

Monitoring and Assessment Protocols

These protocols are used by the Forest Practices Authority to assess the implementation and effectiveness of a representative sample of forest practices plans pursuant to s.4E(1)(b) of the *Forest Practices Act 1985*

Endorsed by the Board of the FPA on 28 August 2009 and subject to ongoing review and revision

Abbreviations and acronyms

| FPA | Forest Practices Authority | | | |
|-----------|---|--|--|--|
| FPO | Forest Practices Officer | | | |
| FPP | Forest Practices Plan | | | |
| LMO | Landscape Management Objective | | | |
| MDC | Management Decision Classification | | | |
| SMZ | Special Management Zone (in State forest) | | | |
| the board | The Board of the Forest Practices Authority | | | |
| the code | The Forest Practices Code | | | |
| WHS | Wildlife Habitat Strip | | | |

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1. Objectives

Statutory basis

- Section 4(E)(1)(b) of the *Forest Practices Act 1985* requires the Forest Practices Authority (FPA) to assess the implementation and effectiveness of a representative sample of forest practices plans (FPPs) and make an annual report to the Parliament of Tasmania.
- 2 Section 4G of the Act requires the FPA to monitor the degree of compliance with the Act and the *Forest Practices Code* (the code) across all tenures within Tasmania.
- 3 Section 40 of the Act provides Forest Practices Officers (FPOs) with the powers to enter land and seek information from any person associated with forest practices that are being or appear to have been carried out on any land.

Specific objectives of these protocols

The FPA has developed these protocols to provide a basis for achieving the following objectives:

- 1 to monitor, assess and report on the effectiveness of the planning and implementation of forest practices plans against the requirements of the code
- 2 to provide feedback to forest managers on areas of good performance and areas requiring improvement
- 3 to identify potential improvements to the code and associated planning tools and training programs
- 4 to identify any major problems or deficiencies that require corrective action or other compliance measures under the Act
- to publicly report on the standard of forest practices being achieved across all tenures and forest operations in Tasmania.

2. Types of Assessments conducted by the FPA

The FPA may undertake a range of assessments including:

Forest Practices Plan Assessments:

- **Planning** assessing the standard and effectiveness of an FPP against the requirement of the code and associated planning tools.
- **Operational Assessments:** assessing the standard of implementation with the requirements of the FPP and the Code.

Specialist or Thematic Assessments: assessing the effectiveness of specific provisions of the code and/or determine compliance relating to specific issues at the direction of the Chief Forest Practices Officer or the board. The FPA will document the basis for sampling and report the results as either a research paper, a separate report or within the FPA's annual report.

3. External assessment

To enhance the accountability, credibility and understanding of the FPA's assessment process, the board will periodically:

- 1 Arrange for external audits of the FPA's monitoring and assessment procedures and publish the findings in its annual report.
- 2 Invite representatives of relevant government departments, agencies and other groups to observe the assessment procedures, provided this is acceptable to the applicant and/or landowner.

4. Roles and responsibilities

4.1 Client

The client for the annual assessment is the Parliament of Tasmania through the Minister responsible for the Act, and to whom an annual report is presented that incorporates findings of the annual assessment under s. 4E of the Act.

4.2 The Board of the FPA

The board is responsible for:

- approving the Monitoring and Assessment Protocols and reviewing and revising these on a regular basis to ensure that they are consistent with national and international benchmarks for assessing and reporting on the standard of forest practices
- approving the *Annual Monitoring and Assessment Plan* and reviewing progress during the year
- forwarding an *Annual Assessment Report* to the Minister by 30 November each year.

The board will maintain a standing committee (Monitoring and Assessment Committee) of at least three directors to assist in its deliberations. The CFPO will not be a member of the committee but will provide reports and information to the committee.

4.3 Chief Forest Practices Officer

The CFPO is responsible for the overall administration of the system and for ensuring that the Monitoring and Assessment Protocols are followed and results reported in a timely manner.

4.4 Lead Assessor

The Senior Manager, Compliance, fulfills the position of Lead Assessor and is responsible for managing the day to day operation of the program, including:

- the preparation of the Annual Monitoring and Assessment Plan and the Annual Assessment Report in consultation with the CFPO
- providing regular (monthly) progress reports to the board through the CFPO
- supervising the Assessors and checking standards to maintain consistency and ensure that the assessments are being conducted in an objective and efficient manner.

4.5 Assessors

Assessors are responsible for following the directions of the Lead Assessor and for objectively collecting and analysing data to determine the standard of implementation of FPPs against prescriptions, the code and the Act. Assessors will be appointed in accordance with the competencies and characteristics listed in Appendix 1 and they must sign and abide by the *Code of Conduct for Assessors* (Appendix 2).

Assessors will exercise their powers as FPOs to enter land and seek information in accordance with s.40 of the Act in a diligent and tactful manner. Assessors will contact landowners and/or applicants of the FPP prior to visiting the site.

4.6 Persons responsible for FPPs that are being assessed

Persons being assessed – including FPOs, landowners, operators and contractors – should take all reasonable steps to facilitate the assessment program by making documentation and the field site available when requested. Persons being assessed or their representative are encouraged to accompany the Assessor in order to assist in providing the required information. The responsible person should make the Assessor aware of any relevant occupational health and safety requirements that relate to the particular workplace.

5. Annual Monitoring and Assessment Plan

The Lead Assessor will by 1 July each year prepare a draft *Annual Monitoring and Assessment Plan*. The plan will contain details on the planned program to be conducted during the period up to 30 June of the following year as follows:

- 1 the number of FPPs to be assessed and the basis for sampling, showing the number of FPPs within each of the categories of a stratified sample (see section 6.1)
- 2 the type of assessments that are proposed (planning and operational)
- 3 the Assessors that are to be appointed to conduct the assessments
- 4 the budget for the planned program, including contract and internal staffing costs
- 5 any proposed changes to the assessment guidelines.

The CFPO will submit the draft plan to the board for approval by 31 July each year.

6. Assessment procedures

6.1 Selection of sample

The Lead Assessor will use a stratified random sampling approach to select the FPPs to be assessed by:

- Consulting the FPA's FPP database and selecting all plans that were certified within the current three financial-year period.
- Stratifying the selection into categories represented by certifying FPO, applicant, forest type and stage of completeness of the operation, noting that Planning Assessments will generally be done within 12 months of certification of the FPP and Operational Assessments will generally be done at the completion of the operations.
- Selecting at random from each category sufficient plans to meet the sampling target prescribed in the annual Monitoring and Assessment Plan.

6.2 Notification of persons responsible for FPPs that are to be assessed

Persons responsible for the FPPs that are to be assessed will be notified, as follows:

- 1. Large companies and organizations that have more than five current FPPs:
 - a. The Lead Assessor will write to formally advise the relevant manager of the FPA's intention to conduct an assessment program.
 - b. The notification will specify the proposed Assessor(s), the types of assessments to be conducted and (for operational assessments) the dates for the Opening Meeting (see section 6.4) and field assessments.
 - c. The FPPs that are to be assessed will not be disclosed prior to the Opening Meeting.
- 2. Small organizations (less than five current FPPs):
 - a. The Assessor will contact the responsible person and provide fourteen day's notice of the intention to conduct an assessment of a particular FPP.

6.3 Supervision of Assessors

The Lead Assessor will:

- 1. brief Assessors on their responsibilities and procedures
- 2. conduct an annual 'calibration assessment' across a range of sites to ensure consistency of approach by all Assessors

- 3. develop a timetable and assign FPPs to individual Assessors; making sure that any potential conflicts of interest are avoided
- 4. conduct individual assessments, or independently verify assessments, undertaken by Assessors at any time to ensure consistency across all Assessors.

