

(11)

1792
01/11/18

5341
11/11/18

**OFFICE OF THE INSPECTOR GENERAL OF POLICE , COBRA SECTOR, CRPF, BLOCK
NO. 11 OLD SECRETARIAT , CIVIL LINES , DELHI-110054**

No. U.II-21/20117-18-Prov-CoBRA

Dated, the 30 October 2018

To,

✓ The DIGP (Prov)
Dte. Genl, CRPF,
CGO Complex, Lodhi Road,
New Delhi.

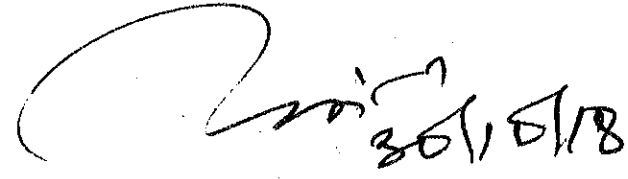
Subject: **Regarding Mobile Water Bottle Purifier.**

Kindly refer to your office letter no. U.II-98(Spec)/2017-18-Prov(Water Bottle)-14 dated 02/02/2018 and signal no. U.II-98(Spec)/2017-18-Prov(Water Bottle)-14 dated 05/06/2018.

2. In this connection, a board of officers was detailed to prepare draft QRs/Specification of Mobile Water Bottle Purifier for CoBRA troops. The board has submitted proceeding which is examined in this HQr and forwarded same for your further needful please..

3. This has the approval of IG.

Encl:- As above.


30/10/18

DIG (Prov) CoBRA

In file

पु.स.स. (संभरण)	
DIG (Prov.)	2/11
अ.स.स.स.स. (संभरण)	
Dy. Comdt. (Prov.)	3
सहायक निदेशक (संभरण/लेखा)	
AD (Prov./Accts.)	2
कार्यालय अधीक्षक (संभरण)	11
OS (Prov.)	
संबंधित सहायक	
DA	14
प्राप्ति की तिथि	
Date of Receipt	

BOARD PROCEEDINGS

Proceedings of : A Board of Officers

Assembled at : CoBRA Sector HQr, Old Secretariat, Civil Lines,
Delhi-54.

Assembled on : 15 /10/2018

By the Order of : IG, CoBRA Sector, CRPF O/O No. U.II-1/2018-19
Prov-CoBRA dated 06/08/2018.

For the purpose of Purifier. : To prepare revised QRs/Specification of Mobile Water
Purifier.

COMPOSITION OF BOARD

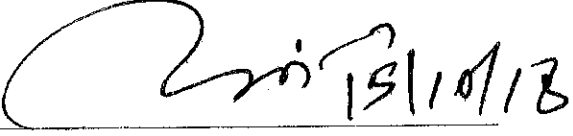
Presiding Officer : Shri Dinesh Pratap Upadhyay, DIG(Prov), CoBRA Sector

Member-I : Shri Suresh Kumar Yadav, Comdt(Prov), CoBRA Sector

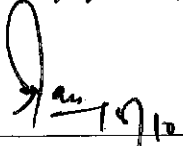
Member-II : Shri Paramjeet Singh, D/C&AC(Prov&LSC), CoBRA Sector

In pursuance to the orders of IG, CoBRA Sector HQr, CRPF vide office order No. U.II-1/2018-19-Prov-CoBRA dated 06/08/2018, the board of officers assembled at CoBRA Sector HQr, Old Secretariat, Civil Lines, Delhi-54 on 15/10/2018 to prepare the draft QRs/Specification of Mobile Water Purifier. The framing QRs/Specification prepared by BOO is enclosed as per appendix-A.

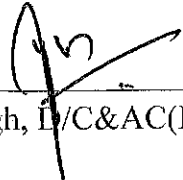
Presiding Officer :


Dinesh Pratap Upadhyay, DIG(Prov), CoBRA Sector

Member-I :


Suresh Kumar Yadav, Comdt(Prov), CoBRA Sector

Member-II :


