DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 20

[Docket No. FWS–R9–MB–2009–0003; 91200–1231–9BPP]

RIN 1018–AW46

Migratory Bird Hunting; Approval of Tungsten-Iron-Fluoropolymer Shot Alloys as Nontoxic for Hunting Waterfowl and Coots; Availability of Final Environmental Assessment

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule; availability of final environmental assessment.

SUMMARY: We, the U.S. Fish and Wildlife Service, approve tungsten-iron-fluoropolymer shot alloys for hunting waterfowl and coots. Having completed our review of the application materials, we have concluded that these alloys are very unlikely to adversely affect fish, wildlife, or their habitats. We therefore add this shot type to the list of those approved for hunting waterfowl and coots.

DATES: This rule is effective on October 20, 2009.

ADDRESSES: You can view the final environmental assessment for this action on *http://www.regulations.gov*, or you can obtain a copy by contacting the person listed under **FOR FURTHER INFORMATION CONTACT**.

FOR FURTHER INFORMATION CONTACT: George T. Allen, Division of Migratory Bird Management, 703–358–1825.

SUPPLEMENTARY INFORMATION:

Background

The Migratory Bird Treaty Act of 1918 (Act) (16 U.S.C. 703–711) and the Fish and Wildlife Improvement Act of 1978 (16 U.S.C. 712) implement migratory bird treaties between the United States and Great Britain for Canada (1916, amended), Mexico (1936, amended), Japan (1972, amended), and Russia (then the Soviet Union, 1978). These treaties protect certain migratory birds from take, except as permitted under the Acts. The Acts authorize the Secretary of the Interior to regulate take of migratory birds in the United States. Under this authority, we control hunting of migratory game birds through regulations in 50 CFR part 20.

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 shot types that do not pose significant toxicity hazards to migratory birds or other wildlife. 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 on lead for waterfowl and coot hunting in 1991. We have continued to consider other potential candidates for approval as nontoxic shot. We are obligated to review applications for approval of alternative shot types as nontoxic for hunting waterfowl and coots.

Tundra Composites, LLC, requested approval of tungsten-iron-fluoropolymer (TIF) shot alloys of 41.5 to 95.2 percent tungsten, 1.5 to 52.0 percent steel, and 3.5 to 8.0 percent fluoropolymer by weight as nontoxic. The tungsten and iron in this shot type have already been approved in other nontoxic shot types. The applicant did a worst-case evaluation of the potential impacts of the fluoropolymer on fish, wildlife, and their habitats.

The data from the applicant indicate that the tungsten-iron-fluoropolymer alloys will be nontoxic when ingested by waterfowl, and should not pose a significant danger to migratory birds, other wildlife, or their habitats.

Many hunters believe that some nontoxic shot types do not compare favorably to lead and that they may damage some shotgun barrels, and a small 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 we believe that compliance will 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, however, is that the Fish and Wildlife Service is obligated to consider all complete nontoxic shot applications.

We have reviewed the shot under the criteria in Tier 1 of the revised nontoxic shot approval procedures contained in 50 CFR 20.134 for permanent approval of shot as nontoxic for hunting waterfowl and coots. We amend 50 CFR 20.21(j) to add TIF shot to the list of the approved types of shot for waterfowl and coot hunting.

Affected Environment

Waterfowl Population Status and Harvest

The following paragraphs provide a brief summary of information on the status and harvest of waterfowl excerpted from various reports. For more detailed information on methodologies and results, you may obtain complete copies of the various reports at the address indicated under **FOR FURTHER INFORMATION CONTACT** or from our Web site *http://www.fws.gov/migratorybirds/NewsPublicationsReports.html*.

Status of Ducks

Federal, provincial, and State agencies conduct surveys each spring to estimate the size of breeding populations and to evaluate the conditions of the habitats. These surveys are conducted using fixed-wing aircraft and helicopters and encompass principal breeding areas of North America, and cover over 2.0 million square miles. The Traditional survey area comprises Alaska, Canada, and the northcentral United States, and includes approximately 1.3 million square miles. The Eastern survey area includes parts of Ontario, Quebec, Labrador, Newfoundland, Nova Scotia, Prince Edward Island, New Brunswick, New York, and Maine, an area of approximately 0.7 million square miles.

