



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pCS1519728916

**3RF - 2**

**BASIN DISPOSAL INC**

10/15/2018

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-147  
Revised April 3, 2017

NMOC

SEP 21 2018

DISTRICT III

## Recycling Facility Only

Type of action: ☐ Permit ☐ Registration ☒ Modification ☐ Closure ☐ Other (explain) \_\_\_\_\_

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: Basin Disposal Inc. dba Basin Water Recycling (For multiple operators attach page with information) OGRID #: \_\_\_\_\_  
Address: Mailing: PO Box 100, Aztec, NM 87410 Physical: 10127 US Hwy 550, Lybrook, NM  
Facility or well name (include API# if associated with a well): Basin Water Recycling  
OCD Permit Number: 3RF-2 (For new facilities the permit number will be assigned by the district office)  
U/L or Qtr/Qtr S $\frac{1}{2}$  NE  $\frac{1}{4}$  N  $\frac{1}{2}$  SE  $\frac{1}{4}$  Section 13 Township 23N Range 7W County: Rio Arriba  
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ **Recycling Facility:**  
Location of recycling facility (if applicable): Latitude 32.225553 N Longitude 107.520556 W NAD83  
Proposed Use: ☒ Drilling\* ☒ Completion\* ☒ Production\* ☐ Plugging\*  
*\*The re-use of produced water may NOT be used until fresh water zones are cased and cemented*  
☐ Other, requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.  
☒ Fluid Storage  
☒ Above ground tanks ☐ Activity permitted under 19.15.17 NMAC explain type \_\_\_\_\_  
☐ Activity permitted under 19.15.36 NMAC explain type: \_\_\_\_\_ ☐ Other explain \_\_\_\_\_  
☐ Closure Report (required within 60 days of closure completion): ☐ Recycling Facility Closure Completion Date: \_\_\_\_\_

3. **Variances:**  
Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.  
*Check the below box only if a variance is requested:*  
☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.  
**If a Variance is requested, it must be approved prior to implementation.**

4. **Operator Application Certification:**  
I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.  
Name (Print): John Volkerding Title: Gen Mgr  
Signature: [Signature] Date: 9/17/18  
e-mail address: jvolkerding@basindisposalinc.com Telephone: 505-334-3014

5. **OCD Representative Signature:** [Signature] Approval/Registration Date: \_\_\_\_\_  
Title: Environmental Spec OCD Permit Number: 3RF-2  
☐ OCD Conditions \_\_\_\_\_  
☒ Additional OCD Conditions on Attachment Envi

## Smith, Cory, EMNRD

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**From:** Smith, Cory, EMNRD  
**Sent:** Monday, October 15, 2018 9:14 AM  
**To:** 'John Volkerding'  
**Cc:** Fields, Vanessa, EMNRD; Billings, Bradford, EMNRD  
**Subject:** RE: 3RF-2 Modification Request 9-17-18

John,

OCD has approved Basin modification to 3RF-2 received on September 21, 2018 with the following conditions of approval

- 1 or more of the Bird deterrents needs to be installed and operational prior to the removal of the floating roof.
- Basin will need to include in their daily/weekly inspections to ensure proper operation of the Bird Deterrent.

OCD approval does not relieve Basin of any other conditions that are imposed by other regulatory agencies.

If you have any additional questions please give me a call.

Thank,

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

**From:** John Volkerding <jvolkerding@basindisposalinc.com>  
**Sent:** Wednesday, October 10, 2018 8:25 AM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Cc:** Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>  
**Subject:** [EXT] Re: 3RF-2 Modification Request 9-17-18

Good morning

over the past week or so we have been watching how the tank behaves and I'm not convinced that approach would solve the hydrocarbon issue. The reason is that when the water is coming out the discharge there is no visible hydrocarbon. It appears that it is disbursed so finally that it is bubbling for lack of a better word to the surface throughout the entire tank and so a boom would only separate it into two areas with hydrocarbon on both sides. I'm not opposed to trying it to see what happens but I wouldn't want to put the balls in on the other side of the boom until that process proves itself to be useful otherwise will be basically in the exact same place we were before. I have been trying to research if there are some filters that we can put in our filter pods that are more absorbent of hydrocarbon than what we currently have which stop the hydrocarbon there. I'm completely open to any other suggestions as well, thanks all  
John



Sent from my iPhone

On Oct 2, 2018, at 9:36 AM, Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)> wrote:

