

Independent Environmental Representative Environmental Audit Report

ACTEW

MURRUMBIDGEE TO GOOGONG WATER TRANSFER

3RD AUDIT (OEMP IMPLEMENTATION)



FEBRUARY 2014

AUDIT DETAILS

AUDITED ORGANISATION	PROJECT
ACTEW	Murrumbidgee to Googong Water Transfer
ADDRESS	CONTACT DETAILS
Stromlo	May McDonald-Cox
DEPTH OF AUDIT	SCOPE OF AUDIT
Environmental	OEMP Implementation
DATE OF AUDIT	AUDIT CRITERIA
7 th February 2014	OEMP, Extraction and Gauging Plan, Geomorphological Monitoring Subplan, Flow Management Plan, Stream Flow and Water Quality Monitoring Subplan, Biodiversity Management and Offset Plan, Ecological Monitoring Subplan, Project Approval 08_0160, EPL 13322, EPBC Approval 2009/5124
PERSONS CONTACTED	AUDIT TEAM
May McDonald-Cox	Erwin Budde, nghenvironmental – Lead auditor
PREVIOUS AUDIT DATE	PREVIOUS AUDIT REFERENCE
February 2013 and August 2013	nghenvironmental (March 2013, August 2013)
NOTE:	
This audit follows on from the documentation audits conducted in February 2013 and August 2013.	

AUDIT SUMMARY

Environment:

This was the third audit of the operation phase of the Murrumbidgee to Googong Water Transfer Project (M2G) by the Independent Environmental Representative (ER). It involved an audit of compliance against the implementation of the Project’s operational management plans, including the OEMP and subplans. As the revised Draft plans had not yet been submitted to the regulators for approval at the time of the audit, the currently approved versions were audited.

The audit included interviews and a desktop-based review of records and plans. Site and project knowledge collected during previous construction-phase audits conducted by the ER were also relied upon. The focus was on the implementation of the OEMP.

The audit found broad compliance was being achieved and OEMP implementation was satisfactory. Close-out of audit findings is ok, although the OEMP is yet to be reviewed/approved. There is good response to issues/incidents and a proactive and adaptive management approached through the delivery of monthly toolboxes and nocturnal surveys.

ACTEW continue to demonstrate a proactive, responsive attitude towards managing environmental compliance on M2G. Staffs remain dedicated, resourceful and adaptive towards implementing the system.

Four (4) Observations of Concern were issued at the close out meeting.

Signed: _____
Principal’s Representative

Date:

Signed: 
Lead Auditor

Date: 20/02/2014

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1. REPORT SUMMARY

1.1 INTRODUCTION

This audit represents the third (3rd) independent environmental representative audit conducted on the operational phase of the M2G Project.

At the time of the audit, the following operational activities were being undertaken:

- On-going water quality monitoring
- On-going landscape rehabilitation, including weed control
- On-going terrestrial and aquatic ecology monitoring, including of the Offset site

1.2 SCOPE OF AUDIT

The audit scope for this audit was the implementation of Operational Environmental Management Plan (OEMP), the relevant Subplans and relevant licence and project approval documents. The following plans and regulatory approvals were audited (all versions were that approved by DoPI):

- OEMP
- Extraction and Gauging Plan
- Geomorphological Monitoring Subplan
- Flow Management Plan
- Stream Flow and Water Quality Monitoring Subplan
- Biodiversity Management and Offset Plan
- Ecological Monitoring Subplan
- Project Approval 08_0160
- Environmental Protection Licence 13322
- EPBC Approval 2009/5124

The operational water release system was not audited during this audit as no operational flows have been conducted. Notwithstanding this, a desktop audit of the flow rules was conducted.

1.3 SUMMARY OF CORRECTIVE ACTIONS

There were no Corrective Action Requests (CARs) during the audit.

1.4 SUMMARY OF OBSERVATIONS OF CONCERN

The following Observations of Concern (OoC) were identified and explained to ACTEW during the audit Closing Meeting. They are considered to be deficiencies in meeting specified requirements, which if not addressed, may lead to a risk of non-compliance.

OoC No.	Section of Report	Details
001	3.4	<p><i>Reference: Noise Management Plan</i></p> <p>The Noise Management Plan does not outline a procedure for responding to noise complaints.</p> <p>By way of background, it is noted that a Noise Compliance Study was conducted which found noise levels at several locations during the monitoring event were above the Approved Project levels. After consultation with NSW and ACT agencies, it was agreed that no further noise mitigation would be undertaken unless complaints were received.</p>
002	3.2.3	<p><i>Reference: OEMP Section 3.1.7 and ISO14001 Management Review</i></p> <p>The OEMP requires an annual management review be conducted of the environmental management system. The details provided in the OEMP reflect the requirements of ISO 14001:2008 in relation to Management Reviews. It is noted that ACTEW have completed a full review of the OEMP. However, this is not considered to constitute a Management Review in accordance with the OEMP or ISO 14001.</p>
003	3.2.2	<p><i>Reference: OEMP Roles and Responsibilities Section 3.1 (Draft OEMP)</i></p> <p>The Manager, Regulations, Compliance and Quality is noted to have the responsibility for ensuring compliance of the project against legal and other requirements. This responsibility is not considered appropriate to sit with this person, instead it should be at a higher managerial level.</p>
004	3.2.6	<p><i>Reference: OEMP Internal Auditing Section 8.1</i></p> <p>The OEMP requires a program for internal auditing be undertaken, with the OEMP and subplans audited at least once per year. It is noted that ACTEW have relied on the independent audits conducted by the ER to fulfil this latter commitment. Notwithstanding this, a program of internal auditing of compliance with the OEMP and subplans has not been initiated.</p>