Breeding Ground Conditions

Habitat conditions during the 2009 Waterfowl Breeding Population and Habitat Survey were characterized by above-average moisture across the southern portions of the traditional survey area, good habitat in the eastern survey area, and late spring conditions across northern survey areas. The total pond estimate (prairie Canada and U.S. combined) was 6.4 ± 0.2 million. This was 45 percent above the 2007 estimate of 4.4 ± 0.2 million ponds and 31 percent above the long-term average of 4.9 ± 0.03 million ponds. The 2009 estimate of ponds in prairie Canada was 3.6 ± 0.1 million. This was a 17 percent increase from the 2007 estimate (3.1 ± 0.1 million) and was similar to the long-term average (3.4 ± 0.03 million). The 2009 pond estimate for the northcentral U.S. of 2.9 ± 0.1 million was 108 percent above the 2007 estimate (1.4 ± 0.07 million) and 87 percent above the long-term average (1.5 ± 0.02 million).

Breeding Population Status

In the Waterfowl Breeding Population and Habitat Survey traditional survey area (strata 1–18, 20–50, and 75–77), the total duck population estimate was 42.0 ± 0.7 [SE] million birds. This estimate represents a 13 percent increase over the 2007 estimate of 37.3 ± 0.6 million birds and was 25 percent above the long-term average (1955–2008). Estimated mallard (*Anas platyrhynchos*) abundance was 8.5 ± 0.2 million birds, which was a 10 percent increase over the 2007 estimate of 7.7 ± 0.3 million birds and 13 percent above the long-term average. Estimated abundance of gadwall (*A. strepera;* 3.1 ± 0.2 million) was similar to the 2008 estimate and 73 percent above the long-term average. Estimated American wigeon abundance (*A. americana;* 2.5 ± 0.1 million) was similar to 2008 and the long-term average. Estimated abundances of green-winged teal (*A. crecca;* 3.4 ± 0.2 million) and blue-winged teal (*A. discors;* 7.4 ± 0.4 million) were similar to the 2007 estimates and well above their long-term averages (+79 percent and +60 percent, respectively). Northern shovelers (*A. clypeata;* 4.4 ± 0.2 million) were 25 percent above the 2008 estimate and remain 92 percent above their long-term average. The estimate for northern pintails (*A. acuta*) was 3.2 ± 0.2 million, which was 23 percent above the 2008 estimate of 2.6 ± 0.1 million, and 20 percent below the long-term average. Estimated abundance of redheads (*Aythya americana;* 1.0 ± 0.1 million) was similar to last year and 62 percent above the long-term average. The canvasback estimate (*A. valisineria;* 0.7 ± 0.06 million) was 35 percent above the 2008 estimate (0.5 ± 0.05 million) and similar to the long-term average. The scaup estimate (*A. affinis* and *A. marila* combined; 4.2 ± 0.2 million) was similar to that of 2008 and 18 percent below the long-term average of 5.1 ± 0.05 million.

The eastern survey area was restratified in 2005 and is now composed of strata 51–72. Estimates of mallards, scaup, scoters (black [*Melanitta nigra*], white-winged [*M. fusca*], and surf [*M. perspicillata*]), green-winged teal, American wigeon, bufflehead (*Bucephala albeola*), American black duck (*Anas rubripes*), ring-necked duck (*Aythya collaris*), mergansers (red-breasted [*Mergus serrator*], common [*M. merganser*], and hooded [*Lophodytes cucullatus*]), and goldeneye (common [*B. clangula*] and Barrow's [*B. islandica*]) all were similar to their 2008 estimates and long-term averages.