John,

Reviewing the modification, has Basin explored the idea of installing oil absorbent booms in the discharge area of the pond? The Booms would absorb any floating Hydrocarbons and would also act as a barrier to the Hexoshield allowing the attendant to still visually see the surface of the pond.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

**From:** John Volkerding <[jvolkerding@basindisposalinc.com](mailto:jvolkerding@basindisposalinc.com)>  
**Sent:** Monday, September 17, 2018 4:42 PM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Subject:** 3RF-2 Modification Request 9-17-18

Good evening Cory;

Attached is a C-147 for a modification request to 3RF-2 addressing the replacement of the floating roof balls with different technologies for protecting wildlife

The hardcopy is in the mail.

Thanks, John

**John Volkerding, PhD**, Vice President  
**Basin Disposal, Inc., 30 Years of HSE Excellence**  
Disposal/Brine Plant: 200 Montana, Bloomfield, NM 87413  
Recycling Plant: 10127 Hwy 550, Lybrook, NM  
Office: 300 Legion, Aztec, NM 87410  
Office#: 505-334-3013  
Mobile#: 505-320-2840  
Fax#: 505-333-3898  
Plant#: 505-632-8938  
Plant#: 505-568-0058  
Email: [jvolkerding@basindisposalinc.com](mailto:jvolkerding@basindisposalinc.com)  
Email: [jvolkerding@aztecwell.com](mailto:jvolkerding@aztecwell.com)

**Water is the driving force of all nature.**

Leonardo da Vinci

**Basin Water Recycling  
Lybrook Facility  
Variance Explanation for Recycling Containment  
Modification 9-17-18**

**C-147 #3. Recycling Containment**

*19.15.34.12.E NMAC states "Netting. The operator shall ensure that a recycling containment is screened, netted or otherwise protective of wildlife, including migratory birds.. "*

In Basin Disposal's original C-147 application dated 6/10/15 Basin Disposal requested a variance from screening and netting and proposed installing a floating roof on the containment.

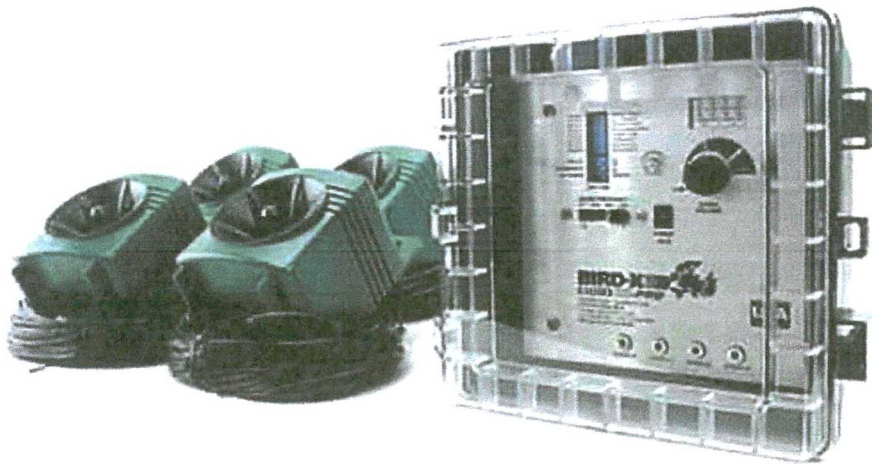
After operating the facility, while from a perspective of being protective of wildlife, minimizing evaporation, minimizing algae growth, and controlling odors the Rhombo Hexoshield® is an outstanding product, Basin Disposal concurs with the concerns raised by the NM OCD that the balls make it difficult to identify if/when oil may be on the surface of the containment an additionally the balls make it difficult to remove any such oil as required by 19.15.34.13 B(1) NMAC.