6.4 Opening meeting

The opening meeting will be conducted by the Assessor and will cover:

- 1. the purpose of the assessment program
- an explanation of the Monitoring and Assessment Protocols, including the assessment guidelines
- 3. the FPPs that are to be assessed
- 4. access to the field sites and information required to be provided to assist the assessment (relevant documentation will be sought at the opening meeting and must be collected by the Assessor prior to leaving the workplace)
- 5. an invitation for the person or their representative to accompany the Assessor
- 6. the arrangements for providing interim results at a Debrief Meeting (see section 7).

6.5 Method of assessment

6.5.1 Performance standards

- 1. Assessors will use the FPA Assessment Guidelines (Appendix 3) and the performance rating definitions and scores shown in the FPA assessment performance rating (worksheet) in Appendix 4 to objectively assess evidence collected by way of interviews, review of documents and observation of activities.
- 2. Assessments will be made of conformance to the code and guidelines applicable at the time of FPP certification; and the degree of conformance that prevails at the time of assessment.
- 3. Assessment of a particular issue may involve either a single evaluation (e.g. checking that the plan is correctly signed by all parties), or require multiple evaluations, (e.g. the assessment of drainage along different sections of a road). Where multiple evaluations are required, the score will reflect the standard across all evaluations.
- 4. Where an individual assessment involves a number of criteria, the score should take account of the relative significance of the criteria and be the overall 'average' of the judgments, unless any one significant assessment criterion will result in an

- impact or non-conformance. In that case, the score will reflect the severity of the impact or non-conformance.
- 5. Assessment of questions involving physical measurement of prescribed distances may include a tolerance. Measurements will be taken at various points sufficient to provide the Assessor with a confident assessment of compliance. Provided the environmental effectiveness is acceptable and the variation appears to be accidental rather than wanton or persistent, the average distance must be within 10 per cent of that prescribed.

6.5.2 Documents

The Assessor may conduct an assessment of all relevant documents including:

- 1. FPPs and associated variations
- 2. correspondence, special value assessments, specialist notification and reports
- 3. operational evaluation records of the company
- 4. non-conformance or incident reports
- 5. any other documents which are considered relevant to support the assessment.
- 6. Neighbour notifications and/or records of community engagement

6.5.3 Field assessment

The Assessor will conduct a field inspection to sample and assess the FPP to determine the standards across a range of site situations, and identify any non-conformance. The Assessor should mark the areas assessed on a copy of the FPP map, take photos and GPS reference points, make notes on the FPA Assessment Performance Rating (work sheet) (see Appendix 4) and make any other necessary record.

6.5.4 Record of assessment

The Assessor will complete all aspects of the assessment and make all necessary notes or comments on the FPA assessment performance rating (work sheet).

6.5.5 Suspected non-conformance

Non-conformances are defined as any failure to comply with the requirements laid down in the Forest Practices Act, the *Forest Practices Code* or supporting documents and instructions issued by the FPA, resulting in deficiencies in the planning, documentation or implementation of forest practices plans. Examples of non-conformances include:

 planning – failure to correctly identify the presence of significant natural and cultural features documentation – failure to enter appropriate details or specifications within FPPs or to maintain records of assessments that support the provisions within the FPP

- implementation failure to comply with a provision of a FPP such as the harvesting of trees from reserved areas.
- Reporting failure to complete compliance reports in line with the Act

Where the Assessor suspects that a non-conformance has occurred, he/she will record all such instances on the FPA assessment performance rating (work sheet), and other records which document and identify the incident and classify the non-conforming incident against one of the following:

- Major non-conformance: a major failure to comply with procedures for the
 planning, documentation or implementation of prescriptions within forest
 practices plans, resulting in actual or potentially serious consequence. Minor nonconformance: an isolated failure to comply with procedures for the planning,
 documentation or implementation of prescriptions within FPPs, which does not
 result in actual or potentially serious consequence. Persistent or multiple minor
 non-conformances may be rated as a major non-conformance.
- 2. Observation: a finding which may not significantly affect environmental or other outcomes but is judged to be either a misunderstanding/technical non-conformance of minimal significance or a potential inadequacy in the planning, documentation or implementation of the FPP which warrants mention. Persistent observations may be rated as a minor non-conformance.

Where a major non-conformance is identified, an Assessor must immediately advise:

- the responsible FPO to request appropriate corrective action
- the responsible land manager.

All non-conformances will be reported to the FPA's Senior Manager, Compliance, who will then determine the appropriate level of response in accordance with the FPA's *Investigation and Enforcement Protocols*.

7. Reporting

7.1 Preliminary assessment report and de-brief meeting

- 1. Following the completion of the compliance assessment, the Assessor will provide a preliminary assessment report, indicating:
 - a. average performance rating scores for individual categories
 - b. the general degree of conformance
 - c. any suspected non-conformance
 - d. specific issues warranting corrective action.

- 2. The FPA Assessment Performance Rating (worksheet) will be provided to the person being assessed, or their representative, on the same day of the assessment, or within 5 working days if there is no opportunity to supply the information on the day. The person being assessed will be given 30 days to provide comment and evidence of corrective actions, after which time the Assessor will note any comment, action or objection by the person being assessed on the FPA assessment performance rating (worksheet) in Appendix 4, and where appropriate adjust the assessment performance rating. An offer to discuss the results at a de-brief meeting.
- 3. Where there is uncertainty or disputation, the Lead Assessor will review any issues with the Assessor concerned. Where any correction is agreed, the Assessor must endorse each change. In the case of irresolvable disagreement, the CFPO will review the issues and may have the plan re-assessed by an alternate Assessor.

7.2 The reporting process

- 1. The Assessor will within 10 workings days of receiving comments on the preliminary assessment report, complete any outstanding aspects of the assessment and submit a final report and FPA assessment performance rating (worksheet) to the Lead Assessor. The Assessor must retain all original copies of the documents in an accessible and secure manner.
- 2. The Lead Assessor will collate all of the individual final assessment reports and will prepare monthly progress reports for the board.
- 3. An *Annual Assessment Report* on the overall results in each financial year will be prepared by the Lead Assessor and forwarded to the board by no later than 1 August each year.
- 4. The board will review the *Annual Assessment Report* and identify actions that it intends to take to foster the continuing improvement of forest practices, including providing feedback to FPA staff on planning tools.
- 5. The board will publish the results of the annual assessment program and its findings in the FPA's annual report, which is to be tabled in parliament by 30 November each year.

7.3 Closing meeting

The Lead Assessor will, by 30 August each year, offer to meet with organizations or other persons who have been assessed and provide a briefing on the results of their assessment. This briefing will provide an opportunity to discuss areas of good performance and opportunities to promote continuing improvement through management practices, planning tools, research and training. The Lead Assessor will also provide feedback to FPA staff on the results of the assessment.

8. Review of the Monitoring and Assessment Protocols

The board will, at least every five years or after any changes to the code, review the *Monitoring and Assessment Protocols* to ensure that they meet accepted international standards for the systematic and objective assessment of forest practices.

Persons being assessed will be advised of any change to the protocols, or associated documents, prior to commencement of future assessments.

Appendix 1: Competencies and characteristics required for persons engaged as Assessors by the FPA

Competencies

- an understanding of the Forest Practices Act, the Forest Practices Code and associated guidelines, including instruction issued by the FPA
- knowledge of and experience in forest planning, operations and compliance monitoring
- ability to identify and assess the significance of any actual or potential environmental impacts which may arise from the planning or conduct of forest practices
- good written and spoken communication skills.