Fall Flight Estimate

The mid-continent mallard population is composed of mallards from the traditional survey area (revised in 2008 to exclude Alaska mallards), Michigan, Minnesota, and Wisconsin, and was estimated to be 10.3 ± 0.9 million in 2009. This was similar to the 2008 estimate of 9.2 ± 0.8 million.

Status of Geese and Swan

We provide information on the population status and productivity of North American Canada geese (*Branta canadensis*), brant (*B. bernicla*), snow geese (*Chen caerulescens*), Ross' geese (*C. rossii*), emperor geese (*C. canagica*), white-fronted geese (*Anser albifrons*), and tundra swans (*Cygnus columbianus*). In May of 2009, temperatures were 1–5 degrees Celsius colder than average throughout the central region of subarctic and Arctic Canada. In some locales harsh spring conditions persisted into June. In areas near Hudson Bay and the Queen Maud Gulf, goose and swan nesting activities were delayed by 1 to 3 weeks. In contrast, nesting conditions were favorable near Wrangel Island, Alaska's North Slope and eastern interior regions, parts of the Canadian high Arctic, and Newfoundland. Improved wetland abundance in the Canadian and U.S. prairies, and other temperate regions, will likely improve the production of Canada geese that nest at southern latitudes. Primary abundance indices decreased for 15 goose populations and increased for 10 goose populations in 2009 compared to 2008. Primary abundance indices for both populations of tundra swans increased in 2009 from 2008 levels. The following populations displayed significant positive trends during the most recent 10-year period ($P < 0.05$); Mississippi Flyway Giant, Aleutian, Atlantic, and Eastern Prairie Canada geese; Greater, Western Arctic/Wrangel Island, and Western Central Flyway light geese; and Pacific white-fronted geese. No populations showed a significant negative 10-year trend. The forecast for the production of geese and swans in North America for 2009 is regionally variable, but production for many populations will be reduced this year due to harsh spring conditions in much of central Canada.

Waterfowl Harvest and Hunter Activity

National surveys of migratory bird hunters were conducted during the 2007 and 2008 hunting seasons. About 1.2 million waterfowl hunters harvested 14,578,900 (±4%) ducks and 3,666,100 (±6%) geese in 2007, and harvested 13,635,700 (±4%) ducks and 3,792,600 (±5%) geese in 2008. Mallard, green-winged teal, gadwall, wood duck (*Aix sponsa*), and American wigeon were the 5 most-harvested duck species in the United States, and Canada goose was the predominant goose species in the goose harvest. Coot hunters (about 33,700 in 2007 and 31,100 in 2008) harvested 198,300 (±29%) coots in 2007 and 275,900 (+43%) in 2008.

Characterization of the Shot Type

Tungsten-iron-fluoropolymer shot has a density ranging from 8.0 to 12.5 grams per cubic centimeter (g/cm^3), and is corrosion resistant and magnetic. Tundra Composites estimates that the volume of TIF shot for use in hunting migratory birds in the United States will be approximately 330,000 pounds (150,000 kilograms, kg) per year. The 8.0 g/cm^3 alloy is approximately the same density as steel. The steel in the alloys contains up to 1.3 percent manganese, 1.2 percent silicon, and 1.2 percent carbon by weight. The shot may have a very fine residual coating of mica from production. We expect the environmental and health effects of the mica to be negligible.

TABLE 1—COMPOSITION OF TIF SHOT ALLOYS

Alloy	Density (g/cm^3)	Percent tungsten	Percent steel *	Percent fluoropolymer
1	8.0	41.5–50.6	41.6–52.0	6.1–8.0
2	9.5	61.0–68.7	24.8–34.0	5.0–6.6
3	11.0	75.2–81.8	12.5–20.5	4.3–5.7
4	12.5	85.9–96.0	1.0–10.3	3.8–5.2

* The steel contains no more than 0.25% chromium, 0.20% copper, and 0.20% nickel. In the alloys, these percentages are no more than 0.13%, 0.1%, and 0.1%, respectively.

