

**Attachment #5**  
**DNR Walleye Fish Feed Specifications and Requirements**

**GENERAL REQUIREMENTS:**

Potential bidders must have been in the fish feed manufacturing business for a minimum of five years.

The manufacturer's best quality feed will be the only product accepted.

No bid will be considered unless the feed is processed solely by the contracted vendor (i.e. no subcontracting) in a mill with facilities for quality control, designed for the manufacture of fish feeds, and guaranteeing the elimination of the danger of cross contamination with other feeds or drugs and chemicals used in other feeds. Any evidence of cross-contamination shall allow the hatchery manager to refuse the delivery.

**FEED REQUIREMENTS:**

Fish feed shall be milled no more than 30 days prior to delivery and contain vitamin and trace mineral amounts equal to or greater than industry standards. Without exception, all cooked extruded feeds shall contain stabilized vitamin C.

In order to maintain Walleyes in healthy condition, all fish feed supplied must be formulated to the exact specifications given in the document.

The ingredients and finished feeds shall be wholesome and clean with materials free from noxious chemicals and foreign materials and shall comply with the temporary tolerances for residues of PCBs established by the U.S. Food and Drug Administration (21 CFR, Section 509.3). PCB levels in the finished feed shall not exceed 0.2 ppm. Random testing of feed lots will be tested at the Iowa DNR's expense. Any feed lots that exceed the PCB limits will be replaced at the manufacturer's expense.

Random finished feed samples may be sent to a certified independent laboratory upon delivery to a receiving hatchery. Finished feed samples will be labeled as to type of ingredient, lot number, and date of manufacture. The independent analytical laboratory will determine if they meet contract specifications. Finished feeds not meeting specifications may be rejected and may result in termination of the contract.

**FEED MANUFACTURING PLANT AND METHODS:**

The contractor's mill, equipment, and manufacturing procedures must comply with the U.S. Food and Drug Administration's (FDA's) "Good Manufacturing Practices," prepared by Robert A. Wilcox, Grain Science and Industry, Kansas State University, Manhattan, Kansas.

The dust content of granules and pellets shall not exceed 2% at the specified delivery point. Dust shall be defined as particles that would pass through a U.S. Screen Size #30 (595 microns).

All pellets shall be specified size(s) after extrusion and drying. Pellets shall contain no oversized particles and not more than 1% undersized particles.

The feed provided by the contractor must meet the following pellet sizes (or closest English equivalent):

2.0 mm by 2.0 mm  
3.0 mm by 3.0 mm  
4.0 mm by 4.0 mm

**ORDERS:**

Orders will be placed by the Hatchery Manager or their designee by telephone or email. The contractor shall provide an order confirmation via email within 24 hours of order placement. Delivery to the specified hatchery(s) shall be no later than 15 calendar days from the date the order is placed.

**BAGGING AND LOADING:**

The pellets and granules are not to be bagged until cooled to 10 degrees above ambient temperature and dried to a moisture content of 10% or less.

All feed, excluding cooked extruded floating feed, shall be bagged in 50 pound capacity bags. Cooked extruded floating feed shall be bagged in either 50 or 40 pound capacity bags. Feed shall be bagged in recyclable plastic bags or new, contaminant free, multi-wall paper bags having at least one inner ply being material to retard oil from seeping to the exterior ply. After being filled, the plastic bags shall be sealed shut and paper bags shall be sewn shut.

Each bag shall be plainly stamped or attached with a tag in an uncoded or readily understood format. The stamp or tag should include the following information: milling date of the feed, feed type, feed size, and identify any specialized mix that has been added.

**DELIVERY PERFORMANCE:**

Feed must be freshly manufactured. Finished feed which has been stored longer than thirty (30) days by the contractor will not be accepted.

Delivery trailers must be of adequate design to prevent damage to feed while transporting. Delivery trailers making deliveries to Rathbun Fish Hatchery, Rathbun Research Facility, and Spirit Lake Fish Hatchery must allow for unloading with a forklift. At Rathbun, pallets will be offloaded using a forklift after being pulled to the rear of the trailer using a pallet puller and cable. The driver may be required to assist with unloading.

The minimum order F.O.B. destination shall be 4,000 lbs. All orders less than 4,000 lbs. shall be shipped prepaid by the vendor and the shipping charge added to the invoice as a separate item.

