

MEANZ SAFETY AUDIT CHECK LIST (update Jan 2020)

Alterations/ additions shown in Red and Change noted in green.

MODEL ENGINEERING ASSOCIATION of NZ

CHECK LIST GUIDELINES FOR AUDITORS

Club _____ Date _____

Club Rep Name _____ Signature _____

Club Exec Name _____ Signature _____

Track Gauges Available:- 7¼" 5" 3½" 2½" **Current ADR Number (added)** _____

Does the club have:- Ground Level Track Elevated/ Raised Track

The attached document has been devised as a way of showing that MEANZ and its member Clubs are actively engaged in the pursuit of a safe environment where the operation of our hobby is married to the pleasure of the public.

It is not intended that the auditing procedure will be anything like a "Police Operation" but rather take the form of an independent check of a Club's safety systems, whilst at the same time passing on and gathering current safety practices.

The "Pool of Auditors" are made up of experienced persons from various MEANZ registered Clubs.

In most cases, the Auditor will be selected by your Club from the list of available auditors. He will possibly join you for an Open Weekend and carry out the audit with a local member assisting while you club is operating.

(Clubs to invite an Auditor from the pool rather than MEANZ or the lead auditors appointing them.)

This system is proposed so that ultimately we can illustrate to the governing powers that we are capable of operating safely and that we have systems in place to ensure that we will continue to operate in a safe manner.

It is hoped that Clubs will view this document as a useful tool rather than an imposition and we look forward to your cooperation to make the system work in our collective favour.

PORTABLE TRACKS: The construction and operation of portable tracks are **not** included in the requirements for registration with MEANZ. Clubs will need to make their own arrangements for the control and inspections of their portable tracks and this may well mean a separate registration with Worksafe Safety NZ under the Amusement Device Regulations.

AUDITORS INSTRUCTIONS:

Tick boxes are placed so that is a simply tick, make an appropriate note if required and go to the next item. This re-issue has maintained the Auditors tick boxes – 1/ Achieved, 2/ Not Achieved, 3/ Urgent Action Required with space for brief comment, and 4/ NA Not Applicable.

If an item does not comply the auditor may give a time to rectify the non-compliance – say 30 days. The club then needs to send evidence to the auditor that the defect item/s have been rectified before the audit papers are passed to the Lead Auditor for moderation and MEANZ Secretary for filing.

It is important to comment where good practice is non-existence or could be improved, or needs immediate attention to rectify a major hazard.

Questions that do not apply to the above club, tick the NON APPLICABLE (N/A) box.

After each question there is space for the Field Auditor to place comments or make extra notes.

The check list has a number system so use identifying number to reference notes.

Please use and write on this set of forms, keep a copy for your records and return the original complete set to your Lead Auditor for moderation when the audit is completed.

1. FORMS AND RECORDS

Scope: It is not an Auditors job to impose their beliefs or ideas on a club, but to view the various operations and records of the club under Audit and, to assess the suitability and adequacy of their systems to achieve the **required safety standards for their particular operation**. Where possible, the daily log book should be an A4 Diary **with** (added) 1 page per day bound variety rather than loose leaf, where sheets cannot be removed or mis-appropriated.

1.1 Daily Log Book to record Manager/ Operator, members, visitors, current hazards and locomotives/
passenger carrying rolling stock (added) operating on any track running day or working bee at the club site.

Achieved Not Achieved Urgent Action required by N/A

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1.2 Daily Check List to cover opening up, including end of day closing up to ensure site is left as it was at the beginning of running session. To be completed by the Day Manager/ Operator for the day.

Achieved Not Achieved Urgent Action required by N/A

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1.3 Forms to cover the following:- Daily Check List – Hazards – Incidents – Accidents.

Achieved Not Achieved Urgent Action required by N/A

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1.4 Boiler Test record folder for locomotives, steam road vehicle, steam boats, and **stationary** (spelling error corrected) steam plant.