Environmental Fate of the Tungsten and Iron in TIF Shot

The tungsten and the iron in these alloys have been approved in other nontoxic shot types (*see* ''Impact of Approval of the Shot Type''), and the submitters asserted that the alloys pose no adverse toxicological risks to waterfowl or other forms of terrestrial or aquatic life. The metals in the alloys are insoluble under normal hot and cold temperatures. Neither manufacturing the shot nor firing shotshells containing the shot will alter the metals or the fluoropolymer, or change how they dissolve in the environment.

Possible Environmental Concentrations for the Manganese and Silicon and Fluoropolymer in TIF Shot in Terrestrial Systems

Calculation of the estimated environmental concentration (EEC) of a candidate shot in a terrestrial ecosystem is based on 69,000 shot per hectare (ha) (50 CFR 20.134). These calculations assume that the shot dissolves promptly and completely after deposition. Because the tungsten and iron have been approved in other nontoxic shot types, we focus on the manganese and silicon in the alloys.

The EEC for the manganese in TIF shot would be approximately 0.11 parts per million. The maximum increase in environmental concentration for manganese in terrestrial settings would be 23.1 micrograms per liter. If the shot were completely dissolved or eroded, the EEC in soil is much less than the 50th percentile of typical background concentrations for manganese in soils of the United States.

If totally dissolved, the shot would produce a silicon concentration of 0.1082 parts per million (ppm), or 0.07 kg/ha/year. Silicon is not found free in nature, but combines with oxygen and other elements in nature to form silicates (LANL 2003; USGS 2009). Silicates constitute more than 25 percent of the Earth's crust (USGS 2009). Sand, quartz, rock crystal, amethyst, agate, flint, jasper, and opal are some of the forms in which the oxide appears (LANL 2003). Thus, the silicon from TIF shot would be insignificant.

Possible Environmental Concentrations for the Manganese, Silicon, and Fluoropolymer in the TIF Shot in Aquatic Systems

The EEC for water assumes that 69,000 number 4 shot are completely dissolved in 1 ha of water 30.48 centimeters deep. The submitter then calculates the concentration of each metal in the shot if the shot pellets dissolve completely. The analyses assume complete dissolution of the shot type containing the highest proportion of each metal in the range of alloys submitted.

The maximum EEC for manganese is 23.1 ppm. There are no U.S. Environmental Protection Agency (EPA) acute or chronic quality criteria available for manganese for freshwater or saltwater. However, the State of Colorado has acute and chronic freshwater quality criteria for manganese of 2,986 ppm and 1,650 ppm, respectively (assuming a hardness of 100 mg/L as $CaCO_3$). The manganese from TIF shot would lead to a fraction of these concentrations, so we believe that the manganese from TIF shot will not pose a threat to the environment.

The EEC for silicon from TIF shot would be 21.4 ppm. The EPA has set no acute or chronic criteria for silicon in freshwater or saltwater. Furthermore, silicates are commonly present in many soils and sediments.

For the fluoropolymer in the shot, the EEC in aquatic systems would be 273.1 ppm. We believe this value has little meaning given the insolubility of the fluoropolymer.

In Vitro Solubility Evaluation of TIF Shot

When nontoxic shot is ingested by waterfowl, both physical breakup of the shot and dissolution of the metals that comprise the shot may occur in the highly acidic environment of the gizzard. In addition to the standard Tier 1 application information (50 CFR 20.134), Tundra Composites provided the results of an *in vitro* gizzard simulation test conducted to quantify the release of metals in solution under the prevailing pH conditions of the avian gizzard. The metal concentrations released during the simulation test were, in turn, compared to known levels of metals that cause toxicity in waterfowl. The evaluation followed the methodology of Kimball and Munir (1971) as closely as possible.

The test solution pH averaged 2.01 over the 14-day test period and the average temperature of the digestion solution averaged 41.8 °C. In the test, the average amount of nickel, copper, and chromium released from 8 TIF shot/day was 0.037 mg, 0.017 mg, and 0.024 mg, respectively.

