

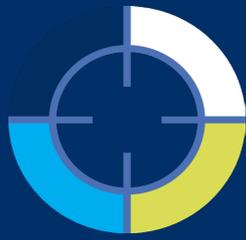
ENVIRONMENTAL BULLET CATCHER

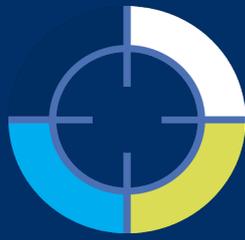
OPERATING AND MAINTENANCE MANUAL



Contents

1	Preface	3
2	Limitations in use	3
3	Description of the Environmental Bullet Catcher	3
4	Checklist	4
5	Maintenance and inspection instructions	4
5.1	RIKO front panels and PEHD edge list	4
5.2	Granulate level	5
5.3	Lid hinges	5
5.4	Lid- and intermediate pieces	5
5.5	Checking and discharging leakage water	5
5.6	Procedure for checking and emptying	6
5.7	Cleaning of rubber granulate	6
5.8	Steel construction	7
6	Completion	7





1 | Preface

This operating and maintenance manual applies to the Environmental Bullet Catcher provided by Military Equipment Denmark A/S (MED).

We note that maintenance of Environmental Bullet Catcher from MED should be done by a qualified personnel, as in case of maladministration, personal injury or environmental pollution can be caused.

MED offers of course to handle all tasks related to the maintenance of Environmental Bullet Catcher contact us for further information and offers.

2 | Limitations in use

The environmental deprivation box is designed for protection with a full-fledged military weapon of the type 5.56-7.62-9.0 mm.

NOTE:

Other ammunition types than those mentioned above may be used, but this may cause greater wear and tear on inter alia. front RIKO boards and may lead to frequent maintenance of the Environmental Bullet Catcher.

Low-energy ammunition types can cause ricochettes or may get caught in the RIKO boards and should not be used.

Projectors with track lights are not recommended for use with the Environmental Bullet Catcher, as ignition of the rubber granulate may occur!



It is important to follow the instructions for the use of the track and guidelines issued by the Army's Fight and Fire Support Center and the shooting range inspectorate!

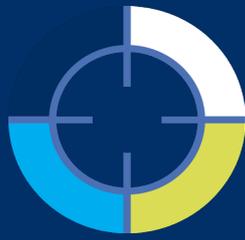
3 | Description of the Environmental Bullet Catcher

The environmental deprivation box is constructed of a steel girder structure on a cast foundation. The inner part of the concrete box (rear wall) is covered with HB400 steel plates. The back plates overlap each other so that shots can not move between two back plates and thereby damage the underlying concrete wall.

The gap between steel plates and concrete walls is filled with hard, insulating bats of a shock absorbing material.

The resulting closed box is secured at the bottom with a geomembrane, and at the lowest point there is a drain pipe leading to the top of the Environmental Bullet Catcher. The drainpipes allow for the sewage of potentially intrusive water, avoiding the discharge of environmentally harmful substances into nature.

On the inside front edge- towards the direction of impact - our MED PP cover fabric is set and the front side is covered with RIKO boards.



The upper part of the Environmental Bullet Catcher is covered with steel lids with overlap. The lids are mounted on fixed spacers and hinged to the rear edge of the concrete wall. The lids have a slight drop towards the concrete wall. In front of all lid and middle pieces, there is an edge steel "knife" that guides projectiles down into the box. On the underside of the lid and middle pieces, there is a projectile rear stop.

There is also a ricochette-resistant, black MED PEHD edge list installed throughout the Environmental Bullet Catcher length. The edge strip is fitted with non-scratch-free screws approved for the purpose. Do not use regular screws or bolts as ruffles may occur.

The locks are located based on the behind-the-wall Kongsberg precision targets and their shooting centers. Each lid is fitted with a metal rod, which securely holds the lid open during inspection, cleaning of granules or other maintenance.



The environmental Bullet Catcher is filled with ricochet and fire retardant rubber granulate.

4 | Checklist

For environmental and safety reasons, it is important to carry out checks on environmental Bullet Catcher according to the following table.

The checkpoints in the chart are described in more detail in section 5 below.

	Each month	Each quarter	As required
RIKO front boards and PEHD edge lists check (5.1)	x		
Granulate level (5.2)	x		
Lubrication and hinges on lid (5.3)		x	
Front edges of lid are checked (5.4)		x	
Water level in drain are checked (5.5)	x		
Checking and discharging leakage water (5.5)			x
Cleaning of rubber granulate (5.7)			x
Steel construction checked (5.8)			x

5 | Maintenance and inspection instructions

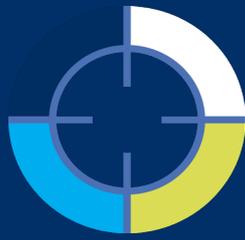
5.1 | RIKO front panels and PEHD edge list

If the RIKO boards and/or the black MED PEHD edge list are damaged, these should be replaced.

The RIKO boards are fitted with screws at the top and bottom.

The top screws are hidden behind the PEHD edge strip while the bottom screws are approx. 10 cm under the track plan.





To replace damaged RIKO boards, remove the PEHD board, remove the track shelf, then remove the top and bottom screws.

New RIKO boards are mounted, after which the horizontal PEHD plank is reattached/replaced and ground level restored. The work should be carried out by trained personnel, and front boards should only be replaced when the Environmental Bullet Catcher has been emptied of granules, as there is a risk that the rubber granulate may fall out of the box.

