System Assessment and Validation for Emergency Responders (SAVER)

Blast Resistant Trash Receptacles
Market Survey Report

March 2013

Homeland Security
Science and Technology

Prepared by the National Urban Security Technology Laboratory
The Blast Resistant Trash Receptacles Market Survey Report was prepared by the National Urban Security Technology Laboratory for the U.S. Department of Homeland Security, Science and Technology Directorate. Photographs included herein were provided by vendors during the course of conducting the market survey, unless otherwise noted.

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The U.S. Department of Homeland Security (DHS) established the System Assessment and Validation for Emergency Responders (SAVER) Program to assist emergency responders making procurement decisions. Located within the Science and Technology Directorate (S&T) of DHS, the SAVER Program conducts objective assessments and validations on commercial equipment and systems and provides those results along with other relevant equipment information to the emergency response community in an operationally useful form. SAVER provides information on equipment that falls within the categories listed in the DHS Authorized Equipment List (AEL). The SAVER Program mission includes:

- Conducting impartial, practitioner-relevant, operationally oriented assessments and validations of emergency responder equipment; and
- Providing information, in the form of knowledge products, that enables decision-makers and responders to better select, procure, use, and maintain emergency responder equipment.

Information provided by the SAVER Program will be shared nationally with the responder community, providing a life- and cost-saving asset to DHS, as well as to Federal, state, and local responders.

The SAVER Program is supported by a network of Technical Agents who perform assessment and validation activities. Further, SAVER focuses primarily on two main questions for the emergency responder community: “What equipment is available?” and “How does it perform?”

As a SAVER Program Technical Agent, the National Urban Security Technology Laboratory (NUSTL) has been tasked to provide expertise for chemical, biological, radiological, nuclear, and explosive (CBRNE) weapons detection; emergency response and recovery; and related equipment, instrumentation, and technologies. In support of this tasking, NUSTL conducted a market survey of commercially available blast resistant trash receptacles that fall under AEL reference number 14EX-00-BCAN titled Blast Resistant Trash Receptacles.

Visit the SAVER website, [www.dhs.gov/science-and-technology/SAVER](http://www.dhs.gov/science-and-technology/SAVER), for more information on the SAVER Program or to view additional reports on blast resistant trash receptacles or other technologies.
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1. **INTRODUCTION**

Blast resistant trash receptacles (BRTRs) are used to protect people from primary and secondary fragmentation that generally result from the detonation of an explosive device inside an ordinary trash receptacle. To provide organizations with information helpful in making purchasing decisions, the System Assessment and Validation for Emergency Responders (SAVER) Program conducted this market survey on BRTRs, which fall under Authorized Equipment List reference number 14EX-00-BCAN.

This market survey report is based on information gathered between September 2012 to October 2012 from government reports, product literature obtained from manufacturer/vendor websites, and responses to a government issued Request for Information (RFI) (see Appendix A) posted on the Federal Business Opportunities (FedBizOpps) website (https://www.fbo.gov).

Companies that responded to the RFI were sent a brief survey with questions about the product(s) they wanted included in this market survey. For inclusion in this report, the manufacturers stated that the BRTR models met the following performance requirements. Upon detonation of an explosive device inside the receptacle, the BRTR:

- Directs the blast effects, pressure, and fragments upwards;
- Contains primary fragments;
- Does not produce secondary fragments from any metallic components of the trash receptacle; and
- Structurally withstands the detonation.

ASTM International has published three standards that can assist buyers in evaluating various BRTRs, selecting the appropriate model for the threat level needed, and deploying them to ensure maximum protection. Due to the sensitive nature of this technology, specific explosive containment ratings and official test reports are released to consumers on a case-by-case basis, and the ratings used by companies are broad (e.g., Level 1 to 5 force protection).

Due diligence was performed to develop a report that is representative of products in the marketplace.

