

23 December 2020

Dam Safety NSW  
Department of Planning, Industry and Environment  
4 Parramatta Square, 12 Darcy Street  
Parramatta NSW 2150

To Whom it May Concern,

**RE: Mount Pleasant Operation Notification of Compliance as per *Clause 26, Dams Safety Regulation 2019***

MACH Energy Australia (MACH Energy) wishes to notify Dams Safety NSW (DSNSW) of its current compliance status in 2020 with Clause 26 of the *Dams Safety Regulation 2019* under the *Dams Safety Act 2015*. It is to be noted there is a two (2) year transition period for all updated requirements of the *Dams Safety Regulation 2019*.

**Mount Pleasant Operation (MPO) Declared Dam Information**

Consequence Category	Name	DSNSW Dam ID
Significant	Mount Pleasant Environmental Dam 3 (ED3)	1257
High C	Mount Pleasant Mine Water Dam (MWD)	1261
High C	Mount Pleasant Fines Emplacement Area (FEA) – Tailings Dam	1260

**2020 Inspection Reports & Emergency Exercises**

- Comprehensive Inspection - *SLR Consulting Australia Pty Ltd (SLR) – Inspection of the Tailings Dam (TD) – February 2020*
- Comprehensive Inspection - *WSP – Mine Water Dam (MWD) Comprehensive Inspection – June 2020*
- Comprehensive Inspection - *WSP – Evaporation Dam 3 (ED3) Comprehensive Inspection – August 2020*
- Mine Water Dam Failure Exercise - 13 November 2020
- FEA Failure Exercise - 2 December 2020

**Annual Management Plan Updates**

Name	Current Plans	Updates
<b>Mount Pleasant Environmental Dam 3 (ED3)</b>	OMM (February 2019) DSEP (January 2018)	OMM Manual – draft under review DSEP – draft under review
<b>Mount Pleasant Mine Water Dam (MWD)</b>	OMM (February 2019) DSEP (January 2018)	OMM Manual – draft under review DSEP – draft under review
<b>Mount Pleasant Tailings Dam (FEA)</b>	OMM and DSEP (August 2018)	OMM Manual – revised final under review DSEP – revised final under review

**Compliance Summary**

MACH Energy is committed to implementing reasonable and feasible measures at the Mount Pleasant Operation to maintain compliance with relevant conditions of the *Dams Safety Regulation 2019* and *Dams Safety Act 2015*.

Please do not hesitate to contact the undersigned should you wish to discuss.

Yours sincerely,



**Andrew Reid**  
Environmental Superintendent  
[andrew.reid@machenergy.com.au](mailto:andrew.reid@machenergy.com.au)

**Attachments**

- Dam Information Form and Plan - Mine Water Dam (MWD)
- Dam Information Form and Plan – Environmental Dam 3 (ED3)
- Dam Information Form and Plan – Fines Emplacement Area (FEA) – Tailings Dam

## Dam Information Form

1. Name of dam: Mine Water Dam (MWD)
2. Location of dam:
  - a) Place Name: Mount Pleasant Operation
  - b) CMA/LPMA/Other Topographic Series Map Series Name: \_\_\_\_\_  
Number: MP001-2410-CIV-DRG-002
  - c1) Geographic Co-ordinates: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_
  - c2) **[OR]** Projected Co-ordinates: Grid: MGA ☒ AMG ☐ Other ☐ (please tick)  
Zone (if known): 54 ☐ 55 ☐ 56 ☒ Other ☐ (please tick)  
Easting 6 429 935 m Northing 295 103 m
- (Note: DSC prefers Geographic data in decimal degrees)
- d) Please attach a copy of the appropriate Topographic Map showing the outline of the area covered by full supply level (indicating Reduced Level) of the dam and any further augmentation.
- e) Approximate Elevation (mAHD): 214.8 ☒ Crest ☐ FSL
3. River/Stream: Dry Creek
4. Owner: MACH Energy Australia Phone No.: 1800 931 873  
Address: Head Office – Suite 1, Level 3, 426 King Street, Newcastle West NSW 2302  
Postal address – PO Box 2115, Dangar NSW 2309  
Owner's Representative: Andrew Reid Phone No.: 02 55171116  
Address: 1100 Wybong Road, Muswellbrook NSW 2333
5. Catchment Area: 0.8 km<sup>2</sup>
6. Dam Height: 20 m
7. Storage Volume: 2,059 ML
  - a) Material stored (attach details): Water
8. Purpose of Dam: Storage of water for mining purposes

