ALRD Protocol for Chemical Decontamination of Field Equipment

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Materials: QUAT-128 containing active compound dodecyl dimethyl ammonium chloride (DDAC) or other comparable Quaternary Ammonium Compound (QAC) products. "The recommended minimum active QAC concentration for effective spray-application disinfection is twice that for submersion disinfection, 0.8% or 8.0 ml of QAC per L of water (Table 2, Rooij et al.)."

Field Method 1(Spray Bottle): While at the site rinse and remove all mud, debris, and organic matter from equipment including nets, booties, wading boots, and waders. Move to a location at least 100ft from the water body. For this method of decontamination a 0.8% solution is required. This means in a two gallon spray bottle 50oz. QAC should be added to obtain this concentration. Fully saturate equipment for 10 mins. Reapplication may be necessary in highly evaporative conditions. Allow equipment to dry as much as possible before moving to the next site.

Field Method 2(Soaking in Solution): While at the site rinse and remove all mud, debris, and organic matter from equipment including nets, booties, wading boots, and waders. Fill a bucket or collapsible container with water from stream. Move to a location at least 100ft from the water body. Mix QUAT solution to a concentration of 0.4% or 4.0 mL of QAC per L of water or 25 oz. per gallon of water. Soak all equipment for 2-5 mins. Remove from solution and allow to dry as much as possible before moving to the next site. Dispose of the solution >100m from the water body on a trail or area of thick duff where particulate carbon can break down the compound quickly. (Pope et al.)

Other Methods: Quat-128 is the preferred method for decontamination however, granulated Chlorine Bleach (Swimming pool Chlorine) containing the active ingredient sodium hypochlorite (6%) is also an effective solution. Liquid household bleach shouldn't be used because it loses most of its effectiveness within two weeks of the container being opened. If no other method is available a concentration of 1% sodium hypochlorite can be used.

Literature Cited

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