Management Plan
CMTS	Culturally Modified Trees
DIDO	Drive in / drive out
DME	Department of Mines and Energy
DSO	Direct Shipping Ore
EAC	Emerson Aggregate Class
EC	Electrical Conductivity
EIS	Environmental Impact Statement
EL	Exploration Lease
EMP	Environmental Monitoring Plan
EMS	Environmental Management System

EPBC	Environmental Protection and Biodiversity Conservation Act
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
ESIA	Economic and Social Impact Assessment
FFW	Fit for work
FIFO	Fly-In Fly-Out
GDE	Groundwater dependent ecosystem
GHG	Greenhouse Gases
HSE	Health, Safety and Environment
IECA	International Erosion Control Association (Best Practice Guidelines)
IVMS	In vehicle management systems
JORC	Joint Ore Reserve Committee
kW	Kilowatt
LCM	Loose cubic metres
ML	Mining Lease
MMP	Mining Management Plan
MOC	Mine operations centre
MPa	Megapascal
MVEV	Murray Valley encephalitis virus
NAIO	North Australian Iron Ore
NATA	National Association of Testing Authorities
NES	National Environmental Significance
NLC	Northern Land Council
NOHSC	National Occupational Health and Safety Commission

NSR	Noise Sensitive Receptor
NT	Northern Territory
NTASS	Northern Territory Aboriginal Sacred Sites Act
NTEPA / EPA	Northern Territory Environmental Protection Agency
NTGS	Northern Territory Geological Association
PAF	Potentially Acid Forming
PPE	Personal Protective Equipment
PWMP	Pest and Weed Management Plan
RC	Reverse Circulation
RMCP	Rehabilitation and Mine Closure Plan
RRV	Ross River Virus
RWA	Restricted Works Area
SEWPaC	Department of Sustainability, Environment, Water, Population and Communities
SG	Specific gravity
SIMP	Social Impact Management Plan
SRE	Short Range Endemic
SWMS	Safe work method statements
THA	Task hazard analysis
TMP	Traffic Management Plan
WONS	Weeds of National Significance
WRD	Waste Rock Dumps