Achieved Not Achieved Urgent Action required by N/A

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1.5 Boiler Inspectors Qualifications as per AMBSC Boiler Rules.

Achieved Not Achieved Urgent Action required by N/A

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1.6 Club rules/ Drivers Instructions – a copy should be available if requested.

Achieved Not Achieved Urgent Action required by

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1.7 Health and Safety Document.

Achieved Not Achieved Urgent Action required by

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1.8 List of Club Approved Personnel – Guards – Non Steam drivers – Steam Drivers.

Achieved Not Achieved Urgent Action required by

MEANZ SAFETY AUDIT CHECK LIST.

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1.8 Locomotive identification folder for locos that run at a club track on a regular basis including photo of the locomotive and contact details of the current owner.

Achieved Not Achieved Urgent Action required by

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1.9 Ride car inspection records for Passenger cars used in regular service at the club.

Achieved Not Achieved Urgent Action required by N/A

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1.10 Tunnels, and Bridges (over 1.2m high) must be suitable for the job intended. They should be assessed. Where a Local Body Permit or a Chartered Engineer's Report is available, auditors should accept it as evidence of a properly designed and constructed structure. Regular inspections by "Competent" people should be documented.

Achieved Not Achieved Urgent Action required by N/A

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1.11 Verification certificate or letter confirming that the club boiler test kit pressure gauge has been checked against a gauge of known accuracy.

Achieved Not Achieved Urgent Action required by N/A

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1. Detail any notes here.

2. HAZARD ASSESSMENT

2.1 Is there an active Hazard Management system in place. Not only should there be a system for identifying and recording Hazards, but also a satisfactory system for follow up action to eliminate, isolate or minimise the Hazard.

Achieved Not Achieved Urgent Action required by N/A

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2.2 Is there a Risk Assessment Management (RAM) document available for visiting groups such as Kindergartens, Play Centres, school groups etc. This should identify significant hazards for visitors and outline club rules and safety expectations.

Achieved Not Achieved Urgent Action required by N/A

3. STATIONS and BUILDINGS

3.1 First Aid kit location preferably designated by Green Cross, should be easily accessible and well stocked for minor injuries.

Achieved Not Achieved Urgent Action required by N/A

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3.2 Yellow safety Lines or appropriate rope or pipe barriers to indicate to the public a safe distance to stand back from rail tracks through the station area.

Achieved Not Achieved Urgent Action required by N/A

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3.3 List of members with First Aid background or certificates close to first aid kit.

Achieved Not Achieved Urgent Action required by N/A

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3.4 Wall map showing nearest Doctor, **Medical Centre** (added) or Hospital Emergency Department.

Achieved Not Achieved Urgent Action required by N/A

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3.5 Fire Extinguishers – Visible with appropriate signage.

Achieved Not Achieved Urgent Action required by N/A

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3.6 Check Service/ expiry dates on fire extinguishers.

Achieved Not Achieved Urgent Action required by N/A

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3.7 Hoses and fire fighting equipment readily available when steam locomotives are operating.

Achieved Not Achieved Urgent Action required by N/A

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3.8 EXIT signs inside buildings above external doorways where people are likely to congregate.

Achieved Not Achieved Urgent Action required by N/A

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3. Detail any notes here.

4. SIGNAGE

4.1 Warning sign located in station area advising passengers of safety issues such as heat, sparks and oil, leaning out when filming, standing up when train is in motion etc.

Achieved Not Achieved Urgent Action required by N/A

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4.2 Speed restrictions if deemed necessary for drivers in designated areas.

Achieved Not Achieved Urgent Action required by N/A

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4.3 Give Way signs or operating signals at diamond crossings or crossovers.

Achieved Not Achieved Urgent Action required by N/A

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4.4 Other signage necessary for the safe operation of the railway.

Achieved Not Achieved Urgent Action required by N/A

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4.5 Public **Access** (added) Restriction signs

Permanent

Temporary

Achieved Not Achieved Urgent Action required by N/A

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4.6 Signs to keep Public from accessing areas of potential Hazard/ Danger/ Risk areas.

