HV Line Clearance Management Plan

Contents

1. INTRODUCTION

1.1 Background

Opal ANZ Pty Ltd is identified by the Electricity Safety Act 1998 to have electric line clearance responsibilities. Under regulation 9(2) of the Electricity Safety (Electric Line Clearance) Regulations 2020 (the 2020 regulations) this includes preparation of an electric line clearance management plan. This HV Line Clearance Management Plan is for the financial year 1st July 2024 to 30 June 2025.

A Line Clearance Management Plan must be prepared before 31st March in each year.

1.2 Purpose

To ensure that high voltage overhead power lines at the Maryvale Mill are managed in compliance with the Electricity Safety (Electric Line Clearance) Regulations 2020.

2. SCOPE

This procedure applies to the high voltage overhead power lines that run from Maryvale Substation to No. 4 Paper Machine and from Maryvale Substation to the Effluent Plant and No. 5 Paper Machine.

3. ACCOUNTABILITIES

Maryvale Mill personnel and Contracting personnel with responsibilities and authorities for activities covered within this Work Procedure are shown in Section 7 of this document.

This Line Clearance Management plan is authorised by the Electrical Automation Manager.

4. OBJECTIVE

The objectives of this Management Plan is:

- maintain electrical safety for onsite personnel;
- provide electrical safety for the workplace;
- prevent the ignition of bushfires;
- protect areas of important vegetation;
- manage vegetation with minimum effect on the environment;
- ensure continuity of power supply to production equipment; and

- comply with the requirements of the Electricity Safety (Electrical Line Clearance) Regulations 2020.

5. LEGAL AND OTHER REQUIREMENTS

The Electricity Safety (Electric Line Clearance) Regulations 2020 details the requirements of managing clearance of vegetation near overhead power lines.

Sub-regulation 9(2) of the Line Clearance Regulations states that:

"A responsible person that is not a major electricity company, before 31 March in each year, must prepare a management plan relating to compliance with the Code for the next financial year".

Sub-regulation 10(2) of the Line Clearance Regulations states that:

"The responsible person must provide a copy of the management plan to Energy Safe Victoria within 14 days after a written request from Energy Safe Victoria or such longer period as specified by Energy Safe Victoria in the written request".

Under sub-regulation 10(2) of the Line Clearance Regulations, Opal ANZ Pty Ltd is only required to submit its plan to Energy Safe Victoria (ESV) if it is requested to do so by ESV.

To ensure up-to-date information is available, this document is kept in a centralised electronic document control system. In order to meet the legislative requirements, a copy of this plan can be made available by request to the main entrance gate-house to the Maryvale Mill (manned 24 hours a day).

Security/First Aid personnel can access the document in the document control system by searching for "HV Line Clearance Management Plan", or by searching for the document number "Original ID 40312". As per the requirements of Sub-regulation 10(6) of the Electricity Safety (Electric Line Clearance) Regulations 2020, the HV Line Clearance Management Plan is published on the Opal ANZ Australian Paper internet site.

This management plan can be accessed via the following link:

https://opalanz.com/sustainability/sustainability-performance/

To provide an audit process, this document will be kept in the Mill document control system, with the document requiring annual review by the responsible person (Electrical & Automation Manager). This review will trigger the responsible person to ensure that compliance with the Line Clearance Regulations is being maintained. The authorisation date for this document is the Version Date given by the document control system, which is shown in the document header. The revised HV Line Clearance Management Plan will be published on the Opal ANZ Australian Paper internet site by 1 July each year and the superseded HV Line Clearance Management Plan is removed from the Internet site. This management plan can be accessed via the following link:

https://opalanz.com/sustainability/sustainability-performance/

6. OPERATIONS MANAGEMENT SYSTEM

Opal ANZ Australian Paper's Maryvale Mill has extensive policies and procedures in place to ensure that responsibilities for meeting regulatory requirements are properly defined. These policies and procedures are kept within an electronic document control system to maintain version control, and provide easy access via the mill's internal computer network.

