

POINTS OF CONTACT

SAVER Program
National Urban Security Technology Laboratory
U.S. Department of Homeland
Security Science and Technology Directorate
201 Varick Street
New York, NY 10014
E-mail: NUSTL@hq.dhs.gov
Website: www.dhs.gov/science-and-technology/SAVER

TABLE OF CONTENTS

Foreword.....	i
Points of Contact.....	ii
1. Introduction.....	1
2. Blast Resistant Trash Receptacles Overview.....	1
2.1 Current Technologies.....	1
2.2 Applications.....	2
2.3 Standards.....	2
3. Product Data.....	3
3.1 Aigis Blast Protection Ltd.: HALO 80 and TC95 Blast Protected Litter Bins.....	8
3.2 American Innovations, Inc.: Guardian, Protector, and Defender Bomb Receptacles.....	8
3.3 BlastGard® International, Inc.: BlastGard Mitigated Trash Receptacles (MTR) 91 and 101.....	9
3.4 Dynasafe Protection Systems AB: DynaKEEPR L4.....	9
3.5 Mistral Security, Inc.: BCR 30/40 Levels 1 through 5.....	10
4. Vendor Contact Information.....	11
5. Summary.....	12
6. References and Resources.....	12
Appendix A. Request For Information.....	A-1

LIST OF TABLES

Table 3-1. Product Comparison Matrix.....	5
Table 4-1. Product and Vendor List.....	11

Table 3-1. Product Comparison Matrix (Continued)

Company: Model	Price (\$)	Product size (w x h) (inches)	Volume (gallons)	Weight (pounds)	Technology	Tested and evaluated with ASTM E2740-12 and E2639-12 standards?	Warranties	Training and installation options	Accessories
American Innovations, Inc.: <i>Defender Bomb Receptacle</i>	>3,000	29 x 37	40	1,900	Single wall and blast cushion	No	2 to 5 years, varies based on finish selected	Installation instructions or installation services available	Weatherproof covers, fork lift base, extra liners
BlastGard [®] International, Inc.: <i>BlastGard Mitigated Trash Receptacles (MTR) 91</i>	>3,000	30 x 32 30 x 36	35 or 40	NA ^a NA ^a	Multiple walls and blast cushion (BlastWrap)	No	24-month standard warranty from installation or shipment	Installation tools and instructions included	Plastic liners; standard lid; dome lid; or recyclable lids for cans, bottles, and newspapers available
BlastGard [®] International, Inc.: <i>BlastGard MTR 101</i>	>3,000	30 x 32 30 x 36	35 or 40	NA ^a 1,650	Multiple walls and blast cushion (BlastWrap)	No	24-month standard warranty from installation or shipment	Installation tools and instructions included	Plastic liners; standard lid; dome lid; or recyclable lids for cans, bottles, and newspapers available
Dynasafe Protection Systems AB: <i>DynaKEEPR L4</i>	2,000 to 3,000	18.1 x 31.5	19.3	220.5	Multiple walls	No	1-year warranty on any manufacturing failures	No training or installation tools needed	Plastic garbage inner chamber

^a This information was not publicly available or provided by the manufacturer in time for this report.

Table 3-1. Product Comparison Matrix (Continued)

Company: Model	Price (\$)	Product size (w x h) (inches)	Volume (gallons)	Weight (pounds)	Technology	Tested and evaluated with ASTM E2740-12 and E2639-12 standards?	Warranties	Training and installation options	Accessories
Mistral Security, Inc.: <i>BCR 30/40 Level 1</i>	2,000 to 3,000	29.3 x 40.9	30 to 40	790	Multiple walls and blast cushion	Yes	1-year standard warranty, extended warranty available	No training required, installation by manufacturer is optional	Removable liner, lockable lids with single or dual stream for recycling
Mistral Security, Inc.: <i>BCR 30/40 Level 2</i>	2,000 to 3,000	29.9 x 40.9	30 to 40	1,106	Multiple walls and blast cushion	Yes	1-year standard warranty, extended warranty available	No training required, installation by manufacturer is optional	Removable liner, lockable lids with single or dual stream for recycling
Mistral Security, Inc.: <i>BCR 30/40 Level 3</i>	2,000 to 3,000	29.9 x 40.9	30 to 40	1,150	Multiple walls and blast cushion	Yes	1-year standard warranty, extended warranty available	No training required, installation by manufacturer is optional	Removable liner, lockable lids with single or dual stream for recycling
Mistral Security, Inc.: <i>BCR 30/40 Level 4</i>	2,000 to 3,000	31 x 40.55	30 to 40	1,490	Multiple walls and blast cushion	Yes	1-year standard warranty, extended warranty available	No training required, installation by manufacturer is optional	Removable liner, lockable lids with single or dual stream for recycling
Mistral Security, Inc.: <i>BCR 30/40 Level 5</i>	2,000 to 3,000	31 x 40.55	30 to 40	2,046	Multiple walls and blast cushion	No	1-year standard warranty, extended warranty available	No training required, installation by manufacturer is optional	Removable liner, lockable lids with single or dual stream for recycling