Product shall be bagged and delivered on structurally-sound good-quality wooden pallets. A cardboard liner is required between stacked plastic bags and pallet and around bottom rows of stacked plastic bags, then shrink wrapped to prevent shifting during transport. Pallets for delivery to Rathbun Fish Hatchery, Rathbun Research Facility, or Spirit Lake Fish Hatchery shall be loaded with not more than 2,000 pounds of bagged feed per pallet. Feed orders for multiple hatcheries/facilities, but shipped to one location shall be palletized separately, even if orders are less than 2,000 pounds.

Deliveries shall be made Monday through Friday, except on State of Iowa holidays (New Year's Day, Dr. Martin Luther King, Jr.'s birthday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day). Deliveries to Rathbun Fish Hatchery and Rathbun Research Facility shall be made between 8:00 a.m. and 3:30 p.m. Deliveries to Spirit Lake Fish Hatchery shall be made from 8:00 a.m. to noon or from 1:00 p.m. to 3:30 p.m. The contractor must arrange shipment schedule to avoid deliveries on Saturday, Sunday, and holidays. Trucks delivering feed and arriving after 3:30 p.m. on a weekday or on Saturdays, Sundays, or holidays will not be unloaded until the next regular business day.

**DELIVERY CONDITIONS:**

A 72 hour advance notice of delivery date is required of the contractor.

All deliveries of fish food made under this contract are to be only by authorized carriers or contractor-owned trucks holding permits or certificates from appropriate regulatory bodies.

No feed shall contain in excess of 10% moisture upon delivery.

**DELIVERIES WILL OCCUR AT THE FOLLOWING LOCATIONS:**

RATHBUN FISH HATCHERY

15053 HATCHERY PLACE

MORAVIA, IA 52571

641-647-2406

ESTIMATED ANNUAL USAGE: 39,700 LBS

RATHBUN FISH CULTURE RESEARCH FACILITY

15053 HATCHERY PLACE

MORAVIA, IA 52571

641-647-2658

ESTIMATED ANNUAL USAGE: 9,050 LBS

SPIRIT LAKE FISH HATCHERY  
122 252<sup>ND</sup> AVE  
SPIRIT LAKE, IA 51360  
712-336-1840  
ESTIMATED ANNUAL USAGE: 4,600 LBS

**ESTIMATED QUANTITIES:**

The quantities indicated are estimates for the information of prospective bidders and are as realistic as possible. The quantity specified herein is the estimated annual usage. The State of Iowa does not guarantee that the quantities listed will be actual amounts purchased.

Summary of bid items:

Line No.	Feed Size	Formulation	Feed Type	Protein Minimum (%)	Fat Minimum (%)	Fiber Maximum (%)	Ash Maximum (%)	Moisture Maximum (%)	Estimated Annual Quantity (lbs)
1	2.0mm	Walleye Grower 9206* Standard Fish Meal	Slow sinking	47	16	1.5	9	10	12,300*
2	3.0mm	Walleye Grower 9206* Standard Fish Meal	Slow sinking	47	16	1.5	9	10	23,700
3	4.0mm	Walleye Grower 9206* Standard Fish Meal	Slow sinking	47	16	1.5	9	10	17,350
4	2.0mm	Walleye Grower 9206* North American Sardine Meal	Slow sinking	47	16	1.5	9	10	12,300*
5		Fish Food Additive – Aquaflor® Type A Medicated Article @ 1.32 lbs/ton of feed							
6		Fish Food Additive – Aquaflor® Type A Medicated Article @ 2.00 lbs/ton of feed							
7		Fish Food Additive – Aquaflor® Type A Medicated Article @ 4.00 lbs/ton of feed							
8		Fish Food Additive – Terramycin® 200 @ 20 lbs/ton of feed							
9		Fish Food Additive – Terramycin® 200 @ 40 lbs/ton of feed							
10		Fish Food Additive - Guar Gum – Add guar gum for enhanced fecal conformation. Decrease whole wheat at an equivalent percentage as guar gum is added.							

\*The estimated annual usage of Walleye Grower 9206 2.00 mm is 12,300 lbs. This may be Line No. 1 or Line No. 4 or any combination thereof.