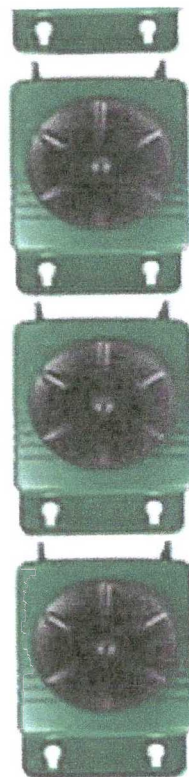
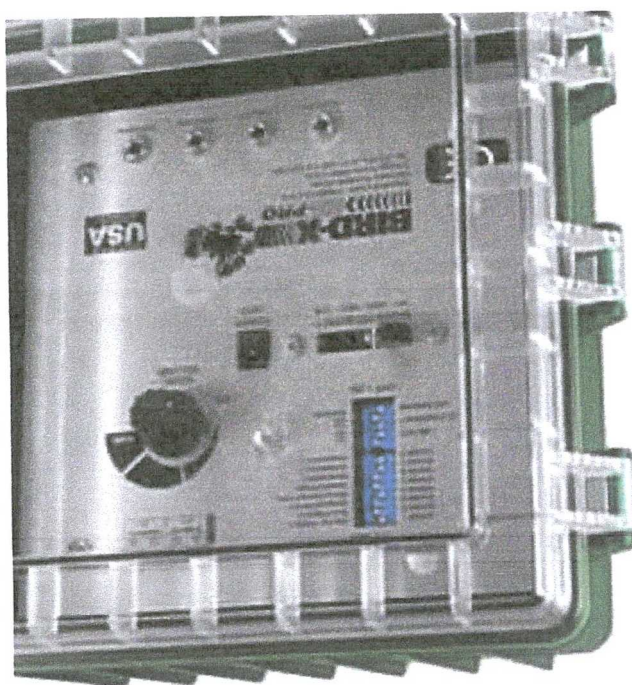
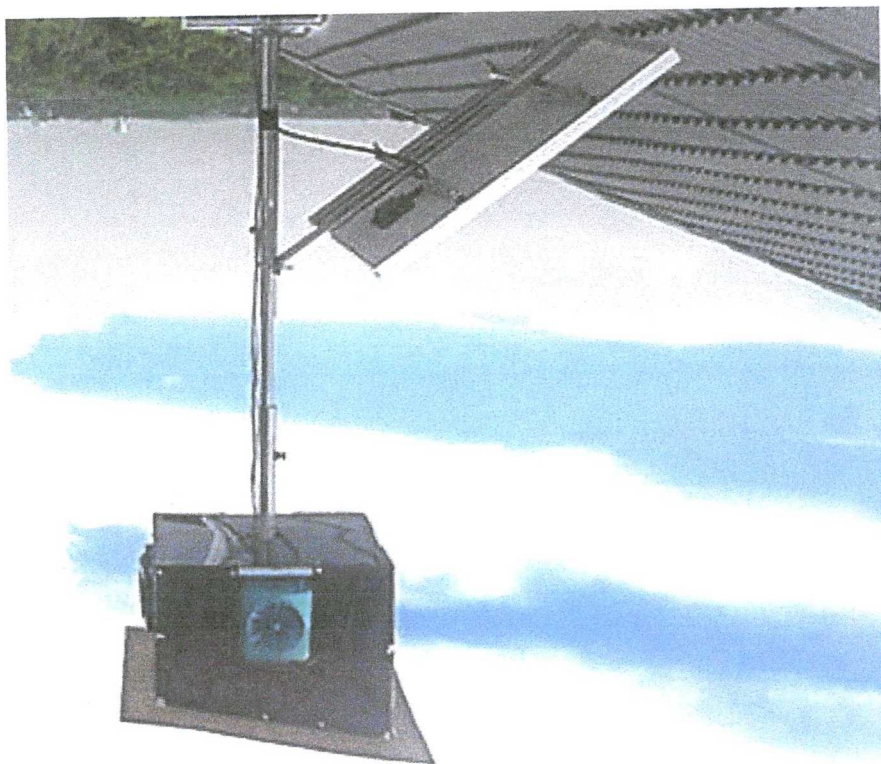
Basin Disposal proposes some or all of the following Bird Control Measures:

- BroadBand PRO 4-speaker sonic and ultrasonic bird repeller
- Terror Eyes
- Prowler Owls
- Bird X Laser