Qualifications and Experience

- appointment as, or suitability for appointment as, an FPO
- formal qualifications in environmental auditing or demonstration of experience and competence in this area.

Personal attributes

- ability to effectively communicate with and relate to people with appropriate tact, sensitivity, assertiveness and objectivity
- observant, perceptive and open-minded
- self-reliant and able to work outdoors in a field location
- willingness to conduct themselves in accord with and sign the Code of Conduct for Assessors (Appendix 2).

Appendix 2: Code of Conduct for Assessors

I will observe the Forest Practices Authority Code of Conduct for Assessors and confirm that:

- 1. I will act professionally, accurately and in an unbiased manner.
- 2. I will conduct myself in a manner that enhances the credibility of the annual assessment program.
- 3. I will strive to increase my competence in the assessment of forest practices
- 4. I will not undertake any assignments that I am not competent to perform.
- 5. I will objectively consider any material when determining performance ratings.
- 6. I will not represent conflicting or competing interests and will disclose to any client or employer any relationships that may influence my judgment.
- 7. I will not discuss or disclose any information relating to any task unless required by law or authorised in writing by the FPA.
- 8. I will not accept any inducement, commission, gift or any other benefit from organisations, their employees or any party that has an interest in the forest practices that are being assessed.
- 9. I will not intentionally communicate false or misleading information that may compromise the integrity of any task or the assessment process.
- 10. I will not act in any way that would prejudice the reputation of the FPA or the assessment process and will cooperate fully with an enquiry in the event of any alleged breach of this code.

| Name: | |
|------------|---|
| | |
| | |
| Signature: | |
| Signature. | |
| | |
| Date: | / |
| Date. | |

Appendix 3: Assessment Guidelines

(Version SEPTEMBER 2008 (edited January 2010 and June 2014) based on the *Forest Practices Code 2000*.

Procedural issues

| No | Questions | Code | Instructions/judgment basis |
|----|---|------|--|
| 1 | Has a complete copy of the original FPP and variations been made available to the assessor? | A3.2 | Has a complete copy of the original FPP, including all variations been made available to the assessor? |
| 2 | Had the FPP and any variations been uploaded to Coverpage? | | Is documentation on Coverpage? Score poorly if the FPP is not on Coverpage or information incomplete. |
| 3 | Has the FPP, including variations, been fully signed and dated? | | Has the signature page(s) of the FPP and any variations been correctly signed and dated by all parties? |
| 4 | Is the FPP and variations in accordance with the code? | | Does the FPP, including variations use the correct forms? Have all relevant FPA instructions been incorporated? Is it in accord with code and standards? Were any non documented variations discovered? |
| 5 | Were state and local governments consulted, as required, and were resulting management conditions incorporated in the FPP or variation? | | Separate to the standard notification, was government consulted where necessary for: Iandscape protection water quality access to public road or state highway Were any requirements incorporated in the plan? |
| 6 | Was local government notified of the operational start date? | | Is there documentary evidence that the local authority was: advised at least 30 days before start? or advised via 3 year plan? |
| 7 | Have all adjacent landholders been identified and notified? | | Is there documentary evidence that reasonable steps have been taken to notify all neighbours, within 100m of the operational boundary, at least 30 days before operations commenced? |

| 8 | Does the FPP indicate that a fire management plan was prepared where necessary? | E3 | Does the FPP indicate that a fire plan exists where: • the consolidated area >50 ha |
|----|---|----|---|
| 9 | Have compliance reports on discrete operational phrases been completed, where required? | | Has a compliance report been completed within 30 days of completion of a discrete operational phrase? Yes or no. |
| 10 | Is the FPP map clear? | | Does the map match the text in the FPP and is it at a scale that makes it easy to interpret in the field. Does the map have a clear key/legend. |

Refer also to the 'special values' section below for further 'planning' questions

Roading

| No | Questions | Code | Instructions/judgement basis |
|------|---|----------------------------|---|
| Plan | ning and Location | 1 | |
| 11 | Have roads been located to minimise soil erosion and stream sedimentation? | B1 | Have environmental impacts been minimized by: using ridge line roads where appropriate locating roads complementary to harvest and reforestation system avoiding sensitive areas? |
| 12 | Where roads are located in proximity to streams has the potential for stream sedimentation been minimised? | B1, B2 | Are newly constructed roads parallel to watercourses at least 100 m from class 1 and 2 watercourse and 40 m from all others? If closer, have measures been taken to minimize impacts? Have major upgrades of existing tracks near streams been recognized as such in the FPP? |
| 13 | Where roads are located in areas of high or very high soil erodibility have precautions to reduce erosion been taken? | B1, B3.2, Appendix 3 | If high or very high erodibility soil is present:Has roading caused avoidable damage? |
| Road | d Standard | | |
| 14 | Has the road standard proven adequate to the haulage task and been sufficiently compacted or continuously repaired to avoid environmental problems? | B2, B3.3 | Have measures been taken to avoid road failure or adverse/unacceptable outcomes: Is the road standard appropriate? Is road consolidation adequate? Have use limitations, where required, been applied and proven effective? Is the type and depth of the surface material adequate? |

| Draiı | nage | | |
|-------|---|--|---|
| 15 | Have road drainage measures been effective? | B2, B3.2, | Consider table drains, culverts, crowning of road, table drain diversion and any additional requirements (e.g. armouring of table drain or outlets on culverts or threatened aquatic species). |
| Acce | ss Tracks | • | |
| 16 | Have access tracks been suitably located, drained and stabilised after use? | B2, B4 | Consider access tracks: are they drained 20 m before crossings into a trap or vegetation have stream crossings been minimised have tracks been effectively drained with grips or relied on cross-fall drainage? |
| Earth | ıworks | <u> </u> | reneu on cross-ran uramage: |
| 17 | Are cuts and fills balanced and/or spoil disposed of properly? | B2, B3.1, B3.4, B6 | Are cuts and fills reasonably balanced? Is surplus fill located at least 10m from watercourse banks and prevented erosion into streams? Has surplus fill been transported away from SSRs where required by the Code? |
| 18 | Are batter slopes stable? | B2, B3.1, B3.2, B3.4, B8, Appendix 3 | bo cut batters: show evidence of unacceptable rilling, collapse or slumping? have highly erodible soils been managed as per by the Code? have benches been cut where necessary? have catch drains been used, if necessary, to prevent severe erosion? |
| Stee | p Country | | |
| 19 | Have Code statements been followed on steep country roads? | B1, B2, B3.4, B7 | Culverts minimum 375 mm? Culvert spacing reduced as per Code? tension cracks have been sealed or advice sought Where cable harvesting to the road, have shoulders been protected and drains kept clear? |

| Clear | ing | | |
|-------|--|------------------------|---|
| 20 | Has clearing width and top soil stripping been minimised? | B3.1, Appendix 3 | Consider the extent and method of clearing. Has: clearing width been the minimum necessary for function, safety, and sun drying with trees felled parallel to streams top soil stripping been minimised and: been stockpiled and reused, where practical material not improperly disposed of not mixed top soil with structural fill or debris? |
| Cross | sings | • | |
| 21 | Have new or upgraded stream crossings been suitably located, designed and constructed? | B1, B3.2 | Location: Have steep approach slopes been avoided? Have deep box cuts been avoided? Is crossing cross at right angles? Have the number of crossings been minimized? Design and construction: Do bridges and culverts meet the flood criteria for the road class? Are causeways and fords constructed to resist scouring? Do crossings (culverts or fords) cater for the passage of aquatic fauna? |
| 22 | Have temporary crossings been confined to class 3 and 4 and dry class 2 watercourses and been properly removed and drained or upgraded? | B3.2 | Have crossings been confined to designated stream classes Have crossings been removed or upgraded with potential erosion points stabilised? |
| | Upgrading and Closure | 1 | |
| 23 | Have all roads and access tracks that are nonconforming or environmentally hazardous been upgraded or closed? | B4 | Have roads and access tracks been closed or upgraded if: there has been mass slumping/deposition of material into a watercourse? there is significant active erosion of table drains and/or surface? |