A Line Clearance Management Plan must be prepared before 31st March in each year and all related regulations and standard will be checked as part of the yearly review process.

Procedures of particular relevance include:

- MG-RD-0216.003 Operations Management System (Maryvale).
- MG-SEP-2316.001 Regulatory Compliance.
- MG-SEP-0116.002 Organisation and Accountability.
- Organisation Chart.
- Quality Management System ISO9001:2008 Certification
- Major Hazard Facility Licence to Operate

7. REGULATION 9: PREPARATION OF A MANAGEMENT PLAN

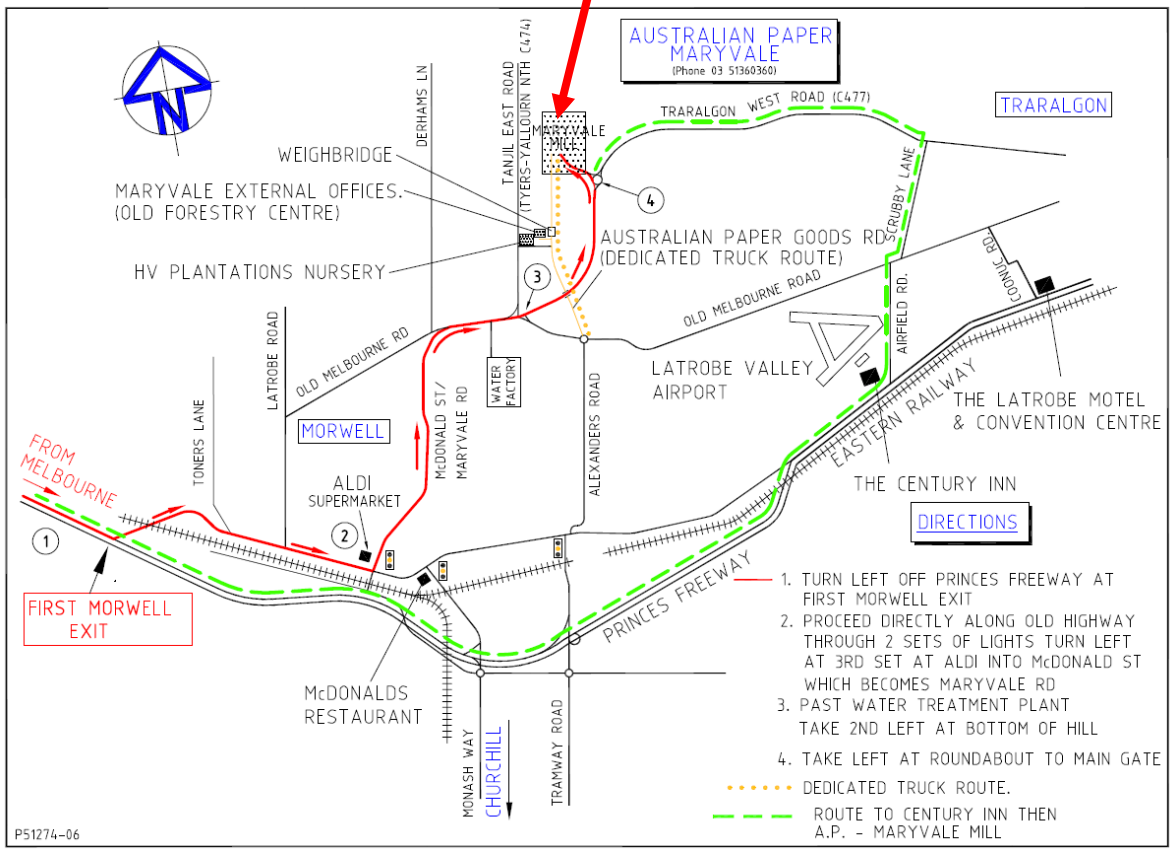
(Electricity Safety (Electric Line Clearance) Regulations 2020)