2 AUDIT PROCESS

2.1 OPENING MEETING

An opening meeting was held on the morning of the 7th February.

2.2 CLOSING MEETING

A closing meeting was held in the afternoon of the 7th February.

2.2 SITE INSPECTION

No site inspection was undertaken during this audit.

2.3 DESIGNATED FOLLOW-UP

A follow-up of the audit findings will be managed by the ACTEW Environment Manager to verify the completion of all corrective actions. The next IER Audit will be conducted in August 2014.

2.4 PREVIOUS ENVIRONMENTAL AUDIT

This audit followed-up Corrective Action Requests (CARs) and OoCs raised at the previous environmental compliance audit conducted on 29th August 2013 and is summarised below:

Table 2-1: Summary of Observations of Concern raised on the previous environmental audit (Aug 2013)

OoC No.	Details	Closed Out Y/N	Comment
001	<p><i>Reference: Condition of Approval 2.9, with reference to the Project Approval</i></p> <p>Reporting of performance against the stated Objective of the Offset Plan could be improved. The Objective states that the condition of the offset site shall be 'maintained or improved'. Currently, all reporting against this objective is done through the twice yearly Monitoring Reports. Whilst these reports contain detail of condition at the time of the monitoring event, and some notes are made of whether there has been any changes since the previous monitoring event, there is no reference to the condition relative to the baseline position.</p>	Y	Ecological Pty Ltd has modified report. 2013 Spring report has baseline values against commitment values.

OoC No.	Details	Closed Out Y/N	Comment
002	<p><i>Reference: Condition of Approval 2.9, with reference to the Project Approval</i></p> <p>One of the stated objectives of the Offset site (Section 4.4 of the Offset Management Plan) is to monitor changes to fauna habitats present in the offset site. This is currently not being reported in the Monitoring Reports.</p>	Y	Fauna is being addressed. Nocturnal survey completed (Anabat Trapping). This is included in the Spring 2013 report.
003	<p><i>Reference: Condition of Approval 6.5, with reference to the EPBC Act Approval Condition 1 and Condition 2</i></p> <p>Flow Rules Trigger Values – The audit found that several trigger values (e.g. N, P, Fe, Mn) may have a significant lag time between a water transfer event and when data on the trigger parameter is available. This represents a risk to the environment in that impacts may have occurred, or continue to occur, for a substantial period of time (up to 45 days) before action is taken.</p> <p>Flow Rules Drought Conditions – The flow rules restrict when water may be transferred depending upon current flows in the Murrumbidgee River. Two different values may apply, one for normal climatic conditions and another for drought conditions. The normal climatic condition values are programmed into the management computers and thus automatically prevent water transfer from occurring if conditions are not met. The drought condition values are not automated in a similar fashion and require manual intervention. This is considered to pose a risk and could result in water transfers occurring in breach of the flow rules.</p>	Y	<p>Flow rules trigger values - remains open. Re-defined in the FMP.</p> <p>Drought conditions flow rules – completed a review of the risks of operator’s knowledge. There will be a system in place after 18 months. It will be a manual system rather than automated.</p> <p>FMP to be modified to include a detailed description of decision making process.</p>

Table 2-2: Summary of Corrective Action Requests raised on the previous environmental audit (Feb 2013)

CAR No.	Details	Closed Out Y/N	Comment
001	<p><i>Reference: NSW Condition of Approval 7.1</i></p> <p>The OEMP does not contain incident response procedures. It is noted that a Draft procedure has been prepared after an incident occurred in December 2012, with approval by ACTEW imminent. The auditor refers ACTEW to the specific incident notification requirements of the NSW Protection of the Environment Operations Act 1997.</p>	Y	Closed out during audit on 29/08/2013

002	<p><i>Reference: Flow Management Plan Section 3.2 Flow Rules</i></p> <p>The Flow rules state that ‘The only exception to the above [flow rules] is when.....’. In essence, this paragraph indicates that the flow rules do not apply during ‘maintenance flows’ or flows required for purposes other than to provide water to Googong Reservoir. This appears to contravene NSW CoA 2.3 and 2.4, and could possibly contravene license requirements. The issue appears to be in the definition of ‘operation’, which ACTEW consider to be pumping for the purposes of providing water to the ACT, as distinct from pumping for the purposes of maintenance. It is considered that this narrow definition of ‘operation’ may potentially breach statutory operating conditions.</p> <p>It also has broader implications for the project, particularly where monitoring requirements are triggered when the pipeline is operating. A narrow definition of operation could result in monitoring not occurring, and impacts going unnoticed.</p>	Y	Closed out during audit on 29/08/2013
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Table 2-3 Summary of Observations of Concern raised on the previous environmental audit (Feb 2013)