2. **BLAST RESISTANT TRASH RECEPTACLES OVERVIEW**

BRTRs are designed to minimize the impact of an explosion inside the receptacle by directing the blast path upwards and capturing shrapnel that could harm potential passerby. It is also important for BRTRs to maintain their structural integrity so as to avoid creating additional shrapnel in an explosion.

2.1 **Current Technologies**

Conventional BRTRs have single- or multiple-wall technology coupled with a blast cushion designed to diffuse the force of an explosion. They direct the force of the blast upwards and are meant to have no metal parts in the blast path that could fragment and become airborne, posing a potential threat to bystanders. Some BRTRs use composite materials and unique construction techniques that minimize fragmentation. Most manufacturers have developed proprietary
systems that have some or all of these basic elements. Lids, featured on some models, are meant to remain attached to the waste receptacle during an explosion. 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. Some models also have optional cigarette trays. Installation comprises leveling the BRTR and, if required, anchoring. The containers can weigh anywhere between 200 and over 2,000 pounds.

2.2 Applications

Trash receptacles pose a serious threat because a terrorist can easily hide an explosive device in them before making a quiet getaway. Additionally, the metal from a bin can rupture into shrapnel that flies outward in all directions, increasing the risk to passersby. BRTRs are currently deployed in train stations, airports, government buildings, and other areas for the purpose of eliminating or significantly reducing fatalities, injuries, and structural damage resulting from “terror bombs.” Not only do BRTRs need to have blast force protection, they also need to remain functional for the main use of collecting trash. These bins need to be placed where they will be easily accessible to sanitation workers on a routine basis. They also need to accommodate plastic liners or have drainage capability if they are to be placed outdoors.

2.3 Standards

The Science and Technology Directorate of the U.S. Department of Homeland Security (DHS) and several manufacturers began working with the National Institute of Standards and Technology (NIST) in 2007 to address the lack of standards for blast resistance among trash receptacles. The results of the DHS-funded work now have been published by ASTM International. These standards allow facilities and venues to make purchasing decisions with confidence in the performance of the unit at the specific threat level anticipated and also consider the relative cost. For example, if the management of a facility or venue estimates that the likely risk is equivalent to five or more pounds of explosive, they can then purchase a BRTR that will mitigate the blast up to that level of explosive force and budget for the cost associated with that level.

In 2005, the Naval Explosive Ordnance Disposal Technology Division conducted 75 tests of 15 models of BRTRs. The tests revealed substantial variations among different products, resulting in the development of standards by ASTM International. The two standards—E2639-12, Standard Test Method for Blast Resistance of Trash Receptacles, and E2740-12, Standard Specification for Trash Receptacles Subjected to Blast Resistance Testing—are now being routinely used by manufacturers and procurers of BRTRs. Three out of the five vendors surveyed here have tested some or all of their products against these standards.

Standard E2639-12 provides a procedure for characterizing the blast resistance of trash receptacles when an explosive is detonated within the receptacle. The tests described in E2639-12 are intended for open-air test arenas and require that a new, randomly selected receptacle be used for every test.

During a test, the trash receptacle is placed on a steel plate in the center of the test arena with witness panels, silhouettes (a witness panel that is constructed in the approximate shape of a human), and a camera station with normal-speed and high-speed cameras. Optional pressure sensors and data acquisition systems can be used at the discretion of the users and testers. An explosive charge is placed at one of four predetermined locations within the receptacle and
detonated. The receptacle is then inspected for breaches in its exterior surface, and the extent and location of fragments produced are recorded. A minimum of three tests are conducted, including two bare charge tests and one fragmentation test.

Standard E2740-12 provides the performance requirements for BRTRs when they are subjected to the test method described in E2639-12. Performance of the BRTR is evaluated by whether it: 1) directs the blast effects, pressure, and fragments upwards; 2) contains primary fragments; 3) does not produce secondary fragments from any metallic components of the trash receptacle; and 4) structurally withstands the detonation. In selecting BRTRs for inclusion in this report, the manufacturer had to state that their product met all these performance requirements, even if they had not been certified to the ASTM standards. Other performance standards exist, such as the standards developed by the United Kingdom (U.K.) Home Office Scientific Development Branch.