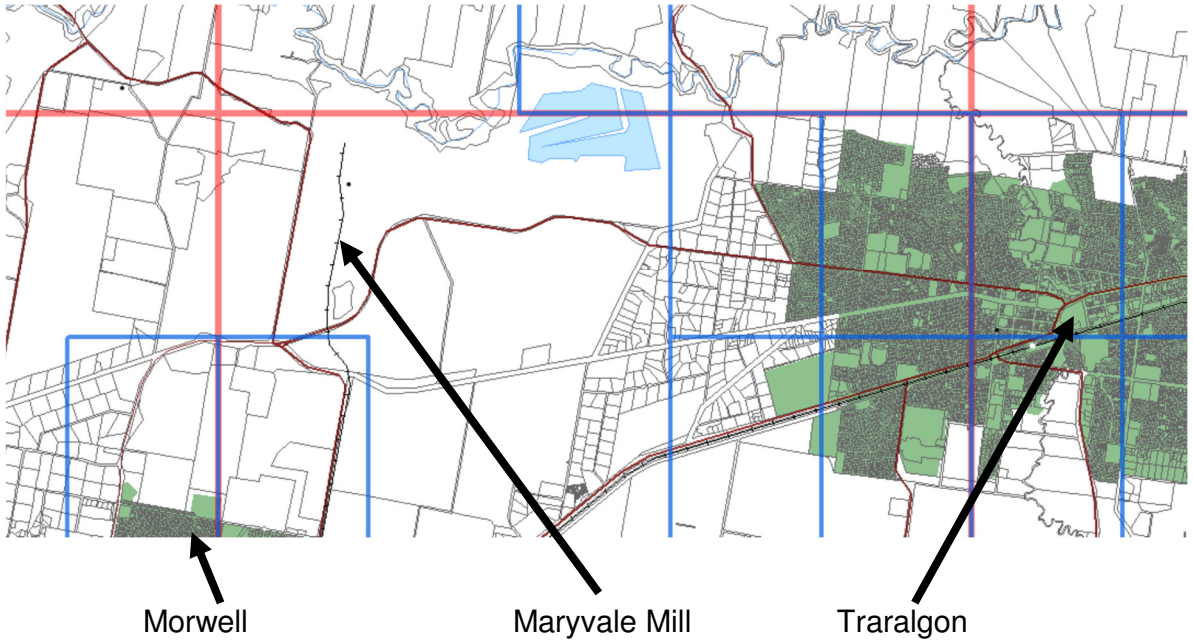
Regulation 9 Sub-regulation 4	**Opal ANZ Australian Paper Maryvale Mill Electrical Line Clearance Management Plan**
A responsible person must ensure that a management plan prepared under sub-regulation (2) or (3) specifies the following—	
(a) **the name, address and telephone number of the responsible person;**	**Responsible Person and Authorises the Management Plan:** Masanobu Iizuka – Chief Executive Officer Opal ANZ Australian Paper Maryvale Mill Traralgon West Road (PO Box 37) MORWELL VIC 3840 Telephone: 03 9730 5440
(b) **the name, position, address and telephone number of the individual who was responsible for the preparation of the management plan;**	**Prepares the Management Plan:** Bahram Ghafari – Senior Automation Engineer Opal ANZ Australian Paper Maryvale Mill Traralgon West Road (PO Box 37) MORWELL VIC 3840 Telephone: 03 5136 0543 0478 489 959 **Reviews and approves the Management Plan:** Maria Creighton – Electrical & Automation Manager Opal ANZ Australian Paper Maryvale Mill Traralgon West Road (PO Box 37) MORWELL VIC 3840 Telephone: 03 5136 0392 0466 945303