OoC No.	Details	Closed Out Y/N	Comment
001	<p><i>Reference: overall environmental management system for the M2G</i></p> <p>This audit has found that the management system for the environmental management of the M2G project is reasonably complex, with duplication of management activities across several key areas including ecological monitoring and terrestrial ecology management. The system could be simplified by combining and integrating plans, thus minimising the potential for overlooking commitments and actions due to duplication.</p> <p>The audit has also found that a number of plans relied upon by ACTEW in the operational phase were developed for construction (namely the Landscape Rehabilitation Management Plan, the Noise and Vibration Management Plan and the Terrestrial Ecology Management Pan). These plans contain irrelevant information and may contribute unnecessarily towards the complexity of the system mentioned above. It is noted that the operational management actions contained in these plans are mostly due to be completed within the next 6 months.</p>	N	OEMP has been revised and ER has reviewed revisions. The OEMP has not yet been provided to the regulators for their Approval.

OoC No.	Details	Closed Out Y/N	Comment
002	<p><i>Reference: OEMP (Draft Jan 2013) Section 3.1.7 Responsibility of the Manager Ecological Monitoring and Biodiversity and Manager Environmental Impacts and Sustainability</i></p> <p>One of the stated responsibilities in the draft OEMP (Jan 2013) for the Manager Ecological Monitoring and Biodiversity and Manager Environmental Impacts and Sustainability is 'ensuring that the OEMP is implemented and maintained'. Given the distribution of roles within ACTEW, resulting in several people having implementation responsibilities for different parts of the OEMP, it is considered that this statement is ambiguous and does not reflect the actual distribution of responsibility for implementing components of the OEMP across ACTEW.</p>	N	OEMP has been revised and ER has reviewed revisions. The OEMP has not yet been provided to the regulators for their Approval.
003	<p><i>Reference: OEMP Section 5 – Standards and Performance Measures</i></p> <p>Objectives 1 and 2 have targets which are considered impractical and unachievable. Whilst these targets could conceivably be objectives, it is considered that more tangible, achievable and realistic targets should be set.</p>	N	Being updated in revised OEMP.
004	<p><i>Reference: OEMP Section 5 – Standards and Performance Measures</i></p> <p>The OEMP does not include any mechanisms for tracking, and reporting, performance of the objectives. Performance measures and targets should be tracked, regularly reviewed, and reported to management to demonstrate the effectiveness of the OEMP in managing the environmental performance of the project.</p>	N	Being updated in revised OEMP.
005	<p><i>Reference: OEMP Section 6 – Compliance Tracking Program – Operations (Routine Monitoring)</i></p> <p>The OEMP states that the results of routine monitoring will be provided to NSW DP&I, OEH and DPI, as required. 'As required' is considered too ambiguous in the context of reporting important information, and a more specific table of reporting commitments should be provided in the OEMP to ensure ACTEW meets all reporting requirements and expectations of external agencies.</p>	N	Being updated in revised OEMP.

OoC No.	Details	Closed Out Y/N	Comment
006	<p><i>Reference: OEMP Section 10 Record Keeping and Document Control</i></p> <p>The Document Control Procedures are not consistent with the ACTEW corporate document control procedures.</p>	N	Being updated in revised OEMP.
007	<p><i>Reference: Community Information Plan</i></p> <p>DoPI and the ER are not identified as possible contact people for landowners to contact in the case of a grievance or unresolved issue with ACTEW.</p>	Y	Closed out during audit on 29/08/2013
008	<p><i>Reference: Geomorphologic Monitoring Sub Plan</i></p> <p>The Annual Report prepared by GHD/ALS contains only a short summary of the results of the geomorphologic monitoring program. The summary does not allow ACTEW to demonstrate that the GMP is being fully implemented, and leaves gaps in the data.</p>	Y	Closed out during audit on 29/08/2013
009	<p><i>Reference: Geomorphologic Monitoring Sub Plan (GMP)</i></p> <p>The GMP does not define 'operation', and hence the monitoring frequency/program is ambiguous. As it reads, it would appear that monitoring is to occur 2-monthly for several parameters, whereas it appears the intent is to monitor two-monthly when the project is transferring water.</p>	N	Addressed in letter to agency. GMP will be incorporated into AEMP – this reflects the detail of the letter.
010	<p><i>Reference: Ecological Management Plan Section 8</i></p> <p>The roles and responsibilities stated in the Plan do not reflect the actual roles and responsibilities of staff in charge of overseeing and implementing this plan.</p>	N	As per OoC 002.