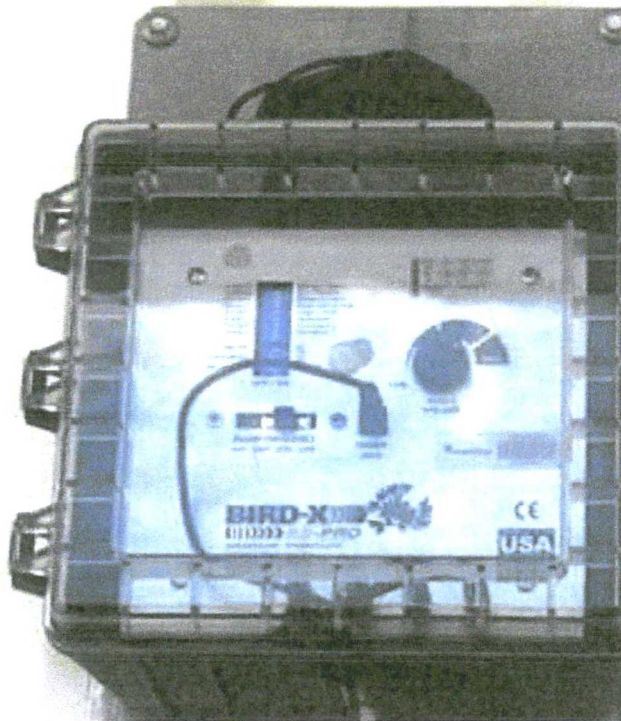
By implementing some or all of these we are dettracting birds with visual and audible repellants. The list provides Basin Disposal the flexibility to utilize the technologies that are most effective without requesting a subsequent modification to add or subtract technologies.

Since the commencement of operations in the fall of 2015, Basin Disposal has observed no birds ever in the recycling containment.









## **BroadBand PRO 4-speaker sonic and ultrasonic bird repeller**

Combines SONIC and ULTRASONIC technology

Repel birds with multi-faceted sonic and ultrasonic sounds! The BroadBand PRO's 4-speaker system simultaneously emits sounds that are both audible and inaudible to humans that confuse, disorient, and intimidate pest birds, keeping them away. Birds will not linger when exposed to these sounds!

- Covers up to 6 acres
- Uses sonic and ultrasonic technology
- Weather resistant box designed to withstand outdoor use
- Includes installation consultation
- 60 Day Electronics Performance Satisfaction Guarantee

With both ultrasonic and sonic frequencies, pest birds won't stand a chance! Use this versatile electronic bird repeller outdoors or in semi-enclosed locations, with coverage up to 6 acres. Four speakers included – each with 100 ft. of wire. Fully programmable – control volume, sound delays, and daylight/night operation.



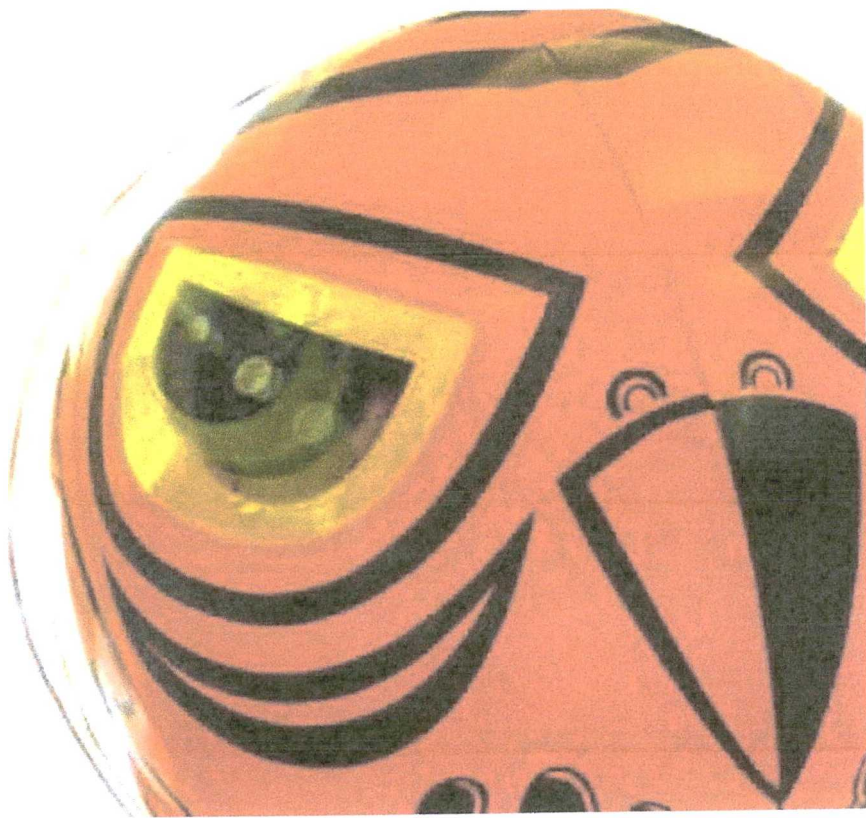
This industry favorite is used worldwide, protecting facilities from damage and liability. Bird-X provides bird control solutions for hundreds of top-tier corporate clients including: UPS, Boeing, Coca-Cola, American Airlines, Wrigley Field, US Air Force, Army, Navy, and many more.

