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# Environmental Management System action list progress update 2021

*Responsible Officer: Group Manager Planning and Delivery (Andrew Logan)*

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## Recommendation

That Council:

1. Receive and note the report on the progress of actions to mitigate risk of environmental harm from activities; and
2. Endorse the recommended changes to the Environmental Management System Action List, as proposed in Attachment 1.

## Background

The purpose of this report is to update Council on the progress of actions from the Environmental Management System (EMS) Action List to mitigate risk of environmental harm from Council activities (Activity 7.2.2.1 of Rous County Council's IPR Delivery Plan).

Rous County Council adopted an *Environmental* policy in July 2007 committing to developing and implementing an AS/NZS ISO14001 Environmental Management System (EMS). The EMS framework was developed in 2009 and the development of supporting procedures and registers ensued.

In 2011, the EMS Action List was developed which identified the required actions, responsibilities and target timeframes to progress environmental management objectives within Rous. The EMS Action List was internally reviewed in 2013 with priority actions identified and several actions that focused on attaining 'industry best practice' indefinitely deferred due to resourcing limitations. The review noted that the indefinite deferral of actions may signal that the risk posed in relation to those actions represented an acceptable risk/exposure for Council.

In 2014, Council adopted a revised *Environmental* policy reaffirming its commitment to protection of the environment in all areas of its business and operations, however removing the previous commitment of implementing an AS/NZS ISO14001 compliant EMS. Council Resolution 83/14 which adopted the revised *Environmental* policy also required that '...annual reporting of the EMS Action List be provided to Council'. Review of Council records found that the EMS Action List was last reported to Council in 2014.

The *Environmental* policy was revoked in April 2021 with Council's commitments to environmental protection included in the *Land Management* policy.

## EMS Action List – progress update

An internal review of the EMS actions was completed in 2018 which identified that three of the thirty-two original actions were outstanding, however a report was not submitted to Council at the time.

GeoLINK Engineering Consultants (GeoLINK) were engaged in 2020 to undertake a third-party review of Council's progress against the outstanding (active) actions and review the continuing implementation of completed actions. In summary, there are three active actions (C1, C2 and C3 – refer to Attachment 1) which is 8 less than was reported to Council in 2014.

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Three actions previously marked 'complete' were recommended by GeoLINK to be re-addressed as the previously identified action resolution had not been fully implemented (C6, LM2 and LM8). These actions are referred to herein as 'semi-complete'.

Staff are continuing to progress the completion of the three active and three semi-complete actions. Completion of the active EMS actions (C1, C2 and C3) requires upgrade and augmentation of the bulk chemical storage facilities at Nightcap Water Treatment Plant (NCWTP). Significant planning has been undertaken on this project, investigating alternative options for either retrofit or relocation of the storage facilities and measures to bring the facilities to modern standards and improve operability of the water treatment plant.

The preferred option for the NCWTP bulk chemical storage upgrade is to relocate the chemical storage facilities to a new location on site which has been determined as the best option to address the environmental, traffic and operational risks while maintaining opportunities for future expansion of the plant. Further investigation is also currently being undertaken to determine the preferred long term chemical option for disinfection. Once this is determined, preliminary design of the bulk chemical storage facility can proceed.

Upgrade of the NCWTP bulk chemical storage facilities is a high priority project for staff and is currently expected to be completed in the 2023/24 financial year.

GeoLINK also reviewed the status and progress on the nine indefinitely deferred actions (D6, D7, D8, D9, D11, D12, D13, LM4 and LM12) from the EMS Action List. It was identified that progress has been made on several of the deferred actions, however some actions have since been superseded by implementation of business-as-usual practices to minimise environmental harm from Council activities.

A subsequent Council staff review of the deferred actions identified several actions had substantially been addressed through other activities that had been undertaken or had been superseded by business-as-usual practices or other Council programs or initiatives. It is recommended all deferred items be marked as complete or removed from the EMS Action List (refer GeoLINK and Council staff comments in Attachment 1).