3 DETAILS OF AUDIT FINDINGS – ENVIRONMENT

This section details the findings of the audit report. It only details those findings requiring action.

3.1 PREVIOUS AUDITS

Two previous audits on operational environmental compliance were conducted on 13th and 14th February 2013 and the 29th August 2013.

3.2 OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN (OEMP)

A review of the OEMP was undertaken.

3.2.1 Incident Management

Incident response – two incidents recorded on Guardian.

1. pH release – September 2013
 - During drainage of the pipeline, the operator was looking at SCADA trends and noticed pH was increasing, indicating a failure in the CO₂ dosing system.
 - The CO₂ dosing system was stopped, then started again. It then stopped again, by which time the pipeline was empty.
 - The Operator notified the ES Manager (Chris). Assessment was made based on volume of water, pH, and previous events, in consultation with specialise consultants. The Burra Creek gauging station was checked, which reported no non-compliance with pH parameters. It was thus determined that it was not likely to have had an environmental incident.
 - Group Water Manager would have been alerted. She would have looked into the root cause. Secondary investigation to look at improving the system.
2. Notification requirements during a maintenance (APPLE) run – December 2013
 - Notifications – single notification was prepared for weed spraying and APPLE run. The relevant customer service staff was sick therefore verbal notification was provided (phone) inside the 7-day notification period. As a result, no letter was sent out, however weed spraying did occur. The weed spraying contractor started spraying before notification went out and hit a fence. The landholder contacted ACTEW, who repaired the fence.
 - An incident report was lodged. May notified customer service. It was escalated to the Group Water Manager. Guardian would have sent email to Quality. Bronwyn did not get notified – this is an issue but not essential.
 - The responsible person in this case was SEQR.
 - As no interaction with the environment occurred, no environmental incident report was prepared.
 - Guardian is relied upon for notification. This can sometimes take a long time to lodge in Guardian. This can result in not meeting notification requirements.
 - The resulting enquiries found that there was a breakdown in communications at the notification stage, coupled with staff absenteeism due to sickness.
 - There will be a workshop to review this and come up with a new way of doing it.
 - Ultimate issues was that landholders were not notified 7 days prior to weed contractor being on site
 - Response is that a workshop is being held to review internal process

The Emergency Response Management Plan and Offset Management Plan now cover bushfires.

3.2.2 Management Structure

Group Water Manager is responsible for the M2G environmental awareness training that is delivered yearly.

Group Manager SEQR is responsible for obtaining CO₂ offsets. These offsets include annual offsets in WA/Parkes 25-30,000ton/years. Contract for 900,000 tonnes over 30 years.

The OEMP states that the Manager, Regulation, Compliance and Quality is responsible for ensuring overall compliance of the project. It is considered that this role is not the most suitable for this responsibility.

Observation of Concern 3.

3.2.3 Management Review

The OEMP requires an annual management review be conducted of the environmental management system. The details provided in the OEMP reflect the requirements of ISO 14001:2008 in relation to Management Reviews. It is noted that ACTEW have completed a full review of the OEMP. However, this is not considered to constitute a Management Review in accordance with the OEMP or ISO 14001. **Observation of Concern 2.**

3.2.4 Training

Induction is given by various ACTEW personnel depending on who is appropriate with environmental input as required. An annual environmental refresher is undertaken for all treatment staff and was last held in November 2013.

Other training includes monthly toolboxes in the office and out in the field. Training for environmental staff includes weekly environmental team meetings. Presentations are made at these meetings. Topical and extended training is held as required.

3.2.5 Environmental Monitoring

Geomorphology Annual – Completed (Refer to latest ERG Report)

Surface Water MEMP – Completed (Refer to latest ERG Report)

Landscape and Offset Site – Completed (Refer to latest ERG Report)

Compliance Status – Completed and sighted this audit

Incidents – no incidents

Annual Performance Report (Cth) – October 2013. Endorsement from the Cth is available on website.

3.2.6 Auditing

No internal audits – low risk due to the two external audits per year. If the external auditing is scaled back, the risk increases. It is recommended that at least one internal audit is done after year two years of operation, or if the external auditing is scaled back.

It is recommended to add at 'Scope' column to the audit program spreadsheet.

The OEMP requires a program for internal auditing be undertaken, with the OEMP and subplans audited at least once per year. It is noted that ACTEW have relied on the independent audits conducted by the ER to fulfil this latter

commitment. Notwithstanding this, a program of internal auditing of compliance with the OEMP and subplans has not been initiated. **Observation of Concern 4.**

3.3 FLOW MANAGEMENT PLAN

The last maintenance flow (Apple) occurred on approximately the 10th December 2013. During this maintenance flow issues were experienced with the hydraulics at the HLPS and CO₂ dosing.

Testing of the screens - seasonality pushed the run to happen before mechanics were ready.

Egg screens were tested. Findings report due soon.

A maximum transfer of 20ML/day over 24 hours is being achieved. Total transfer approximately 30ML.