(c) **the name, position, address and telephone number of the persons who are responsible for carrying out the management plan;**	**Responsible for carrying out the management plan:** Lyndon Davey – Team Leader Central E/I Workshop Opal ANZ Australian Paper Maryvale Mill Traralgon West Road (PO Box 37) MORWELL VIC 3840 Telephone: 03 5136 0885
(d) **the telephone number of a person who can be contacted in an emergency that requires clearance of a tree from an electric line that the responsible person is required to keep clear of trees;**	**Emergency Contact:** The Maryvale Mill site is manned 24 hours a day, every day of the year. Emergency contact numbers are listed below in order of priority: Shift Manager: 03 51360459 Security/Gate: 03 51360360 Power Plant Senior Operator: 03 51360467
(e) **the objectives of the management plan;**	The objectives of this Management Plan are to: - maintain electrical safety for the public; - provide electrical safety for the workplace; - prevent the ignition of bushfires; - protect areas of important vegetation; - manage vegetation with minimum effect on the environment; - ensure continuity of power supply to production equipment; and - comply with the requirements of the Electricity Safety (Electrical Line Clearance) Regulations 2020.

(f) **the land to which the management plan applies (as indicated on a map);**	The Maryvale Mill is located between Morwell and Traralgon, approximately 160km east of Melbourne.

Location of overhead power lines at Maryvale Mill



(g) **any hazardous bushfire risk areas and low bushfire risk areas in the land referred to in paragraph (f) (as indicated on the map);**	The Maryvale Mill is in an area that has not been classified by the Country Fire Authority (CFA) as having a low fire hazard rating. As such, it has been defined as a Hazardous Bushfire Risk Area, as shown on this map from the 2011 edition of 'fire hazard ratings for the Electricity Safety Act 1998'. (Low fire risk rating areas are shaded green)  During the annual review of this document the CFA web site will be consulted to determine if the Bushfire Risk of the Maryvale Mil site has changed.

(h) **each area that the responsible person knows contains a tree that the responsible person may need to cut or remove to ensure compliance with the Code and that is—** **(i) indigenous to Victoria; or** **(ii) listed in a planning scheme to be of ecological, historical or aesthetic significance; or** **(iii) a tree of cultural or environmental significance;**	There are no trees that can encroach within the minimum clearance space specified in the Line Clearance Regulations that are: (i) indigenous to Victoria; or (ii) listed in a planning scheme to be of ecological, historical or aesthetic significance; or (iii) are of cultural or environmental significance.   Pole 1: looking North Pole 8: looking East

(i) **the means which the responsible person is required to use to identify a tree of a kind specified in paragraph (h)(i), (ii) or (iii);**	Identification of a tree of a kind specified in paragraph (h)(i), (ii), or (iii) is not required as there are no trees near the 22kV overhead power lines that run through cleared private property on the Maryvale Mill site.
(j) **the management procedures that the responsible person is required to adopt to ensure compliance with the Code, which must—** **(i) include details of the methods to be adopted for managing trees and maintaining a minimum clearance space as required by the Code; and** **(ii) specify the method for determining an additional distance that allows for cable sag and sway for the purposes of determining a minimum clearance space in accordance with Division 1 of Part 3 of the Code;** (A) must specify the method for determining an additional distance that allows for conductor sag and sway; and (B) may provide for different additional distances to be determined for different parts of an electric line span;	Maryvale Mill manages the maintenance of equipment using a Computerised Maintenance Management System (CMMS). This includes 'Programmed Maintenance' (PM) tasks for: – M04896: Overhead lines, annual inspection; – M04897: Overhead switches, annual inspection; – M04898: Overhead switches, 6-yearly maintenance; and – Programmed Maintenance 1225: Inspection of Overhead Lines & Poles by an ESV approved Asset Inspector every 36 months. An annual inspection of the overhead lines shall be undertaken to ensure compliance prior to, and for the duration of, the declared fire danger period, and will include: – Visual checking to verify there is no tree or vegetation near the overhead power line, as it is not anticipated that any cutting or removal of trees will be required within the specified 'No Go Zone' or the minimum clearance space. – If close approach to the lines is required for any reason, the lines will be isolated and earthed, and permits issued, as detailed by organisational High Voltage operating procedures, which follow the principles outlined in the Code of Practice of Electrical Safety for Work on or Near High Voltage Electrical Apparatus (the 'Blue Book'). – If any 'hazard trees' or 'significant trees' are identified, Opal ANZ Australian Paper will engage a suitably qualified arborist to assess the tree and recommend appropriate action (National Certificate 3 in Horticulture and Arboriculture including AHCARB408 - Perform a ground-based tree defect evaluation training module, and at least 3 years field experience in assessing trees). – If vegetation clearance is required within the minimum clearance space, Opal ANZ Australian Paper will engage a competent and experienced tree removal contractor employing people with appropriate and current training in Certificate II in ESI Power line Vegetation Control (UET20321). The Cert II ESI training units of the person who are to carry

