

GOVERNMENT OF ALBERTA EQUIPMENT LIST FOR DECONTAMINATION PURPOSES

(Updated June 2017)

This list serves a guide for which water-based equipment is preferred or unsuitable for decontamination (to curb the spread of aquatic invasive species and fish disease)

EQUIPMENT DESCRIPTION	SUITABLE	NOT PREFERRED	UNSUITABLE	COMMENTS
Aluminum irrigation pipe – 6” or 8”				Due to size, nature of the equipment and quantity, it is almost impossible to decontaminate effectively using QUAT. Preventative measures and sufficient dry time suggested
Ammonium Chloride Pumping Equipment (Pumps, Hoses, Tanks, etc.)				May be self-decontaminating
Anchors				Can be subject to QUAT and hot water wash
Angling gear – line, rods, tackle, and landing nets				Can be subject to QUAT and hot water wash. If hot water not available, soak in 3000 ppm (Red Zone) or 1500 ppm (Yellow Zone) of QUAT for at least 10 minutes.
Any equipment with wooden handles or wooden components which are not sealed				High risk of decontamination failure due to porosity. Replace with aluminum or plastic, or consider using as dedicated gear (not used outside of Red Zone).
Backpacks				Launder or soak in QUAT
Backpack Water Bag c/w hand pump				Submerge in QUAT solution for at least 10 minutes
Benthic sampling equipment – kick nets, neil cylinder and accessories				
Boats (non-inflatable) and trailers				Avoid use of inboard and jet boats where possible as they are harder to decontaminate than outboards. Can be subjected to hot water and QUAT. Carpeted areas in boats are nearly impossible to adequately decontaminate.
Boat motor, tank, fuel line				Spray with QUAT if exposed to water
Carboy				Acid washed

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Conduit				Stays within basin/HUC
Coolers				Easily decontaminated with QUAT. May be sensitive to heat.
Electrofishers and associated equipment – backpack, float and boat				Spray/wipe down with QUAT
Engines (fire)				Wash with Hotsy at 90°C or steam truck or use QUAT solution
Epi Kit				Avoid exposure to source water. Kit cannot receive hot water, but individual items can be sprayed.
Felt soled waders (non-removable)				Do not use due to difficulty in properly disinfecting and drying unless the soles are removable and can be disinfected and dried completely
Fiberglass dipnet poles				
Field Assembly Equipment (Cables, Cords, Zip Ties, Concrete Blocks, Tools, etc.)				Use equipment constructed of non-porous materials
Field Electronics (Laptops, GPS, Phones, iPods, Display Units, etc.)				Wipe-able only
Field unit bag				Avoid exposure to source water. Swap canvas bag for hard plastic surface or contain in plastic bag.
Fire Hose				Send to provincial warehouse for cleaning and drying
Fish Hatchery trucks – more specifically the hose used to transfer fish into stocked lakes				Hot water or steam truck needed (90C)
Fish identification books				Cannot be decontaminated. Keep in sealed bag and ensure does not come into contact with water.

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Fish sampling gloves (cotton/wool)				Considered disposable, not to be used from water body to another in the Red Zone. Use as dedicated gear in the Red Zone for multiple uses.
Float Planes & aviation equipment				Clean all organic material and mud before take off. Avoid dense plant beds or shallow water (mud). Raise and lower rudders to dislodge residual organics. Remove plane from water for thorough drying when possible (hand clean floats when not).
Flow Measuring Structure (Flumes, Flume Boxes, and Weirs)				Structures constructed of PVC or metal are easily decontaminated with QUAT
Flow Metering Equipment (Current Price Meters, ADCPs, Swoffers, etc.)				Consult manufactures for specific chemical and temperature sensitivities
Goretex or breathable waders (neoprene)				Hot water can affect the waterproofing – QUAT soak only
Heavy equipment (bulldozer, excavator, nodwell, skidgeon, rollogon, water truck)				Wash with Hotsy at 90°C or steam truck (if equipment travelled through a waterbody) or spray with QUAT
Ice packs				Contain in plastic bag so decon not required
Inflatable Watercraft				Check with manufacturer, but many cannot be subject to QUAT or hot water. Only for use in dedicated Red Zone unless manufacturer informs of decontamination option.
enclosed floor with floorboards				Extremely difficult to remove floor to adequately clean
pontoon style (open floor)				Inflatable pontoons cannot be treated with 90 C water
Kemmerer				Rope will have to be replaced or cleaned with hot water/QUAT
Measuring tapes				Must ensure all parts are decontaminated
Net pickers (plastic handles only)				Need to replace all wooden handled types with plastic