Table 1 below provides a summary of the status of actions from Council's EMS.

**Table 1 - EMS Actions Progress Summary**

Action status	Number of actions
Complete	17
Active	3
Deferred	9
Semi-complete	3
<b>TOTAL</b>	<b>32</b>

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## Conclusion

Addressing the active EMS actions (C1, C2 and C3) through the bulk chemical storage facility upgrade at NCWTP continues to be a priority through identified activities in Council's Delivery Program. Several interim solutions have been implemented to further mitigate risk of water treatment chemicals entering the environment including implementation of an alternative method of cleaning lime hoses, purchase and installation of self-bunded chemical tanks and installation of stormwater treatment bunds and pollutant traps. The primary risk that is unable to be addressed until the new bulk chemical storage facility is constructed is spill containment bunding in the tanker unloading area.

Attachment 1 provides recommendations from Council staff on the management of the 15 EMS actions that are active, deferred or semi-complete.

Annual reports on the progress towards addressing the active EMS actions will be provided to Council as part of the Integrated Planning and Reporting updates, until the active and semi-complete actions are closed out.

Attachment:

1. Environmental Management System Actions.

## Attachment: Environmental Management System Actions

Status	Action No.	Description	GeoLINK Review - March 2021	Rous Staff comment – January 2022
Active	C1	Review process allowing wash down of lime to the environment at both Nightcap WTP and Emigrant Creek WTP and identify options for eliminating/addressing the hazard. Prepare a SWMS for wash down of lime handling equipment. Train relevant staff in execution of SWMS.	<p><b>Status: Active</b></p> <p>A review of lime washdown procedures has been undertaken.</p> <p>At Nightcap WTP - the lime slurry system is cleaned by either of two methods: a) removal and washing out of slurry hoses along roadway with lime discharging to drains through litter baskets. It is noted that litter baskets are not designed to capture lime; b) recirculation of citric acid through lime slurry delivery system for approximately 1 hour with lime/acid solution dumped to wastewater system. Operators advise the acid wash is quite effective however not all operators trained in this operation yet and occasional hose washout is still required.</p> <p>At Emigrant WTP - the lime slurry system is cleaned by either of two methods. a) as per above. c) circulation of air/water through lime slurry delivery system to dislodge lime which is discharged to drains (no litter basket). drains head to dam.</p> <p><b>Measures to complete action:</b></p> <p>Implement method b) - recirculation of citric acid through lime slurry system with lime waste discharged to wastewater treatment system. Where occasional hose washout required, discharge to be captured and directed to wastewater treatment.</p>	<p>Recirculation of citric acid is now the adopted practice of cleaning lime lines at Nightcap WTP with all operators trained and instructed to use this method. A permanent solution for storage and dosing of citric acid will be included in the bulk chemical storage upgrade.</p> <p>At Emigrant Creek Dam WTP, lime hoses are hosed out, however the slurry and solids are captured and directed to the drying beds which eliminates the hazard of these waste materials ending up in the dam.</p> <p>Operating Procedures will be finalised for the lime cleaning operations once a permanent solution has been implemented at Nightcap WTP in 2023/2024.</p>