Note

Clause 21(2) of the Code requires a distribution company or an owner or operator of a railway or tramway supply network that is consulted by a Council to assist the Council by determining an additional distance.

out the inspection, cutting or removal of trees must be current and align with their work roles, including applicable refreshers. This should be verified by consulting an RTO. For example, EWP operators require a high risk work license and the relevant training modules in ESI Cert II Power line Vegetation Control (UETDRVC004 and UETDRVC007).

– Visual checking that no “hazard trees” exist that are likely to fall onto or otherwise come in contact with the overhead power line.

– The check for hazard trees has regard to foreseeable local conditions, including weather.”

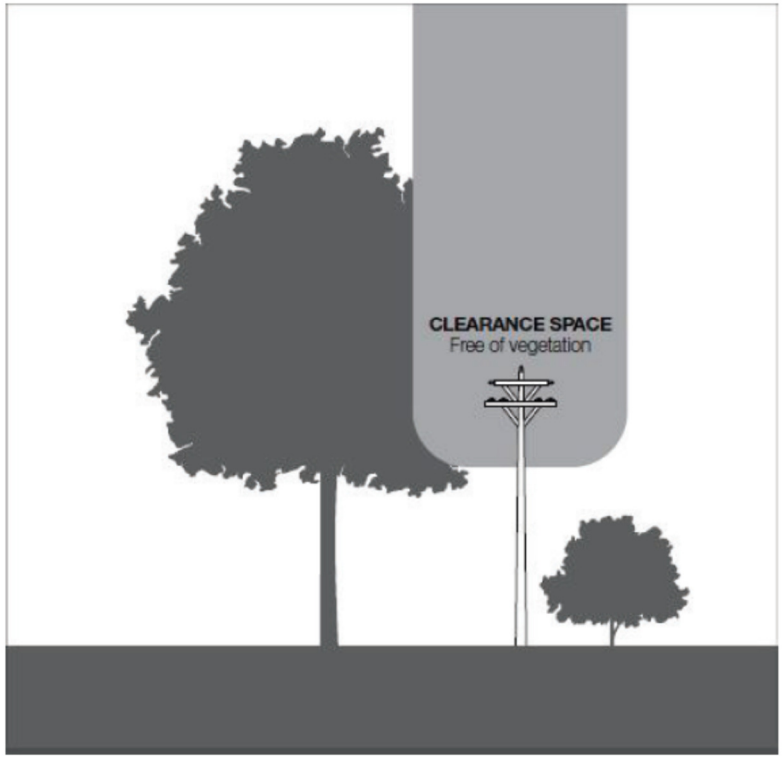
The 22kV overhead lines covered under this Management Plan are supported by 16 concrete poles. The 22kV overhead power lines run through cleared private property. The Maryvale Mill site has been used for industrial production since the 1930’s. There are no trees that can encroach within the minimum clearance space specified in the Line Clearance Regulations. Any small bushes or trees that regrow from the ground are detected during routine inspections and removed before they can encroach within the minimum clearance space specified in the table provided below. The code of practice for Electric Line Clearance (Code clause 28) provides a formula that can be used to calculate the “applicable distance” of a span. The additional distance that allows for cable sag and sway in the middle two thirds of the longest span (123.5m) is 3300mm and has been applied to all spans. Using this formula the permitted minimum clearance space for each of the spans of 22kV line on the Maryvale Mill site are shown calculated in the table below.