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Nets – FWIN, NAG, SPIN, Trap, Seine and Pound nets (monofilament, nylon web and polypropylene)				QUAT soak and freshwater rinse
Nozzles (Hansen, Poly, Foam), sprinklers (Mini or Rainbird), suction hose, valves (3-way instantaneous or shut off), pails (collapsible), water thief, foot valve				Submerge in QUAT solution for at least 10 minutes or dry for 24 hrs.
Nylon dipnet mesh				QUAT soak (but check net frame to see if hollow, requires more thorough decontamination)
OHV's – ATVs, Side-by-sides				Avoid contact with water (especially in the Red Zone). Use bridges and built-up crossings. Always Clean, Drain and Dry. Cannot treat with hot water, but remove organics, particularly when crossing multiple streams. Use high pressure to remove organics and mud at the completion of field activities.
Orifice line and block				Permanent installation (never re-used)
Paddles				
Pails and coolers				Must be all hard sided as soft sided cannot be decontaminated with hot water in red zone
PFD's, life jackets, dry and wet suits, survival suits, throwbags				Not easy to decontaminate, BUT required for safe working procedures. Unable to use hot water, QUAT spray where appropriate.
Plankton Sampling Equipment (Tow Nets, Dolphin Buckets, Secchi Disks, etc.)				Treated with Vinegar bath for Zebra/Quagga Mussels
Paster				Acid washed between sites (monitoring)
Plastic measuring board				
Plastic net tubs				

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Portable depth sounders				Rinse with QUAT solution
Pumps (MKIII c/w backboard, Floto, BB4, Mini Mark, Shindawa, Mini Striker etc.)				All mud and plant material to be removed from pumps. QUAT solution to be pumped through pump for 10 minutes at warehouse or base camps.
Pumps – 8” and 6” PTO pumps				Due to size, nature of the equipment and quantity, it is almost impossible to decontaminate effectively using QUAT. Preventative measures and sufficient dry time suggested
Rubber boots				
Rubber electrofishing gloves				
Rubber waders				One piece systems will full rubber material and open cleat soles are preferred.
Secchi disk				Use QUAT, seasonal use
Sediment sampling equipment – corer, eckman, spoons				Rope difficult to decon due to porosity. Soak in QUAT solution
Spar Bouys – Plastic				
Spar Bouys – Wood				
SPMD cages				
Steel or aluminum cables or anode rings				Stays within basin/HUC
Synthetic wading boots				Submerge in QUAT solution for at least 10 minutes after thorough scrubbing and ensure complete saturation of material with disinfectant
Telescoping Sampling Pole				Submerge, spray, or wipe with QUAT solution
Tool kit/tools, crimpers and cutters				Avoid exposure to water source. Kit cannot receive hot water treatment, but individual items can be sprayed/wiped with QUAT if necessary
Trays				
Tubing				Acid washed between sites (monitoring)

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Under ice sampling equipment: foam insert, rod and clamp, rope				
Various irrigation pipe elbows, fittings, hoses, intakes				Due to size, nature of the equipment and quantity, it is almost impossible to decontaminate effectively using QUAT. Preventative measures and sufficient dry time suggested
Wading boots (synthetic, leather etc.)				Submerge for at least 10 minutes in QUAT after thorough scrubbing and ensure complete saturation of material with disinfectant
Water bladder (60 gallon or 300 gallon), water tank (self-supporting)				Send to provincial warehouse for cleaning. Wash with Hotsy at 90°C
Water Quality/Quantity Loggers				Consult manufactures for specific chemical and temperature sensitivities
Water quality meters				Consult manufactures for specific chemical and temperature sensitivities
Water Quality Sensors/Sondes				Consult manufactures for specific chemical and temperature sensitivities
Water safety gear – knives, tweezers, scalpels, tables				
Winter sampling clothing – boots, snow pants, coats, gloves, other gear				Hot water compromises gear integrity and is not feasible. Use dry time or freezing (minimum 7 days) or having dedicated gear.
Winter sampling equipment – Ice cleats, ice picks, augers, axes, ice scoops, chainsaw				
Wooden fish measuring board				Should be well sealed with varnish or should be disposed of after use at a single site
Wooden GOA truck box liners				Avoid exposure to source waters or bare/spray-in liners should be used for field work.
Wooden lid				Dedicated to Red Zone or stay within one basin/HUC