Next run will be undertaken at the end of February as there is currently not enough water in the river for a flow run.

3.4 NOISE AND VIBRATION MANAGEMENT PLAN

An orifice plate was installed at the LLPS to overcome inefficiencies with the CO₂ dosing system. However, high levels of audible noise was found to occur, and therefore the plate was removed.

No complaints regarding noise have occurred during the audit period.

There is not enough data at the moment on noise impacts of the pipeline due to the lack of any operational flows.

By way of background, it is noted that a Noise Compliance Study was conducted which found noise levels at several locations during the monitoring event were above the Approved Project levels. After consultation with NSW and ACT agencies, it was agreed that no further noise mitigation would be undertaken unless complaints were received. The Noise Management Plan does not outline a procedure for responding to noise complaints.

Observation of Concern 1.

3.5 ECOLOGICAL MONITORING SUBPLANS

The recently completed Annual report for geomorphology is much more detailed than the previous report. It is a summation of all geomorphological monitoring done to date, including usual inspection in April and October 2013.

Based on the aquatic ecological monitoring it appears to demonstrate that maintenance flow impacts are overshadowed by natural flow impacts. There is the possibility to scale back monitoring during maintenance flows.

Autumn 2013 – Full report.

Spring 2013 (November) – Observation report with full report forthcoming.

Full reports are available on the website.

Fish monitoring has been undertaken in the Murrumbidgee every year but it is proposed to extend this out to once every two years in the near future. Fish monitoring is conducted in Burra Creek every two years.

3.6 TERRESTRIAL ECOLOGY & OFFSET MANAGEMENT PLAN

Two 'control plots' have been established at Angle Crossing Road near the highway and the other near the cattle grid, in accordance with the ERG's recent request.

Goat trapping has been undertaken in August 2013 and is ongoing. Goat trapping has been very successful.

Night time fauna surveys were undertaken after finding the sugar glider within the Offset site. A nocturnal survey was undertaken including spotlighting, anabat and frog surveys over two nights. Six frogs, one mammal (possum) and eight bats were recorded. It is noted that this was a proactive response to an onsite observation, and went beyond the requirements of the OEMP.

Recent observations of deer have also been made on site.

Weed control has been completed for this season (summer). Next weed control is planned for winter.

3.7 LANDSCAPE REHABILITATION MANAGEMENT PLAN

The BWA maintenance period has expired, including weed control they were responsible for, and now ACTEW is in the process of taking over management of landscaping.

To date, only three monitoring plots have met the KPI's which represents 8 landholders. These landholders have all signed off on rehabilitation being complete (for one of them only one of the two plots on his property achieved rehab, the other is still outstanding). No change has occurred over summer, with rehabilitation stalling recently due to the weather and possibly land capability.

9 landholders property's remains outstanding, meaning they have not met the rehabilitation KPIs. ACTEW consider that it is becoming more difficult to achieve the KPI's and it is unlikely that they will be achieved in the medium term. At this stage, will continue to be monitored and adaptively managed. Examples of maintenance include weed control and watering of failed plants. Weed maintenance (Section 5.3.6) requires a minimum of two years of weed management, but many properties owners have negotiated more than this.

Two properties are still under 'construction' (Hehir & McDonalds).

ATTACHMENT A

Observations of Concern Issued at the Close-Out Meeting

Observation of Concern (OoC) Form

OoC No.: 001

Audit Date: 7th February 2014

Activities Under Review: All operational components of the M2G project

Audit Criteria: OEMP, OEMP subplans and Environmental Management Plans

Type of Audit: External Audit Internal Audit

Requirement (Standard Clause #, procedure #):

Noise Management Plan

Observation:

The Noise Management Plan does not outline a procedure for responding to noise complaints.

By way of background, it is noted that a Noise Compliance Study was conducted which found noise levels at several locations during the monitoring event were above the Approved Project levels. After consultation with NSW and ACT agencies, it was agreed that no further noise mitigation would be undertaken unless complaints were received.

Proposed Action:

Date action is to be completed by: Prior to submission of revised Noise Management Plan to agencies for approval

Action taken:

Client Representative Name:

Signature:

Date:

Observation of Concern (OoC) Form

OoC No.: 002

Audit Date: 7th February 2014

Activities Under Review: All operational components of the M2G project

Audit Criteria: OEMP, OEMP subplans and Environmental Management Plans

Type of Audit: External Audit Internal Audit

Requirement (Standard Clause #, procedure #):

OEMP – Management Review

ISO 14001 – Management Review

Observation:

The OEMP requires an annual management review be conducted of the environmental management system. The details provided in the OEMP reflect the requirements of ISO 14001:2008 in relation to Management Reviews. It is noted that ACTEW have completed a full review of the OEMP. However, this is not considered to constitute a Management Review in accordance with the OEMP or ISO 14001.