9. Type of Dam (i.e. concrete gravity, zoned earthfill, etc.): Zoned Earthfill
10. Design Flood Assessment  
 Inflow Flood Peak: 60.1 m<sup>3</sup>/s Annual Exceedance Probability 100,000  
 Method: Rational Method Date: June 2020
- a) Spillway Type: Reinforced concrete lined area with geotextile and rock fill
- 11a. Sunny Day Consequence Category: (if known) (please tick the appropriate box)  
 Refer Declared dams consequence category assessment and determination methodology  
☐ Extreme ☐ High A ☐ High B ☒ High C ☐ Significant ☐ Low ☐ Very Low  
 Reasons for assessment (including PLL or PAR): Proximity of Bengalla Mine's  
Clean Water Dam, Wybong Road and Bengalla's Open pit
- 11b. Flood Consequence Category: (if known) (please tick the appropriate box)  
 Refer Declared dams consequence category assessment and determination methodology  
☐ Extreme ☐ High A ☐ High B ☒ High C ☐ Significant ☐ Low ☐ Very Low  
 Reasons for assessment (including PLL or PAR): An existing clean water diversion drain  
to divert clean water runoff from surrounding catchments
12. Names of and River Distances to Downstream Dams: Dry Creek  
Located approx 100m upstream of Bengalla's Clean Water Dam 1

**The following data is required for existing dams only**

13. Engineered by: ATC Williams
14. Constructed by: Hardy Brothers Mining And Construction and Ditchfield Contracting P/L
15. Year of completion: 2018 followed by installation of Geosynthetic Clay Liner (GCL) in 2019
16. Frequency of surveillance inspections: Every Five Years
17. Date of last inspection: 15 April 2020
18. Was a surveillance report prepared? Yes

Name:	Mine Water Dam Comprehensive Inspection
Signature and Date	Alistair Hitchon June 2020
Designation (Owner, Manager, Consultant etc)	WSP





## Dam Information Form

1. Name of dam: Environmental Dam 3 (ED3)
  2. Location of dam:
    - a) Place Name: Mount Pleasant Operation
    - b) CMA/LPMA/Other Topographic Series Map Series Name: \_\_\_\_\_  
Number: MP-2470-CIV-DRG-002
    - c1) Geographic Co-ordinates: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_
    - c2) [OR] Projected Co-ordinates: Grid: MGA ☒ AMG ☐ Other ☐ (please tick)  
Zone (if known): 54 ☐ 55 ☐ 56 ☒ Other ☐ (please tick)  
Easting 6429 205 m Northing 294622 m

(Note: DSC prefers Geographic data in decimal degrees)

  - d) Please attach a copy of the appropriate Topographic Map showing the outline of the area covered by full supply level (indicating Reduced Level) of the dam and any further augmentation.
  - e) Approximate Elevation (mAHD): 200 ☒ Crest ☐ FSL
3. River/Stream: Unnamed tributary to Dry Creek
  4. Owner: MACH Energy Australia Phone No.: 1800 931 873  
Address: Head Office – Suite 1, Level 3, 426 King Street, Newcastle West NSW 2302  
Postal address – PO Box 2115, Dangar NSW 2309  
Owner's Representative: Andrew Reid Phone No.: 02 55171116  
Address: 1100 Wybong Road, Muswellbrook NSW 2333
5. Catchment Area: 0.06 km<sup>2</sup>
  6. Dam Height: 11 m
  7. Storage Volume: 331.9 ML
    - a) Material stored (attach details): Water
  8. Purpose of Dam: Storage and evaporation of water

9. Type of Dam (i.e. concrete gravity, zoned earthfill, etc.): Zoned Earthfill

10. Design Flood Assessment

Inflow Flood Peak: 69.5 m<sup>3</sup>/s Annual Exceedance Probability 100,000

Method: Rational Method Date: August 2020

a) Spillway Type: Reinforced concrete lined area with geotextile and rock fill

11a. Sunny Day Consequence Category: (if known) (please tick the appropriate box)

Refer Declared dams consequence category assessment and determination methodology

☐ Extreme ☐ High A ☐ High B ☒ High C ☒ Significant ☐ Low ☐ Very Low

Reasons for assessment (including PLL or PAR): Proximity of Bengalla Mine's  
Clean Water Dam, Wybong Road and Bengalla's Open pit

11b. Flood Consequence Category: (if known) (please tick the appropriate box)

Refer Declared dams consequence category assessment and determination methodology

☐ Extreme ☐ High A ☐ High B ☐ High C ☐ Significant ☐ Low ☐ Very Low

Reasons for assessment (including PLL or PAR): An existing clean water diversion drain  
to divert clean water runoff from surrounding catchments

12. Names of and River Distances to Downstream Dams: Approx 350m upstream from Dry Creek  
The dam was constructed along an unnamed tributary of Dry Creek.