Status	Action No.	Description	GeoLINK Review - March 2021	Rous Staff comment – January 2022
			Also see comments relating to C2 - upgrade to bulk storage facility, below.	
Active	C2	Establish appropriate bunding for all chemical storages. Establish and implement procedures for the management of chemical storage areas, including the delivery of chemicals at both Nightcap WTP and Emigrant Creek WTP (and specifically the management of the driveway valve system). Train relevant staff in execution of procedures.	<p><b>Status: Active</b></p> <p>Bunded delivery bay and bulk storage facility is still an outstanding item and is currently with planning and delivery for implementation. The upgrade will address bunding of chemical storage tanks and tanker unloading areas. Upgrade of the bulk chemical storage to address environmental risks is on hold pending the completion of a current review of treatment chemicals to address finished water pH issues. Chemical types and storage volumes may change because of the review. In April 2020, a 13kL self-bunded tank was installed at Nightcap WTP to store Caustic Soda. This replaces a 5kL un-bunded tank and reduces the risk of major chemical spill from tank rupture.</p>	<p>The project team for the Nightcap WTP Strategic Review is progressing the Nightcap WTP bulk chemical storage upgrade. A preferred location has been determined for the new facility and further investigations are being undertaken to determine the preferred long term chemical option for disinfection. Once this has been completed, preliminary design of the bulk chemical storage upgrade can proceed. The upgrade will include appropriate bunding in accordance with modern standards.</p> <p>Two 21,000L self-bunded tanks have been purchased and installed for storage of Aluminium Hydro-Chlorate (ACH). A temporary pallet bund is being used for the citric acid. The chlorine tanks are bunded however the bunding is in fair to poor condition and is proposed to be tested and if required, remediated.</p> <p><b>Recommend this action remain on the list until the Nightcap WTP Chemical Storage Upgrade works are completed in 2023/2024.</b></p>
Active	C3	Design and implement a stormwater management system to collect and treat runoff from the internal and external areas (incl. chemical storage areas) at Nightcap WTP. To include sealing all drains in bunded areas and removal of all penetrations and valves in bund walls.	<p><b>Status: Active</b></p> <p>Stormwater treatment basins have been installed at Nightcap WTP and are designed to stop pollutants in stormwater from entering the dam. Litter baskets have been installed, though it is noted that they were not in place in all drains at the time of site visit.</p> <p><b>Measures to complete action:</b></p> <p>Note that litter baskets should be re-installed immediately after being cleaned. Train staff in procedure and update relevant SWMS.</p>	<p>The Nightcap WTP lime dosing hoses are now being cleaned using citric acid re-circulation which eliminates the need for litter baskets and point of discharge collection. Bunds and bund drains, and valves will be addressed as part of the bulk chemical storage upgrade.</p> <p><b>Recommend this action remain on the list until the Nightcap WTP Chemical Storage Upgrade works are completed in 2023/2024.</b></p>

Status	Action No.	Description	GeoLINK Review - March 2021	Rous Staff comment – January 2022
			Sealing of all drains in bunded areas and removal of all penetrations and valves in bund walls is outstanding and will be addressed as part of bulk chemical storage upgrade. See comments relating to C2.	
Deferred	D6	Review all policies, plans and operational procedures to determine whether there is a need to integrate environmental controls/considerations. Revise plans, policies and operating procedures to reflect the Rous County Council Environmental policy guidance.	Deferred issue due to resource limitation. Environmental hazards /controls / considerations incorporated into work task risk assessments, project management framework, project design and development procedures.	Council's environmental protection commitments have been incorporated into the Land Management policy adopted by Council in April 2021. Environmental controls and considerations have been incorporated into business-as-usual practices across Council operations. <b>Recommend this action be marked complete.</b>
Deferred	D7	Develop Rous County Council policy/procedure on the undertaking of environmental impact assessment (EIA) for activities. This should identify the appropriate level of EIA for various types of activities.	Deferred issue due to resource limitation. Level of EIA is currently determined by the project manager responsible for the planning and design of the project and is generally commensurate to the scale of the project and level of environmental risk identified	The level of environmental assessment is currently determined by the project manager responsible for the planning and delivery of the project. <b>Recommend this action be marked complete.</b>
Deferred	D8	Develop an education module for integration with the staff induction process that introduces the Rous County Council Environmental policy and EMS. Integrate this module into the formal induction process.	Deferred issue due to resource limitation. Induction module not developed for general induction. Individual areas have their own specific inductions, so positions focussed on environmental functions of Council are inducted on Council's Environmental policy.	Council's Land Management policy adheres to the general state legislated principles of environmental protection. New staff are made aware of Council's policies and procedures during induction. <b>Recommend this action be marked complete.</b>
Deferred	D9	Review draft documentation, finalise and implement the following documents as required by the EMS: Register of Objectives and Targets, Environmental Management Program, Environmental Training and Awareness Program and Register, Environmental Document Control File and Register, and the Operational Control Register.	Deferred issue due to resource limitation. Superseded/obsolete. This documentation relates to procedures that support the implementation of an Environmental Management System. When Council adopted the revised Environmental policy on 17/9/2014 it abolished the EMS and so these outstanding procedures effectively became obsolete. Rather than a systems approach, RCC now relies on a risk assessment	This action is obsolete. <b>Recommend this action be removed from the EMS Action List.</b>

