

Tarago Action Plan Routine Inspection Checklist

Date:	15-May-23	UGL RL Environmental Representative completing inspection ¹ :		
Start time:	10:57 AM			
Finish time:	11:52 AM	[REDACTED]		
Weather:	10.8°C, mostly sunny, areas of morning fog, high change of no rain, 82% humidity, NW 4km/h wind, 0mm rain since 9am			BoM
Date and volume of maximum rainfall in a 24hr period since last inspection?				
Date:	30-Apr-23			
Max volume (mm) in 24hr period:	37.2			
General Site Observations				
Is airborne dust from site evident?				
No airborne dust was visible (Photos 1 and 2)				
Is sediment run-off evident that is not captured by sediment controls?				
No. Some evidence of sediment was observed in pooled water on site downgradient of the middle culvert (Photo 5), however there was no evidence of run-off of this water from site in between inspections (Photos 6 - 7). No evidence of sediment run-off past northern and southernmost rail culverts (Photos 3, 4, 8).				
Is surface water discharging from site?				
Yes. Surface water discharging at a slow rate from the southern culvert (Photos 3 - 4). Some pooled water observed on site and immediately downstream of middle culvert but not discharging off site (Photo 5). No surface water at northern culvert (Photo 8).				
Is there evidence of excavation or other works non-compliant with the Action Plan?				
No				

Other observations?

Minor marker layer exposure was noted in three places on the western side of the stockpile in a previous inspection checklist dated 20 April 2023. These were marked and did not appear to have been patched in between site visits (**Photos 18 - 19**). Additionally, two new marker layer exposure locations were identified (**Photos 20 - 21**), Ramboll recommends repairing these by patching with sand and cement mixture. A UGL representative on site was notified of location and informed Ramboll representative of patching works planned to take place Friday 19 May 2023.

Evidence of erosion was noted upgradient of the southern most culvert in previous site inspection on 20 April 2023 and remains on site (**Photo 24**). However, no evidence of sediment was found in water flowing offsite at 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.

Evidence of build up of sediment in some silt fences upgradient of middle culverts (**Photo 12**). Ramboll recommends removing silt build up on fences using a shovel to prevent breakage of fences.

Ramboll notes that the major damage to the silt fencing uphill of the rail line (western side) and to the south of the middle culvert remains (**Photo 11**). This was identified in April and March inspections also. Ramboll recommends this silt fencing be replaced as soon as possible. UGL Representative advised these works were planned to take place on the Friday 19th May 2023. Minor damage to the silt fencing uphill of rail line and running between the southern and middle culverts was also seen (**Photo 25**), Ramboll recommends retying silt fencing to stakes to prevent further damage.

The poly-sealant application noted in inspection checklist 15 March 2023 remains on the Woodlawn siding (**Photo 23**) and was noted on site. Gravels are sealed together and layer of sealant evidence by shine.

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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.

s	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 16 - 17)		
	Is Exclusion Zone signage undamaged?	Yes, signage was in good condition (Photos 16 - 17)		
	Are sediment controls present in/adjacent each rail culvert?	Yes, rock checks and rock armour observed upgradient of each culvert. Silt fencing west of former Woodlawn siding and along cess drain feeding the south and middle culverts (Photos 9 - 16).		
	If sediment is present what is the estimated depth of sediment?	Moderate sediment present in pooled water on site downgradient of middle culvert (Photo 5), sediment present on silt fencing and rock checks (~8cm) (Photo 12)		
	Are sediment controls still functional?	Yes, with the exception of silt fencing discussed in Photos 11 and 25 . Refer to 'Other Observations' for recommendations.		

	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.	No, weeds previously growing out of stockpile had been removed due to vegetation maintenance.
	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.	Yes, geofabric marker layer visible in three locations on west of stockpile. Location and size detailed in Photos 18 - 21 , refer to 'Other Observations' section for recommendations.
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

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Photo 1: Picture of railway station facing north east. No airborne dust visible in air or on surfaces.



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Client: UGL Regional Linx			

Photo 2: Train entering loop line from south west direction. No airborne dust visible in air or on surfaces during train movements.



Photo 3: Southern most culvert discharge off site through culvert under Golburn street, showing evidence of surface water run off on site. Water is clear, no turbidity, with no observable sediment.

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Photo 4: Outlet of culvert under Golburn street, downgradient of southernmost culvert on site, showing evidence of surface water run off on site. Water remains clear with no turbidity and no observable sediment.

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Photo 5: Downgradient of middle culvert showing pooled sediment laden water on site. Brown, moderate turbidity.



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Photo 6: Downgradient of middle culvert. Dry beyond the pooled water and no evidence of current surface water run off on site.



Photo 7: Causeway downgradient of middle culvert showing no evidence of current surface water run off on site. No visible sediment on road or vegetation nearby from sediment water was running off site in between inspections.

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Photo 8: Downgradient of northernmost culvert showing evidence of no surface water runoff from site to neighbouring property.

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Photo 9: Upgradient of southernmost culvert showing silt fencing and rock armoury used as control measures for sediment control.



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Photo 10: Rock checks and silt fences running along former Woodlawn siding and between southern and middle culverts. Minor sediment build-up on rock checks and fencing.



Photo 11: Rock checks and silt fences running alongside former Woodlawn siding towards the middle culvert. Major damage to silt fencing remaining on southern side. No evidence of sediment build-up in rock armoury.

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Photo 12: Upgradient of middle culvert showing signs of sediment in silt fencing on northern side. Silt fencing is full and sediment needs to be clear or fencing needs to be replaced before breakages.



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Photo 13: Upgradient of trainline culvert facing north, showing pooling on site near rock checks and silt fencing. Water is clear with no signs of turbidity and sediment.



Photo 14: Silt fencing and rock armoury upgradient of trainline running from the middle to the north culvert. Some erosion evidence of soil and build-up of sediment on silt fencing and rock armoury.

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Photo 15: Upgradient of northernmost culvert. No evidence of surface water run off on site. No evidence of sediment buildup on rocks. Rock armory and natural vegetation allow for sediment control in surface water.



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Photo 16: Exclusion zone signing placed periodically along contamination areas. Reverse side of more signing can be seen on opposite side of railway track.



Photo 17: Additional exclusion zone signing placed periodically along contamination areas.

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Photo 18: Geofabric marker layer visible in stockpile capping remained from previous inspection Approximately 10cm x 2cm. UGL representative stated patching works will take place Friday 19 May 2023.

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Photo 19. Geofabric marker layer visible in stockpile capping remained from previous inspection. Approximately 10cm x 2cm. UGL representative stated patching works will take place Friday 19 May 2023.



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Photo 20. New location of geofabric marker layer visible in stockpile capping UGL on site representative was notified. Approximately 30cm x 2cm.



Photo 21. New location of geofabric marker layer visible in stockpile capping UGL on site representative was notified. Approximately 5cm x 3cm.

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Photo 22. Picture of stable stockpile capping on site. Minimal cracks and breaks can be seen on the topside of the stockpile.

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Photo 23. Poly sealant application noted in inspection checklist 15 March 2023 remains on Woodlawn siding. Gravels are sealed together and layer of sealant evidence by shine.



Photo 24. Evidence of erosion upgradient of southern most culvert noted in site inspection dated 20 April 2023 remains on site but stable.

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Photo 25. Damage to silt fencing between southern and middle culverts. Ties holding fencing to stakes are no longer functioning and silt fence cannot remain up. Ramboll recommends fixing or replacing this fencing.

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