3.1 Aigis Blast Protection Ltd.: HALO 80 and TC95 Blast Protected Litter Bins

Aigis Blast Protection Ltd. offers two models of BRTRs: the HALO 80 and the TC95. The HALO 80 Blast Protected Litter Bin has a volume capacity of 18 gallons, exterior dimensions of 22.05 x 31.5 (diameter x height) inches, and a weight of 257.9 pounds. The TC95 has a volume capacity of 25.1 gallons, exterior dimensions of 27.56 x 32.87 (diameter x height) inches, and a weight of 870.8 pounds. Both models use Aigis's proprietary TABRE™ system for horizontal blast and fragment protection and decreased vertical pressure.

Both products use standard trash bags and have self-draining features for outdoor use. Optional blast disintegrating and fire retardant lids are available. Other accessory options for these products are a recycling lid and waste separator, removable plastic liner, and cigarette stubber plate. Aigis offers a 12-month minimum standard warranty. No special installation or training is required; a bolt-down mounting option is available for extra safety. Both models have been certified by the U.K. government as having exceptional blast mitigation and have also been tested and evaluated according to ASTM E2740-12 and E2639-12 standards.



*HALO 80
Photo Courtesy of Aigis Blast
Protection Ltd.*



*TC95
Photo Courtesy of Aigis Blast
Protection Ltd.*

3.2 American Innovations, Inc.: Guardian, Protector, and Defender Bomb Receptacles

American Innovations, Inc. offers three models of trash receptacles, the Guardian, Protector, and Defender, with Level 1, 2, and 3 blast protection levels, respectively. These BRTRs have been tested to withstand bottom, side wall, and midpoint detonations without outer wall penetration or secondary fragmentation. The technology used is a combination of multiple walls and a blast cushion. All three BRTRs have a height of 37 inches, a diameter of 29 inches, and a 40-gallon capacity. They range in weight from 1,380 pounds to 1,900 pounds. The warranty on these products is 2 to 5 years, depending on the finish selected. Installation instructions or service is available. The optional accessories for this product are weatherproof covers, extra liners, and a fork-lift base. For the Guardian model, a stainless steel upgrade or anti-graffiti coating finish is available. Of the three models, only the Protector has been tested against the latest ASTM standards.



*Guardian Bomb Receptacle
Photo Courtesy of American
Innovations, Inc.*

3.3 BlastGard® International, Inc.: BlastGard Mitigated Trash Receptacles (MTR) 91 and 101

The BlastGard® MTR series of BRTRs reduces primary fragments, secondary fragments, mechanical effects (shock/blast pressure), and thermal effects (contact and radiation burn) from the fireball, afterburn, and resultant post-blast fires. BlastGard® has patent-pending blast-mitigating technology, BlastWrap. The MTR 101 can handle three times the explosive charge of the MTR 91. The BlastGard® MTR series received designation and certification in 2011 by the DHS Support Anti-terrorism by Fostering Effective Technologies Act of 2002 (SAFETY Act)ⁱ (designation and certification will expire on October 31, 2016). While they have been certified, the company stated that they have not tested their products against the newest ASTM standards.



MTR 91

Photo Courtesy of BlastGard International, Inc.

Both models come with a 35- or 40-gallon capacity insert. Both products have a diameter of 30 inches and a height of 32 inches and 36 inches for the 35- and 40-gallon inserts, respectively. Three lid types are available—standard lids, dome lids, and recyclable lids for newspapers, cans, and bottles. In addition to the various laminate colors that are available, BlastGard® offers an anti-graffiti paint exterior. Installation tools and instructions are included with the product, but on-site supervision and/or installation services can be provided for a fee.