| Qua | ries/ Borrow Pits | | |
|------|---|----|--|
| 24 | Have quarries and borrow pits been properly located, managed and rehabilitated? | B5 | Is the quarry located so that impacts on forest values are minimized e.g. karst? Does the quarry conform to the Quarry Code of Practice? Has the quarry been located closer than 40 m to a watercourse without approval? Is the area of clearance minimised? Is there stockpiled material for rehabilitation? Have measures been taken to control Phytophthora? Is the quarry adequately drained with maintained traps or filters? Has the quarry been rehabilitated progressively or on completion of use? Have measures been taken to control weeds? |
| Road | l Maintenance | | |
| 25 | If the operation has been completed, is there evidence of ongoing maintenance of the road system? | B7 | An effective road maintenance system is known to be or is obviously (from the condition of the road) in place The state of the roads will avoid unacceptable erosion i.e.: crowned road table drains and culverts clear timely replacement of structures prevention of drain outlet scouring silt traps maintained roadside vegetation properly maintained road has been decommissioned |

Harvesting

| No | Questions | Code | Instructions/judgement basis |
|-------|--|----------|--|
| Gen | eral | • | |
| Extra | action Design and equipment | | |
| 26 | Is the extraction design | C1 | Did the approach: |
| | and harvesting equipment consistent with the code? | | Minimise the number of snig tracks and landings? Minimise soil movement during construction and use of snig tracks? Site major snig tracks on spurs and ridges and in places minimising potential environmental impacts? Equipment: |
| | | | Is the equipment consistent with code Table 5, unless otherwise approved? |
| Harv | esting dispersal and design | | |
| 27 | Is coupe dispersal | C1.1, C6 | For native forest clearfall coupes: |
| | consistent with the code? | | Are they less than 100 hectares in size |
| | | | Is the cutting sequence of regeneration planned so |

| | | | adjacent areas of native forest are not harvested until dominant height of 5 metres is achieved |
|--------|---|------|---|
| | | | Clearfelling avoided on karst soils unless authorised by CFPO |
| | | | Steep country harvesting requirement met Plantations: |
| | | | Have large forest blocks established at the same time |
| | | | been harvested to improve dispersal over subsequent |
| | | | rotations? |
| Fellin | ng | l . | |
| 28 | Has the harvesting | C1.5 | Have reasonable steps been taken: |
| | boundary been clearly | | to ensure the property/harvesting boundary is correct |
| | marked or defined? | | and adequately marked or defined e.g. by a road, fenceline etc. |
| | | | to provide clear marking around other significant |
| | | | features such as wildlife habitat clumps, |
| | | | geoconservation or cultural sites |
| 20 | | 64.5 | responsibility for boundary marking stated in the FPP |
| 29 | Has harvesting been confined within the | C1.5 | Has the harvesting boundary been breached? (SSRs and MEZs are covered later). Has debris fallen over the harvest boundary |
| | harvesting boundary? | | and if so, has it been removed with adequate consultation |
| | narvesting boundary. | | where necessary? |
| Wet | Weather Limitations | I | _ |
| 30 | Has harvesting complied | C2 | Consider: |
| | with wet weather | | Evidence of puddling, mixing and compaction |
| | limitations? | | Slurry >200 mm deep over a length of 20 m |
| | | | Rutting>300 mm over a length of 20 m |
| | | | Turbid water flowing on snig tracks |
| | | | Harvest on vulnerable karst soils |
| | | | Minimisation of the number of snig tracks Darallal snig tracks |
| | | | Parallel snig tracksCording and matting of snig tracks |
| | | | Percentage of damaged soil within coupe |
| 31 | Has cartage complied with | C2 | Consider: |
| | wet weather limitations? | | Has cartage occurred on wet rutted roads? |
| | | | Were roads closed during prolonged heavy rainfall? |
| | | | Is/was turbid water flowing in ruts and bypassing |
| | | | culverts? |
| | / Forwarder Tracks | Π | |
| 32 | Have snig tracks been | C3 | Consider the situation, practical options and likely outcome. |
| | located and constructed to minimise environmental | | Has location of snig tracks made best use of available terrain to facilitate drainage and minimise earthworks? |
| | harm and enable effective | | Has outsloping, periodic turns, use of natural run off points etc |
| | drainage? | | been considered? |
| | | | Consider location of snig tracks in relation to: |
| | | | Wet areas |
| | | | Watercourses / Minimise stream crossings |
| | | | If forwarders have cross culverted or bridged |
| | | | Class 1 or 2 streams has CFPO permission |

| | | | been obtained and were protective measures implemented? For class 3 and 4 streams – are crossing points at least 100m apart? Do dry class 4 crossings meet Code criteria? Have crossings over flowing streams been made with logs or culverts? Have crossings used for more than 12 months been constructed with an opening designed to cope with typical winter peak flows? Has machine damage to streambanks been avoided? |
|----|---|------------------------|---|
| | | | Drainage depressions avoided (except as permitted in plantations) Soil disturbance minimised Damage to table drains and road batters Caves and sinkholes |
| 33 | Has snig track management effectively minimised damage to retained trees and protected soil and water values? | C3.1 | Facilitate drainage? Consider the overall snig track design and outcome. Have equipment/thinning regime been selected to minimise impact? Has use of outrows conformed to wet weather limitations for major snig tracks? Have existing stabilised tracks within 10 m of a Class 4 been used only: in dry conditions without damaging streambanks where no reasonable alternative exists where use is specified in the FPP? In wet conditions has slash and branches been placed on outrows? In outrow or similar thinning, have non-ground skidding equipment only crossed Class 4 watercourses where: the watercourse is dry harvesting conditions are dry damage to banks is avoided no or minimal earthworks are required slash has been placed on the crossing during harvesting, and subsequently removed? |
| 34 | Have snig tracks been restored, including the removal of temporary crossings? | C3.2, Appendix 3 | Consider: has restoration been completed across the coupe and/or is it progressive? Are cross drains well constructed, at correct spacings (Table 6 in Code) and able to cope with subsequent reforestation activities? Where snig tracks are rutted to a depth of more than 300 mm below the original ground level, over a 20 m section or longer, has the snig track been restored by filling in and draining? Has cording and matting been loosened to |

| | | | facilitate hurning or beaned to expect coodless |
|------|---|---------------|--|
| | | | facilitate burning or heaped to expose seedbed where necessary? Have temporary log crossings been removed from watercourses to allow the watercourse to flow unrestricted along its original course and stream banks at temporary crossing points left in stable condition? |
| Land | | | |
| 35 | Are landings (and continuous roadside landings) appropriately located, sized and constructed? | C3.3 | Is the landing located: on a gently sloping elevated area? so that mud/slush does not enter watercourses? to avoid a fire risk or adverse visual impact? where possible, so snig tracks approach from below as far as practicable from watercourses? within 40 m of a streamside reserve or a Class 4 machinery exclusion zone and if so is the position shown in the FPP and have specific measures been provided to protect water quality? Do continuous roadside landings meet Code criteria? Size: Is the landing as small as practicable (0.2 ha or less excluding stockpile areas)? If the landing is up to 0.3 ha is this authorised in an FPP? |
| | | | Construction: Consider the construction, management and stabilisation. Have landings been: • properly constructed with gravel, cording or matting, soil stockpiling as necessary? • Designed to prevent entry of mud and slush entering from snig tracks? |
| 36 | Have landings been properly managed and stabilised? | C3.3, C3.4 | Have landings been: properly drained at all times and inflow of mud or water prevented? cleared of debris from around retained trees had proper bark management redrained on completion with discharge to silt traps or vegetation temporarily drained if conditions prevent complete restoration? For temporary landings after completion of harvesting and bark treatment: Has the general original ground contour of the landing been re-established? Have soils been ripped if necessary? Has stockpiled topsoil been respread over the landing Has the same reforestation as the surrounding forest occurred? |