5.2 | Granulate level

The lids are lifted by two persons and secured with the hook located on top of the insulation at the rear of the



Environmental Bullet Catcher

Replace with approved rubber granulate until the level is horizontal with concrete backing and the horizontal RIKO post in the front.

NOTE: Do not use plain rubber granulate from car tires, as it is filled with dust residues that increase the risk of fire in the Environmental Bullet Catcher.



NOTE: There should always be two persons present when working with steel rods.

5.3 | Lid hinges

All lids hinged nipples are lubricated using a grease spray containing Multifak T EP 2 grease.

5.4 | Lid- and intermediate pieces

Damaged lid or middle pieces with major damage in front cutting or heavy wear on front edge or with heavy wear on the under surface should be replaced by disassembling the hinges. The current door is lifted and replaced with a new one.



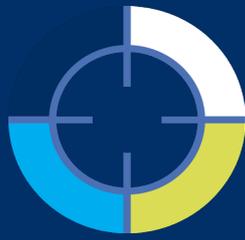
5.5 | Checking and discharging leakage water

Every month, the leakage level should be checked. The check can be done visually- the water mirror may not be visible- or with a level meter that is available as an accessory for both 230 Volt and/or 9 Volt batteries.

Drainage of leakage water is usually carried out the first time 1 year after the use of the Environmental Bullet Catcher- and then as needed.

As leakage water is likely to be contaminated with environmentally hazardous substances from projectiles, it must be emptied and dispatched for destruction by an authorized environmental transporter and in accordance with applicable regulations for disposal in the area.

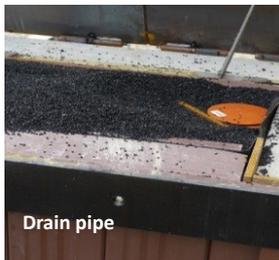
If the leakage water is not contaminated, it can be discharged into the ordinary sewer system.



Whether leakage water is contaminated or not can be determined by having a water analysis before emptying. Then drain a quantity of leakage water into a test bottle, which is sent to an approved laboratory for analysis of the degree of contamination. When available, drain the rest of the leakage water and dispose of according to the above instructions.

5.6 | Procedure for checking and emptying

1. The steel cap on the right/left side of the Environmental Bullet Catcher opens and the metal pin is inserted into the hole at the projectile stop on the steel roof bottom.
2. The drainpipe drainage plug is located in the granulate in the rear corner of the Environmental Bullet Catcher. The stud is located behind a vertical slanted steel plate on the right or left side.
3. The granulate is released around the tube and the plug is removed. Be aware that no granules fall into the drain pipe.
4. Check visually if the water mirror is visible, or set the dipstick (thumb) vertically into the drain pipe.
5. If the water level is visible in the drain pipe and more than 12 cm of leakage is measured, the Environmental Bullet Catcher must be emptied.



6. Discharging is carried out by an approved environmental carrier, as leakage water is expected to be contaminated with environmentally hazardous substances.
7. The check/delivery report for the correct handling of leakage water must subsequently be stored for possible later environmental authority control.
8. Restarting is done in the opposite order.

5.7 | Cleaning of rubber granulate

Using MED's special suction/pressure equipment, the rubber granulate is sucked up from the Environmental Prevention box and into a mobile purification plant and cleaned for projectiles and any other metal parts. Residual products in the form of projectiles, residues thereof and other metal parts are sent for recycling.

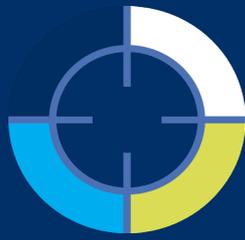
NOTE:

These material residues must be handled by an approved carrier, and there must be documentation for collection. MED naturally carries out all environmental aspects associated with the cleaning of rubber granulates.

After cleansing, the rubber granulate is placed back into the Environmental Bullet Catcher and refill with rubber granules if necessary (see section 5.2).

It must be ensured that the Environmental Bullet Catcher has been emptied of water before cleaning the rubber granulate. MED is of course helpful with this work, if it is not desired to be taken care of by the lane personally.

MED recommends that personnel working with the above have passed the statutory §26 safety course "Working Environment and Safety, Welding/Thermal". This course includes the requirements of the Danish Working En-



Environment Authority's Executive Order No. 908 of 27 September 2005 on measures to prevent cancer risk in work with substances and materials.

5.8 | Steel construction

Any defective parts of the steel structure are replaced by opening the doors and removing the granules using MED's special suction/pressure system.

The granulate is stored in a container while the exposed parts of the steel structure are loosened and removed from their inserts. All defective parts are replaced and the box is reinstalled.

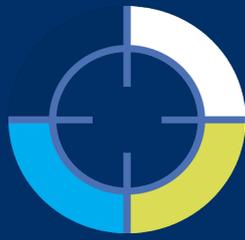
During the work with the granules use protective equipment such as coveralls, gloves and respirators, as the granules may be contaminated with lead and other environmentally harmful substances. Similarly, filters are applied to MED's suction/pressure system, which absorbs particles down to 0.3 μ m.

6 | Completion

We note that, this manual must be followed, before MED's obligations under applicable warranty terms are binding.

MED reserves the right to make changes to components and specifications without prior notice.

Best regards
Military Equipment Denmark A/S



MED

Military Equipment Denmark

Virkelyst 1-3 | DK-4420 Regstrup | Tlf. +45 5943 0300 | info@med.dk

www.med.dk