3.4 Dynasafe Protection Systems AB: DynaKEEPR L4

The DynaKEEPR L4 is designed to withstand detonations and give protection against high-speed fragments and a horizontally directed blast wave. The suppression bin has a dual casing and can be used with or without the inner bomb suppression chamber depending on the security level needed. The performance of the DynaKEEPR L4 has been verified in computer simulations and in dynamic explosive tests. This BRTR has a diameter of 18.1 inches and a height of 31.5 inches. It weighs 220.5 pounds and can hold 19.3 gallons of litter. Dynasafe offers a 1-year warranty on any manufacturing failures. This model does not require any training or special installation tools.



DynaKEEPR L4

Photo Courtesy of Dynasafe Protection Systems AB

ⁱ SAFETY Act designation and certification creates liability protections for sellers of Qualified Anti-Terrorism Technology (QATT) that have been found effective by the Secretary of Homeland Security and placed on the “Approved Products List for Homeland Security.” If the technology is certified, the seller is afforded a complete defense in litigation related to the performance of the technology, and cause of action may not be brought against the buyer(s), their contractors, or downstream users of QATT.

3.5 Mistral Security, Inc.: BCR 30/40 Levels 1 through 5

Mistral Security, Inc. offers five models of BRTRs with Level 1 to 5 blast containment protection. All models have a 30- to 40-gallon trash capacity, and confine the blast effect of an explosive located anywhere within the inner storage area. All but the newest BCR 30/40 Level 5 model have been certified to the ASTM E2740 and E2639 standards and received SAFETY Act designation and certification in 2007 (designation and certification expired January 31, 2013). All BCR models use proprietary Mistral Security, Inc., multiple wall and blast cushion technology.

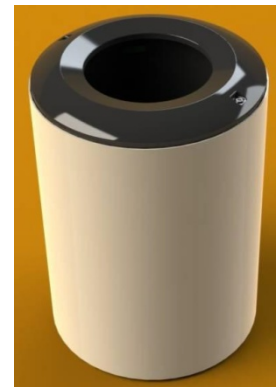
The BCR 30/40 Level 1 model has a diameter of 29.3 inches, a height of 40.9 inches, and a weight of 790 pounds. The BCR 30/40 Level 2 model has a diameter of 29.9 inches, a height of 40.9 inches, and a weight of 1,106 pounds. The BCR 30/40 Level 3 model has a diameter of 29.9 inches and a height of 40.9 inches. It weighs 1,150 pounds. The BCR 30/40 Level 4 model has a diameter of 31 inches, a height of 40.55 inches, and a weight of 1,490 pounds. The BCR 30/40 Level 5 model has a diameter of 31 inches, a height of 40.55 inches, and a weight of 2,046 pounds.

Optional features include removable plastic liners, bifurcated plastic lids and liners for double stream waste recycling, and a choice of color finishes. Standard finish for this model is painted or stainless steel clad. Mistral Security, Inc. offers a 1-year standard warranty for this product. An extended warranty is also available. No training is required and installation by the manufacturer is optional.

The information in Sections 3.1 to 3.5 was compiled from vendor-provided information and from publicly available vendor information.



*BCR 30/40 Level 1
Photo Courtesy of
Mistral Security, Inc.*



*BCR 30/40 Level 3
Photo Courtesy of
Mistral Security, Inc.*

4. VENDOR CONTACT INFORMATION

Additional information on the products included in this market survey report can be obtained from the vendors of BRTRs. Table 4.1 has the vendor contact information for all products included in this market survey.

Table 4-1. Vendor Contact Information

Company	Point of Contact/E-mail	Website	Address/Phone Number
Aigis Blast Protection Ltd.	Laura Gill blast-protection@aigis.co.uk	www.aigis.co.uk	Unit 1, Bemrose Park Wayzgoose Drive, Derby DE21 6XQ United Kingdom +44 (0) 1332 291401
American Innovations, Inc.	Grant Haber Granth@aiiny.com	www.AmericanInnovations.com	500 Chestnut Ridge Road Chestnut Ridge, NY 10977 845-371-3333
Blastgard International, Inc.	Michael J. Gordon mgordon@blastgardintl.com	www.blastgardintl.com	2451 McMullen Booth Road Suite 212 Clearwater, FL 33759 727-592-9400
Dynasafe Protection Systems AB	Lars Norell lars.norell@dynasafe.com	www.dynasafe.com	Gammelbackavägen 8 Karlskoga, Sweden 691 80 +46 586 771270
Mistral Security, Inc.	Roey Bahat security@mistralgroup.com	www.mistralsecurityinc.com	7910 Woodmont Avenue Suite 820 Bethesda, MD 20814 301-913-9366

5. SUMMARY

This market survey identified 13 BRTR models from 5 manufacturers.