| Nativ | Native Forest Streamside Reserves | | | | |
|-------|--|--------------------------|--|--|--|
| 37 | Is the width of the SSRs and MEZs correct and is marking correct? | C4.1, D2 | Have streams been classed correctly and marked correctly for their class? | | |
| 38 | Have class 4 streams been upgraded according to Class 4 guidelines, where necessary? | D2.1 see guideline | Check that correct buffers have been prescribed and implemented according to the Class 4 guidelines. | | |
| 39 | Has felling and machinery avoided unreasonable damage to SSRs and MEZs? | C4.1 C4.3, C5, C6 | trees been felled into a SSR? trees accidentally felled into a SSR been removed unless this is more damaging? damage to vegetation including myrtle been avoided trees been felled away from class 4 watercourses and caused minimal vegetation damage? check that slash has not been pushed into areas and that heaps are sufficiently separated from reserves to avoid fire damage has machinery been excluded from SSRs and MEZs unless at crossings or approved for harvesting, salvage or restoration works? | | |
| 40 | Has approved felling in SSRs and MEZs complied with the code? | C4.1 | Consider felling in SSRs and MEZs. See page 45-46 in Code | | |
| Plant | ation Streamside Reserves | • | | | |
| 41 | Has harvesting of trees in plantation SSRs complied with code requirements? | C4.2 C | onsider felling in SSRs and MEZs. See page 47-48 Code. | | |
| Steep | Steep Country Harvesting | | | | |
| 42 | Have cables been pulled through Class 1, 2, 3 SSR without causing unacceptable damage? | C6 | Consider the situation. Acceptable damage is defined as: not >50% delimbing tops not broken out or trees not pulled from the vertical position. | | |
| 43 | Have potential erosion channels on cabled areas been stabilised? | C6 | Have cable draglines (roads) which are rutted to a depth of more than 200 mm below ground level for a distance of 20 m or more, been water barred or gripped at maximum intervals of 20 m? | | |

Reforestation

| No | Questions | Code | Instructions/judgement basis |
|------|---|-----------------------------------|---|
| Nati | ve Forest Regeneration | | |
| 44 | Has an appropriate reforestation technique and stocking standard been prescribed? | E1.1, E1.2, E1.2.1. E1.4 | Consider the forest type, species, species requirements, existing stand structure and altitude. Is prescribed stocking standard as per E1.4 of the Code? |
| 45 | Have fuel reduction, low or high intensity burns, been effectively carried | E.1.2.1, C1.2, E3.3 | Did burning achieve desired result of a suitable seed bed and avoided escapes / excessive damage to retained areas? |

| | out? | | |
|-------|---|--------------------------|---|
| 46 | Have streamside reserves and MEZs been protected from fire? | E1.2.1 | Unless required for hazard reduction, have SSRs and MEZs been protected? |
| 47 | Has appropriate seed been selected for native forest regeneration? Has stocking standard as prescribed in the plan | E1.3 | • from the site or the nearest similar ecological zone and • providing a species composition to approximate the natural canopy trees for the site Consider the stocking achieved. Is this likely to be in accord with the plan? |
| | been achieved, or is it likely to be achieved? | | |
| 49 | Have trees been effectively protected from grazing and browsing damage? | E1.5 | Consider the outcome and evidence of protection. Does this suggest: • a monitoring system has been specified and implemented • an appropriate control system has been implemented? |
| Plant | ation Development | | |
| 50 | Has burning been effectively carried out and streamside reserves protected? | E1.2.2 | Did burning: occur before weed development made burning difficult? occur under suitable weather conditions? contain escapes and avoid unnecessary damage? protect stream side reserves and MEZs? |
| 51 | Was soil cultivation carried out in a manner that minimises the risk of unacceptable soil erosion? | E1.2.2, Appendix 5 | Did the method comply with table 10 in the Code or specialist advice? Was specialist advice sought for high to very high erodibility? Was cultivation carried out under appropriate conditions? Are windrows and heaps reasonably free of soil? Have the outlets of culverts been dispersed over stable, uncultivated and preferably vegetated ground? Has cultivation been excluded from within 10 m of any swamp or wet area and have crossings been corded? |
| 52 | Has cultivation been excluded from within 2 m of the edge of drainage depressions? | E1.2.2 | Has cultivation been excluded from within 2 m of the edge of drainage depressions? |
| 53 | Have class 1, 2, 3 and 4 streams and their streamside reserves and/or MEZs been protected? | E1.2.2 | Inspect SSRs. Consider: Have existing native forest SSRs & MEZs been retained? Where plantation is to be re established, have areas within Class 1, 2 and 3 streamside reserves been: managed to encourage native understorey species? |

| 54 | Has the specified stocking standard been achieved, or is it likely to be | E1.3, E1.4 | managed to keep introduced weed species to a minimum? During establishment of plantation with class 1,2 and 3 SSRs see page 82 Code and page 83 establishment within 10 m of Class 4 watercourses. Consider the actual or likely outcome. Is stocking in accord with the FPP? Note – stocking should be proven by stocking surveys. |
|-------|--|---------------|---|
| | achieved? | | Plantations with less than 50% survival have to be reestablished. |
| 55 | Have trees been effectively protected from grazing and browsing damage? | E1.5 | Consider the outcome and evidence of protection. Does this suggest: • a monitoring system been specified and implemented? • an appropriate control system been implemented? |
| Fireb | reaks in native forest and pla | ntations | , |
| 56 | Have firebreaks been located and managed to protect soil, water and visual values? | E1.6 | Consider if firebreaks: • were needed • were located appropriately for soil, water and landscape values • were drained and gripped as per Table 6 of the Code • avoided SSRs and class 4 MEZ except at approved crossings • had old crossings relocated if causing sedimentation • have minimised disturbance at crossings • have water bars within 20 m of a crossing • have been effectively maintained |

Fuels, rubbish and emissions

| No | Questions | Code | Instructions/judgement basis |
|----|--|--------|--|
| 57 | Have fuels, oils, greases and chemicals been properly and effectively managed and rubbish removed? | F1, F2 | Consider from overall observations, and if there is evidence of: significant spillage of fuels and oils obviously poorly maintained equipment leaking fuel/oil poorly sited or constructed (no bund) fuel store and/or fuel is likely to enter water systems. rubbish containers provided and removed rubbish on site from forestry sources |