### **Effective Against:**

pigeons, sparrows, starlings, crows, blackbirds, grackles, seagulls, swallows, woodpeckers, bats, rodents, and more

<b>Dimensions</b>	Control Unit 9" x 9" x 5", Speakers 4" x 4" x 6"
<b>Box dimensions</b>	19" x 13" x 8" / Shipping weight: 10 lbs
<b>Speakers</b>	8 ohms, 75 watts
<b>Frequency</b>	15-25 KHz
<b>Coverage</b>	Up to 3,600 sq. ft (ultrasonic), up to 6 acres (sonic)
<b>Power Requirements</b>	110vAC (220vAC available)
<b>Cord</b>	110v, 220v and 240v cords are 6 ft
<b>Sound Pressure</b>	Ultrasonic sounds 95–102 dB (each speaker) at 1 meter, Sonic 105–110 dB (each speaker) at 1 meter
<b>Frequency</b>	Ultrasonic 15–25 kHz, Sonic 3–5 kHz
<b>Compliance</b>	Supply power source is UL and CE listed
<b>EPA Est.</b>	075130-OR-001
<b>Body</b>	Weatherproof box
<b>Warranty</b>	60 Day Electronics Performance Satisfaction Guarantee











## Terror Eyes®

Terror Eyes' bright colors and fierce features mimic natural predators. Holographic eyes create the illusion of a predator following pest birds to attack, while moving organically with the wind. It is easy to install and requires little to no maintenance.

- ✓ 3D Visual Scare Device
- ✓ Reduces Damages
- ✓ Inexpensive, Effective Solution

### Details

- Predator decoy; 3D balloon
- Weatherproof, vinyl, inflatable balloon
- Markings exaggerate the glaring stare & gaping mouth of natural predators
- Holographic material creates the illusion that the eyes are following pest birds
- Wind causes the inflatable Terror Eyes® to move in the wind, increasing efficacy
- Easy installation

### Applications

Effective wherever visible, up to once acre of open space.



## Effectively Repels:

- [Pigeons](#)
- [Ducks](#) and [Geese](#)
- [Seagulls](#)
- [Sparrows](#) and [Starlings](#)
- [Woodpeckers](#)
- [Crows](#)
- [Blackbirds](#)
- [Grackles](#)
- [Swallows](#)
- Other Birds
- Rabbits, [Roents](#)
- [Skunks](#) and other small animals

## Ideal For Use At:

- Indoors and Outdoors
- Farms and Barns
- Golf Courses, Parks, and Public Spaces
- Car and Parking Lots
- Yards, Gardens, Porches, and Patios
- Fields, Barns, Orchards, and Vineyards
- Infrastructure and Transportation
- Boats, Harbors, Docks, and Marinas
- Homes, Garages, and Rooftops
- Warehouses, Loading Docks and Hangers
- Any large open or semi-enclosed space

## Benefits

- Cut down on cleanup and repair costs
- Protect buildings, equipment, and vehicles from corrosive bird droppings
- Reduce health and liability risks associated with pest bird infestation
- Prevent the spread of diseases, such as West Nile, Salmonella and E. Coli
- Eliminate fire hazards caused by birds building nests in vents and chimneys
- Avoid government and safety inspection failures
- Save outdoor grounds from bird damage
- Increase property aesthetics
- Decrease nuisance for residents, workers, customers, etc.

## Specifications

- Balloon diameter: 19" (inflated) / about 27" (deflated)
- Box dimensions: 12" x 9" x 2"
- 2 lbs





# Prowler Owl

Scare away birds and small pests with this predator replica of the most-feared aerial predator, the Great Horned Owl, which catches and eats nearly everything in its path. Without movement, an owl scare is useless – don't be fooled by imitations that are immobile! Install Prowler Owl decoy in any open outdoor area where pest birds or small critters are a problem.

