

No. U.II-24(Spec)/2013-14-Prov(CoBRA)
Bharat Sarkar/Government of India
Griha Mantralaya/Ministry of Home Affairs
PM Division/Prov. I Desk

26, Man Singh Road, Jaisalmer House
New Delhi, Dated : 2nd September, 2013

To,

DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject : QRs of Hydration Pack & Machete.

The QRs of Hydration Pack & Machete as per Appendix 'C' and Appendix 'D' respectively have been accepted by the Competent Authority in MHA

2. Henceforth, all the CAPFs should procure the above items required by them strictly as per the laid down Technical Specifications/QRs.

Yours faithfully,




(Smt. S. B. Nanda)

Under Secretary to the Govt. of India
Tel : 23381278

Encl : As above.

Copy forwarded to : SO (IT), MHA, with the requested to host the QRs (soft copy being sent through email) on the MHA website (under the page Organisational Set up-Police Modernisation Division - Qualitative Requirements)



(R K Soni)
Section Officer (Prov.I)

Copy to : Director (Procurement), MHA.

Copy for information to : PS to JS (PM)

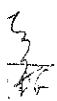
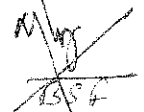
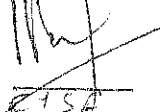
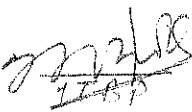
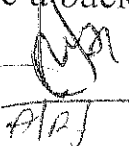
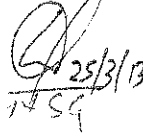

The draft specification of above items as approved by the sub-group are placed at **Appendix-C** (Hydration Pack) & **Appendix-D** (Machete).

Member: Inspector (M) P. Tirkey, CISF	Member: Shri T.D Deashta, AC, ITBP
Member: Shri Pankaj Dangwal, DC, SSB	Member: Shri Dinesh Singh, SC(Prov)/ DC, NSG
Member: Shri S K Thakur, DC Assam Rifle	Member: Shri N.S. Sodha, DC, BSF
Member: Shri S. Chatterjee, SSO(U &A) BPR&D	Member: Shri N.K.Yadav, DIG(Prov), CRPF
Member : Dr N.C Asthana, IPS, IG(Prov) CRPF	
Chairman : Shri Pranay Sahay, IPS, DG CRPF	

Appendix "C"

QRS / SPECIFICATION OF HYDRATION PACK


- Hydration system that is in itself built like a backpack so that if at all it is desired to carry it as a standalone system, it may be carried so.
- It should also be capable of being attached to the outside of a military backpack with straps/fasteners/Velcro's so that if the soldier wants to attach the system to the outside of the backpack, he may do so.
- The straps/fasteners/Velcro's of the hydration system must be removable so that if the soldier wants to keep only the shell inside his backpack for compactness or for protecting it from heat, he may do without the encumbrance of the straps, etc.
- The reservoir must be made of flexible impermeable insulating material. Material through which water seeps out and evaporates is not acceptable.
- The reservoir must be protected by a flexible fabric shell so that the reservoir is unlikely to be damaged by other gear that it shares the interior of the backpack with.
- The fabric of the shell must be waterproof and the shell should have such construction that it does not allow water to get inside where the reservoir is.(Soaking increases the weight which is critical— it also increases the chances of contamination).
- The reservoir should be strong enough to withstand pressures of rough usage in field condition (For example, in combat the soldier may have to drop the load of his back in a hurry) and particularly because there would be metallic objects (like ammunition, tools etc) in the backpack. (for the purpose of ruggedness in this context, the device shall be tested by keeping inside a backpack loaded with











a total weight of 15kg which will have besides the regular items carried by the soldiers, metallic items like 150 rounds of 7.62 x 39 mm ammunition, steel teaspoon, mess tin, INSAS bayonet in scabbard , etc. and dropping it from the back of a six foot man on hard ground.)