Special values

| No | Questions | Code | Instructions/judgement basis |
|-------|--|-----------------|---|
| Soils | | | |
| 58 | Has the soil erodibility rating been correctly | D1, Appendix | Check surface soils and road cutting, drains and other exposures. |
| | determined? | 6 | |

| 59 | Has landslip potential | D1 | Consider the soil/slope range. Has the threshold slope angle |
|-------|---------------------------|----------|---|
| | been correctly | | been correctly determined and the correct landslip potential |
| | determined? | | defined in the special values and FPP (where appropriate)? |
| 60 | Has burning intensity | D1, | Consider site conditions and fire outcomes. Has: |
| | been appropriate for the | Appendix | burning on very high erodibility soils been limited |
| | soil erodibility and | 3 | (Appendix 3 of the code) |
| | nutrient status of the | | has slash been retained on site, and burning limited, |
| | soils? | | particularly on soils with moderate high or high |
| | | | erodibility, where forests are being managed on short |
| | | | rotations? |
| 61 | Have coupes with high | D1 | Has specialist advice been sought? |
| | and very high erodibility | | Have recommended measures been included in the FPP or |
| | soils or with land | | variations? |
| | exceeding the landslide | | |
| | threshold been referred | | |
| | to the FPA for comment? | | |
| 62 | Is there evidence of | | Observe if operations have resulted in significant erosion, which |
| | significant post- | | has caused: |
| | operation erosion? | | movement of soil outside the operational area wills following publication lines. |
| | | | rills following cultivation lines |
| | | | rills in drainage depressions |
| | | | sheet erosion (loss of top soil) on steep or hilly land |
| | | | landslides |
| | | | erosion on fire breaks |
| | | | excessive erosion in table drains |
| | | | batter slope collapse catch drains ineffective because full of sediment. |
| Water | Quality and Flows | | • catch drains menective because full of sediment. |
| 63 | Have all watercourses | D2 | Consider the classification of all watercourses. |
| | been identified and | | Have all class 1, 2, 3 and 4 watercourses been |
| | correctly classified? | | identified? |
| | , | | Is the classification consistent with Table 8 in the code? |
| | | | Are significant springs rated as Class 3/4 watercourses? |
| | | | Has advice been sought where necessary? |
| | | | Have watercourse classifications been correctly |
| | | | upgraded, where necessary i.e. have: |
| | | | Class 4 watercourses been upgraded to Class 3 |
| | | | where high intensity rain warrant |
| | | | wider SSRs, including reserves on Class 4, been |
| | | | specified for: |
| | | | significant recreational, water supply, |
| | | | landscape, habitat or conservation |
| | | | values |
| | | | significant at risk myrtle gullies at risk |
| | | | high or very high erodibility soils |
| | | | fish spawning or nursery areas |
| | | | areas at significant risk of windthrow |
| | | | steep areas on landslide prone rock |

| | | | types? |
|----|---|----------|---|
| 64 | Is there evidence of significant post-operation stream erosion? | | As required in Class 4 guidelines? Observe if there is significant stream erosion, including: down cutting of streams following harvesting including fresh bank erosion sheet, tunnel or gully erosion in riparian areas sediment entry to stream from table drains sediment fans where stream gradient decreases debris dams and associated gravel slugs |
| | versity - Flora | 1 | |
| 65 | Has the flora section of the biodiversity evaluation been completed correctly, including a map detailing the results of the field assessment? | D3, D3.1 | The Assessor must be confident that biodiversity values have been assessed and taken into account as required through processes and procedures in place at the time the FPP was prepared. Has it covered all aspects of the check list provided in the evaluation sheet? Consider the following: Vegetation communities Have plant communities been identified using appropriate Forest Botany Module? Check by reference to Tasveg maps, vegetation survey reports, formal advice and/or field inspection by Assessor. Have conservation priorities been correctly determined? Check by reference to appropriate Forest Botany Module. Have the vegetation communities and their areas been transferred to FPP cover sheet? Threatened and priority species Have databases been used to determine if threatened plant species are within or close to FPP area Have localities for threatened and priority species been transferred to the FPP map? Sites of potential significance Have sites of significance been identified using appropriate Forest Botany Module? An indication if such sites are present is given by topographic, geology or PI maps. Have localities of sites of potential significance been transferred to the FPP map (where applicable)? Phytophthora, weeds, remnants, hybrids and adjacent reserves |
| 66 | Have flora values been referred to FPA Biodiversity Section as required? | D3 | Consider the following for plant communities, priority plant species, sites of potential significance, Phytophthora, weeds, remnants, hybrids, effects of operations on reserves or SMZs (Flora or Health): • Has the FPA Botany Section been notified in accordance with the Evaluation Sheet? • In FPPs where the Evaluation Sheet has not been satisfactorily completed – should the FPA Botany Section have been notified? • Site inspection, by the assessor, must assess that any |

| | | | important flora values have been correctly identified. |
|-------|---|----------------------------|---|
| 67 | Have important flora values and advice been taken into account in FPP? | D3.3 | Consider the FPP and variations. Check Section D of FPP and other sections if appropriate (e.g. roading, felling, reforestation). In FPPs where formal advice has been received, has botanical advice been incorporated into plan (areas excluded from operations or prescriptions)? In FPPs where no formal advice has been received, are planning and prescriptions consistent with flora requirements of the code? |
| 68 | Have the flora prescriptions of the FPP and variations been implemented? | | Are there any deviations from the FPP that affect plant communities, priority plant species, sites of significance, Phytophthora, weeds, remnants, hybrids or formal reserves/SMZs (Flora or Health)? |
| Fauna | | | |
| 69 | Has the fauna section of the biodiversity evaluation been completed correctly, including a map detailing the results of the field assessment? | D3, D3.2 | Consider the FPP and variations. Has it covered all aspects of the check list provided in the evaluation sheet? |
| 70 | Have fauna values been referred to FPA Biodiversity Section as required? | D3.2, D3.3 | Consider the evaluation sheet, use of planning tools (databases, TFA etc) and variations to the FPP. Site inspection, by the assessor, must assess that any important fauna values have been correctly identified and referred where required. |
| 71 | Were prescriptions for threatened species incorporated clearly in FPP text and map? | | Check FPP and map. Have necessary prescriptions been incorporated clearly into the FPP or variations? |
| 72 | Have threatened fauna prescriptions, and other fauna provisions (WHS/WHC) in the FPP been implemented? | | Are there any deviations from the plan's wording? Are there any omissions or prescriptions not implemented or altered with a variation without consulting with the specialist? |
| Lands | cape | | |
| 73 | Was the Landscape Management Objective (LMO) assessed correctly? | D4 | Refer to the Landscape Manual: check whether sufficient viewpoints were identified to represent key public viewing opportunities/ directions Was the resulting LMO correct, as per the matrix in the manual? |
| 74 | Were the Code provisions included in the FPP? | D4, D4.1, D4.2, D4.3 | Refer to sections of code, where measures to reduce/eliminate visual impact applied? |
| 75 | Have landscape prescriptions been implemented? | | Compare field inspection with prescriptions. Were prescriptions implemented? |
| 76 | Was the Recommended | | Yes or no. |

| | LMO in the Evaluation Sheet achieved? | | |
|--------|---|-------------------|---|
| Cultur | ral Heritage | | |
| 77 | Has MDC zoning been complied with on State forest? | D5, D5.1 | Check State forest MDC zoning. |
| 78 | Has the Aboriginal Known Sites Report and Conserve been consulted? | D5 | Check Aboriginal Known Sites and Conserve reports have been consulted in evaluation. Yes or no. |
| 79 | Have areas of sensitivity for Aboriginal cultural heritage been identified using the Archaeological Potential Zone maps, or the potential zoning predictive statements? | D5, D5.1 | Check that sensitivity has been correctly determined from maps and predictive statements. |
| 80 | Was specialist advice sought where necessary? | D5 | Check the evaluation sheet. |
| 81 | Has specialist advice and cultural heritage prescriptions been incorporated in to the FPP? | D5.1 | Has advice been included into the FPP, including requirement for surveys where appropriate? |
| 82 | Were the FPP prescriptions implemented? | | Consider any specific prescriptions, including the requirement for a survey. |
| 83 | Have site recording and management been in accordance with the Aboriginal Relics Act 1975? | D5.2 | Consider: If sites found was FPA advised. Have known sites remained undisturbed? |
| Geosc | cience | | |
| 84 | Has the Geoscience evaluation been correctly completed? | D6, D6.1, D6.2 | Check pages 36 and 37 (section 5.1.2) of the <i>Geomorphology Manual</i> . Were all required landforms identified? Have all unusual landform features been identified as required? Have vulnerable karst soils been correctly identified? |
| 85 | Has the FPA Geoscientist been consulted or a consultant engaged as required? | D6.1, D6.2 | Check pages 36 and 37 of the <i>Geomorphology Manual</i> . Has specialist advice been sought as required? |
| 86 | Have appropriate prescriptions been included in the FPP? | D6.1 | Have appropriate prescriptions been included to address identified risks? If type A & B triggers are present, check specialist advice has been taken into account by inclusion of appropriate prescriptions. |
| 87 | Have geoscience prescriptions been | D6, D6.1, D6.2 | Are there any significant deviations from the plan?Are there any omissions i.e. prescriptions not |