Proposed Action:

Date action is to be completed by: Before the end of the 2nd year of operation of the project

Action taken:

Client Representative Name:

Signature:

Date:

Observation of Concern (OoC) Form

OoC No.: 003

Audit Date: 7th February 2014

Activities Under Review: All operational components of the M2G project

Audit Criteria: OEMP, OEMP subplans and Environmental Management Plans

Type of Audit: External Audit Internal Audit

Requirement (Standard Clause #, procedure #):

OEMP – Roles and Responsibilities (draft OEMP)

Observation:

The Manager, Regulations, Compliance and Quality is noted to have the responsibility for ensuring compliance of the project against legal and other requirements. This responsibility is not considered appropriate to sit with this person, instead it should be at a higher managerial level.

Proposed Action:

Date action is to be completed by: Prior to submission of revised Noise Management Plan to agencies for approval

Action taken:

Client Representative Name:

Signature:

Date:

Observation of Concern (OoC) Form

OoC No.: 004

Audit Date: 7th February 2014

Activities Under Review: All operational components of the M2G project

Audit Criteria: OEMP, OEMP subplans and Environmental Management Plans

Type of Audit: External Audit Internal Audit

Requirement (Standard Clause #, procedure #):

OEMP – Internal Auditing

Observation:

The OEMP requires a program for internal auditing be undertaken, with the OEMP and subplans audited at least once per year. It is noted that ACTEW have relied on the independent audits conducted by the ER to fulfil this latter commitment. Notwithstanding this, a program of internal auditing of compliance with the OEMP and subplans has not been initiated.

Proposed Action:

Date action is to be completed by: The end of the 2nd year of operation of the project

Action taken:

Client Representative Name:

Signature:

Date:

ATTACHMENT B

Audit Documentation



Annual M2G Environmental Management Refresher Training

Trainers: May McDonald-Cox
 Date: 4/12/13
 Venue: Corin Room Mitchell
 Time: 10:00 – 10:30

Surname	First name	Signature	Branch
Burgess	Walter	W.B.	Treatment
Jordan	Richard	Ryan	Treatment
Stebbins	Arthur	[Signature]	Field Services
1 on 16/12/13			

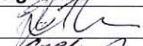


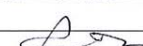



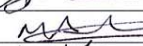
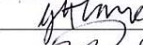
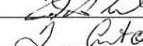
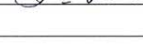

ACTEW Water a business name owned by ACTEW Corporation Limited ABN 86 069 381 960.



+ Incident Response plan Awareness

Annual M2G Environmental Management Refresher Training

Trainers: May McDonald-Cox
 Date: 15/11/13
 Venue: Training Room 2 Mitchell
 Time: 10:00 – 10:30

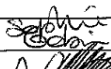
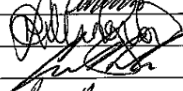
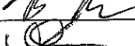

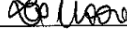
Surname	First name	Signature	Branch
TURNER	Elizabeth		Water ops
KHADKA	Sagar		Water Asset planning
JACKSON	Jeremy		Cust. Service s.
BOTTARI	Marco		WATER OPS.
AVENELL	Ann		
BROWN	Amanda		Water ops
SMITH	James		
SCAYSBROOK	Nathan		Cust Service
PURVES	Timothy		Water Network Planning
SLUSSER	SHANE		Marat
ACKLAND	MARK		Marat
ALANNE	GLEN		WATER ASSET PLANNING
THIRLELL	JONATHAN		
ANTONSEN	TROND		WATER ASSET PLANNING

ACTEW Water a business name owned by ACTEW Corporation Limited ABN 86 069 381 960.



Annual M2G Environmental Management Refresher Training

Trainers: ~~May McDonald-Cox~~ BENJAMIN BRYANT
Date: 25/11/13
Venue: Training Room 2 Mitchell
Time: 2:00 – 2:30

Surname	First name	Signature	Branch
AVENELL	Ann		
BHANDARI	Rajesh		
GOBIN-ALLAN	Sophie		Customer Support Water
LEWRY	Amanda		
LILLINGTON	Peta		Customer Support Water Operations
PATRICK	Cameron		
PRATT	Rick		Water ops
ROLFE	Amber		Customer Support
THIRKELL	Jonathan		
MOORE	ZOE		REM.

