

NSW Resources Regulator

FORM

Application for a Mining Operations Plan (Class D – Puddling site) Section 194 of the Mining Act 1992

November 2020

Mining Operation Plan requirements

Under Mining Lease and Class D Puddling claim conditions, the applicant/claim holder is required to develop a Mining Operations Plan (MOP) to the satisfaction of the Department of Regional NSW (the Department). Puddling activities cannot commence until an approved MOP is in place. All puddling activities must be undertaken in accordance with the approved MOP.

A MOP may be for five (5) years or, if convenient to both the Department and the claim holder, an agreed lesser period.

MINING LEASE 2010 condition No. 3 for Lightning Ridge, the MOP must:

- identify areas that will be disturbed by mining operations
- detail the staging of specific mining operations
- identify how the mine will be managed to allow mine closure
- identify how mining operations will be carried out in order to prevent and or minimise harm to the environment
- reflect the conditions of approval under:
 - a) the Environmental Planning and Assessment Act 1979
 - b) the Protection of the Environment Operations Act 1997
 - and any other approvals relevant to the development including the conditions of this lease; and
 - d) have regard to any relevant guidelines adopted by the Director-General.

CLASS D - PUDDLING claim condition No. 2 states:

Mining Operations Plans



- Operations must be conducted in accordance with a Mining Operations Plan (incorporating an Environmental Management Plan and Mine Closure Plan) approved by an Inspector Environment or unless directed in writing by the Mines Safety Officer or an Inspector Environmental.
- An application for approval of the proposed Mining Operations Plan must be lodged and approved before operations commence, and:
 - a) must describe the means by which it is proposed that the environment is to be protected in the course of the conduct of operations in relation to:
 - i. the disposal of tailings, silt or like substance and other waste products (including toxic wastes) arising from the conduct of operations
 - ii. the minimisation of pollution of air and water and the visual impact of the operations
 - iii. the minimisation of noise pollution
 - iv. the prevention of soil erosion
 - v. the rehabilitation of any land on which operations are conducted
 - b) must contain the following particulars in relation to the land on which operations are to be conducted:
 - i. describe the nature, scale and extent of the proposed operations
 - ii. the approximate depth of top soil
 - iii. the nature of the vegetation
 - iv. the contours of the land as they were immediately before the operations began.
 - v. the manner in which it is proposed to remove, store and replace the topsoil and the subsoil
 - vi. a site plan showing existing features, drainage channels, buildings, roads, dams, etc
 - vii. a site plan showing the proposed location of any processing or puddling plant, water storage areas, stockpiles, drainage channels, silt traps and all ancillary facilities
 - viii. the nature of the vegetation proposed to be planted in the course of the rehabilitation of the land
 - ix. the contours of the land as they are proposed to be after rehabilitation of the land has been completed



x. an assessment of the environmental impact on the area.

Plan guidelines

Please provide three (3) sketch plans of the puddling site. Plans may be derived from a convenient base map/plan with activity areas and features drawn by hand provided there is sufficient accuracy and detail to adequately describe activities and their impact. If contours are not shown, slopes and drainage lines must be clearly marked. The scale should show sufficient detail to review operations and rehabilitation. For most puddling sites A3 or A4 or sized plans will be appropriate. Also provide photographs and diagrams where appropriate. All plans must show:

- the name of the lease
- a graphical scale
- boundaries of leases
- cadastral information (land ownership boundaries)
- a title block showing the date of preparation of the plan, title and number
- the signature of the person responsible for the plan.

Plans required

Plan 1: Pre MOP

Show the state of the site at the **commencement** of the MOP period including:

- site access and relationship to the nearest main road and town
- natural features including swamps, rivers, creeks, streams or watercourses
- existing non puddling developments including roads, fences, transmission lines
- vegetation and land use boundaries; eg cropping, pasture, forest, undisturbed flora/fauna habitat
- derelict land from activities which occurred before the grant of the present mine lease
- neighbouring residences, within and adjacent to the lease(s) area.



Plan 2: End of MOP

Show the proposed state of the site at the **end** of the MOP period including:

- the extent of all processing, waste emplacement, ore/product stockpile, soil stockpiles and other infrastructure features
- constructed water dams, silt dams, number of agitators, drainage lines, water management and erosion control structures, water monitoring sites
- the slope and shape of rehabilitated land
- vegetation on rehabilitated land and boundaries of vegetation types.

