

Appendix 8-H

Murray River Coal Project: Identified Contaminants of Potential Concern for Wildlife

MURRAY RIVER COAL PROJECT

Application for an Environmental Assessment Certificate / Environmental Impact Statement

Appendix 8-H1. Identified Contaminants of Potential Concern for Wildlife at Decline Site Pond

Model Case	Surface Flows	Groundwater Inflows	Stream Chemistry	Geochemistry Source Terms	COPC for Wildlife		
					Construction	Operations	Decommissioning and Post-Closure
Base	average	moderate	median	expected case	-	NA	NA
1	average	high	median	expected case	-	NA	NA
2	average	low	median	expected case	-	NA	NA
3	wet	moderate	median	expected case	-	NA	NA
4	wet	high	median	expected case	-	NA	NA
5	wet	low	median	expected case	-	NA	NA
6	dry	moderate	median	expected case	-	NA	NA
7	dry	high	median	expected case	-	NA	NA
8	dry	low	median	expected case	Al, As, B, Cu, Pb, Hg, Mo, Se, Cl, F	NA	NA
9	average	moderate	95th percentile	expected case	Se	NA	NA
10	average	high	95th percentile	expected case	Se	NA	NA
11	average	low	95th percentile	expected case	-	NA	NA
12	average	moderate	median	upper case	-	NA	NA
13	average	high	median	upper case	-	NA	NA
14	average	low	median	upper case	-	NA	NA

Note:

- indicates no identified contaminants of potential concern (COPC)

NA indicates that the Decline Site pond is reclaimed in Operations

Appendix 8-H2. Identified Contaminants of Potential Concern for Wildlife at Shaft Site Pond

Model Case	Surface Flows	Groundwater Inflows	Stream Chemistry	Geochemistry Source Terms	COPC for Wildlife		
					Construction	Operations	Decommissioning and Post-Closure
Base	average	moderate	median	expected case	-	NA	NA
1	average	high	median	expected case	-	NA	NA
2	average	low	median	expected case	-	NA	NA
3	wet	moderate	median	expected case	-	NA	NA
4	wet	high	median	expected case	-	NA	NA
5	wet	low	median	expected case	-	NA	NA
6	dry	moderate	median	expected case	Hg, Se	NA	NA
7	dry	high	median	expected case	Hg, Se	NA	NA
8	dry	low	median	expected case	Hg, Se	NA	NA
9	average	moderate	95th percentile	expected case	Hg	NA	NA
10	average	high	95th percentile	expected case	Hg	NA	NA
11	average	low	95th percentile	expected case	Hg	NA	NA
12	average	moderate	median	upper case	Hg, Se	NA	NA
13	average	high	median	upper case	Hg, Se	NA	NA
14	average	low	median	upper case	Hg, Se	NA	NA

Note:

- indicates no identified contaminants of potential concern (COPC)

NA indicates that the Shaft Site pond is reclaimed in Operations

Appendix 8-H3. Identified Contaminants of Potential Concern for Wildlife at Coal Processing Plant Pond

Model Case	Surface Flows	Groundwater Inflows	Stream Chemistry	Geochemistry Source Terms	COPC for Wildlife		
					Construction	Operations	Decommissioning and Post-Closure
Base	average	moderate	median	expected case	Se	Hg, Se	NA
1	average	high	median	expected case	Se	Hg, Se	NA
2	average	low	median	expected case	-	Se	NA
3	wet	moderate	median	expected case	Se	Hg, Se	NA
4	wet	high	median	expected case	Se	Hg, Se	NA
5	wet	low	median	expected case	-	Hg, Se	NA
6	dry	moderate	median	expected case	Se	Hg, Se	NA
7	dry	high	median	expected case	Se	Hg, Se	NA
8	dry	low	median	expected case	-	-	NA
9	average	moderate	95th percentile	expected case	Se	Hg, Se	NA
10	average	high	95th percentile	expected case	Se	Hg, Se	NA
11	average	low	95th percentile	expected case	-	Se	NA
12	average	moderate	median	upper case	Se	Hg, Mo, Se, F	NA
13	average	high	median	upper case	Se	Hg, Mo, Se	NA
14	average	low	median	upper case	-	Mo, Se, F	NA

Note:

- indicates no identified contaminants of potential concern (COPC)

NA indicates that the Coal Processing Plant is reclaimed in Decommissioning and Post-Closure