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Tool Box Talks

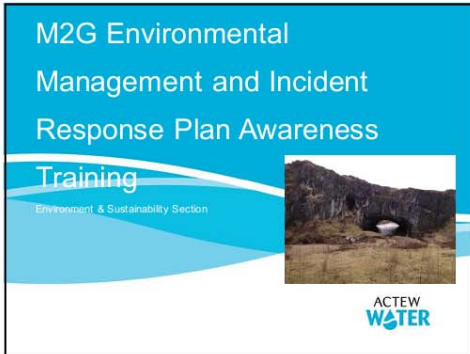
Toolbox Talk schedule 2014

#	Year	Month	Field Operations / Contractors	Office
12.	2013	December	Quarterly Report SLAM	Quarterly Report SLAM

#	Year	Month	Field Operations / Contractors	Office (STRO, MIT, LMWQCC)
1.	2014	January	Office & Vehicle Safety	Office & Vehicle Safety
2.		February	Personal Protective Equipment (PPE) & PPE Hygiene Environmental advice services – Bronwen Butterfield	Personal Protective Equipment (PPE) Environmental advice services – Bronwen Butterfield
3.		March	Quarterly Report Incident Reporting / Guardian & WorkSafe Reporting EHN virus awareness – James Gray	Quarterly Report Incident Reporting / Guardian & WorkSafe Reporting EHN virus awareness – James Gray (Craig Hardge, Chris Pulkkinen, John Hyam)
4.		April	Contractor Management PCS-ActewAGL Code of Practice – Benjamin Bryant	Contractor Management Carbon and energy action plan – what can I do to help? – Kris Robinson (Bronwen Butterfield, Benjamin Bryant, John Hyam)
5.		May	Emergency Planning – Field & Process Operations Work in or on waterways – Benjamin Bryant	Emergency Planning – Office Work in or on waterways – Benjamin Bryant (James Gray, Lara Odell, Jane Fredericks)
6.		June	Quarterly Report Manual Handling Noise and vibration minimisation – Alastair Smith	Quarterly Report Manual Handling PCS-ActewAGL Code of Practice – Lara Odell (Alastair Smith, Benjamin Bryant, Miranda Gardner)
7.		July	Safe Work method Statements Heritage protection awareness – Alastair Smith	Safe Work method Statements Heritage protection awareness – Alastair Smith (Miranda Gardner, Benjamin Bryant, John Hyam)
8.		August	Bushfire Preparation & Planning Threatened flora and fauna – Craig Hardge	Bushfire Preparation & Planning IPaD Sustainability Approach and Infrastructure Sustainability Rating for Googong WTP Chemical Dosing Facility – Kris Robinson & Benjamin Bryant (Bronwen Butterfield, Sally Wright)
9.		September	Quarterly Report Fitness for Work – Fatigue Management Bushfire preparedness – Jane Fredericks	Quarterly Report Fitness for Work – Fatigue Management Bushfire preparedness – Jane Fredericks (Benjamin Bryant, Craig Hardge, Alastair Smith)
10.		October	Hazardous Substances & Storage Weed and pest management – Craig Hardge	Hazardous Substances & Storage Weed and pest management – Craig Hardge (James Gray, Jane Fredericks, Miranda Gardner)
11.		November	Drug & Alcohol Awareness & EAP Dust control – May McDonald-Cox	Drug & Alcohol Awareness & EAP Results of the environmental monitoring program – John Hyam (Chris Pulkkinen, James Gray, May McDonald-Cox)
12.		December	Quarterly Report SLAM Environmental incident response and notification – Benjamin Bryant	Quarterly Report SLAM Environmental incident response and notification – Benjamin Bryant (Bronwen Butterfield, Chris Pulkkinen, May McDonald-Cox)

#	Year	Month	Field Operations / Contractors	Office
1.	2015			

2/17/2014



M2G Environmental Management and Incident Response Plan Awareness Training
Environment & Sustainability Section
ACTEW WATER

1. M2G Incident Response Plan (IRP)
M2G 003 (intranet, Policy and Process documents)

Overview of Plan

- Site Information
- Incident Response Hierarchy & Responsibilities
- Incident Response Equipment
- Incident Preparedness
- Incident Response
- Appendix 1 – Generic Incident Response Plan
- Appendix 2 – Work Safety Incident Response Plan
- Appendix 3 – Environmental Incident Response Plan
- Appendix 4 – Damage to M2G Assets Response Plan
- Appendix 5 – Damage to Private Property Response Plan
- Appendix 6 – Fire Response Plan
- Appendix 7 – Flood Response Plan
- Appendix 8 – Contact List
- Appendix 9 – Site Plan

Outline

M2G INCIDENT RESPONSE PLAN


1. M2G Incident Response Plan – awareness training

M2G ENVIRONMENTAL MANAGEMENT

2. M2G Environmental approval conditions
3. Overview of M2G Operation Environment Management Plan and sub-plans
4. M2G Pipeline Rehabilitation, Offsets and Access

M2G CONTACTS

5. M2G environmental roles and responsibilities



2. M2G Environmental Approvals

- There are ~1,300 environmental approval conditions associated with the M2G which ACTEW Water must meet.
- Environmental conditions are met through M2G Management Plans, M2G projects and ACTEW Water processes.
- ACTEW Water is regularly audited on compliance with these conditions with reports provided to the regulator.
- Governance arrangements include the Environmental Reference Group, compliance tracking, environmental incident management and Management Plan review.