ASTM Standard, E2831/E2831M-11, Standard Guide for Deployment of Blast Resistant Trash Receptacles in Crowded Places, gives guidance for the placement of trash receptacles at both exterior and interior locations of facilities and venues. This standard provides basic recommendations for various operational applications and explosive effects considerations for deployment. Operational considerations take into account the impact of the use of BRTRs during the routine collection and removal of trash from the facility or venue. Explosive considerations pertain to the mitigation of explosive effects resulting from the detonation of a device in a receptacle. For example, since BRTRs direct most blast products vertically, significant damage could occur to overhead structures when receptacles are placed in indoor locations.

E2831/E2831M-11 also provides a list of factors to consider when developing a threat assessment to evaluate the deployment of BRTRs. It includes directives on both recommended and non-recommended placements of BRTRs. For example, special security concerns at high-value facilities or high pedestrian-count venues will require additional guidance concerning the deployment of BRTRs from security personnel familiar with that facility.

The standards provide a basic framework of guidance and considerations for individuals in both the private and public sectors who are considering the purchase and/or deployment of BRTRs. Every facility and venue has unique associated factors, such as demographics, location, and functions, for which the basic recommendations for deployment may not be applicable. The standards are scalable and can therefore provide useful information on performance at any threat level.

### 3. PRODUCT DATA

Table 3-1 summarizes key features of 13 BRTR models identified in the market survey. Product descriptions and additional information on each BRTR are presented in sections 3.1 to 3.5. This information was provided by manufacturers and has not been independently verified by the SAVER Program.

