



**Billing Code 4333-15**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 20**

**[Docket No. FWS-HQ-MB-2015-0073; FF09M21200-178-FXMB1231099BPP0]**

**RIN 1018-BB06**

**Migratory Bird Hunting; Approval of Corrosion-Inhibited Copper Shot as Nontoxic for Waterfowl Hunting**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** Having completed our review of the application materials for corrosion-inhibited copper shot, the U.S. Fish and Wildlife Service (hereinafter Service or we) approves the shot for hunting waterfowl and coots. We have concluded that this type of shot left in terrestrial or aquatic environments is unlikely to adversely affect fish, wildlife, or their

habitats. Approving this shot formulation would increase the nontoxic shot options for hunters.

**DATES:** This rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You can view the final environmental assessment by one of the following methods:

- Federal eRulemaking Portal: *http://www.regulations.gov*. Search for Docket No. FWS–HQ–MB–2015–0073.

- Request a copy by contacting the person listed under **FOR FURTHER INFORMATION CONTACT**.

**FOR FURTHER INFORMATION CONTACT:** Ron Kokel, Division of Migratory Bird Management, at 703–358–1967; ronald\_kokel@fws.gov.

**SUPPLEMENTARY INFORMATION:**

**Background**

The Migratory Bird Treaty Act of 1918 (Act) (16 U.S.C. 703–712 and 16 U.S.C. 742 a–j) implements migratory bird treaties between the United States and Great Britain for Canada (1916 and 1996, as amended), Mexico (1936 and 1972, as amended), Japan (1972 and 1974, as amended), and Russia (then the Soviet Union, 1978). These treaties protect most migratory bird species from take, except as permitted under the Act, which authorizes

the Secretary of the Interior to regulate take of migratory birds in the United States. Under this authority, we control the hunting of migratory game birds through regulations at title 50 of the Code of Federal Regulations (CFR) in part 20. We prohibit the use of shot types other than those listed at 50 CFR 20.21(j) for hunting waterfowl and coots and any species that make up aggregate bag limits.

Deposition of toxic shot and release of toxic shot components in waterfowl hunting locations are potentially harmful to many organisms. Research has shown that ingested spent lead shot causes significant mortality in migratory birds. Since the mid-1970s, we have sought to identify types of shot for waterfowl hunting that are not toxic to migratory birds or other wildlife when ingested. Following a process set forth at 50 CFR 20.134, we review applications for approval of nontoxic shot types and coatings and add those that we approve to the migratory bird hunting regulations at 50 CFR 20.21(j).

We addressed lead poisoning in waterfowl in an environmental impact statement (EIS) in 1976, and again in a 1986 supplemental EIS. The 1986 document provided the scientific justification for a ban on the use of lead shot and the subsequent approval of steel shot for hunting waterfowl and coots that began that year, with a complete ban of lead for waterfowl and coot hunting in 1991. We have continued to consider other potential nontoxic shot candidates for approval. We are obligated to review applications for approval of alternative shot types as nontoxic for hunting waterfowl and coots.

Many hunters believe that some nontoxic shot types compare poorly to lead and may damage some shotgun barrels. A small and decreasing percentage of hunters have not complied with nontoxic shot regulations. Allowing use of additional nontoxic shot types may encourage greater hunter compliance and participation with nontoxic shot requirements

and discourage the use of lead shot. The use of nontoxic shot for waterfowl hunting increased after the ban on lead shot (Anderson *et al.* 2000), but that compliance would continue to increase with the availability and approval of other nontoxic shot types. Increased use of nontoxic shot will enhance protection of migratory waterfowl and their habitats. More important is that the Service is obligated to consider all complete nontoxic shot applications submitted to us for approval.

### **Application**

Environ-Metal, Inc., of Sweet Home, Oregon, seeks approval of corrosion-inhibited copper shot as nontoxic. We evaluated the impact of approval of this shot type in an environmental assessment (see **ADDRESSES**, above, for information on viewing a copy of the environmental assessment). The data from Environ-Metal, Inc., indicate that the shot's coating will essentially eliminate copper exposure in the environment and to waterfowl if the shot is ingested. We conclude that this type of shot if left in the aquatic or terrestrial environments will not pose a danger to migratory birds, other wildlife, or their habitats.

We have reviewed the shot under the criteria in Tier 1 of the nontoxic shot approval procedures at 50 CFR 20.134 for permanent approval of shot and coatings as nontoxic for hunting waterfowl and coots. We amend 50 CFR 20.21(j) to add the shot to the list of those approved for waterfowl and coot hunting. Details on the evaluations of the shot can be found in the environmental assessment.