**The following data is required for existing dams only**

13. Engineered by: ATC Williams

14. Constructed by: Hardy Brothers Mining And Construction

15. Year of completion: 2017 followed by installation of Geosynthetic Clay Liner (GCL) in 2019

16. Frequency of surveillance inspections: Every Five Years

17. Date of last inspection: 17 June 2020

18. Was a surveillance report prepared? Yes

Name:	ENVIRONMENTAL DAM 3 COMPREHENSIVE INSPECTION
Signature and Date	Alistair Hitchon 10-Aug-20
Designation (Owner, Manager, Consultant etc)	WSP





## Dam Information Form

1. Name of dam: Mount Pleasant Operation (MPO) Tailings Dam
  2. Location of dam:
    - a) Place Name: Mount Pleasant Operation Tailings Dam
    - b) CMA/LPMA/Other Topographic Series Map Series Name: As Constructed Survey Data  
Number: MP001-2610-CIV-DRG-004
    - c1) Geographic Co-ordinates: Latitude: -32.239465° Longitude: 150.806416°
    - c2) **[OR]** Projected Co-ordinates: Grid: MGA ☐ AMG ☐ Other ☐ (please tick)  
Zone (if known): 54 ☐ 55 ☐ 56 ☒ Other ☐ (please tick)  
Easting 292530.75 m Northing 6431390.96 m

(Note: DSC prefers Geographic data in decimal degrees)

  - d) Please attach a copy of the appropriate Topographic Map showing the outline of the area covered by full supply level (indicating Reduced Level) of the dam and any further augmentation.
  - e) Approximate Elevation (mAHD): 259.77 ☒ Crest ☐ FSL
3. River/Stream: Hunter River Catchment
  4. Owner: MACH Energy Australia Pty Ltd Phone No.: 1800 886 889  
Address: 1100 Wybong Road  
Muswellbrook, NSW 2333  
Owner's Representative: Sedgman Pty Ltd Phone No.: 07 3514 1343  
Address: Level 5, 179 Grey Street  
South Bank, Brisbane QLD 4101
  5. Catchment Area: 2.2 km<sup>2</sup>
  6. Dam Height: 30.5 m
  7. Storage Volume: 3148.2 ML
    - a) Material stored (attach details): Tailings - see Operational Maintenance Manual for details
  8. Purpose of Dam: Main fine reject's storage for MPO

9. Type of Dam (i.e. concrete gravity, zoned earthfill, etc.): \_\_\_\_\_  
Zoned Earthfill (see MP001-2510-CIV-DRG-003 for details)

10. Design Flood Assessment

Inflow Flood Peak: 100.5 m<sup>3</sup>/s Annual Exceedance Probability 1 in 100,000

Method: \_\_\_\_\_ Date: October 2017

Critical case based on 1:100,000 AEP critical duration event with 1:10 AEP wave runoff allowance or PMP flo

a) Spillway Type: Emergency Spillway (see MP001-2510-CIV-DRG-004 for details)

11a. Sunny Day Consequence Category: (if known) (please tick the appropriate box)

Refer Declared dams consequence category assessment and determination methodology

☐ Extreme ☐ High A ☐ High B ☒ High C ☐ Significant ☐ Low ☐ Very Low

Reasons for assessment (including PLL or PAR): See ATC Williams Design  
See ATC Williams Design Report MP001-2000-CIV-REP-006 for details

11b. Flood Consequence Category: (if known) (please tick the appropriate box)

Refer Declared dams consequence category assessment and determination methodology

☐ Extreme ☐ High A ☐ High B ☒ High C ☐ Significant ☐ Low ☐ Very Low

Reasons for assessment (including PLL or PAR): \_\_\_\_\_  
See ATC Williams Design Report MP001-2000-CIV-REP-006 for details

