Trial Plan and Agreement

Project Name

Delivery Contractor

|  |  |
| --- | --- |
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**DOCUMENT AND VERSION STATUS**

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| TEMPLATE VERSION | DETAILS | DATE |
| T-1.0 | Template – November 2024 | XX/XX/XX |
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DOCUMENT STATUS

The document status will be updated as the Trial Plan and Agreement is developed. The stages are outlined as follows:

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| DOCUMENT STATUS | REVISION DETAILS | DETAILS |
| DRAFT PLAN (OPTIONAL) | A, B, C… | Submission of Trial Plan (Section 2) to relevant stakeholders for review and input. |
| DRAFT AGREEMENT | 1, 2, 3…. | Submission of Trial Agreement (Section 3), for review by relevant stakeholders (asset owner, delivery agency etc.) |
| UPDATED DRAFT AGREEMENT | 1, 2, 3…. | Submission of updated document, as per any feedback received from approving agencies. |
| APPROVED FINAL | 1, 2, 3…. | Approved trial agreement. |

REVISION DETAILS OF THIS PLAN

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REVIEW AND APPROVAL

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| REVIEWER | ROLE | SUGGESTED REVISIONS | SIGNED | DATE |
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# Overview

## Recycled First Policy

The Victorian Government introduced the State’s Circular Economy Policy called Recycling Victoria in February 2020. A key intent of the Recycling Victoria Policy is to optimise the use of recycled and reused Victorian materials in transport infrastructure projects.

The Recycled First Policy supports the Recycled Victoria circular economy strategy by increasing the use of recycled and reused materials in infrastructure construction. The Recycled First Policy applies to all Victorian major transport infrastructure projects awarded since March 2020.

Access to the full policy can be found here: [Recycled First Policy - Victoria’s Big Build](https://bigbuild.vic.gov.au/about/ecologiq/recycled-first).

## Template Scope

This template is intended for use by Victoria Infrastructure Delivery Agency (VIDA) projects, to document all key stages through the life of a trial. This template is targeted to trials of products containing recycled materials, though may be adapted for technologies and products with broader sustainability benefits.

This document is intended to be a live document and is expected to be updated as the trial progresses, including lessons learned and outcomes captured throughout the trial.

## Target Audience

This template shall be completed by VIDA projects, in collaboration with their delivery partner. The template is designed to support trial planning, and to communicate key aspects of proposed/approved trials to key stakeholders. These key stakeholders will be unique to each trial, though may include the asset owner, designers and contractors.

This document may also be used to share between project teams and programs, to facilitate knowledge share and create awareness of trials undertaken and their learnings.

## How to Use

The development of a trial idea is a complex task. Refer to “Product and Material Trials for Recycled Material Use – Reference Guide November 2024” for more information and guidance on how to identify suitable products for trial and match those to VIDA projects and programs.

**Section 2: Trial Plan**

Section 2 of this template serves to guide teams through the development and planning of new trials, and their design, construction, monitoring and reporting. This Section is optional to complete.

As every project is different, this component of the template is provided as a guide only. Not all fields may be relevant to every trial, and there may be additional information relevant to the successful development of a trial that is not captured in this template. Prompting questions are provided to assess the value of the proposed trial. It considers early planning; determination of trial objective; funding; timelines; product performance; environmental and workplace health and safety factors; risks; site selection; approvals; reporting and exit strategy. Refer to “Product and Material Trials for Recycled Material Use – Reference Guide November 2024” for more context.

**Section 3: Trial Agreement**

Section 3 of this template is typically to be completed by project teams and delivery partner submitted to and endorsed by Delivery Agency, in this case MRPV Project team. Other interested parties’ endorsement may be needed by asset owner/ operator and collaborating parties such as ecologiQ or Sustainability Victoria.

This supports documentation of finalised details for site evaluation and selection, product design, construction, performance monitoring and reporting. This Section is intended for trial concepts that are formalised and have been given endorsement to progress by the relevant asset owner and key stakeholders. This will accompany any required Recycled First, VIDA and asset owner contractual documentation.

**Section 4: Trial Outcomes**

Section 4 of this template may be used to document trial outcomes, once constructed, and facilitate knowledge share and awareness of the trial learnings. Refer to “Product and Material Trials for Recycled Material Use – Reference Guide November 2024” for more information on effective reporting and knowledge dissemination.

# Trial Plan

This Section outlines key considerations for planning a trial, include evaluating its benefit to broader industry. They factors are important to consider upfront, as it will inform who the key stakeholders are, and the construction, performance monitoring and reporting requirements. This Section is optional to complete.

Refer to “Product and Material Trials for Recycled Material Use – Reference Guide November 2024” for more information when completing this Section.

The Reference Guide will also be a valuable resource in consolidating a trial idea, and ensuring it is fit for purpose for a VIDA environment. Initial idea generation does not need to be documented in this template, though it is expected it will inform much of the information captures through this Section.

Table 1 shall be completed with the summary details of the proposed trial and its stakeholders.