### **Corrosion-Inhibited Copper Shot**

Corrosion-inhibited copper shot (CIC shot) consists of commercially pure copper that

has been surface-treated with benzotriazole (BTA) to obtain insoluble, hydrophobic films of BTA-copper complexes (CDA 2009). These films are very stable; are highly protective against copper corrosion in both salt water and fresh water; and are used extensively to protect copper, even in potable water systems. Other high-volume applications include deicers for aircraft and dishwasher detergent additives, effluents of which may be directly introduced into municipal sewer systems, indicative of the exceptionally low environmental impact of BTA. “The corrosion-inhibiting effectiveness of BTA-copper complex coating, based on actual testing conducted by the applicants and by others, is substantial.”

### **Shot Coating and Test Device**

CIC shot will have an additional coating that will fluoresce under ultraviolet light. The coating is applied by a proprietary process and coats the shot so that the layers of coating are visible through the translucent shotshell. The coating is environmentally safe and is very long-lasting in the shotshells. The sole purpose of fluorescent-coating CIC shot is to provide a portable, non-invasive and affordable field-detection method for use by law enforcement officers to identify this non-magnetic shot type as approved for waterfowl and coot hunting.

ECO Pigments<sup>TM</sup>, manufactured exclusively by DayGlo, Inc. (Cleveland, OH), are thermoplastic fluorescent powders free of formaldehyde, heavy metals, azo compounds, perfluorooctanoic acid, aromatic amines, regulated phthalates, bisphenol A (BPA), polyaromatic hydrocarbons, substance-of-very-high-concern (SVHC) chemicals, and California Proposition 65 chemicals. The pigments were originally developed for use as brightly colored “markers” to be mixed with aerially applied, fire-retardant chemicals used in forest fire suppression, because they are more “environmentally friendly” than even the

relatively inert iron-oxide powders formerly applied. They are globally approved for a wide variety of uses, including textile dyes, paints, and toys. Environ-Metal, Inc., anticipates applying coatings approximately 0.001-inch thick, a value that is calculated to add about 0.13 percent by weight to the mass of a #4-size copper shot.

Environ-Metal, Inc., will apply the pigment to metallic shot using a proprietary process to create a thin, adherent coating of a tough, resilient, fluorescent substance. The coating is visually detectable through the wall of a shotshell when ultraviolet light is applied to the exterior of the shell. To further aid field detection, after application of the nontoxic ultraviolet (UV) pigment to CIC shot, the shot is loaded into an uncolored (“clear”) hull, with a unique inner shot wad printed with the manufacturer and shot material type.

Law enforcement officers who have reason to suspect that a non-magnetic shotshell may contain unapproved shot (*e.g.*, toxic lead) need only shine the UV light on the side of the translucent shell, which will be marked by Environ-Metal, Inc., as containing copper, to determine the presence or absence of a visible glow emitted by the shot coating.

Although the shot coating is inherently water-proof, it is further protected against environmental degradation by being sealed within two layers of polyethylene plastic—the wad and the hull or shell. Environ-Metal, Inc., has stated that “potential fading of the thermoplastic UV dye could not become significant until after both of the enveloping polyethylene cylinders had become embrittled/cracked by excessive exposure to direct sunlight, a condition which would essentially render the shotshell useless.”

### **Positive Effects for Migratory Waterfowl Populations**

Allowing use of additional nontoxic shot types may encourage greater hunter

compliance and participation with nontoxic shot requirements and discourage the use of lead shot. Furnishing additional approved nontoxic shot types and nontoxic coatings likely would further reduce the use of lead shot. Thus, approving additional nontoxic shot types and coatings would likely result in a minor positive long-term impact on waterfowl and wetland habitats.

### **Unlikely Effects on Endangered and Threatened Species**

The impact on endangered and threatened species of approving corrosion-inhibited copper shot would be very small, but positive. Corrosion-inhibited copper shot is highly unlikely to adversely affect animals that consume the shot or habitats in which it might be used. We see no potential significant negative effects on endangered or threatened species due to approval of the shot type.

Further, we annually obtain a biological opinion pursuant to section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), prior to establishing the annual migratory bird hunting regulations. The migratory bird hunting regulations promulgated as a result of this annual consultation remove and alleviate chances of conflict between migratory bird hunting and endangered and threatened species.

### **Beneficial Effects on Ecosystems**

Previously approved shot types have been shown in test results to be nontoxic to the migratory bird resource, and that they cause no adverse impact on ecosystems. There is concern, however, about noncompliance with the prohibition on lead shot and potential ecosystem effects. The use of lead shot has a negative impact on wetland ecosystems due to

the erosion of shot, causing sediment/soil and water contamination and the direct ingestion of shot by aquatic and predatory animals. Though noncompliance is of concern, approval of the shot type would have little impact on the resource, except the small positive impact of reducing the rate of noncompliance.