BRTR features in Table 3-1, are defined as follows, listed in column order:
<p>| <strong>Company:</strong> | The name of the product manufacturer or distributor and the model name of the product. |
| <strong>Model</strong> | |
| <strong>Price</strong> | The price range provided by the vendor or distributor. Within the range, the actual price will vary depending on bulk product discounts and customizable features selected by the customer. |
| <strong>Product size</strong> | The width (or diameter) in inches and the height (from the base of the trash receptacle to the top). |
| <strong>Volume</strong> | The volume of the trash receptacle in gallons. |
| <strong>Weight</strong> | The weight of the trash receptacle in pounds. |
| <strong>Technology</strong> | The type of technology used to diffuse explosive force. Includes multiple wall technology, blast cushion, and proprietary technology that was not disclosed to this market survey. |
| <strong>Tested and evaluated with ASTM E2740-12 and E2639-12 standards?</strong> | Vendors or distributors were asked if they had evaluated their product with the performance standards published by the ASTM: E2639-12, <em>Standard Test Method for Blast Resistance of Trash Receptacles</em>, and E2740-12, <em>Standard Specification for Trash Receptacles Subjected to Blast Resistance Testing</em>. |
| <strong>Warranties</strong> | Vendors or distributors were asked about different warranties offered with the product, including options for extended warranties and/or service contracts. |
| <strong>Training and installation options</strong> | Vendors or distributors were asked if they offered any training or installation options. |
| <strong>Accessories</strong> | Any optional accessories available for the product. |</p>
<table>
<thead>
<tr>
<th>Company: Model</th>
<th>Price ($)</th>
<th>Product size (w x h) (inches)</th>
<th>Volume (gallons)</th>
<th>Weight (pounds)</th>
<th>Technology</th>
<th>Tested and evaluated with ASTM E2740-12 and E2639-12 standards?</th>
<th>Warranties</th>
<th>Training and installation options</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aigis Blast Protection Ltd.: HALO 80 Blast Protected Litter Bin</td>
<td>1,000 to 1,999</td>
<td>22.05 x 31.5</td>
<td>18</td>
<td>257.9</td>
<td>Proprietary blast mitigation system (TABRE™)</td>
<td>Yes</td>
<td>12-months minimum</td>
<td>Operating manual included</td>
<td>Stainless steel sheath, recycling lid and waste separator, removable plastic liner, cigarette stubber plate</td>
</tr>
<tr>
<td>Aigis Blast Protection Ltd.: TC95 Blast Protected Litter Bin</td>
<td>1,000 to 1,999</td>
<td>27.56 x 32.87</td>
<td>25.1</td>
<td>870.8</td>
<td>Proprietary blast mitigation system (TABRE)</td>
<td>Yes</td>
<td>12-months minimum</td>
<td>Operating manual included</td>
<td>Stainless steel sheath, recycling lid and waste separator, removable plastic liner, cigarette stubber plate</td>
</tr>
<tr>
<td>American Innovations, Inc.: Guardian Bomb Receptacle</td>
<td>2,000 to 3,000</td>
<td>29 x 37</td>
<td>40</td>
<td>1,380</td>
<td>Multiple walls and blast cushion</td>
<td>No</td>
<td>2 to 5 years, varies based on finish selected</td>
<td>Installation instructions or installation services available</td>
<td>Weatherproof covers, fork lift base, extra liners</td>
</tr>
<tr>
<td>American Innovations, Inc.: Protector Bomb Receptacle</td>
<td>2,000 to &gt;3,000</td>
<td>29 x 37</td>
<td>40</td>
<td>1,600</td>
<td>Multiple walls and blast cushion</td>
<td>Yes</td>
<td>2 to 5 years, varies based on finish selected</td>
<td>Installation instructions or installation services available</td>
<td>Weatherproof covers, fork lift base, extra liners</td>
</tr>
<tr>
<td>Company: Model</td>
<td>Price ($)</td>
<td>Product size (w x h) (inches)</td>
<td>Volume (gallons)</td>
<td>Weight (pounds)</td>
<td>Technology</td>
<td>Tested and evaluated with ASTM E2740-12 and E2639-12 standards?</td>
<td>Warranties</td>
<td>Training and installation options</td>
<td>Accessories</td>
</tr>
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<td>-------------</td>
</tr>
<tr>
<td>American Innovations, Inc.: Defender Bomb Receptacle</td>
<td>&gt;3,000</td>
<td>29 x 37</td>
<td>40</td>
<td>1,900</td>
<td>Single wall and blast cushion</td>
<td>No</td>
<td>2 to 5 years, varies based on finish selected</td>
<td>Installation instructions or installation services available</td>
<td>Weatherproof covers, fork lift base, extra liners</td>
</tr>
<tr>
<td>BlastGard® International, Inc.: BlastGard Mitigated Trash Receptacles (MTR) 91</td>
<td>&gt;3,000</td>
<td>30 x 32</td>
<td>35 or 40</td>
<td>NA&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Multiple walls and blast cushion (BlastWrap)</td>
<td>No</td>
<td>24-month standard warranty from installation or shipment</td>
<td>Installation tools and instructions included</td>
<td>Plastic liners; standard lid; dome lid; or recyclable lids for cans, bottles, and newspapers available</td>
</tr>
<tr>
<td>BlastGard® International, Inc.: BlastGard MTR 101</td>
<td>&gt;3,000</td>
<td>30 x 32</td>
<td>35 or 40</td>
<td>NA&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Multiple walls and blast cushion (BlastWrap)</td>
<td>No</td>
<td>24-month standard warranty from installation or shipment</td>
<td>Installation tools and instructions included</td>
<td>Plastic liners; standard lid; dome lid; or recyclable lids for cans, bottles, and newspapers available</td>
</tr>
<tr>
<td>Dynasafe Protection Systems AB: DynaKEEPR L4</td>
<td>2,000 to 3,000</td>
<td>18.1 x 31.5</td>
<td>19.3</td>
<td>220.5</td>
<td>Multiple walls</td>
<td>No</td>
<td>1-year warranty on any manufacturing failures</td>
<td>No training or installation tools needed</td>
<td>Plastic garbage inner chamber</td>
</tr>
</tbody>
</table>