Start		Finish	Span (metre)	The minimum clearance space (mm) for spans shorter than 45m is 1500mm and the minimum clearance space (mm) for spans in HBRA longer than 45m is 1500+((Span-45)*(500/303))+3300 (The additional Sag and sway for the longest span 123.5m)
Pole 1	to	Pole 2	19.0	1500
Pole 2	to	Pole 3	101.6	4893
Pole 3	to	Pole 4	105.5	4900
Pole 4	to	Pole 5	39.9	1500
Pole 5	to	Pole 6	104.3	4898
Pole 6	to	Pole 7	123.5	4930
Pole 7	to	Pole 8	99.0	4889
Pole 8	to	Pole 9	103.8	4897
Pole 9	to	Pole 10	103.8	4897
Pole 10	to	Pole 11	103.8	4897
Pole 11	to	Pole 12	107.7	4903
Pole 12	to	Pole 13	115.3	4916
Pole 13	to	Pole 14	48.1	4805
Pole 14	to	Pole 15	66.1	4835
Pole 13	to	Pole 13E	120.6	4925

It is noted that the Code of Practice for Electric Line Clearance (Code clause 28) allows a minimum clearance space of 1500mm for the first and last sixths of a span. However as any tree clearing is unlikely, Maryvale Mill will comply with the larger distances given in the table for the entire span. The distances shown in the table shall be applied as indicated in Figure 5 of the Code of Practice for Electric Line Clearance (Code 28).

FIGURE 5—UNINSULATED 66 000 VOLT ELECTRIC LINE IN A LOW BUSHFIRE RISK AREA AND UNINSULATED ELECTRIC LINE IN A HAZARDOUS BUSHFIRE RISK AREA

Clauses 27, 28 and 29, Graphs 4, 5 and 6



NOT TO SCALE

(k) **the procedures to be adopted if it is not practicable to comply with the requirements of AS 4373 while cutting a tree in accordance with the Code;** **Note** Clause 10 of the Code requires a responsible person to cut trees, as far as practicable, in accordance with AS 4373.	As there are no trees near the 22kV overhead power lines that run through cleared private property on the Maryvale Mill site, it is not anticipated that any cutting will be required. If in the future any tree cutting is required it will be done in accordance with AS4373 Pruning of Amenity Trees.
(l) **a description of each alternative compliance mechanism in respect of which the responsible person has applied, or proposes to apply, for approval under clause 31 of the Code;**	No alternative compliance mechanism is applied or proposed.
(m) **the details of each approval for an alternative compliance mechanism that—** **(i) the responsible person holds; and** **(ii) is in effect;**	No alternative compliance mechanism is held or in effect.

