Tarago Action Plan Routine Inspection Checklist

Date:	14-Nov-23	UGL RL Environmental Representative completing inspection[1]:	
Start time:	9:40 AM		
Finish time:	10:30 AM	[redacted]	
Weather: (BOM)	17.1°C, 4.8°C lowest temp, 17.3°C highest temp, 0mm of rain since 9am (14/11/23), 15km/h highest wind gust, WNW 7km/h wind speed, 54% humidity		
Date and volume of maximum rainfall in a 24hr period since last inspection?			
Date:	5-Oct-23		
Max volume (mm) in 24hr period:	22.2mm		

General Site Observations

Is airborne dust from site evident?

No airborne dust was visible (**Photos 1 - 2**)

Is sediment run-off evident that is not captured by sediment controls?

No evidence of sediment run-off from site, attributed to no flowing surface water observed onsite due to the drier site conditions (**Photos 8, 16, 17**).

Is surface water discharging from site?

No surface water was observed discharging from the site at either the southernmost, middle or northernmost culvert (**Photos 8, 16, 17**). Damp soil and a small pool of water was observed on site immediately downstream of southernmost culvert (**Photo 4**) and middle culvert (**Photo 6**). No other pooled or flowing surface water was observed onsite during the inspection (**Photo 19**).

Is there evidence of excavation or other works non-compliant with the Action Plan?

No

Other observations?

1. Regarding the stockpile, no new exposed marker layer locations were identified during the inspection. However, several small-medium sized weeds were observed growing out from the stockpile (**Photo 20**).

2. The rock armour at the southernmost culvert, upgradient of the railway, appears to be in a weathered condition. Sediment and debris are visible among the rocks (**Photos 23-24**), and one appears misshaped (**Photo 25**). Ramboll recommends they be reinstated by clearing the sediment and debris. In addition, repair of the misshaped rock armour closest to the culvert is recommended

3. Evidence of erosion has been noted upgradient of the southern most culvert in multiple previous site inspections and remains on site but in a stable condition (**Photo 21-22**). No evidence of sediment was found in pooled water at the southern culvert. Ramboll recommends replacing ground cover material (ballast) if further erosion occurs or sediment is visible in the downstream surface water of the southern culvert. UGL has advised Ramboll of planned erosion repairs scheduled for the 4th of December 2023.

4. The previous inspection report (19/10/23) noted drier conditions on site than during the September inspection. Conditions during this inspection were even drier. Most notably apparent at the almost dry downgradient middle culvert opening (**Photo 6**) and at the southernmost culvert which had no flowing water (**Photo 4**). During this inspection, no surface water was observed discharging to off-site (**Photos 8, 16, 17**).

[1]Action Plan inspections must be completed by a UGL Representative suitably trained and experienced in application and management of erosion and sediment controls including stockpile management.

Section	Control	Inspection		Corrective Action
		Yes	No	
5.1	Is Exclusion Zone signage present as recommended on Figures 2a - 2e Appendix 1 to demarcate contamination in the rail formation and adjacent soils?	Yes (**Photos 9-10**)		
	Is Exclusion Zone signage undamaged?	Yes, exclusion zone signage appeared in good condition (**Photo 9-10**).		
	Are sediment controls present in/adjacent each rail culvert?	Yes, rock checks and rock armour observed upgradient of each culvert. Coir sediment control logs west of former Woodlawn siding and along cess drain feeding the south and middle culverts (**Photos 3, 5, 7, 11-15)**. Silt fencing between middle and northern culvert.		
	If sediment is present what is the estimated depth of sediment?	Minimal surface water and sediment present on-site.		
	Are sediment controls still functional?	Yes. The southernmost rock armour was observed with sediment and debris - refer to 'additional observations' section point 3 for comment'.		
	Is the existing stockpile covered securely to prevent surface water infiltration?	Yes		
	Are cracks present in the capping of the existing stockpile? If so record the width and length of cracks in written form and through photographs and consolidate with this checklist.	Yes, minor hairline cracking is present on the stockpile (observed during an inspection 15/03/23), these remain stable and are not expected to adversely affect cap competency in current condition.		
	Are there signs of erosion or sediment run-off on or relating to the existing stockpile? If so record in written form and through photographs and consolidate with this checklist.	No. No erosion of, or sediment from the stockpile was observed.		
	Are there signs of vegetation on the existing stockpile? If so record in written form and through photographs and consolidate with this checklist.	Yes, several small-medium sized weeds were identified growing out from the stockpile (**Photo 20**). Refer to 'Other Observations' section point 1 for additional comments.		
	Is geofabric marker layer visible beneath capping of the existing stockpile? If so record in written form and through photographs and consolidate with this checklist. If marker layer is visible rectification work is required.	No. No exposed marker layer locations were observed.		
7.3	Have any additional stockpiles of contaminated material been created?	No		
	Are additional stockpiles placed away from drainage lines, gutters, stormwater pits or inlets?	n/a no additional stockpiles		
	Are stockpiles covered securely to prevent surface water infiltration?	n/a no additional stockpiles		
	Are stockpiles positioned on level surfaces with construction of bunds to control water ingress / egress.	n/a no additional stockpiles		