<sup>a</sup> This information was not publicly available or provided by the manufacturer in time for this report.
<table>
<thead>
<tr>
<th>Company: Mistral Security, Inc.</th>
<th>Model</th>
<th>Price ($)</th>
<th>Product size (w x h) (inches)</th>
<th>Volume (gallons)</th>
<th>Weight (pounds)</th>
<th>Technology</th>
<th>Tested and evaluated with ASTM E2740-12 and E2639-12 standards?</th>
<th>Warranties</th>
<th>Training and installation options</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mistral Security, Inc.: BCR 30/40 Level 1</td>
<td>2,000 to 3,000</td>
<td>29.3 x 40.9</td>
<td>30 to 40</td>
<td>790</td>
<td>Multiple walls and blast cushion</td>
<td>Yes</td>
<td>1-year standard warranty, extended warranty available</td>
<td>No training required, installation by manufacturer is optional</td>
<td>Removable liner, lockable lids with single or dual stream for recycling</td>
<td></td>
</tr>
<tr>
<td>Mistral Security, Inc.: BCR 30/40 Level 2</td>
<td>2,000 to 3,000</td>
<td>29.9 x 40.9</td>
<td>30 to 40</td>
<td>1,106</td>
<td>Multiple walls and blast cushion</td>
<td>Yes</td>
<td>1-year standard warranty, extended warranty available</td>
<td>No training required, installation by manufacturer is optional</td>
<td>Removable liner, lockable lids with single or dual stream for recycling</td>
<td></td>
</tr>
<tr>
<td>Mistral Security, Inc.: BCR 30/40 Level 3</td>
<td>2,000 to 3,000</td>
<td>29.9 x 40.9</td>
<td>30 to 40</td>
<td>1,150</td>
<td>Multiple walls and blast cushion</td>
<td>Yes</td>
<td>1-year standard warranty, extended warranty available</td>
<td>No training required, installation by manufacturer is optional</td>
<td>Removable liner, lockable lids with single or dual stream for recycling</td>
<td></td>
</tr>
<tr>
<td>Mistral Security, Inc.: BCR 30/40 Level 4</td>
<td>2,000 to 3,000</td>
<td>31 x 40.55</td>
<td>30 to 40</td>
<td>1,490</td>
<td>Multiple walls and blast cushion</td>
<td>Yes</td>
<td>1-year standard warranty, extended warranty available</td>
<td>No training required, installation by manufacturer is optional</td>
<td>Removable liner, lockable lids with single or dual stream for recycling</td>
<td></td>
</tr>
<tr>
<td>Mistral Security, Inc.: BCR 30/40 Level 5</td>
<td>2,000 to 3,000</td>
<td>31 x 40.55</td>
<td>30 to 40</td>
<td>2,046</td>
<td>Multiple walls and blast cushion</td>
<td>No</td>
<td>1-year standard warranty, extended warranty available</td>
<td>No training required, installation by manufacturer is optional</td>
<td>Removable liner, lockable lids with single or dual stream for recycling</td>
<td></td>
</tr>
</tbody>
</table>
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.

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.
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.

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.

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\(^i\) 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.
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**

<table>
<thead>
<tr>
<th>Company</th>
<th>Point of Contact/E-mail</th>
<th>Website</th>
<th>Address/Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aigis Blast Protection Ltd.</td>
<td>Laura Gill</td>
<td><a href="http://www.aigis.co.uk">www.aigis.co.uk</a></td>
<td>Unit 1, Bemrose Park Wayzgoose Drive, Derby DE21 6XQ United Kingdom +44 (0) 1332 291401</td>
</tr>
<tr>
<td>Dynasafe Protection Systems AB</td>
<td>Lars Norell</td>
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</table>
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


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

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., Suite 2000, 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.1kb.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
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.

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 [email_address], DHS Contracting Officer, at [email_address].