12. Names of and River Distances to Downstream Dams: \_\_\_\_\_  
Approximately 7.6km west of Hunter River

**The following data is required for existing dams only**

13. Engineered by: ATC Williams

14. Constructed by: Ditchfield Contracting

15. Year of completion: 2018

16. Frequency of surveillance inspections: Annually

17. Date of last inspection: November 2019

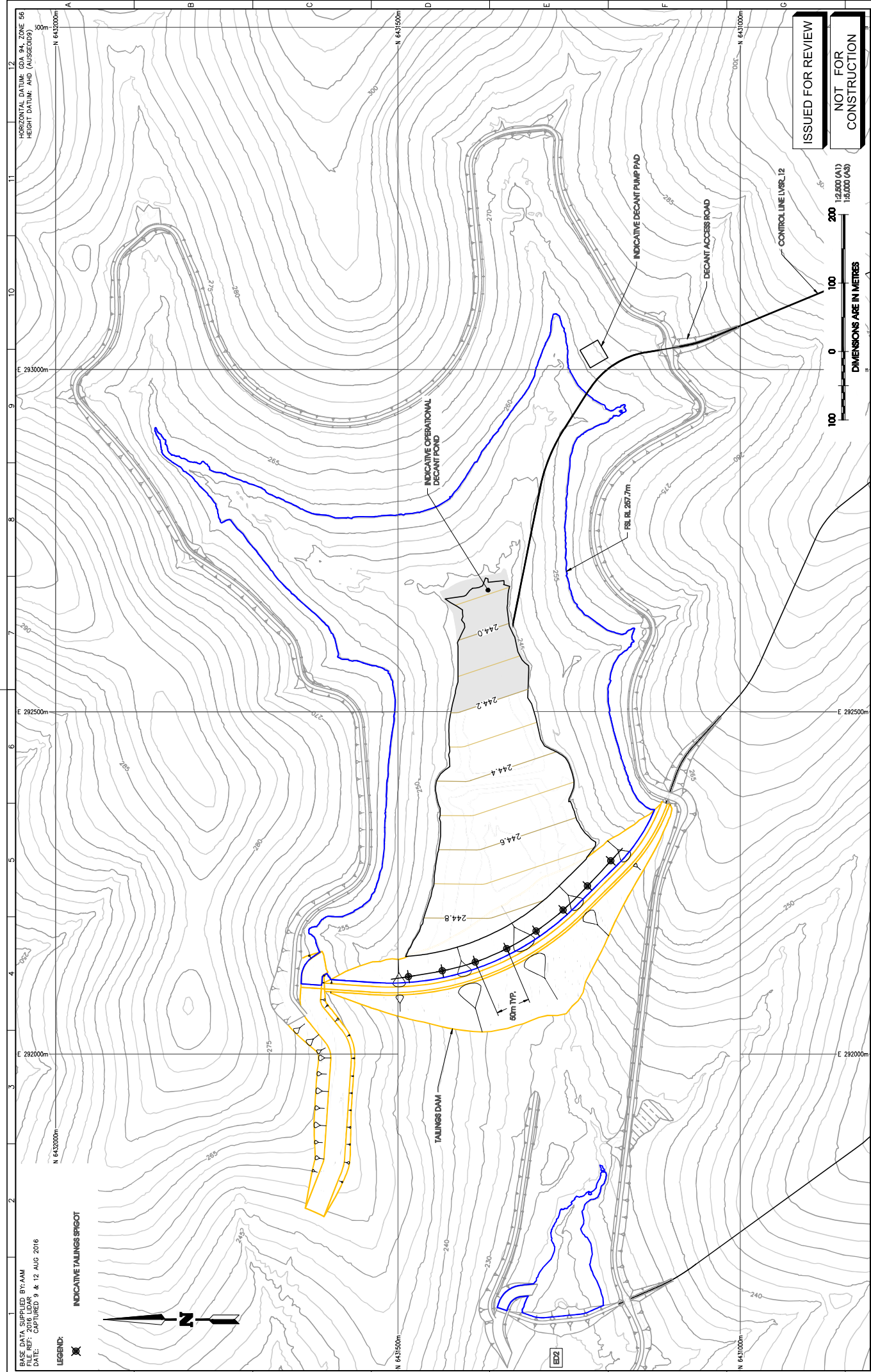
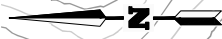
18. Was a surveillance report prepared? Yes

Name:	Mount Pleasant Operation - Tailings Dam 2019 Intermediate Inspection, 12 Months Post Commissioning
Signature and Date	
Designation (Owner, Manager, Consultant etc)	SLR Consulting



BASE DATA SUPPLIED BY: AM  
FILE REF: 2016 LEAD  
DATE: CAPTURED 9 & 12 AUG 2016

LEGEND:  
INDICATIVE TAILINGS SPIGOT



ISSUED FOR REVIEW  
NOT FOR CONSTRUCTION

SCALE: 1:5000

JOB No.	11613401
DATE	APR 2017
DESIGN	AJB
DRAWN	BT
CHECKED	MT
APPROVED	RI

28/04/17

DATE

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ATC Williams

A.B.N. 64 005 931 286  
www.atcwilliams.com.au

MACHEnergy

Mount Pleasant Operation

MOUNT PLEASANT PROJECT

TAILINGS DAM  
FINES EMPLACEMENT PLAN  
YEAR 1 - INDICATIVE TAILINGS DEPOSITION

DWG No.

ME16-010-BSE-SKT-0040

SHEET SIZE

A3

Rev.

A

SHEET 1

OF 1