Paramjeet Singh, D/C&AC(Prov&LSC), CoBRA Sector

0.0 FOREWARD

- 0.0 This specification has been prepared by the CoBRA HQr of the CRPF under the authority of The Director General of Police, CRPF.
- 0.1 This specification is for use by the troops of the CRPF.
- 0.2 This specification would be used for manufacture, quality assurance and procurement of the item.
- 0.3 Quality assurance authority for the item covered in this specification is Office of the Director General of Police, CRPF, New Delhi. All enquiries regarding this specification, including those relating to any contractual conditions contained therein shall be addressed to the Quality Assurance authority at the following address:
IG(Provisioning), Directorate General of Police,
CRPF, Ministry of Home Affairs
Block No-1, CGO Complex, Lodhi Road,
New Delhi-03
- 0.4 Copies of the specification can be obtained from the office of :
IG(Provisioning), Directorate General of Police,
CRPF, Ministry of Home Affairs
Block No-1, CGO Complex, Lodhi Road,
New Delhi-03
- 0.5 This specification holds good only for the supply order for which it is issued.
- 0.6 The Quality Assurance Authority reserves the right to amend or modify this specification as and when required.
- 0.7 The Quality Assurance Authority is the competent authority to grant concessions, if any, in respect of any clause contained in this specification.
- 0.8 For the purpose of deciding whether a particular requirement of this specification is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS:2-1960 (Reaffirmed 2006). The number of significant places retained in the rounded off value should be the same as that of the specified value in this specification.

1.0 SCOPE

- 1.1 This specifications covers the requirement for "mobile water purifier" for the requirements of the CRPF.
- 1.2 This specifications do not specify general appearance, feel etc. of the "mobile water purifier".

Assemblies

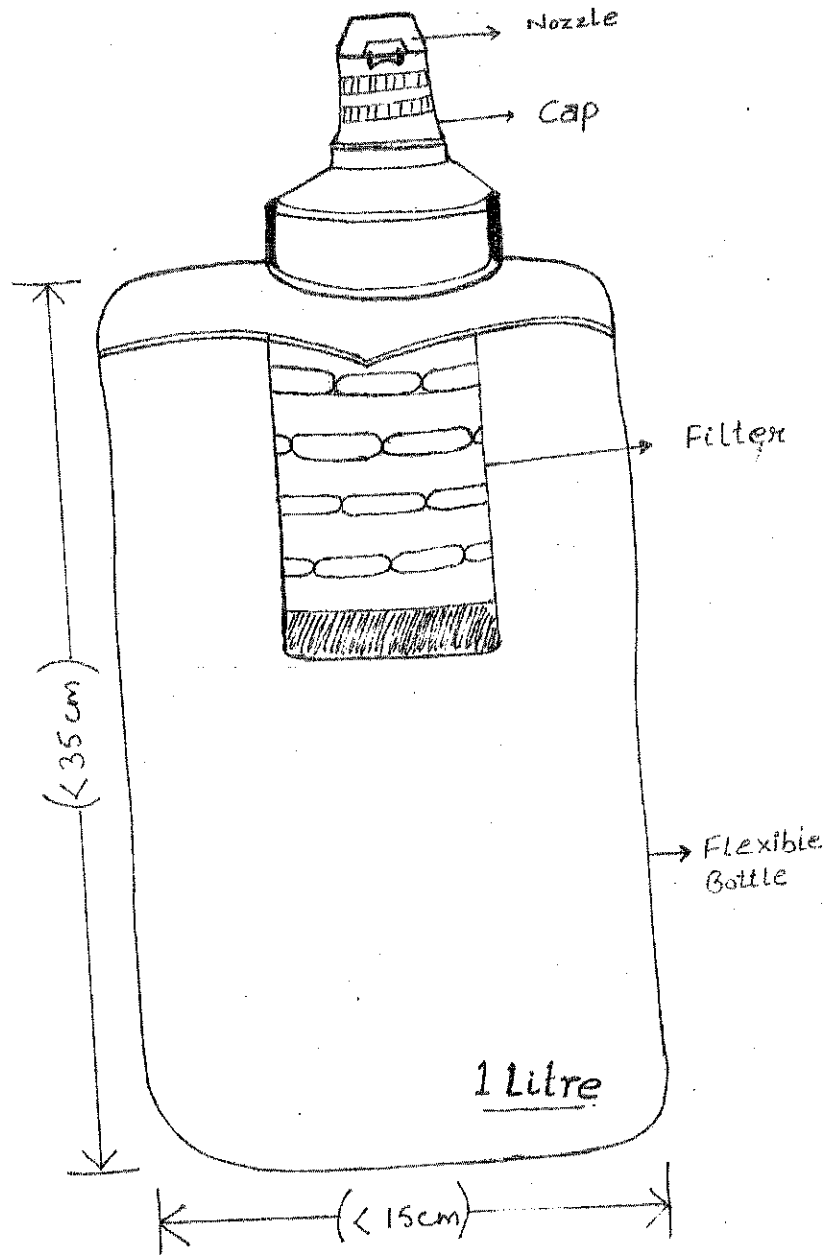
The complete "mobile water purifier" shall have following items:-