- ✓ **Proven Realistic Visual Scare**
- ✓ **Saves Money on Cleanup and Repair**
- ✓ **4-Foot Wingspan Moves in the Wind**

**Decades-proven visual deterrent, improved with dynamic realism and movement!**

- Accurate plumage and hunting flight pose
- Intimidating, glassy eyes “follow” pests
- 4-foot wingspan and accurate markings
- Owl scare decoy repels pest birds and other small animals
- Flexible wings move and flap in the wind realistically

## Applications

Recommended for use wherever birds & small critters are a problem. Effective where visible for up to 6,000 sq. ft.

## Effectively Repels:

- [Pigeons](#)
- [Seagulls and Gulls](#)
- [Grackles](#)
- [Crows](#)
- [Blackbirds](#)
- [Sparrows](#)
- [Starlings](#)
- [Barn Swallows](#)
- Also works on [rodents](#), rabbits, [squirrels](#), and more

## Ideal For Use At:

- Parks, Fields, Bushes, and Trees
- Yards and Gardens
- Rooftops and Patios
- Near Light Poles and Telephone Poles
- Waterfront Property and Businesses

- Airports and Transportation Platforms
- Marinas and Boat Docks
- Farm Fields, Orchards, and Vineyards
- Warehouses and Manufacturing Facilities

## **Benefits**

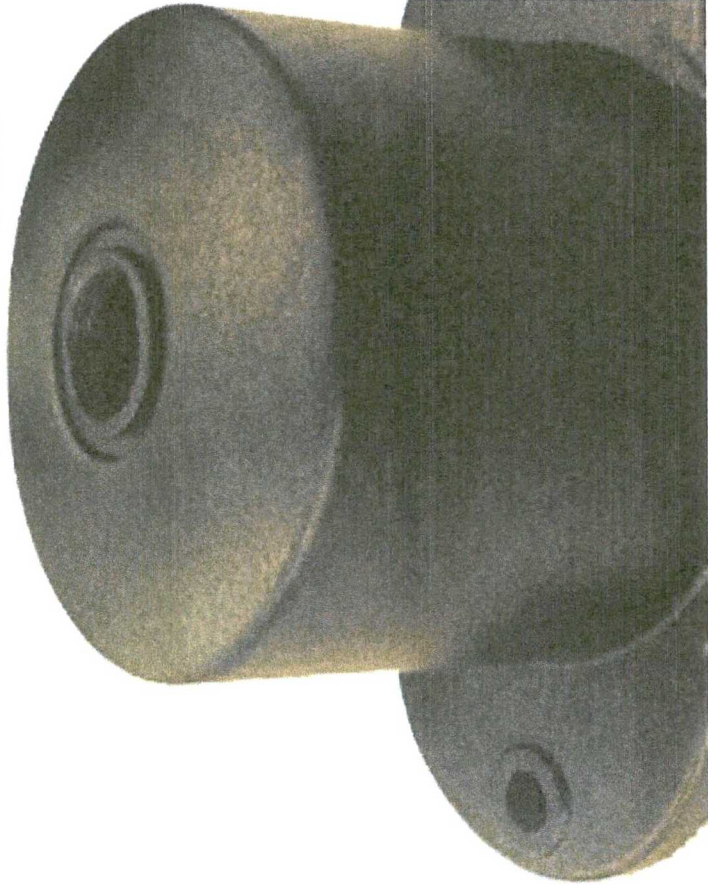
- Cut recurring cleanup and repair costs
- Protect buildings and equipment from corrosive bird droppings
- Reduce health and liability risks associated with pest bird infestation
- Prevent the spread of diseases, such as West Nile, Salmonella and E. Coli
- Eliminate fire hazards caused by birds building nests in vents and chimneys
- Avoid government and safety inspection failures
- Save outdoor grounds from bird damage
- Increase property aesthetics
- Decrease bird nuisance

## **Specifications**

- Dimensions: 44" wingspan, 23" total head-to-tail, 6" head diameter
- Box dimensions: 12" x 8" x 13" / 2 lbs
- Materials: Head is hard plastic resin, body/wing is extra-durable, waterproof non-woven fabric supported by flexible cables and riveted plastic struts
- Mounting: Place neck opening on a 1/2" diameter pole