BRTRs help mitigate the threat of explosives detonated inside trash receptacles around populated public spaces. BRTRs are designed to minimize that threat by directing blast products upwards, limiting the amount of shrapnel produced from the receptacle, and containing other blast products. Facility and venue operators should select a BRTR with the protection level appropriate to the threat level of the environment where they are deployed and that have been tested against standards to verify performance capability. BRTR models are available in attractive designs and various laminates and colors. They usually accommodate plastic liners and sometimes feature internal drainage out of the bottom or the side for outdoor use. Some models also feature lids and optional cigarette trays. Installation comprises leveling the BRTR and, if desired, anchoring for increased protection. The containers can weigh from 200 to over 2,000 pounds.

This report reviews only a sampling of the available BRTRs. Consumers should determine which features are useful and research the numerous manufacturers to get the best product for their individual needs.

6. REFERENCES AND RESOURCES

ASTM E2740-12: *Standard Specification for Trash Receptacles Subjected to Blast Resistance Testing*

ASTM E2639-12: *Standard Test Method for Blast Resistance of Trash Receptacles*

ASTM E2831/E2831M-11: *Standard Guide for Deployment of Blast Resistant Trash Receptacles in Crowded Places*

SAVER Reprint: *Test Results of Blast Resistant Trash Receptacles* (original report published by Naval Explosive Ordnance Disposal Technology Division) December 2005

APPENDIX A. REQUEST FOR INFORMATION

U. S. Department of Homeland Security
National Urban Security Technology Laboratory
201 Varick Street, New York, NY 10014-7447



Document Type: Special Notice

Title: Market Survey – Blast Resistant Trash Receptacles

Posted Date: September 17, 2012

Contracting Office Address:

Office of the Chief Procurement Officer
Washington, District of Columbia 20528
United States

Description:

Request for Information (RFI) – BLAST RESISTANT TRASH RECEPTACLES

DUE: October 5, 2012

The U.S. Department of Homeland Security, National Urban Security Technology Laboratory (NUSTL), 201 Varick St., New York, NY 10014, is seeking information on commercially available Blast Resistant Trash Receptacles to meet the needs of emergency responders. The Department of Homeland Security (DHS) Authorized Equipment List (AEL) item number(s) for this equipment is 14EX-00-BCAN. The target audience for this information is public safety providers and their purchasing agents. All submittals should be suited to the target audience's specific needs.

Review of this information is being performed for the DHS Science and Technology Directorate's System Assessment and Validation for Emergency Responders (SAVER) Program. DHS established SAVER to conduct comparative assessments and validation activities that provide the emergency responder community with information on important products and services. For more information on the SAVER Program, visit the SAVER Website at <https://www.rkb.us/saver>.

All information received will be treated as public knowledge and may be used in SAVER Program documentation; therefore, vendors should not submit proprietary information in response to this RFI. Specific information sought includes:

1. Company information, including name, address, point of contact, URL, and the number of employees.
2. Whether the company is a manufacturer or distributor.
3. A point of contact for follow-up information, and the point of contact's phone number and e-mail address.

www.dhs.gov



- 2 -

4. Product name, brief description, and specifications.
5. Cost information such as purchase price and General Services Administration (GSA) schedule information.

The submitted information will be evaluated for inclusion in SAVER projects and reports. Determination as to an individual product's suitability will be made by NUSTL based on the objectives of this request. Therefore, requests for feedback should not be made through the Federal Business Opportunities posting agency. Vendors may be contacted following submission for more detailed product information. Vendor provided information may be reformatted for publication in SAVER Program documents.

Submittals

Respondents are required to complete a product summary questionnaire for each product.

The questionnaire may be obtained, via e-mail, by contacting the technical point of contact, [REDACTED]

This RFI is for information gathering and planning purposes only, and should not be construed as a Request for Proposal (RFP) or solicitation of an offer. The Government does not intend to award a contract on the basis of this RFI or otherwise pay for the information solicited. Submission of vendor information constitutes consent to publication of that information in SAVER Program documentation. E-mail your non-technical questions to [REDACTED], DHS Contracting Officer, at [REDACTED]