[1]Action Plan inspections must be completed by a UGL Representative suitably trained and experienced in application and management of erosion and sediment controls including stockpile management.

Photo 1: Picture at southern end of Tarago railway station platform facing south. No airborne dust visible.

Photo 2: Picture at northern end of Tarago railway station facing north. No airborne dust visible.

Title:	**Tarago Rail Yard Inspection**	**Approved:** **SM**	**Project-Nr.:** **318001704**	**Date:** **November 2023**
Site:	**Tarago, NSW**			
Client:	**UGL Regional Linx**			

Photo 3: Southern culvert upgradient of the railway line with no flowing surface water. No observed build-up of sediment on rocks. Rock armor and natural vegetation providing sediment control for surface water.

Photo 4: Southern culvert downgradient of the railway line with no flowing surface water. Damp soil with a small pool of water is present with low turbidity. No evidence of surface water travelling off-site at the southern culvert.

Photo 5: Middle culvert upgradient of the railway line with no flowing or pooled surface water. No observed build-up of sediment on rocks or in culvert. Rock armor and natural vegetation providing sediment control for surface water.

Photo 6: Middle culvert downgradient of the railway line with no flowing surface water. Soil dampness and a small pool of water is present. Water appeared to have low turbidity. No evidence of surface water currently running off site at middle culvert.

Photo 7: Northern culvert upgradient of the railway line with no flowing or pooled surface water. No observed build-up of sediment on rocks or in culvert. Rock armor and vegetation providing sediment control for surface water.

Photo 8: Northern culvert downgradient of the railway line with no flowing or pooled surface water. No evidence of surface water currently running off site.

Title:	**Tarago Rail Yard Inspection**	**Approved: SM**	**Project-Nr.: 318001704**	**Date: November 2023**
Site:	**Tarago, NSW**			
Client:	**UGL Regional Linx**			

Photo 9: Exclusion zone signing placed periodically along contamination areas. Undamaged and in good condition. Facing south-east.

Photo 10: Exclusion zone signing placed periodically along contamination areas. Undamaged and in good condition. Facing east.

Photo 11: Upgradient of southern culvert showing Coir sediment control logs, used as control measures for sediment control. Facing north-east.

Photo 12: Rock checks running along former Woodlawn siding and between southern and middle culverts. Previously silt fencing, since replaced by Coir sediment control logs.

Photo 13: Rock checks running alongside former Woodlawn siding towards the middle culvert. No evidence of sediment build-up in rock armour or coir sediment control logs.

Photo 14: Upgradient of middle culvert facing east. Silt fencing is clear with some sediment visible.

Photo 15: Rock armour west of the rail formation running from the middle to the north culvert. Some sediment visible on rock armour. Facing north-east.

Photo 16: Southern culvert downgradient of railway line at the site boundary. No surface water discharging off-site.

Title:	**Tarago Rail Yard Inspection**	**Approved:** **SM**	**Project-Nr.:** **318001704**	**Date:** **November 2023**
Site:	**Tarago, NSW**			
Client:	**UGL Regional Linx**			

Photo 17: Downgradient of middle culvert. No surface water currently running off site at middle culvert.

Photo 18: Causeway downgradient of middle culvert showing no evidence of current surface water moving off site.

Photo 19: No pooled water adjacent to railway tracks. Facing north-east.

Photo 20: Plant growth on the stockpile is present. Located on north-eastern side of stockpile.

Photo 21: Visible evidence of erosion due to loss of ground cover (ballast material) upgradient of southernmost culvert. Remaining material is stable and no major further erosion is noted since last inspection (19/10/11). Facing north-east.

Photo 22: Additional photograph of erosion upgradient at southern culvert.

Photo 23: Southern culvert upgradient of railway tracks rock armoury for sediment control.

Photo 24: Additional photograph of southern rock armour with a build-up of debris.

Photo 25: Additional photograph of southern rock armour. Pictured is the closest rock armour to the culvert opening appearing misshaped and with a build-up of sediment.