It is reasonable to expect that if the *in vitro* gizzard simulation test conditions had degraded the fluoropolymer in the TIF shot, fluoride would be present in the digestion solution. However, the fluoropolymer present in TIF shot is extremely resistant to degradation. The formation of hazardous decomposition byproducts from the fluoropolymer occurs only at temperatures over 300 °C. A representative fluoropolymer, polytetrafluoroethylene, will endure 260 °C for more than 2 years until failure due to degradation (Imbalzano 1991). The applicant concluded that the fluoride concentrations in the solution were background levels of fluoride in the digestion solution, rather than a decomposition byproduct of the fluoropolymer. This conclusion was supported by the variability and lack of a trend in the estimated fluoride concentrations (Day 0 concentrations were greater than Day 14 concentrations). Perfluorooctanoic acid (PFOA) is not used in the manufacture or formulation of the fluoropolymer present in TIF shot because it has been identified as a persistent global contaminant (EPA 2003).

The testing completed by the applicant indicates that TIF shot is highly resistant to degradation, and poses little risk to waterfowl or other biota if ingested in the field. The slow breakdown of the shot only permits metals to be released at concentrations that are substantially below toxic levels of concern in waterfowl. Furthermore, the fluoropolymer present in TIF shot will not degrade if ingested by waterfowl.

Impacts of Approval of the Shot Type

Effects of the Metals

We have previously assessed and approved various alloys containing tungsten and/or iron as nontoxic for hunting waterfowl (*e.g.* 66 FR 737, January 4, 2001; 68 FR 1388, January 10, 2003; 69 FR 48163, August 9, 2004; 70 FR 49194, August 23, 2005; 71 FR 4294, January 26, 2006). We have approved alloys of almost 100 percent of both tungsten and iron. Approval of TIF alloys raises no new concerns about approval of the tungsten or the iron in TIF shot.

Manganese

Manganese is an essential nutrient for both plants and animals. In animals, manganese is associated with growth, normal functioning of the central nervous system, and reproductive function. In plants, manganese is essential for the oxidation-reduction process (EPA 2007). Manganese compounds are important soil constituents, and the 50th percentile of typical background concentrations for manganese range from 400 kg dry weight in eastern U.S. soils to 600 kg dry weight in western U.S. soils.

One number 4 TIF shot contains approximately 0.001 gram of manganese. The geometric mean of avian No Observed Adverse Effect Level (NOAEL) values for reproduction and growth that were identified by the EPA in its derivation of an Ecological Soil Screening Level (Eco-SSL) for manganese was 179 kg of body weight per day (EPA 2007). Based upon the avian NOAEL of 179 milligrams of manganese per kilogram of body weight per day, a 2-kg bird could safely consume about 352 TIF shot per day without suffering from the consumption of the shot. Similarly for mammals, the geometric mean of mammalian NOAEL values for reproduction and growth that were identified by the EPA in its derivation of an Eco-SSL for manganese was 51.5 milligrams of manganese per kilogram of body weight per day (EPA 2007). Based upon the mammalian NOAEL of 51.5 milligrams of manganese per kilogram of body weight per day, a 1-kg mammal could safely consume approximately 50 TIF shot per day without suffering manganese toxicosis.

There are no EPA acute or chronic freshwater or saltwater criteria for manganese. However, Colorado acute and chronic freshwater criteria are 2,986 micrograms per liter and 1,650 micrograms per liter, respectively (assuming a hardness of 100 milligrams per liter as $CaCO_3$) (5 CCR 1002–31). The aquatic EEC for manganese is 23.1 micrograms per liter when we assume complete dissolution of the 69,000 shot in 1 ha of water 30.48 cm deep. Therefore, the manganese from TIF shot should not pose an environmental problem in aquatic environments.

Based upon available NOAEL values, birds and mammals would have to ingest in excess of 50 TIF shot per day before manganese toxicosis could occur. Assuming complete erosion of all shot, the EEC of manganese in soil is much less than the 50th percentile of typical background concentrations for manganese in soils of the United States. The EEC for manganese is well below both the acute and chronic criteria for fresh water from the State of Colorado, assuming complete dissolution of the shot. In sum, the manganese in TIF shot will result in very minimal estimated exposure concentrations to wetland biota.