Status	Action No.	Description	GeoLINK Review - March 2021	Rous Staff comment – January 2022
			approach to identify and address environmental issues.	
Deferred	D11	Prepare an Energy Management Strategy and Plan for all Rous County Council activities and operations. Plan to include review of efficiency, maintenance and use of air-con, lighting, electrical equipment. Provide training to staff. Monitor effectiveness of staff awareness training.	Partially complete by actions completed for C7. Overall Energy Management Strategy not yet started due to resourcing limitations.	Consideration of energy efficiency is a key consideration for renewal and replacement of all Council assets including building facility assets. Energy efficient lighting and air conditioning has recently been installed in Council's administration building and is set on timers and thermostats to minimise energy wastage. An Energy Management Strategy is not a current priority of Council. <b>Recommend this action be removed from the EMS Action List.</b>
Deferred	D12	Review current paper usage, recycling system and waste disposal (incl. organic, trade, hazardous and electronic waste). E-waste includes fluorescent lights, mobile phones, printer cartridges etc. Organise waste type-specific waste collection service if required. Establish a system to monitor/quantify paper consumption and overall waste management performance. Provide training to staff.	When the EMS was abolished following adoption of the existing Environmental policy on 17/9/2014 the majority of the 'aspirational targets' that were identified through the EMS process were relegated to the deferred items listing. Whilst discrete actions relating to on-ground or direct actions were able to be assigned to asset managers, the aspirational targets – such as this were left on the 'deferred list.' Whilst such a scheme (and alternate ways of funding this approach) was considered at the time of the Rous Water restructure, no further action has been taken on this item.	Council has been progressively moving toward less paper usage through implementation of a digital records system. Recycling facilities are provided in staff work facilities as required. E-waste is responsibly recycled or disposed of. <b>Recommend this action be marked complete.</b>
Deferred	D13	Audit water consumption and efficiency within the Rous County Council. Review audit and identify actions as required. Ensure that water conservation measures are reinforced for water users in Rous County Council Centre. Establish a system to monitor/quantify water consumption. Train and educate staff/building occupants.	When the EMS was abolished following adoption of the existing Environmental policy on 17/9/2014 the majority of the 'aspirational targets' that were identified through the EMS process were relegated to the deferred items listing. Whilst discrete actions relating to on-ground or direct actions were able to be assigned to asset managers, the aspirational targets – such as this were left on the 'deferred list.' Whilst such a scheme (and alternate ways of funding this approach) was considered at the time of the Rous Water	Water efficiency programs have been run with staff. Signage and education on efficient water usage is provided through staff facilities. <b>Recommend this action be marked complete.</b>