**\*NO SUBSTITUTION**

**Walleye Grower (WG) 9206**

**PROTEIN: NOT LESS THAN 47%**

**FAT: NOT LESS THAN 16%**

**FIBER: NOT MORE THAN 1.5%**

**ASH: NOT MORE THAN 9%**

**MOISTURE: NOT MORE THAN 10%**

**Fish meal: 49.5%**

**Blood meal - 5.27%**

**Soybean meal - 9.67%**

**Corn Gluten meal – 8.25%**

**Whole – wheat – 14.55%**

**Fish oil – 10.5%**

**Vitamin premix – 0.6%**

**Choline chloride – 0.45%**

**Stable C - 0.11%**

**Trace mineral mix – 0.1%**

**3,965 kCAL ME/kg**

Walleye Fish Feed Bid Template

Line No	Quantity	Unit	Commodity Description	Unit Cost
1		LB	Walleye Grower Fish Feed WG9206 - <b>STANDARD FISH MEAL</b> Size: 2.0mm Slow sinking <b>NO SUBSTITUTION</b> 47% Protein Minimum 16% Fat Minimum 1.5% Fiber Maximum 9% Ash Maximum 10% Moisture Maximum Estimated Annual Quantity 12,300 LBS* Fish meal - 49.5% Blood meal - 5.27% Soybean meal - 9.67% Corn Gluten meal – 8.25% Whole – wheat – 14.55% Fish oil – 10.5% Vitamin premix – 0.6% Choline chloride – 0.45% Stable C - 0.11% Trace mineral mix – 0.1% 3,965 kCAL ME/kg	
2		LB	Walleye Grower Fish Feed WG9206 - <b>STANDARD FISH MEAL</b> Size: 3.0mm Slow sinking <b>NO SUBSTITUTION</b> 47% Protein Minimum 16% Fat Minimum 1.5% Fiber Maximum 9% Ash Maximum 10% Moisture Maximum Estimated Annual Quantity 23,700 LBS Fish meal - 49.5% Blood meal - 5.27% Soybean meal - 9.67% Corn Gluten meal – 8.25% Whole – wheat – 14.55% Fish oil – 10.5% Vitamin premix – 0.6% Choline chloride – 0.45% Stable C - 0.11% Trace mineral mix – 0.1% 3,965 kCAL ME/kg	

Line No	Quantity	Unit	Commodity Description	Unit Cost
3		LB	Walleye Grower Fish Feed WG9206 - <b>STANDARD FISH MEAL</b> Size: 4.0mm Slow sinking <b>NO SUBSTITUTION</b> 47% Protein Minimum 16% Fat Minimum 1.5% Fiber Maximum 9% Ash Maximum 10% Moisture Maximum Estimated Annual Quantity 17,350 LBS Fish meal- 49.5% Blood meal - 5.27% Soybean meal - 9.67% Corn Gluten meal – 8.25% Whole – wheat – 14.55% Fish oil – 10.5% Vitamin premix – 0.6% Choline chloride – 0.45% Stable C - 0.11% Trace mineral mix – 0.1% 3,965 kCAL ME/kg	
4		LB	Improved Walleye Grower Fish Feed WG9206 – <b>NORTH AMERICAN SARDINE MEAL</b> Size: 2.0mm Slow sinking <b>NO SUBSTITUTION</b> 47% Protein Minimum 16% Fat Minimum 1.5% Fiber Maximum 9% Ash Maximum 10% Moisture Maximum Estimated Annual Quantity 12,300 LBS* Fish meal - 49.5% Blood meal - 5.27% Soybean meal - 9.67% Corn Gluten meal – 8.25% Whole – wheat – 14.55% Fish oil – 10.5% Vitamin premix – 0.6% Choline chloride – 0.45% Stable C - 0.11% Trace mineral mix – 0.1% 3,965 kCAL ME/kg	

Line No	Quantity	Unit	Commodity Description	Unit Cost
5		LB	Fish Food Additive – Aquaflor® Type A Medicated Article @ 1.32 lbs/ton of feed	
6		LB	Fish Food Additive – Aquaflor® Type A Medicated Article @ 2.00 lbs/ton of feed	
7		LB	Fish Food Additive – Aquaflor® Type A Medicated Article @ 4.00 lbs/ton of feed	
8		LB	Fish Food Additive – Terramycin® 200 @ 20 lbs/ton of feed	
9		LB	Fish Food Additive – Terramycin® 200 @ 40 lbs/ton of feed	
10		LB	Guar Gum – Add guar gum for enhanced fecal conformation. Decrease whole wheat at an equivalent percentage.	

\*The estimated annual usage of Walleye Grower 9206 2.00 mm is 12,300 lbs. This may be Line No. 1 or Line No. 2 or any combination thereof.