Nickel

No reproductive or other effects were observed in mallards consuming the equivalent of 102 milligrams of nickel as nickel sulfate each day for 90 days (Eastin and O'Shea 1981). Therefore, the 0.037 milligram of nickel released from 8 TIF shot per day will pose no risk of adverse effects to waterfowl. In addition, metallic nickel likely is absorbed less from the gastrointestinal tract than is the nickel sulfate used in the mallard reproduction study.

Copper

The maximum tolerable level of dietary copper during the long-term growth of chickens and turkeys has been reported to be 300 kg (CMTA 1980). At the maximum tolerable level for chronic exposure of 300 kg for poultry, a 1.8-kg chicken consuming 100 g of food per day (Morck and Austic 1981) would consume 30 mg copper per day (16.7 milligrams of copper per kilogram of body weight per day). Since the average amount of copper released from 8 TIF shot per day would be 0.017 mg, a bird would have to ingest in excess of 1000 TIF shot to exceed the maximum tolerable level.

Dietary levels of 10.0 mg chromium(III)/kilogram for 10 weeks depressed survival in young black ducks (Haseltine *et al.* 1985), but no adverse effects were observed in chickens exposed to 100 ppm dietary chromium(VI) in a 32-day study (Rosomer *et al.* 1961). Therefore, the average amount of chromium released from 8 TIF shot/day of 0.024 mg will pose no risk of adverse effects to waterfowl.

Effects of Silicon

We found no data for assessing acute or chronic toxicity of the silicon present in TIF shot. EPA has not set acute or chronic criteria for silicon in aquatic systems. However, silicon compounds are widespread in nature, and we think it highly likely that sediments consumed incidentally by waterfowl contain silicates.

Silicon is not found free in nature, but silicates constitute more than 25 percent of the Earth's crust (USGS 2009), in sand, quartz, rock crystal, amethyst, agate, flint, jasper, and opal, among other rocks. Granite, hornblende, asbestos, feldspar, clay, and mica are among the numerous silicate minerals.

Effects of the Fluoropolymer

No data are available on acute or chronic toxicity of the fluoropolymer used in the TIF alloys. However, fluorinated organic polymers are very stable and resistant to hydrolysis (Danish Ministry of the Environment 2004). An *in vitro* gizzard simulation test conducted with 8.0 g/cm^3 TIF shot showed that the fluoropolymer used in the alloys will not degrade if ingested by waterfowl. Exposure to stable fluoropolymers does not give rise to increased free fluoride concentration in the blood in humans (Danish Ministry of the Environment 2004). Based on the information provided by the applicant and our assessment, we have little concern for problems due to organisms ingesting TIF shot or from dissolution of the shot in aquatic settings.

Effects of the Approval on Migratory Waterfowl

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. Thus, approving additional nontoxic shot types will likely result in a minor positive long-term impact on waterfowl and wetland habitats.

Effects on Endangered and Threatened Species

The impact on endangered and threatened species of approval of the TIF alloys would be very small, but positive. The metals in TIF alloys have been approved in other nontoxic shot types, and we believe that the fluoropolymer is highly unlikely to adversely affect animals that consume the shot or habitats in which the shot might be used. We see no potential effects on threatened or endangered species due to approval of these alloys.

We obtained 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 seasonal hunting regulations. The hunting regulations promulgated as a result of this consultation remove and alleviate chances of conflict between migratory bird hunting and endangered and threatened species.

Effects on Ecosystems

Previously approved shot types have been shown in test results to be nontoxic to the migratory bird resource, and we believe that they cause no adverse impact on ecosystems. There is concern, however, about noncompliance with the prohibition on lead shot and with 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. Therefore, approval of the TIF alloys will have little impact on the resource, unless it has the small positive impact of reducing the rate of noncompliance.