### **Cumulative Impacts**

We foresee no negative cumulative impacts if we approve this shot type for waterfowl hunting. Its approval could help to further reduce the negative impacts of the use of lead shot for hunting waterfowl and coots. We conclude the impacts of the approval for waterfowl hunting in the United States should be positive.

### **Review of Public Comments**

On August 15, 2017, we published in the *Federal Register* (82 FR 38664) a proposed rulemaking to approve this group of alloys for hunting waterfowl and coots and to make available our draft environmental assessment. We accepted public comments on our proposed rule and draft environmental assessment for 30 days, ending September 14, 2017. We received eight comments on the proposed rule. Several commenters simply expressed support for the inclusion of CIC shot in the list of approved nontoxic shot types and for providing hunters with another nontoxic shot option. More specific comments and responses are identified below:

*Comment:* A commenter believed CIC shot would be better environmentally than lead shot but objected to hunting and the use of tax dollars to support hunting.

*Service Response:* As we stated above, the Migratory Bird Treaty Act of 1918 (Act) implements migratory bird treaties between the United States and Great Britain for Canada, Mexico, Japan, and Russia. These treaties protect most migratory bird species from take, except as permitted under the Act, which authorizes the Secretary of the Interior to regulate take of migratory birds in the United States. Under this authority, we regulate the hunting of migratory game birds through regulations at 50 CFR part 20. Furthermore, our long-term objectives continue to include providing opportunities to harvest portions of certain migratory game bird populations and to limit harvests to levels compatible with each population's ability to maintain healthy, viable numbers. We annually take into account the zones of temperature and the distribution, abundance, economic value, breeding habits, and times and lines of flight of migratory birds, before establishing hunting seasons that are compatible with the current status of migratory bird populations and long-term population goals.

*Comment:* A commenter requested further information on whether hunters would use CIC shot based on market price and ballistic properties of the shot.

*Service Response:* Our responsibility is to determine if the shot in question is safe for the environment. We conclude that it is safe. We have no control over the marketplace. The public will ultimately decide whether they support both the price and ballistic properties of CIC shot.

*Comment:* A commenter had questions regarding the reliability of the proposed method for differentiating between CIC shot and illegal lead shot in the field.

*Service Response:* As discussed above in **Shot Coating and Test Device**, the UV-fluorescent shot coating on CIC shot is encapsulated within two separate cylinders of

polyethylene: the inner "wad" containing the shot and the outer "hull." The proposed detection method is based on several separate and distinct layers of protection. For example, the unique shot coloration would be visibly evident through the translucent wad and hull assembly. Second, the inner wad cylinder would clearly be printed with the manufacturer and shot type. And, finally, and only in the event that the law enforcement officer still had reasons to be suspicious of counterfeiting, the officer could shine a simple long-wave UV light on the outside of the shotshell assembly to observe the very bright UV "glow" unique to CIC shot.

Therefore, as stated in the proposed rule, we reviewed the subject shot under the criteria at 50 CFR 20.134, and we add this product to the list of those approved for hunting waterfowl and coots at 50 CFR 20.21(j).

### **Effective Date of This Rule**

This rule is effective upon publication in the *Federal Register*. We have determined that any further delay in allowing this additional nontoxic shot would not be in the public interest, in that a delay would preclude hunters an additional nontoxic shot option. Allowing use of additional nontoxic shot types may encourage greater hunter compliance with nontoxic shot requirements and discourage the use of lead shot, which is harmful to the environment. Increased use of nontoxic shot will enhance protection of migratory waterfowl and their habitats. Furthermore, CIC shot is very similar to other nontoxic shot that is already available and in use. We provided a 30-day public comment period for the August 15, 2017, proposed rule. This rule relieves restrictions by newly approving CIC shot for hunting waterfowl and coots. We therefore find that "good cause" exists, within the terms of 5

U.S.C. 553(d)(3) of the Administrative Procedure Act, to make these regulations effective immediately upon publication.

### **List of References Cited**

A list of the references cited in this rule may be found at <http://www.regulations.gov> in Docket No. FWS-HQ-MB-2015-0073.

### **Required Determinations**

#### *Executive Order 13771—Reducing Regulation and Controlling Regulatory Costs*

This rule is considered to be an Executive Order (E.O.) 13771 deregulatory action (82 FR 9339, February 3, 2017) because it would approve an additional type of nontoxic shot in our regulations at 50 CFR part 20.

#### *Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that OIRA will review all significant rules. OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the

rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (Pub. L. 104-121)), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions).

SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. We have examined this rule's potential effects on small entities as required by the Regulatory Flexibility Act, and have determined that this action would not have a significant economic impact on a substantial number of small entities. The rule would allow small entities to improve their economic viability. However, the rule would not have a significant economic impact because it would affect only two companies. We certify that because this rule would not have a significant economic effect on a substantial number of small entities, a regulatory flexibility analysis is not required.

This rule is not a major rule under the SBREFA (5 U.S.C. 804 (2)).

- a. This rule would not have an annual effect on the economy of \$100 million or more.
- b. This rule would not cause a major increase in costs or prices for consumers;

individual industries; Federal, State, Tribal, or local government agencies; or geographic regions.

c. This rule would not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

#### *Unfunded Mandates Reform Act*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we have determined the following:

a. This rule would not “significantly or uniquely” affect small governments. A small government agency plan is not required. Actions under the rule would not affect small government activities in any significant way.

b. This rule would not produce a Federal mandate of \$100 million or greater in any year. It would not be a “significant regulatory action” under the Unfunded Mandates Reform Act.

#### *Takings*

In accordance with E.O. 12630, this rule would not have significant takings implications. A takings implication assessment is not required. This rule does not contain a provision for taking of private property.

#### *Federalism*

This rule does not have sufficient Federalism effects to warrant preparation of a

federalism summary impact assessment under E.O. 13132. It would not interfere with the ability of States to manage themselves or their funds.

### *Civil Justice Reform*

In accordance with E.O. 12988, the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of E.O. 12988.

### *Paperwork Reduction Act of 1995 (PRA)*

This rule does not contain any new collections of information that require approval by the Office of Management and Budget (OMB) under the PRA (44 U.S.C. 3501 et seq.). OMB has approved our collection of information associated with applications for approval of nontoxic shot (50 CFR 20.134) and assigned OMB Control Number 1018-0067, which expires March 31, 2020. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

### *National Environmental Policy Act*

Our environmental assessment is part of the administrative record for this rule. In accordance with the National Environmental Policy Act (NEPA, 42 U.S.C. 4321 *et seq.*) and part 516 of the U.S. Department of the Interior Manual (516 DM), approval of corrosion-inhibited copper shot and fluoropolymer coatings would not have a significant effect on the quality of the human environment, nor would it involve unresolved conflicts concerning alternative uses of available resources. Therefore, preparation of an environmental impact

statement is not required.

#### *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), E.O. 13175, and 512 DM 2, we have evaluated potential effects on federally recognized Indian Tribes and have determined that there are no potential effects. This rule would not interfere with the ability of Tribes to manage themselves or their funds or to regulate migratory bird activities on Tribal lands.

#### *Energy Supply, Distribution, or Use (E.O. 13211)*

E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule would not be a significant regulatory action under E.O. 12866, nor would it significantly affect energy supplies, distribution, or use. This action would not be a significant energy action, and no Statement of Energy Effects is required.

#### *Compliance with Endangered Species Act Requirements*

Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), requires that "The Secretary [of the Interior] shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act" (16 U.S.C. 1536(a)(1)). It further states that the Secretary must "insure that any action authorized, funded, or carried out \* \* \* is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse

modification of [critical] habitat” (16 U.S.C. 1536(a)(2)). We have concluded that this rule would not affect listed species.

**List of Subjects in 50 CFR Part 20**

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

**Regulation Promulgation**

For the reasons discussed in the preamble, we amend part 20, subchapter B, chapter I of title 50 of the Code of Federal Regulations as follows:

**PART 20—MIGRATORY BIRD HUNTING**

1. The authority citation for part 20 is revised to read as follows:

**Authority:** 16 U.S.C. 703–712, and 16 U.S.C. 742a–j.

2. Amend § 20.21(j)(1) by:

a. Adding a table entry immediately following the entry for “Copper-clad iron”; and

b. Revising the first table note.

The addition and revision read as follows:

**§ 20.21 What hunting methods are illegal?**

\* \* \* \* \*

(j)(1) \* \* \*

Approved shot type*	Percent composition by weight	Field testing device**
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* * * * *		
Corrosion-inhibited copper	≥99.9 copper with benzotriazole and thermoplastic fluorescent powder coatings	Ultraviolet Light
* * * * *		

\* Coatings of copper, nickel, tin, zinc, zinc chloride, zinc chrome, fluoropolymers, and fluorescent thermoplastic on approved nontoxic shot types also are approved.

\*\* The information in the "Field Testing Device" column is strictly informational, not regulatory.

\* \* \* \* \*

Dated: \_October 25, 2017\_\_\_\_\_.

Jason Larrabee

*Acting Assistant Secretary for Fish and Wildlife and Parks.*

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