Table - Proposed trial details

|  |  |  |
| --- | --- | --- |
|  | Item | Response |
| 1 | Delivery Agency: |  |
| 2 | Delivery Partner: |  |
| 3 | Technical Partner: |  |
| 4 | Asset Owner: |  |
| 5 | Proposed Trial Product/Application: |  |
| 6 | Proposed Project Construction Start & Finish Dates: |  |
| 7 | Proposed Monitoring Timeline (Months/ Years): |  |

Table 2 shall be completed with a summary of the trial scope and key considerations. Include and reference any relevant Attachments throughout this table, where more information is required.

Table - Proposed trial plan

| Topic | Item | Response | |
| --- | --- | --- | --- |
| Idea Validation | What problem or opportunity will this trial address? i.e., a specific waste stockpile, enhanced performance, increased safety. |  | |
| What are the objectives of the trial? This should relate to the identified problem or opportunity. i.e., target a waste stockpile, or update a specification. |  | |
| Does the trial support the increased use of recycled materials? | Choose an item. | |
| Is the recycled material used a high priority waste stream? i.e. plastic, rubber, concrete. | Choose an item. | |
| Is there a sufficient market/demand for the product? i.e. consider the ecologiQ Demand Model and the required volumes of this product/its conventional counterpart. |  | |
| Will the use of the product result in a reduction in use of virgin materials? | Choose an item. | |
| Does the product and its supply suit a major project application? | Choose an item. | |
| Has the whole of life sustainability been considered? i.e., recyclability at end of life, embodied carbon or design life? |  | |
| Does the use of the product provide benefits to consumers i.e., increased design life, lower emissions, enhanced safety? |  | |
| Does the product meet current standards and specifications, and has it been tested by an independent certified testing organisation? |  | |
| If not, will this trial result in a change to current standards and specifications, or development of a new standard or specification? |  | |
| Is a trial required? i.e, justify why the product cannot already be used under standard approval mechanisms. |  | |
| Partners and Stakeholders | Who will need to be engaged for successful delivery and execution of trial outcomes? Consider assigning responsible to each partner, via a RACI matrix. | | |
| Supplier |  | Choose an item. |
| Asset Owner |  | Choose an item. |
| Delivery |  | Choose an item. |
| Technical Advisors |  | Choose an item. |
| Contractors |  | Choose an item. |
| Other (ecologiQ, peak industry body, research partner) |  | Choose an item. |
| What stakeholder engagement activities will need to be undertaken? |  | |
| Costs and Funding | What is the estimated trial cost? (if it can be shared) i.e., research and development costs, construction costs, monitoring and report costs. |  | |
| How will the trial be funded? Is this funding secured or is the trial dependant on finding a funding source? Will the project contribute to funding the trial? |  | |
| Timelines | What is the estimated construction date? | Click or tap to enter a date. | |
| Are there any critical approvals unique to the trial and when will they be required by, to ensure construction may proceed? |  | |
| What is the proposed monitoring timeframe and frequency? i.e., every 6 months for 2 years. |  | |
| Product Details and Performance | What pre-trial product assessment has been undertaken, or is required? i.e., testing undertaken by an independent certified testing organisation, comparison standards and specifications, case studies applications. |  | |
| What are the key supplier claims? i.e., performance enhancements, service life, cost savings, workplace health and safety benefits. |  | |
| What performance indicators need to be measured, how often and who will evaluate this data? Consider pre-trial monitoring to establish a base-case. |  | |
| Site Considerations | What are the key site selection criteria? i.e., climate, location, traffic conditions. If a site is already proposed, document here. |  | |
| Is a control site feasible, if so, what site characteristics will be required? |  | |
| Health, Safety and Environmental | Have any workplace health and safety or environmental risks associated with the product production or trial placement been identified? If there are, have mitigation measures been established? |  | |
| Does the product have an Environmental Product Declaration or other product certification (ideally identifying emissions/ circularity)? |  | |
| What are the workplace health and safety requirements? This should include all stages of processing, production, placement, maintenance and future recycling of the trial product. |  | |
| Approvals and Agreements | What permits and approvals are required? i.e., approvals or permissions from the asset owner, regulatory requirements, such as Environmental Protection Act or associated legislation. |  | |
| Consider how and if confidentiality is required to be managed, i.e., in the case of a propriety product. |  | |
| Exit Strategy, Outcomes and Reporting | How are the trial outcomes going to be reported and shared? i.e., what the proposed reporting activities, their frequency and expected recipients. |  | |
| What is the intended outcome at completion of trial? i.e., is there an intention to update a standard, specification or industry practice at close of the trial? Have all relevant stakeholders agreed upon the required outcomes to achieve this? |  | |
| What is the proposed exit strategy in the case of product failure or determination that the product is not fit-for-purpose. i.e., an agreement/proposed plan for who will accept the risk and cost of product replacement should it be required. |  | |

## Attachments

Outline any attachments that have been provided to support the content in this Section. This may include:

* Cost/funding breakdown.
* Stakeholder map/matrix.
* Timeline summary of key activities.
* Supporting research, i.e., literature review, key supplier claims, preliminary testing results, evaluation against standards and specifications, and case studies of comparable applications.
* Market evaluation, i.e. volume of waste generated cost comparison to virgin materials, location and availability; viability of product market.
* Environmental Product Declaration, or other third-party certifications.
* Risk/hazard assessment.
* Relevant standards, specifications, permits and/or legislation.