1. **Bottle-** The bottle (transparent or black/transparent in colour) shall be made of soft touch and flexible polyurethane. The material shall be food grade. The bottle cap shall be of universal size, which shall be fitted on packed mineral water bottle or cold drink pet bottle.
2. **Cap-** The mobile water purifier shall be provided with a screw cap (black/transparent in colour) which shall be made out of High Density Polyethylene (HDPE). The material shall be food grade. The cap shall contain a filter with the end of nozzle from which water can be sucked after filtration.
3. **Filter-** The filter shall be so made that it can reduce level of lead and harmful chemicals and remove bacteria and other parasites from water. It shall be used in 5 different ways: as a personal straw, with the included flexi water bottle, attached with a plastic water bottle, hydration bladder and as a gravity filter.

Mobile Water purifier

The shape and dimension of the mobile water purifier are shown in figure 1.

Figure - 1



Note:- The diagram only represents general appearance of the bottle. The appearance of the bottle may differ provided that the specifications match the QR.

Technical specification:-

S.No.	Technical specification	Requirement	TD
1	Material of Integrated mobile water purifier	Polyurethane (Food grade) material which shall be BPA free and 100% PVC free.	It will be checked by Government lab or NABL
2	Dimension (Length & width)	35 cm Length Not exceeding 15 cm Width	It will be checked by Government lab or DJBL.
3	Weight	Not exceeding 75 gms	---
4	Storage capacity	1000 ml (max)	B.O.O
5	Water filtration capacity	2000 liters \pm 100 liters	Lab (Like Delhi Jal Board Lab)
6	Roughness of Integrated mobile water purifier.	The integrated soft bottle of the mobile water purifier should be rugged and strong, capable of withstanding damage and tear under combat conditions like impact or fall.	B.O.O. during field trial will physically check with the following methods- A: - <u>Drop test</u> - By filling the mobile water purifier (at least 80%) with water and dropping it from a height of 6 meters. The mobile water purifier must not burst. B :- <u>Bat Test</u> - By filling mobile water purifier (at least 80%) with water and suspended by a rope, then hit with a full swing of the bat on the soft part of mobile water purifier. The mobile water purifier must not burst.
7	Colour and transparency of mobile water purifier.	It shall be translucent. Colour black/olive green or camouflage	Will be checked by B.O.O. (Board of officers appointed by CRPF)

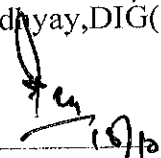
8	Mouth of Mobile water purifier.	Shall have an open/close cap or mechanism to prevent external particles such as dirt, dust and bacterial growth from entering the mouth. The cap/mechanism shall be attached to the mouth of mobile water purifier.	B.O.O. will check
9	Water discharge mechanism	The discharge must be with gravity or by squeezing the bottle and must also by sucking the mouth piece of mobile water purifier.	B.O.O. will check
10	Flow of water when mobile water purifier is dirty with dust/dirt.	In case of external parts of the kit being contaminated by mud or dirt the mobile water purifier should be capable of facilitating the consumption of purified water without the user's mouth coming in contact with the mouth piece.	
11	Material of filter element	It shall be made with Hollow Fiber or ceramic.	Checked by Lab.
12	Rate of flow of filtered water.	2000 ml \pm 100 ml per minute.	B.O.O. in field trial. B.O.O. will fill mobile water purifier with dirty water and by squeezing mobile water purifier, the turbid water shall pass through the filter element and collect 1000 ml water in beaker. The time taken to filter 1000 ml will be measured with a stop watch and the rate of flow will be calculated. The exercise must be repeated 10 times and average will be taken to determine rate of flow.

13	Pore size of water filter	Must not be more than 0.2 micron	Verified from Lab.
14	Bacteria removal	Bacteria shall be removed by mobile water purifier (99.99% min.)	
15	Removes parasites	Yes (99.99%)	
16	Removes virus	Yes (99.99%)	
17	Reduces chemical	Yes (chlorine and heavy metals)	
18	Reduces organic chemical matter	Yes (Pesticides, herbicides, Volatile Organic Compounds)	
19	Improves taste and odor.	Yes	

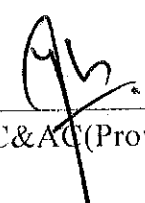
Presiding Officer :


15.10.18
Dinesh Pratap Upadhyay, DIG(Prov), CoBRA Sector

Member-I :


19/10
Suresh Kumar Yadav, Comdt(Prov), CoBRA Sector

Member-II :


Paramjeet Singh, D/C&AC(Prov&LSC), CoBRA Sector