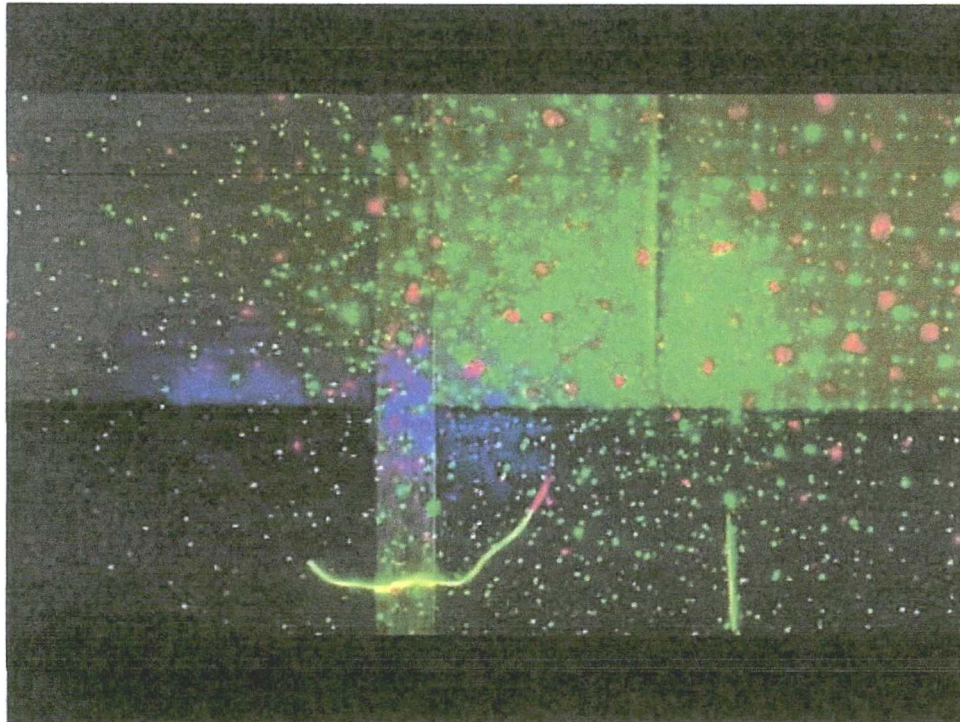




**Bird-X Laser for Outdoors**

The state of the art Bird-X Outdoor Laser uses randomized laser patterns in colors birds hate, forcing them to find somewhere calmer to land.

- ✓ SILENT – scares away birds with visuals, not sound
- ✓ FLEXIBLE – 10,000 square feet of coverage for outdoor use
- ✓ CONSTANT – works day and night



With a range of up to 10,000 square feet, the unrelenting red and green lasers of the Bird-X Laser for Outdoors will irritate and alarm birds, bats, and small mammal pest species without traps or chemicals. Powerful Class 3R “fat beam” laser diodes create multiple random patterns that prevent birds from acclimating and keeps them away!

The Bird-X Laser for Outdoors is pre-programmed, weather-resistant, and can be used night or day in darker areas. It comes ready to mount with included bracket. The convenient and flexible coverage makes it perfect for outdoor spaces like golf courses and corporate grounds. Plus, it comes with a 30-Day satisfaction guarantee to assure your unwanted guests are gone for good!

**Effective Against:**



pigeons, swallows, seagulls, ducks, grackles, crows, blackbirds, sparrows, starlings, cormorants, bats, rodents, and small critters

### **Uses:**

warehouses and manufacturing plants, barns and stables, storages sheds, parking garages and lots, car washes, tunnels, underpasses, breezeways, sports arenas and convention centers, loading docks and transportation platforms, airplane hangars, boat houses, facilities and corporate grounds, apartments and condo buildings, walkways

<b>Dimensions</b>	10" x 10" x 8"
<b>Weight</b>	3.31 lbs / 1.5 kg
<b>Laser Power</b>	Red – 650nm100mW, Green – 532nm50mW
<b>Unit Power</b>	1mW Red + 1mW Green
<b>Power</b>	AC 100v-240v at 50/60Hz
<b>Electric Current</b>	100mA
<b>Classification</b>	3R
<b>Fuse</b>	2A
<b>Housing</b>	Casting Aluminum
<b>Beam Divergence</b>	60°
<b>Operating Temperature</b>	-68 to 104°F / -20 to 40°C
<b>Safe Temperature for Use</b>	– 50 to 95°F / -10 to 35°C