Achieved Not Achieved Urgent Action required by N/A

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4.Detail any notes here.

5. STATION OPERATION WHEN HAULING PASSENGERS.

The Station Master or Loading Supervisor must ensure all passengers sit facing forward, **each wagon is loaded evenly, (added)** and advise passengers before the journey that when the train is in motion, to sit still, do not lean out sideways, keep arms in and feet on the support boards at all times, and to remain seated at all times until the train has come to a complete stop.

5.1 Station Master has been appointed.

Achieved Not Achieved Urgent Action required by N/A

5.2 Is the Station Master readily identifiable.

Achieved Not Achieved Urgent Action required by N/A

5.3 Are other staff involved in the Station's operations readily identifiable.

Achieved Not Achieved Urgent Action required by N/A

5.4 Are the Safety Instructions being relayed to the passengers.

Achieved Not Achieved Urgent Action required by N/A

6. FUEL AND DANGEROUS GOODS STORAGE

Fuel, petrol, LPG, paint and thinners etc should be stowed well away from any naked light, fire place, kitchen, the station, clubrooms or steaming bays area etc.

6.1 Storage Locker or bunker well away from the Station, Clubrooms, or Steaming Bay area.

Achieved Not Achieved Urgent Action required by N/A

6.2 There should be written procedures for the safe refuelling of Petrol, Diesel, L.P.G. Locos together with a designated refuelling area allocated.

Achieved Not Achieved Urgent Action required by N/A

6.3 Check to ensure that fuel or liquid containers are correctly labelled for their contents.

Achieved Not Achieved Urgent Action required by N/A

6. Detail any notes here.

7. WORKSHOP SAFETY

7.1 Check all workshop machines for **correctly fitted/ adjusted** (added) belt guards and that on **any** (added) bench grinders, the work rest is adjusted properly.

Achieved Not Achieved Urgent Action required by N/A

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7.2 Check that Safety Glasses or face shields, **and ear muffs** (added) are available.

Achieved Not Achieved Urgent Action required by N/A

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7.3 Check the condition of extension power leads for damage **and are fit for purpose.** (added)

Achieved Not Achieved Urgent Action required by N/A

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7.4 An RCD unit or Isolating Transformer should be available for use with portable electrical power tools connected to the mains.

Achieved Not Achieved Urgent Action required by N/A

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7.5 General Tidiness of workshop area.

Achieved Not Achieved Urgent Action required by N/A

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7. Detail any notes here.

8. PERMANENT WAY – TRACK – VIADUCTS – BRIDGES – UNLOADING.

Scope: It is not the Auditors job to rule on routes, curve radii, or grades. The track bed should be built on stable (or stabilised) ground and have sufficient width to allow comfortable unloading of passengers, anywhere along the line, in the event of a derailment. In the event that this requirement is not able to be achieved on both sides of the track, then the narrow side should be provided with some sort of protection to avoid any possibility of harm to passengers.

Is the Railway operated in both directions? **Yes** **No**

If so then a general walking inspection of the track must be done in both directions looking for any major track misalignment, rotting sleepers or other areas which may need the attention of the maintenance crew.

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8.1 Gates or doors on tunnels should have a method of fastening them open and closed.

Achieved Not Achieved Urgent Action required by N/A

8.2 Check the walking surface on viaducts and bridges for loose or uneven boards.

Achieved Not Achieved Urgent Action required by N/A

8.3 Check viaducts and bridges for signs of rotting timbers, rusting steel work and cracks in concrete that could suggest integrity failure of the structure.

Achieved Not Achieved Urgent Action required by N/A

8.4 Check around the steaming bays, turntable/ traverser areas for any sharp rail ends or other areas that could jam fingers or cause damage to clothing etc.

Achieved Not Achieved Urgent Action required by N/A

8.5 Check lineside clearances relating to close signal posts, trees and foliage that may interfere with passengers. A minimum clearance of 700mm from centre of track should be achievable.