(n) **a description of the measures that must be used to assess the performance of the responsible person under the management plan;**	It is not anticipated that any tree clearing will be required to maintain the minimum clearance space, thus no targets are set regarding tree clearing operations. This document will be stored in a document control system, which will include a requirement for annual review. This review will trigger an audit to ensure that the annual 'PM' task for line inspection has been carried out. Performance of the Maintenance Manager is monitored annually via a performance review with the Mill Manager. This review includes measures relating to safety and reliability of equipment.
(o) **details of the audit processes that must be used to determine the responsible person's compliance with the Code;**	Section 8 of this document includes and annual review of this plan and audit of compliance. This will be updated each year with a statement of compliance and any other relevant information. The responsible person for audit has a suitable qualification like Electrical Engineer and competent level of knowledge and experience with the related regulations and standards.
(p) **the qualifications and experience that the responsible person must require of the persons who are to carry out the inspection, cutting or removal of trees in accordance with the Code and the Electricity Safety (General) Regulations 2019[2];** **Note** Regulation 616(2) of the Electricity Safety (General) Regulations 2019 sets out specific requirements for qualified persons carrying out vegetation management work.	As trees are not allowed to grow near the overhead power line, it is not anticipated that any cutting or removal of trees will be required within the specified 'No Go Zone' or the minimum clearance space. If close approach to the lines is required for any reason, the lines will be isolated and earthed, and permits issued, as detailed by organisational High Voltage operating procedures, which follow the principles outlined in the Code of Practice of Electrical Safety for Work on or Near High Voltage Electrical Apparatus (the 'Blue Book'). If, in the future, any 'hazard trees' or 'significant trees' are identified, Opal ANZ Australian Paper will engage a suitably qualified arborist to assess the tree and recommend appropriate action (National Certificate 3 in Horticulture and Arboriculture including AHCARB408 - Perform a ground-based tree defect evaluation training module, and at least 3 years field experience in assessing trees). If, in the future, vegetation clearance is required within the minimum clearance space, Opal ANZ Australian Paper will engage a competent and experienced tree removal contractor employing people with appropriate and current training in Certificate II in ESI Power line Vegetation Control (UET20321). The Cert II ESI training units of the person who are to carry out the inspection, cutting or removal of trees must be current and align with their work roles,

	including applicable refreshers. This should be verified by consulting an RTO. For example, EWP operators require a high risk work license and the relevant training modules in ESI Cert II Power line Vegetation Control (UETDRVC004 and UETDRVC007). Access to the Maryvale Mill site is tightly controlled to comply with Major hazard Facility requirements. Any person coming on site to perform tree removal will be required to complete a site induction and be in possession of an access pass issued by Maryvale Mill. Currency of training and qualifications of personnel engaged in vegetation maintenance work near the overhead power line will be checked will be checked before issuing a site pass.
(q) **notification and consultation procedures, including the form of the notice to be given in accordance with Division 3 of Part 2 of the Code;**	The overhead power line runs entirely over cleared private property, owned by Opal Australian Paper. It is not anticipated that any tree-clearing will be required. If, in the future, vegetation clearance is required, there are no identified affected parties.
(r) **a procedure for the independent resolution of disputes relating to electric line clearance;**	The 22kV overhead power lines run entirely through cleared private property owned by Opal Australian Paper. Due to current management practices there are no foreseeable disputes that could arise from clearing of vegetation near the power lines. Thus this plan does not include any dispute resolution process. For more general consultation on community issues the Maryvale Mill hosts a Community Consultative Committee, which includes members from management, local government, the Environment Protection Agency, and community members.
(s) **if Energy Safe Victoria has granted an exemption under regulation 11 relating to a requirement of the Code, details of the exemption or a copy of the exemption.**	No exemption has been granted.

8. ANNUAL MANAGEMENT PLAN REVIEW AND AUDIT OF COMPLIANCE

During the document update, section 8 was updated to capture the completion of the 2025 annual review of the management plan, as well as the results of the 2025 annual audit of the planned PM tasks.

PM Number	PM Title	WO Number Date Completed
M04896	Overhead lines, annual inspection	The last inspection was on 7/6/2024 through WO 55031468. Planning to re-inspect before end of June 2025.
M04897	Overhead switches, annual inspection	The last inspection was on 6/6/2024 through WO 53128202. Planning to re-inspect before end of June 2025.
M04898	Overhead switches, 6-yearly maintenance	The last inspection was on 27/5/2024 through WO 55031671. Planning to re-inspect before end of May 2030.
Programmed Maintenance 1225	Inspection of Overhead Lines & Poles by an ESV approved Asset Inspector every 36 months.	The last inspection was on 23/06/2024 through WO 55029795. Planning to re-inspect before end of June 2027.

Based on the completion of these preventative maintenance tasks and a visual inspection of the overhead lines that I have undertaken, I am satisfied that we are complying with the requirements of this Management Plan.

Bahram Ghafari, Senior Automation Engineer