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# Trial Agreement

The Section is to be completed by whomever is leading the trial (VIDA project/program, or contractor) and submitted to the Delivery Agency to confirm requirements for endorsement, as this may differ for each trial. This documents the site evaluation and selection, product design, construction, performance monitoring and reporting conditions. This Section is compulsory for a proposed trial.

Refer “Product and Material Trials for Recycled Material Use – Reference Guide November 2024” more information when completing this Section.

Table 3 shall be completed with the summary details of the trial and its stakeholders.

Table 3 - Trial details

|  |  |  |
| --- | --- | --- |
|  | Item | Response |
| 1 | Delivery Agency: |  |
| 2 | Delivery Partner: |  |
| 3 | Technical Partner: |  |
| 4 | Asset Owner: |  |
| 5 | Proposed Trial Product/Application: |  |
| 6 | Proposed Project Construction Start & Finish Dates: |  |
| 7 | Proposed Monitoring Timeline (Months/ Years): |  |

Table 4 shall be completed with key contact details of trial stakeholders.

Table - Key contacts

|  | Name | Organisation | Role/Responsibility | Contact Details |
| --- | --- | --- | --- | --- |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |

Table 5 shall be completed to document the site, design, construction, monitoring and reporting details of the trial, for endorsement. Include and reference any relevant Attachments throughout this table, where more information is required.

Table - Site, design, construction, monitoring and reporting details

| Phase | Item | Response |
| --- | --- | --- |
| Site | Site address: |  |
| Pre-trial monitoring plan: |  |
| Visitor/observation plan: |  |
| Design | Expected performance outcomes/performance targets: |  |
| Limit for intervention, i.e. set failure limits for the performance parameters being monitored: |  |
| Product and/or application design, e.g., standard drawings, mix design: |  |
| Pre- and post-construction sampling and testing plan: |  |
| Health and environmental risk reporting, i.e., leachate testing, safety data sheet etc.: |  |
| Workplace health and safety requirements, i.e., material preparation, handling, personal protective equipment required: |  |
| End of life plan/ deconstructability of asset, i.e., expected product life and plan for recycling/reuse at end of life: |  |
| Construction | Product manufacture details, i.e., quality control and assurance records, installation or construction methodology, handling, and storage requirements: |  |
| Pre- and post-construction sampling and testing plan: |  |
| Placement and installment arrangements, i.e., plan for visual inspection of placed product, including timeline, record keeping, requirements for photos of construction and final product. |  |
| Workplace health and safety documentation and monitoring, i.e., required PPE, risk assessment, Job Safety and Environmental Analysis, material safety data sheets, safe work method statements, and auditing documentation: |  |
| Workplace health and safety documentation for visitors, including any observers and media personnel: |  |
| Control site requirements (if relevant, and if different from trial site construction): |  |
| Monitoring | Performance monitoring plan, including frequency and duration of all tests: |  |
| Third-party/external testing contractors and their responsibilities: |  |
| Minimum/maximum/target requirements for test results, including plan in case of non-conformance: |  |
| Reporting | Reporting plan, including scope of reporting, frequency, organisation responsible for collating and reporting results, confidentiality parameters and expected recipients of results: |  |
| Third-party/external reporting contractors and their responsibilities: |  |
| Media and communications plan: |  |
| Confidentiality considerations that apply to reporting and/or media and communications: |  |

## Attachments

Outline any attachments that have been provided to support the content in this Section. This may include:

* Drawings, mix designs.
* Performance test results; laboratory or from previous case study.
* Environmental test results; laboratory or from previous case study.
* Safety Data Sheet, Safe Work Method Statements.
* Risk or hazard assessments.
* Workplace health and safety plan.
* Detailed sampling and testing plan.
* Detailed performance monitoring plan.
* Relevant test methods, standards and specifications.

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# Trial Outcomes

Table 6 shall be completed to document the trial outcomes, to enable learnings to be implemented in future projects, or uses of the trialled product/application. Include and reference any relevant Attachments throughout this table, where more information is required, ensuring confidentiality is considered where relevant.

Table 6 - Trial outcomes

| Phase | Item | Response |
| --- | --- | --- |
| Outcomes | Describe if and how the trial objectives have been met. Align this with the Idea Validation assessment in Table 2, where possible. |  |
| Describe how the trial site/ product/ application performed. This may be in comparison to targeted performance outcomes, or a control site, as relevant. Reporting may be in an ongoing manner, as per the performance monitoring plan. |  |
| Describe the outcomes of any health, safety and environmental risk assessment/ testing undertaken, as relevant. |  |
| Describe any lesson learned from this trial. These may be related to planning, construction, engagement with stakeholders, testing/monitoring of the trial etc. |  |

## Attachments

Outline any attachments that have been provided to support the content in this Section, ensuring confidentiality is considered where relevant. This may include:

* Media releases/ case studies
* Publications
* Reports
* Standards/ specifications/ technical documents

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# Appendix A – Attachments

Attachments as required