Pre-start health and safety review checklist (PSR)

A pre-start health and safety review checklist earns its keep on the two things engineers most often wait for: a supplier letter naming the standards a machine was built to, and structural drawings nobody can find. The list below runs in the order the work happens: deciding whether you need a review, collecting documents, preparing the floor for the visit, then acting on the report. It applies to new and modified equipment under any of the eight items in section 7 of Reg. 851, with extra lines per item further down.

Before you book

Settle these first. They decide whether you need a review at all, and which kind of engineer you're looking for. If you're not yet sure what a pre-start review covers, start there.

- [ ] Confirm the workplace is a factory under the Occupational Health and Safety Act, and not a logging operation.
- [ ] Name the Table item (or items) the change falls under. A robot cell with a fenced perimeter and a new rack beside it is two items.
- [ ] Decide whether it's new, or a modification that needs new or changed controls. A like-for-like part replacement is maintenance and doesn't count.
- [ ] Check the exemption for that item, and whether you actually hold the documents it needs. The checker walks through the official flow charts, step by step (https://prestartreview.ca/do-i-need-a-psr/).
- [ ] Record the decision in writing, whichever way it goes, following your company's procedure.
- [ ] Note your target start-up date, including any testing or commissioning, because the review has to be finished before those begin.

Equipment and supplier documents

Ask the supplier for these at the purchase order stage, not the week before start-up. Suppliers answer faster when the request is in the contract.

- [ ] Manufacturer's manuals: installation, operation and maintenance.
- [ ] A manufacturer's certificate or letter stating the standards the equipment was built to, by name and edition.
- [ ] For imported CE-marked machinery (https://prestartreview.ca/pre-start-review/imported-ce-equipment/), the EU declaration of conformity. Check that it lists the specific standards used; one that doesn't won't support an exemption.
- [ ] The installer's written statement that the equipment was installed to current applicable standards and the manufacturer's instructions (needed for the machine guarding and spray booth exemptions).
- [ ] Rated capacities, load tables and nameplate data.
- [ ] Any risk assessment and safety circuit calculations the builder did.

- [ ] For used equipment, whatever the seller can provide, plus photos of every nameplate and label. Gaps here are common; see reviews for used equipment (https://prestartreview.ca/pre-start-review/used-equipment/).

Drawings and layout

- [ ] A floor plan showing where the equipment goes, with aisles, exits and neighbouring equipment.
- [ ] Electrical schematics, including the safety circuits.
- [ ] Pneumatic and hydraulic schematics where valves stop or hold motion.
- [ ] Structural drawings for anything that carries load: racks, crane runways, platforms, supports.
- [ ] Ventilation layouts and fan data for exhaust systems.
- [ ] For a modification, the existing drawings marked up with what's changing, and any earlier pre-start review report for the equipment.

Extra documents by Table item

Each item page has the full list. These are the ones engineers most often wait for.

Item 1: flammable liquids

- [ ] Floor plans with cabinet locations, cabinet specifications, and the procedure that limits quantities per cabinet.
- [ ] Safety data sheets for each liquid, so the engineer can confirm which count as flammable.
- [ ] Dispensing locations and the ventilation, bonding and grounding arrangements (see flammable liquids reviews (https://prestartreview.ca/pre-start-review/flammable-liquids/)).

Item 2: machine guarding

- [ ] Data sheets for light curtains, scanners, interlocks, safety relays and safety PLCs.
- [ ] Stopping time data where safety distances depend on it; the Item 2 guarding review (https://prestartreview.ca/pre-start-review/machine-guarding/) checks light curtain mounting distances against it.
- [ ] Safety PLC program or configuration files, and any performance level calculations (https://prestartreview.ca/performance-level-assessment/).

Item 3: racks

- [ ] The manufacturer's statement that the rack as a whole is designed and tested to ANSI MH16.1-2012 (R2019), the edition the guideline names, plus capacity tables, component identification, and installation instructions.
- [ ] Lift truck make, capacity, turning radius and reach, which the racking review (https://prestartreview.ca/pre-start-review/racking/) has to consider.

Item 4: ignition or explosion risk

- [ ] Process description with materials and quantities, and piping drawings, since the ignition or explosion review (https://prestartreview.ca/pre-start-review/ignition-explosion-hazards/) covers the entire process including the piping.
- [ ] For a spray booth, the manufacturer's or certifier's documents and the installer's statement.

- [ ] Any existing hazardous area classification drawing (https://prestartreview.ca/hazardous-area-classification/), even an old Class and Division one.

Item 7: lifting devices

- [ ] Original engineer-sealed drawings or report showing the design capacity of the supporting structure. The crane and hoist review (https://prestartreview.ca/pre-start-review/lifting-devices/) turns on whether that structure was originally designed for the device.
- [ ] For vehicle lifts, proof of certification to the standard the guideline names.

Item 8: ventilation for hazardous agents

- [ ] The agents involved and their Reg. 833 exposure limits, ventilation design data, and any existing hygiene sampling results. The hazardous agent ventilation review (https://prestartreview.ca/pre-start-review/hazardous-substances-ventilation/) page explains what gets measured.

Dust collector PSRs (https://prestartreview.ca/pre-start-review/dust-collectors/) (Item 5) and foundry reviews (https://prestartreview.ca/pre-start-review/foundries/) (Item 6) have no exemptions, so expect the engineer to need full process and layout information from the start.

Site readiness for the visit

1. [ ] Send documents ahead so the engineer arrives having read them.
2. [ ] Make sure the equipment or installation area is accessible and lit.
3. [ ] Arrange lockout if panels or guards will be opened.
4. [ ] Have someone on the floor who knows the process: a maintenance lead, controls technician or the integrator.
5. [ ] If the engineer is to watch a test run, agree in advance how workers will be protected during testing; the report must describe those measures.
6. [ ] Book a lift, ladder or forklift if the engineer needs to see anything at height.

People to involve

- [ ] Your joint health and safety committee or health and safety representative, who must receive the report before start-up.
- [ ] The machine builder or integrator, for technical questions the documents don't answer.
- [ ] Purchasing, so supplier document requests are part of the order.
- [ ] Whoever will sign off the measures the report requires, with a budget for them.

After the report

1. [ ] Read the measures required for compliance separately from any extra recommendations; the guideline asks engineers to list them apart.
2. [ ] Complete the required measures, or give the JHSC or representative written notice of what measures have been taken to comply, before operating (section 7(6)).

3. ☐ Give the JHSC or representative a copy of the report before the equipment is operated or used (section 7(7)).
4. ☐ Keep the report and supporting documents readily accessible in the workplace for as long as the equipment stays (section 7(8)). An inspector can ask to see it at any time.
5. ☐ If you're relying on an exemption instead, keep those documents the same way, and give the JHSC a copy if asked.

For the full picture of each item, start from the section 7 hub covering the eight items (https://prestartreview.ca/pre-start-review/).

PreStartReview.ca is a referral service and doesn't do engineering work. This checklist is general information, not engineering or legal advice; the engineer doing your review decides what documents they need. Current version: https://prestartreview.ca/guides/psr-checklist/