Achieved Not Achieved Urgent Action required by N/A

8.6 Extremely low clearances through tunnels and under bridges should have Warning Tapes or signage on the approaches.

Achieved Not Achieved Urgent Action required by N/A

8.7 Elevated railway tracks should have anti-tip rails to prevent passenger cars from being able to tip and contact with track support pillars.

Achieved Not Achieved Urgent Action required by N/A

8.8 Passenger Ride Cars operating on elevated track should have a method to prevent passengers from touching the rails between passenger ride cars while the train is in motion.

Achieved Not Achieved Urgent Action required by N/A

8. Detail any notes here.

9. ROLLING STOCK, STEAMING BAYS, UNLOADING BAYS AND VEHICLE AND PEDESTRIAN CROSSINGS.

MEANZ clubs are required to have a register of all club and privately owned locos and passengers ride cars, that operate at the club on a regular basis. This register should show all maintenance and safety checks carried out on this equipment. A person or persons should be appointed to keep the register and make sure that the checks are done and recorded at pre-determined intervals.

9.1 Is there a system of checking all rolling stock, and a register kept.

Achieved Not Achieved Urgent Action required by N/A

9.2 Is there a person, or persons, appointed to keep the register and make sure that the checks are done and recorded at pre-determined intervals.

Achieved Not Achieved Urgent Action required by N/A

Steaming Bays are potentially the most hazard prone area of a club's facility and ideally should be fenced off to prevent public access. Alternatively some form of temporary fencing together with some policing is required.

9.3 Is there some form of fencing or temporary fencing in place or available to put into place **to keep the general public out of the steaming bay area.** (added)

Achieved Not Achieved Urgent Action required by N/A

Unloading Areas, where these areas are part of, or adjacent to, public areas, the club should endeavour to limit the risk to the public by using signage and/ or barriers.

9.4 Is there any signage and/ or barriers in place to limit public access while in the process of unloading or re-loading equipment.

Achieved Not Achieved Urgent Action required by N/A

Walkways, tracks and viewing areas. Where these facilities are under the maintenance and control of the club, then attention must be paid to their condition i.e. steps, surface, handrails etc.

9.5 Check tracks, walkways, steps and handrails for slippery surfaces, damaged timbers or loose gravel which could be considered hazardous to anyone.

Achieved Not Achieved Urgent Action required by N/A

Crossings; Vehicle and Pedestrian. This always appears to be a High Risk Area, but recorded incidents seem to be non-existent. However in order to minimise the perceived risk, measures should be taken to provide warning systems for both trains and vehicles/ pedestrians. Simple signs are a start with ongoing risk assessment which may eventuate in the installation of moveable barriers.

11. TETHERED RACE CAR TRACKS.

11.1 Check that spectators are adequately protected by a suitable perimeter fence, well constructed and maintained such that in the event of a break-away, a race car cannot escape through the perimeter.

Achieved Not Achieved Urgent Action required by N/A

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11. Detail any notes here.

12. BOATING PONDS.

12.1 Ensure that the pond has the required local council approved safety fencing, to keep unsupervised small children out of the pond area.

Achieved Not Achieved Urgent Action required by N/A

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12. Detail any notes here.

13. ON-GOING SAFETY TRAINING.

13.1 Clubs should provide some evidence that they have or are implementing an ongoing program of safety training for their members.

Achieved Not Achieved Urgent Action required by N/A

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13. Detail any notes here.

MEANZ SAFETY AUDIT CHECK LIST.

Additional notes or comments by Field Auditors:

MEANZ Club being Audited _____

Club contact address _____

Club Assistants name _____ Signature _____

Contact email address _____

Private Ph number _____ Cell _____

Auditor name _____ Signature _____

Date of Audit _____

Repairs/ upgrades to be completed by _____

Evidence provided of repairs completed _____

Date sent to MEANZ Lead Auditor _____

Date sent to MEANZ Secretary _____