Plan 3: Final Rehabilitation

Show the anticipated state of the site after rehabilitation has been completed and the lease prepared for title relinquishment including:

- natural features including swamps, rivers, creeks, streams or watercourses
- pre operation developments including roads, fences, transmission lines
- boundaries and slopes of disturbed and rehabilitated land
- vegetation type and land use boundaries of disturbed and undisturbed land
- post operation land use capability of undisturbed and rehabilitated land
- constructed drainage lines, water management and erosion control structures;
- remaining voids/pits and remaining disturbed land
- all site related infrastructure to remain on site after site closure
- fences, bunds and other public, fauna/ and stock safety features.

Where site closure will be completed during this MOP period, plans 2 and 3 may be combined



1. Mining Operations Plan for puddling sites

1.1. Title details

Name of the affect	ed land holder							
Mineral lease num								
	ber							
Western Lands leas	se number							
Name of leasehold	er							
Name of mine oper	rator (if different)							
Postal address								
Phone			Email					
Purpose of the oper Is this a new operati Outline the reason f	on or renewal of an	existing (operation?	P 🗌 Ne	ew	Re	newal	
1.2. Con	sents and	licen	ces					
1.2. Cons	sents and	licen	ces					
		☐ Gra	nted quired but required	not grar	nted			

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1.3. MOP period

MOP commencement date	
MOP completion date (nominal)	

1.4. Signatures

SIGNATURE: LEASEHOLDER	SIGNATURE: ENVIRONMENTAL OFFICER			
Name	Name			
Date	Date			

2. Water storage dam

Size	square metres (m ²)
Excavated depth	meters (m)
Height of dam wall	meters (m)
Maximum storage capacity	cubic metres (m³)
Size of catchment	hectares or square kilometres (H/km²)

Method of construction:



3. Silt storage dam/s

Size	square metres (m²)
Excavated depth	metres (m)
Height of retaining walls – stage 1	metres (m)
Height of retaining walls – stage 2	metres (m)
Height of retaining walls – other stages	metres (m)
Total maximum height	metres (m)
Dam designed by:	·

Method of construction (include all stages):

STORAGE CAPACITIES			STORAGE LIFE		
Stage I		cubic metres (m³)		years	
Stage II		cubic metres (m³)		years	
Other stages		cubic metres (m³)		years	
Maximum storage		cubic metres (m³)	maximum	years	

Note: A minimum of 1 metre of freeboard must be maintained throughout the life of the operation.

Topsoil is required to be stripped from all areas affected by the construction of dams, silt dams, stockpile areas, etc. and stored in a manner that prevents water and wind erosion.

Sufficient topsoil will be required to be stockpiled to provide a cover over the silt dams and banks upon completion of operations.



4. Area

Total area of lease (hectares)						
Total area to be affe	ected by puddling ope	eration and dam (hect	ares)				
What is the area currently used for?							
What has the area be	en used for previous	ly?					
5. Clearing	ng require	ements					
Is any clearing of tim roads, etc.? Yes	ber required on the s	ite for the constructio	n of the o	dams, silt dams and/or access			
,		64h - 1 4h 6	41	an accoming of the local ground finet ha			
obtained.	i witnin the boundaries oj	r tne Lease, tne consent of	tne owner (or occupier of the land must first be			
6. Buildir	ngs						
Will a caretaker's res	idence be required?	Yes No					
If yes, approval will I	oe required from the	Walgett Shire Counci	il.				
		ling, including: the dim mework, walls and flo		i.e. width, height, length; and			
Will a machinery she	d be required? 🗌 Y	es No					
If a machinery shed i	s proposed, provide t	he following details:					
Enclosed area =		metres long x		metres wide			
Unenclosed area =		metres (m)		metres wide			
Height =		metres (m)					

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Construction materials	Roof:	
illaterials	Walls:	
	Frame:	
	Floor:	
7 10000	e trooke	
7. Acces	5 liacks	
Has the route been of	discussed with, and ag	reed to, by the landholder? 🔲 Yes 🔲 No
If yes provide the wi	ritten approval of the	landholder.
	tained from the landl 164 or Section 211 of a	holder then the lease applicant will need to seek a Right of the Mining Act 1992.
Will clearing be requ	ired for access tracks	Yes No
What width of cleari	ng is proposed?	_metres
	ring exceeds 30 metres, the btained by the landholder	en a clearing approval from the Western Catchment Management of the property.
Method and materia	als for constructing the	road:
What steps will be ta	aken to reduce dust fr	om the road?



8. Treatment capacity

Planned number of agitators/puddling sites	
Estimated daily through-put per agitator/puddler (m³)	
Estimated number of days operating per annum	
Estimate total volume of silt per annum (m³)	

N.B. Compare the volume of silt produced per annum with the designed capacity of the silt dams.