Cumulative Impacts

We foresee no negative cumulative impacts of approval of the TIF alloys for waterfowl hunting. Their approval may help to further reduce the negative impacts of the use of lead shot for hunting waterfowl and coots. We believe the impacts of approval of TIF shot for waterfowl hunting in the United States should be positive.

Review of Public Comments

On August 7, 2009, we published in the **Federal Register** (74 FR 39598) 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 8, 2009.

We received one comment on the proposed rule. The commenter disagreed with our analysis that the proposed shot was nontoxic and claimed that the fluoropolymer in the shot should be of concern. However, as noted in the application and the environmental assessment, an *in vitro* gizzard simulation test conducted with 8.0 g/cm^3 TIF shot showed that the fluoropolymer used in the alloys will not degrade if ingested by waterfowl. Exposure to stable fluoropolymers does not give rise to increased free fluoride concentration in the blood in humans (Danish Ministry of the Environment 2004).

Thus, based on the information provided by the applicant and our assessment, TIF shot should not pose a significant danger to migratory birds, other wildlife, or their habitats due to organisms ingesting shot or from dissolution of the shot in aquatic settings. Further, we conclude that this group of alloys raises no particular concerns about deposition in the environment or about ingestion by waterfowl or predators.

Summary

Previous assessments of nontoxic shot types indicated that the iron and the tungsten from shot alloys should not harm aquatic or terrestrial systems. The solubility testing of TIF shot indicated that the negligible release of the metals from TIF shot (including the trace amounts of chromium, copper, and nickel released at low pH) will not be a hazard to aquatic systems or to biota. For these reasons, and in accordance with 50 CFR 20.134, we approve TIF

shot as nontoxic for hunting waterfowl and coots, and amend 50 CFR 20.21(j) accordingly. Our approval is based on the toxicological report, acute toxicity studies, reproductive/chronic toxicity studies, and other published research. The available information indicates that the TIF alloys should be nontoxic when ingested by waterfowl and that they pose no significant danger to migratory birds, other wildlife, or their habitats.

Literature Cited

For a complete list of the literature cited in this rule, visit *http://www.regulations.gov* or contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

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 and discourage the use of lead shot harmful to the environment. Increased use of nontoxic shot will enhance protection of migratory waterfowl and their habitats. Furthermore, tungsten-iron-fluoropolymer 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 7, 2009, proposed rule. This rule relieves restrictions by newly approving tungsten-iron-fluoropolymer shot alloys 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.

Required Determinations

Regulatory Planning and Review (E.O. 12866)

The Office of Management and Budget (OMB) has determined that this rule is not significant under E.O. 12866. OMB bases its determination upon the following four criteria:

a. Whether the rule will have an annual effect of $100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

b. Whether the rule will create inconsistencies with other Federal agencies' actions.

c. Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

d. Whether the rule raises novel legal or policy issues.

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 will not have a significant economic impact on a substantial number of small entities. The rule will allow small entities to continue actions they have been able to take under the regulations—actions specifically designed to improve the economic viability of those entities—and, therefore, will not significantly affect them economically. We certify that because this rule will 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 will not have an annual effect on the economy of $100 million or more.

b. This rule will 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 will 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 will not ''significantly or uniquely'' affect small governments. A small government agency plan is not required. Actions under the regulation will not affect small government activities in any significant way.

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

Takings

In accordance with E.O. 12630, this rule does 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 assessment under E.O. 13132. It will 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 the 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

This rule does not contain any new collections of information that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. 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 April 30, 2012.

National Environmental Policy Act

Our environmental assessment is part of the administrative record for this rulemaking. 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 TIF alloys will not have a significant effect on the quality of the human environment, nor will it involve unresolved conflicts concerning alternative uses of available resources. Therefore, preparation of an environmental impact statement (EIS) 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 will 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)

On May 18, 2001, the President issued E.O. 13211 addressing regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rulemaking is not a significant regulatory action under E.O. 12866, and it will not significantly affect energy supplies, distribution, or use. This action will 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 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 change to the regulations will not affect listed species.