1. M2G Incident Response Plan (IRP)
M2G 003 (intranet, Policy and Process documents)

- M2G licensed under NSW Pipelines Act
- Requirement of the Act to have an IRP
- IRP aligns with existing ACTEW Incident/Emergency Response procedures:
 - ACTEW Water Supply and Sewerage Plan
 - Environmental Incident Response and Notification (ES 004)
 - M2G Environment Investigation and Notification Procedure (M2G 005)

2. M2G Approvals – Environmental Themes


- Landscape rehabilitation (revegetation, weeds, soil stabilisation);
- Plant, animal and habitat protection;
- Noise and vibration minimisation;
- Heritage protection;
- Dust control;
- Waterway protection;
- Waste management
- Environmental emergencies



2/17/2014


3. M2G Operation Environment Management Plan (OEMP)

- Statutory arrangements
- Management structure
- Environmental framework
- Performance measures
- Record keeping, document control, compliance tracking & auditing
- Environmental monitoring
- Communication, consultation & training



4. Offset Area Management

- South of Williamsdale, east of Monaro Hwy
- Approval requirement to offset losses - 110 Ha
- Large purple areas are M2G offsets
- Includes EPBC listed Box-gum woodland
- Management sub-plans to inform decisions
- 6 monthly monitoring and adaptive management



3. OEMP Sub Plans

- Operational sub plans exist for the offset area, flow rules and water quality, environmental monitoring, social interaction and compliance tracking.
- Many construction sub plans also exist but most are not relevant to operation (a few are relevant for the 1st year of operation).




4. M2G Easement Access

- Operation Property Interaction Plans
- Written notice (7 days) for easement access – through Customer Service
- No notice required for reactive emergency activities
- Specific Access Conditions
- MKC Access



4. M2G Pipeline Corridor Rehabilitation

- Revegetation monitoring
- Weed monitoring and control
- Soil stabilisation



- (revegetation complete on 6 out of 17 properties)

5. M2G Environmental Roles & Responsibilities (1)

	Kirilley Dickson – Group Manager Safety, Environment, Quality and Regulation <ul style="list-style-type: none"> • Regulatory Engagement • Carbon Offsets
	Bronwen Butterfield – Manager Environment & Sustainability <ul style="list-style-type: none"> • Oversees Environment Regulatory Compliance • Resources & Budget • Environment Reference Group (Secondary ACTW Representative)
	May McDonald-Cox – Environmental Impacts Officer <ul style="list-style-type: none"> • EIS/DA Comments Custodian • Easement Property Interaction Plan (PIP) Custodian • DA VET Custodian (including training & auditing) • Safety & Operating Committee (Environmental Representative) • Environmental Reference Group (Secretary)
	Chris Pulkkinen – Senior Environmental Project Officer <ul style="list-style-type: none"> • Environmental Monitoring & Adaptive Management • Flow Rules • Environment Reference Group (Primary ACTW Representative)

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5. M2G Environmental Roles & Responsibilities (2)



Craig Hardge – Senior Environmental Projects Officer
 • Off-site Monitoring & Management
 • Pipeline Rehabilitation Management



Mario Bottari – Water Quality Officer
 • Water Quality Monitoring
 • Aquatic Ecology Monitoring & Management

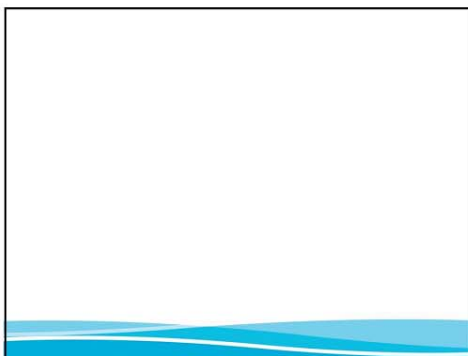


Benjamin Bryant – Regulation, Compliance and Quality
 • Oversees Environment Regulatory Compliance

Plant, Animal and Habitat Protection

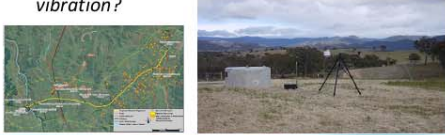
- *Why do we have to protect plants and animals?*
- *What you need to do..*






Noise and Vibration Minimisation

- *Why is noise & vibration important?*
- *What are the issues from noise & vibration?*
- *What should we be doing about noise & vibration?*



Weeds

- *Why do we manage weeds?*
- *What are the risks associated with weeds?*
- *How to prevent the spread of weeds...*



Heritage Protection

- *Why do we need to protect heritage?*
- *What are the risks in working with heritage?*
- *How should we manage heritage?*



Do-fuse activities such as fence top and building works are done in a way that does not damage heritage and are managed in a way that does not damage heritage.

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Dust Control

- *Why do we need to control dust?*
- *What are the main sources of dust?*
- *What should we be doing about it?*



Environmental Emergencies

- *Why do we need to have an emergency response?*
- *What are environmental emergencies?*
- *What should we be doing about it?*



Waterway Protection

- *Why do we need to protect waterways?*
- *What are the risks of working in or near waterways?*
- *What should we be doing about it?*



Waste Management

- *Why do we need to minimise waste?*
- *What are the main sources of waste?*
- *What should we be doing about it?*