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			restructure, no further action has been taken on this item.	
Deferred	LM4	Map and monitor relocated threatened species/ habitats within Rous County Council buffer zones using GIS. Ensure mapping is kept up to date.	When the EMS was abolished following adoption of the existing Environmental policy on 17/9/2014 the majority of the 'aspirational targets' that were identified through the EMS process were relegated to the deferred items listing. Whilst discrete actions relating to on-ground or direct actions were able to be assigned to asset managers, the aspirational targets – such as this were left on the 'deferred list.' Whilst such a scheme (and alternate ways of funding this approach) was considered at the time of the Rous Water restructure, no further action has been taken on this item.	Mapping is maintained by State Government databases. Threatened species/habitat mapping is accessed for environmental impact assessments related to projects as required. Rous regularly engages specialist ecologists to undertake in-field species surveys for project planning purposes to verify threatened species mapping. Duplication of mapping will lead to error or double handling. <b>Recommend this action be removed from the EMS Action List.</b>
Deferred	LM12	Complete the design of a catchment restoration program that shall fund the conduct of on-ground works on private property through the formal certification of carbon credits sequestered in native vegetation establishment. Develop regional partnerships as part of the establishment of this program. Secure formal certification of carbon credits sequestered in Rous County Council revegetation programs on Rous Water owned property.	When the EMS was abolished following adoption of the existing Environmental policy on 17/9/2014 the majority of the 'aspirational targets' that were identified through the EMS process were relegated to the deferred items listing. Whilst discrete actions relating to on-ground or direct actions were able to be assigned to asset managers, the aspirational targets – such as this were left on the 'deferred list.' While such a scheme (and alternate ways of funding this approach) was considered at the time of the Rous Water restructure, no further action has been taken on this item.	Council has developed and is implementing a greenhouse gas abatement strategy which identifies Council's agreed carbon reduction projects. Development of a catchment restoration program related to carbon credits is not a current priority of Council. <b>Recommend this action be removed from the EMS Action List.</b>
Semi-Complete	C6	Review the approved contractors pack with view to the inclusion of the Rous Water Environmental policy and associated procedures into the specification. The purpose of this review is to ensure that any approved contractor has in place an appropriate methodology for	<b>Status: Semi-Complete</b> Contractors' Handbook final is dated June 2014. Note however this information is not routinely provided to contractors. Ensure that contractor's handbook is provided to all contractors	Contractors' Handbook currently being reviewed for currency and whether a handbook is the best form for delivery of this information. <b>Recommend this action remain on the list until a position is adopted on its need and value.</b>



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		addressing the environmental impacts of their activities they are performing on behalf of Rous Water.		
Semi-Complete	LM2	Develop written procedure for the recording of catchment inspections.	<p><b>Status: Semi-Complete</b></p> <p>Refer to guide entitled <i>Catchment Surveillance Inspections Program</i> that has been established and is stored in hard copy on technical library at depot in sealed box. Inspection program entered into CONFIRM until 2016. Since 2016 catchment inspections have not been recorded through CONFIRM and have only been occurring on ad hoc basis. A suitable inspection frequency should be implemented, and all future inspections recorded through CONFIRM.</p>	<p>Catchment Inspection program and resourcing will be reviewed.</p> <p><b>Recommend this action remain on the list until a position is adopted.</b></p>
Semi-Complete	LM8	<p>(i) Ensure that spill control equipment is available at all locations where hazardous chemicals/fuels are stored, and for all vehicles that transport and/or use chemicals/fuels.</p> <p>(ii) Keep a register of spill control equipment.</p> <p>(iii) Conduct a regular inspection of all spill control equipment and ensure that all requirements are kept up to date.</p> <p>(iv) Ensure that all staff that use and/or transport chemicals/fuels have received training in the use of spill control equipment.</p>	<p><b>Status: Semi-Complete</b></p> <p>Spill control equipment inspections are recorded in CONFIRM (spill control checks undertaken as part of safety shower monthly checks). Note: all staff identified as handling chemicals have been trained in SWMS 79 and training recorded in PayGlobal HR system. Outstanding items - spill control equipment register, spill kit in all WTPO and WO utes that carry chlorine on a regular basis.</p>	<p>Outstanding items from this action - spill control equipment register, spill kit in all WTP Office and Water Operations vehicles that carry chlorine on a regular basis. This action has been tasked to the Dams and Treatment team to complete.</p> <p><b>Recommend this action remain on the list until it is completed.</b></p>