| implemented | implemented? |
|-----------------|--|
| satisfactorily? | If in a karst area, have the karst FPC provisions been |
| | followed? Check for completeness against the summary |
| | on page 2 of the Forest Sinkhole Manual. |

Appendix 4: FPA Assessment Performance Rating (Worksheet)

| FPP | FPO | Prescription | |
|-------------------|---|--|--|
| Coupe | Assessor | Date | |
| Type of operation | · | | |
| Roading or Quarry | Harvesting - Softwood plantation - Hardwood plantation - Native forest - Ground based - Cable | Reforestation - Softwood plantation - Hardwood plantation - Native forest - Clearing | |
| Forest Manager | <u> </u> | • | |
| Forestry Tasmania | Company | Independent | |
| Applicant | · | • | |
| FPP uploaded | Compliance report (type and date) | Contractor | |

Performance Rating Definitions and Scores

| Performance | Description | Score |
|----------------|---|-------|
| Rating | | |
| Sound | Addressed all judgment criteria and achieved an acceptable result. | 3.0 |
| Below sound | Have not addressed all judgment criteria and/or implemented plan as prescribed, which may result in adverse impact. | 2.0 |
| Unacceptable | Non-compliant and has not adequately addressed judgment criteria or achieved an unacceptable result. | 1.0 |
| Not assessable | The condition/situation does not occur e.g. high erodibility Operations have has not commenced Insufficient or no objective evidence to make a judgment | NA |

Assessors should attach a map and note objective evidence or comments on the work sheet

Procedural issues

| | TOTAL | |
|----|---|--|
| 10 | Is the FPP map clear? | |
| 9 | Have compliance reports on discrete operational phrases been completed, where required? | |
| 8 | Does the FPP indicate that a fire management plan was prepared where necessary? | |
| 7 | Have all adjacent landholders been identified and notified? | |
| 6 | Was local government notified of the operational start date? | |
| 5 | Were state and local governments consulted, as required, and were resulting management conditions incorporated in the FPP or variation? | |
| 4 | Is the FPP and variations in accordance with the code? | |
| 3 | Has the FPP, including variations, been fully signed and dated? | |
| 2 | Had the FPP and any variations been uploaded to Coverpage? | |
| 1 | Has a complete copy of the original FPP and variations been made available to the assessor? | |

Comments:

Roading

| Plan | ning and Location | |
|-------|---|--|
| 11 | Have roads been located to minimise soil erosion and stream sedimentation? | |
| 12 | Where roads are located in proximity to streams has the potential for stream sedimentation been minimized? | |
| 13 | Where roads are located in areas of high or very high soil erodibility have precautions to reduce erosion been taken? | |
| Road | d Standard | |
| 14 | Has the road standard proven adequate to the haulage task and been sufficiently compacted or continuously repaired to avoid environmental problems? | |
| Drain | nage | |
| 15 | Have road drainage measures been effective? | |
| Acce | ess Tracks | |
| 16 | Have access tracks been suitably located, drained and stabilised after use? | |
| Earth | hworks | |
| 17 | Are cuts and fills balanced and/or spoil disposed of properly? | |
| 18 | Are batter slopes stable? | |
| Stee | p Country | |
| 19 | Have Code statements been followed on steep country roads? | |
| Clear | ring | |
| 20 | Has clearing width and top soil stripping been minimised? | |
| | Crossings | |
| 21 | Have new or upgraded stream crossings been suitably located, designed and constructed? | |
| 22 | Have temporary crossings been confined to class 3 and 4 and dry class 2 watercourses and been properly removed and drained or upgraded? | |
| | Road Upgrading and Closure | |
| 23 | Have all roads and access tracks that are nonconforming or environmentally hazardous been upgraded or closed? | |
| Quar | rries/ Borrow Pits | |
| | | |

| 24 | Have quarries and borrow pits been properly located, managed and rehabilitated? | |
|------|---|--|
| Road | Maintenance | |
| 25 | If the operation has been completed, is there evidence of ongoing maintenance of the road system? | |
| | TOTAL | |

Comments:

Harvesting

| No | Questions | |
|-------|--|--|
| Extr | action Design and Equipment | |
| 26 | Is the extraction design and harvesting equipment consistent with the code? | |
| Disp | persal | |
| 27 | Is coupe dispersal consistent with the code? | |
| Felli | ng | |
| 28 | Has the harvesting boundary been clearly marked or defined? | |
| 29 | Has harvesting been confined within the harvesting boundary? | |
| Wet | : Weather Limitations | |
| 30 | Has harvesting complied with wet weather limitations? | |
| 31 | Has cartage complied with wet weather limitations? | |
| Snig | / Forwarder Tracks | |
| 32 | Have snig tracks been located and constructed to minimise environmental | |
| | harm and enable effective drainage? | |
| 33 | Has snig track management effectively minimised damage to retained trees | |
| | and protected soil and water values? | |
| 34 | Have snig tracks been restored, including the removal of temporary | |
| | crossings? | |
| Land | dings | |
| 35 | Are landings (and continuous roadside landings) appropriately located, sized | |
| | and constructed? | |
| 36 | Have landings been properly managed and stabilised? | |
| Nati | ve Forest Streamside Reserves | |
| 37 | Is the width of the SSRs and MEZs correct and is marking correct? | |
| 38 | Have class 4 streams been upgraded according to Class 4 guidelines, where | |
| | necessary? | |
| 39 | Has felling and machinery avoided unreasonable damage to SSRs and MEZs? | |
| 40 | Has approved felling in SSRs and MEZs complied with the code? | |
| Plan | tation Streamside Reserves | |
| 41 | Has harvesting of trees in plantation SSRs complied with code requirements? | |
| Stee | p Country Harvesting | |
| 42 | Have cables been pulled through Class 1, 2, 3 SSR without causing | |
| | unacceptable damage? | |
| 43 | Have potential erosion channels on cabled areas been stabilised? | |
| | TOTAL | |

Comments:

Reforestation

| No | Questions | | |
|-------|---|---|--|
| Nati | ve Forest Regeneration | | |
| 44 | Has an appropriate reforestation technique and stocking standard been | | |
| | prescribed? | | |
| 45 | Have fuel reduction, low or high intensity burns, been effectively carried out? | | |
| 46 | Have streamside reserves and MEZs been protected from fire? | | |
| 47 | Has appropriate seed been selected for native forest regeneration? | | |
| 48 | Has stocking standard as prescribed in the plan been achieved, or is it likely | | |
| | to be achieved? | | |
| 49 | Have trees been effectively protected from grazing and browsing damage? | | |
| Plan | tations | | |
| 50 | Has burning been effectively carried out and streamside reserves protected? | | |
| 51 | Was soil cultivation carried out in a manner that minimises the risk of | | |
| | unacceptable soil erosion? | | |
| 52 | Has cultivation been excluded from within 2 m of the edge of drainage | | |
| | depressions? | | |
| 53 | Have class 1, 2, 3 and 4 streams and their streamside reserves and/or MEZs | | |
| | been protected? | | |
| 54 | Has the specified stocking standard been achieved? | | |
| 55 | Have trees been effectively protected from grazing and browsing damage? | | |
| Firel | oreaks in Native Forest and Plantations | | |
| 56 | Have firebreaks been located and managed to protect soil, water and visual | · | |
| | values? | | |
| | TOTAL | | |

| Co | m | m | e | n | ts: |
|----|---|---|---|---|-----|
|----|---|---|---|---|-----|

Fuels, rubbish and emissions

Have fuels, oils, greases and chemicals been properly and effectively managed and rubbish removed?