9. Water management

Sources of water:

General catchment	Yes	No	(If yes, see below)		
Bore	Yes	□ No	(If yes, see below)		
5016			(ii yes, see selell)		
Coocoran Lake	Yes	☐ No	(If yes, see below)		
Other	Yes No Please specify:				
If using a bore , give det	ails of:				
Depth:(n	netres)				
Flow rate: (li	tres per se	cond)			
N.B A bore requires a Licence	e from the NS	SW Office of Water.			
If accessing water from	Coocoran	Lake, give estimate of volume	e demand:		
(megalitres per annum)					
N.B Pumping from the Lake may require a licence from the NSW Office of Water and applicants should contact that Department before any pumping is commenced.					
If the general catchment is to be used, then:					
(a) Has the impact on other users in the catchment zone been evaluated? Yes No					
(b) Has the capacity of the catchment been assessed in relation to the proposed scale of puddling?					
Yes No					



If yes to (a) and/or (b), attach details. If no to (a) and/or (b), indicate who will carry out these evaluations.					
10. Power require Detail the source of power to be used for					
Water pumping:					
Operating agitators/puddling:					
11. Expenditure					
Initial capital expenditure	\$				
Annual operating expenditure	\$				
12. Waste and po Will silt be periodically removed from the	Ilution management e dams?				
If yes, what will be the method and volui	mes of disposal (when, how and where to):				
What steps will be taken to prevent cont	aminated waters discharging from the Lease area?				

N.B. A minimum freeboard of one (1) metre at all times will be required to prevent overtopping during major storm events.



13. Operating hours

Indicate times and tick the days on which operations will be conducted:

	START TIME	AM/PM		FINISH	TIME	АМ/РМ
Haulage		□ АМ □ РМ	to			□ АМ □ РМ
	Mon Tues	Wed	Thur	Fri S	Sat Sui	n 🗌
	START TIME	AM/PM		FINISH	TIME	AM/PM
Puddling		АМ РМ	to			АМ РМ
	Mon Tues	Wed	Thur	Fri S	Sat Sui	n 🗌
How will this ope	ration impact upo	on other local ope	rations?			'
How does the ope	eration integrate	with mining and c	ther activit	ies in the re	gion?	
Will this operation	n reduce impacts	that have occurre	ed on the sit	te previously	y?	es No
44 5 1		41				
14. Pub	lic heal	th and s	satety			
What methods w	ill be used to prev	vent or restrict pu	blic access t	to the area?		
What methods w	ill be used to prev	vent stock and wil	dlife access	ing the area	1?	

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15. Rehabilitation

Details are required of the progressive and final rehabilitation program for areas affected by the proposed development. These details should also be described on **Plan 3**.

The areas to be considered for rehabilitation are the dam, the silt traps, the access roads, the opal stockpile areas, the puddlers and any buildings and structures.

The aim of rehabilitation is to return the land for a useful purpose in such a way it is stable, erosion and pollutant free and provides no ongoing hazards to stock and the community.

What will be the intended use of the land on completion of puddling operations? Will the water storage facility remain? Yes No If yes, has the owner and/or occupier agreed? Yes No If yes provide the written approval of the landholder. Will the access roads remain? Yes No If yes, has the owner and/or occupier agreed? Yes No If yes provide the written approval of the landholder. What rehabilitation is proposed for the silt dam? N.B. The minimum requirement for the silt dam/s is for it to be self-draining and the banks battered to an angle to allow subsoil and topsoil to be respread, so as to allow the establishment of a permanent vegetation cover. What rehabilitation is proposed for any buildings/infrastructures?

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Declaration

I declare that to the best of my knowledge, the information provided in this form, and any attachment to this form, is true and correct in every detail.

CLAIM HOLDER #1			
Name			
Signature		Date	
CLAIM HOLDER #2			
Name			
Signature		Date	

Note: Giving false or misleading information is a serious offence under section 268 of the Work Health and Safety Act 2011, and Part 5A of the Crimes Act 1900.

Submitting the form

- By email: Send an electronic copy of the form including any attachments to nswresourcesregulator@service-now.com
- **By mail:** Mail your form and any attachments to NSW Resources Regulator, Compliance Coordination Unit, PO Box 344, Hunter Regional Mail Centre, NSW, 2310
- In person: The Lightning Ridge office of Mining, Exploration and Geoscience, Regional NSW, Lot 60 Morilla Street, Lightning Ridge, NSW.

This form may not be submitted to other offices of NSW Planning, Industry and Environment or Regional NSW.

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