List of Subjects in 50 CFR Part 20

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

■ 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—[AMENDED]

■ 1. The authority citation for part 20 continues to read as follows:

Authority: Migratory Bird Treaty Act, 40 Stat. 755, 16 U.S.C. 703–712; Fish and Wildlife Act of 1956, 16 U.S.C. 742a–j; Public Law 106–108, 113 Stat. 1491, Note Following 16 U.S.C. 703.

■ 2. Amend § 20.21 by revising paragraph (j) to read as follows:

§ 20.21 What hunting methods are illegal?

* * * * *

(j)(1) While possessing loose shot for muzzle loading or shotshells containing other than the following approved shot types.

Approved shot type *	Percent composition by weight	Field testing device **
Bismuth-tin	97 bismuth, and 3 tin	Hot Shot®. ***
Iron (steel)	iron and carbon	Magnet or Hot Shot®.
Iron-tungsten	any proportion of tungsten, and ≥1 iron	Magnet or Hot Shot®.
Iron-tungsten-nickel	≥1 iron, any proportion of tungsten, and up to 40 nickel	Magnet or Hot Shot®.
Tungsten-bronze	51.1 tungsten, 44.4 copper, 3.9 tin, and 0.6 iron, or 60 tungsten, 35.1 copper, 3.9 tin, and 1 iron.	Rare Earth Magnet.
Tungsten-iron-copper-nickel	40–76 tungsten, 10–37 iron, 9–16 copper, and 5-7 nickel	Hot Shot® or Rare Earth Magnet.
Tungsten-matrix	95.9 tungsten, 4.1 polymer	Hot Shot®.
Tungsten-polymer	95.5 tungsten, 4.5 Nylon 6 or 11	Hot Shot®.
Tungsten-tin-iron	any proportions of tungsten and tin, and ≥1 iron	Magnet or Hot Shot®.
Tungsten-tin-bismuth	any proportions of tungsten, tin, and bismuth.	Rare Earth Magnet.
Tungsten-tin-iron-nickel	65 tungsten, 21.8 tin, 10.4 iron, and 2.8 nickel	Magnet.
Tungsten-iron-polymer	41.5–95.2 tungsten, 1.5–52.0 iron, and 3.5-8.0 fluoropolymer	Magnet or Hot Shot®.

* Coatings of copper, nickel, tin, zinc, zinc chloride, and zinc chrome on approved nontoxic shot types also are approved.
** The information in the ''Field Testing Device'' column is strictly informational, not regulatory.
*** The ''HOT*SHOT'' field testing device is from Stream Systems of Concord, CA.

(2) Each approved shot type must contain less than 1 percent residual lead (*see* § 20.134).

(3) This shot type restriction applies to the taking of ducks, geese (including brant), swans, coots (*Fulica americana*), and any other species that make up aggregate bag limits with these migratory game birds during concurrent seasons in areas described in § 20.108 as nontoxic shot zones.

Dated: October 7, 2009.

Thomas L. Strickland,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. E9–25108 Filed 10–19–09; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

RIN 0648–XS22

Atlantic Highly Migratory Species; Atlantic Bluefin Tuna Fisheries

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Inseason action; notification of applicable Longline category incidental retention limits.

SUMMARY: NMFS has determined that the 25–mt quota available for the Atlantic bluefin tuna (BFT) Longline category Northeast Distant gear restricted area (NED) fishery has been attained. NMFS announces that the Longline category incidental BFT retention limits will apply in the NED for the remainder of the fishing year. This action applies to Atlantic Tunas Longline category permitted vessels that fish in the NED.

DATES: Effective October 20, 2009, through December 31, 2009.

FOR FURTHER INFORMATION CONTACT: Sarah McLaughlin or Brad McHale, 978–281–9260.

SUPPLEMENTARY INFORMATION: Regulations implemented under the authority of the Atlantic Tunas Convention Act (16 U.S.C. 971 et seq.) and the Magnuson-Stevens Fishery