Comments:

Special values

| Soils | | |
|-------|---|--|
| 58 | Has the soil erodibility rating been correctly determined? | |
| 59 | Has landslip potential been correctly determined? | |
| 60 | Has burning intensity been appropriate for the soil erodibility and nutrient status of the soils? | |
| 61 | Have coupes with high and very high erodibility soils or with land exceeding | |
| | the landslide threshold been referred to the FPA for comment? | |
| 62 | Is there evidence of post-operation accelerated erosion? | |
| Wate | er Quality and Flows | |
| 63 | Have all watercourses been identified and correctly classified? | |
| 64 | Is there evidence of significant post-operation stream erosion? | |
| | TOTAL | |
| Biod | iversity | |
| 65 | Has the flora section of the biodiversity evaluation been completed correctly, including a map detailing the results of the field assessment? | |

| 66 | Have flora values been referred to FPA Biodiversity Section as required? | | |
|------|--|--|--|
| 67 | Have important flora values and advice been taken into account in FPP? | | |
| 68 | Have the flora prescriptions of the FPP and variations been implemented? | | |
| 69 | Has the fauna section of the biodiversity evaluation been completed | | |
| | correctly, including a map detailing the results of the field assessment? | | |
| 70 | Have fauna values been referred to FPA Biodiversity Section as required? | | |
| 71 | Were prescriptions for threatened species incorporated clearly in FPP text and map? | | |
| 72 | Have threatened fauna prescriptions, and other fauna provisions (WHS/WHC) in the FPP been implemented? | | |
| | TOTAL | | |
| Land | scape | | |
| 73 | Was the Landscape Management Objective (LMO) assessed correctly? | | |
| 74 | Were the Code provisions included in the FPP? | | |
| 75 | Have landscape prescriptions been implemented? | | |
| 76 | Was the Recommended LMO in the Evaluation Sheet achieved? | | |
| | TOTAL | | |
| Cult | ural Heritage | | |
| 77 | Has MDC zoning been complied with on State forest? | | |
| 78 | Has the Aboriginal Known Sites Report and Conserve been consulted? | | |
| 79 | Have areas of sensitivity for Aboriginal cultural heritage been identified | | |
| | using the Archaeological potential Zone maps, or the potential zoning predictive statements? | | |
| 80 | Was specialist advice sought where necessary? | | |
| 81 | Has specialist advice and cultural heritage prescriptions been incorporated in to the FPP? | | |
| 82 | Were the FPP prescriptions implemented? | | |
| 83 | Have site recording and management been in accordance with the | | |
| | Aboriginal Relics Act 1975? | | |
| | TOTAL | | |
| Geos | science | | |
| 84 | Has the Geoscience evaluation been correctly completed? | | |
| 85 | Has the FPA Geoscientist been consulted or a consultant engaged as | | |
| | required? | | |
| 86 | Have appropriate prescriptions been included in the FPP? | | |
| 87 | Have geoscience prescriptions been implemented satisfactorily? | | |
| | TOTAL | | |

| Comments: |
|-----------------------------|
| |
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Non-conformance issues

| Photos | Nature of non- conformance | Notification of FPO and person responsible | Notification FPA Senior Manager, Compliance |
|--------|-------------------------------|--|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | Photos | | Photos Nature of non-conformance PPO and person responsible |

Comments:

Note:

| GPS: | Readings will be recorded for all observed non-conforming issues | | |
|-----------------|---|--|--|
| Photos: | Note the number of photos taken for each non-conforming issue observed | | |
| Nature Non- | As per Protocols (Major, Minor, Observation) | | |
| Conformance | | | |
| Notification of | What action is to be taken? Note if s41(1) or other directive issued by FPO | | |
| FPO: | | | |
| Notification of | Indicate date of notification and method | | |
| FPA: | | | |

References

Environmental Protection, Planning and Analytical Services Division 1999, *Quarry Code of Practice*, Department of Primary Industries, Water and Environment, Hobart, Tasmania, viewed 18 January 2010,

http://www.mrt.tas.gov.au/portal/page? pageid=35,832358& dad=portal& schema=PORTAL>

Forest Practices Authority 2005, *Forest Botany Manual*, Forest Practices Authority, Hobart, Tasmania, viewed 18 January 2010, http://www.fpa.tas.gov.au/index.php?id=90>

Forest Practices Authority 2006, *Manual for forest landscape management*, Forest Practices Authority, Hobart, Tasmania, viewed 18 January 2010, http://www.fpa.tas.gov.au/index.php?id=72

Forest Practices Authority, Fauna technical note series, viewed 18 January 2010, http://www.fpa.tas.gov.au/index.php?id=84>

Forest Practices Authority, Flora technical note series, viewed 18 January 2010, http://www.fpa.tas.gov.au/index.php?id=86>

Forest Practices Board 2002, *Forest sinkhole manual*, Forest Practices Board, Hobart, Tasmania, viewed 18 January 2010,

http://www.fpa.tas.gov.au/index.php?id=67&tx avotherresources pi1[action]=ResByCat &tx avotherresources pi1[cat]=36>

Forestry Commission Tasmania 1990, Geomorphology Manual, Forestry Commission Tasmania, Hobart.

Document Control Log Table

Document Summary Information

| Document name | Monitoring and assessment protocols | |
|---------------------|-------------------------------------|--|
| Version | 2.1 | |
| Trim record | 2010/2550 | |
| Owner | M Schofield | |
| Author(s) | M Schofield and G Wilkinson | |
| Release date | Aug 2009 | |
| Release Approved by | FPA Board | |
| Release status | Public document | |

Version Control

| Version | Date | Author(s) | Summary of changes | |
|---------|------------|---|---|--|
| 1.0 | 28/08/2009 | FPA Board | Original final document endorsed | |
| 1.1 | 20/01/2010 | C Grove Document proofed and formatted | | |
| 2.0 | 26/04/2010 | M Schofield & J Code references updated; included version control with document | | |
| 2.1 | 28/10/10 | M Schofield | Minor additions | |
| 2.2 | 01/02/11 | C Grove | Added hardcopy warning and standard FPA document control information. | |
| 2.3 | 5/04/11 | M Schofield | Note re contacting landowner and/or applicant | |
| 3.0 | 3/6/14 | M Schofield & A La Sala | Major overhaul, amalgamation of questions and updated criteria. | |
| 3.0 | 17/04/2015 | FPA Board | Endorsed changes. | |

Stages required for release outside FPA

| Category of advice | | |
|-----------------------------|-----------------------|------------------|
| Stages | Required/not required | Completed (date) |
| Specialist | Not required | |
| Line Manager | Not required | |
| Peer/FPO/stakeholder review | Not required | |
| CFPO | Required | Aug 2009 |
| FPAC | Not required | |
| Board | Required | Aug 2009 |