- Weight of reservoir not to exceed 230 grams.
- The configuration of the reservoir inside the shell and the shell itself must be vertical so as to blend with the backpack.
- Reservoir capacity to be 03 Liters.
- The reservoir must have a screw capped absolutely leak proof mouth for filling and a 37 inches long flexible drinking tube to allow the wearer to drink hands-free.
- The mouth must have a diameter of at least 5 cms to facilitate easy filling.
- The drinking tube must have a ' bite valve' at the end which must open only when the user bites down on it – the valve should also have a dust cover for hygienic concerns.
- Before the bite valve there must be a one-way rotating tap valve operable by one hand that stays open or closed according to the position of a lever, so that even if the bite valve is pressed accidentally, the water does not leak out.
- The bite valve must be installed with a right angle extension between it and the tube, to achieve a preferred positioning and angle of the valve relative to the user's mouth. (desirable)
- In – line ceramic based filter to allow the use of locally available water. The ceramic filter should be capable of cleaning later by back flushing with clean water so that replacements are not necessary (desirable).


CRDA

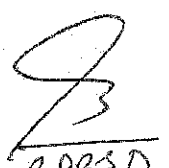

BSF



EISA


TTBP


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FISG


BPRSD


SSB

- There should be plastic foam tubing to surround the drinking tube to reduce heat transfer between the environment and liquid in the tube.
- The mouth, the valve and all joints, seams of the reservoir must be absolutely leak / spill proof even when the reservoir or the whole system is violently shaken.
- The drinking tube must join the reservoir very near the bottom of the reservoir to maximize the volume of accessible liquid.
- There should be channel inside one or both of the shoulder straps, for the tube to pass through, preventing the tube from tangling with other gear or the environment, and reducing the chances of the liquid warming up while waiting in the tube to be drunk next.
- The reservoir's change in volume as it is gradually emptied must be reflected in the decrease of its smallest dimension (thickness); so that the vertical and side-to-side dimensions stay fixed, thereby limiting the shifting of it and any items next to it, and minimize the flexing of the reservoir walls.
- Essential accessory: Sets of at least two cylindrical nylon bristle brushes (a large one for inside of the reservoir, and a thin one with a flexible handle long enough to run at least half way through the drinking tube permitting removal of bacterial colonies that may build up inside the system).
- Means of holding the reservoir walls apart to encourage drying between uses, such as a plastic frame that collapses to pass through the fill opening, but expands inside the reservoir to hold the sides apart even near the corners. (desirable accessory)

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CRPA

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ASR

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TCBP

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ARF

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NSG

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SSB

QRs / SPECIFICATION OF MACHETE

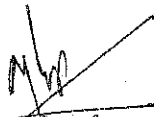
General Features

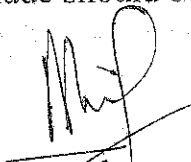
- Straight blade with full tang
- Blade to broaden slightly towards the top with nearly symmetric curved edges- curvature more on the inside.
- Single – edge throughout but double edge at the top for 3 inches – that is the spine of the top to also have edge for 3 inches.
- No cross guard required but the vase of the spine near the grip to have no edge for 2 inches.
- The remaining part of the spine to have saw-teeth.
- Contoured impact resistant ABS/ tough rubber / propylene grip with a simple band hilt so that the machete does not slip out of the hand even if jerked.
- The inside of the band hilt to have same plastic / rubber on its inside.
- Full scabbard (nylon) for the blade and an adjustable loop with Velcro for attaching to the standard uniform belt.

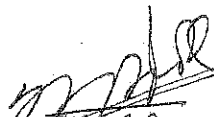
Dimensions and Specifications.

- Blade made of 1095 Carbon steel with black powder epoxy/zinc phosphate finish or Black oxide coated 440 C stainless steel.
- Blade length 12 inches.
- Grip length 5 inches
- Total length 17 inches
- Total weight not to exceed 450 grams and not less than 400 grams
- Blade styling approximating to the so-called Bush style
- Thickness of the blade should be 0.125 Inches

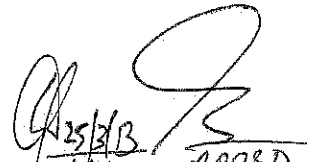

ERPA



ASA


CSA


TLBP


ATRF


NSG


BPSD


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