

“WE’RE GONNA MAKE YOU AN OFFER YOU CAN’T REFUSE” OR: CONTRACT PURCHASING FUNDAMENTALS

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Purchasing contracts are an integral part of a Nutrition program’s procurement arsenal. Versatile and adaptive, they are one way to secure a consistent source and pricing of a product. However they can also be limiting and result in delivery of an inferior, albeit more economical, product. We will examine the advantages and disadvantages of contract purchasing and development of specification to ensure procurement of the intended product.

What is a Contract?

A contract is an agreement to purchase a specific product or products from a vendor at a set price or percentage of market over a predetermined period of time. This can involve only one institution or may incorporate several institutions as a method of cooperative buying. This purchasing method is known by many names including: contract, purchasing agreement and/or vendor agreement. In order to utilize or create a contract, a request for proposal or bid must be solicited. In a request for proposal solicitation you may not know exactly what you need or how much an item may cost but you have a general idea. A request for bid solicitation means you are asking for a fixed price for an item. In general, a proposal is used if you do not really know what you want and you want the vendor to offer the best solution. A bid solicitation is used if you know exactly what you want. The exact method used may be determined by the institution.

Advantages:

Contracts allow an institution to lock in product pricing for a specific time frame, usually one year or more. This eliminates price changes due to market fluctuations and can help plan budgets and predict spending. Also, working with a set group of vendors makes it easier to make adjustments in products or to deal with quality concerns. Because you will be dealing with a limited number of vendors and pricing is set, placement of orders is faster and payment of invoices is streamlined.

Disadvantages:

The procurement system may require selection of the vendor with the lowest price, not necessarily the best in a combination of price, quality and service. You can ensure this does not happen by including “Best Value” language specifications in your contract. (Best Value language will allow you to take into consideration vendor references, past performance, quality of product, etc.) This makes specification development essential. The contracted price may not be the lowest price available in the marketplace. Not all vendors are willing to lock in a price over time. Termination of a contract may be difficult if you are unhappy with some aspect. Finally, working with contracts requires a substantial time commitment up front to contact vendors and write specifications.

The Contract Process

The contract process may take up to several months starting with the initial establishment of specifications to solicitation of vendors to selection and finally award notification of a successful bid to a vendor. Some government institutions may have an additional step of approval in this process. Various steps in the contract development process may include:

- 1) Development of general product specifications and delivery needs. You may also want to speak with current vendors to help you develop these specifications.
- 2) Solicitation of bids from vendors. Ensure all the vendors you want to notify of this bid are aware of the opportunity. You may want to hold a pre-bid conference to clarify your specifications with potential vendors prior to the bid submittal date. This will allow an addendum to be issued prior to bid closing date to correct any mistakes in your specifications or to clarify any vendor questions.
- 3) Receipt of bids/Opening of sealed bids.
- 4) Vendor reference check.
- 5) Selection of vendor.
- 6) Award of bid.
- 7) Ratification of selection by governing body if necessary.

Contract Scope of Service Specification Development

The contract Scope of Services is the major portion of the contract we will be dealing with here. The contract legal wording will be handled by your staff attorneys or your purchasing department. The Scope of Services is where you will describe to any potential vendors exactly what you wish to purchase. This Scope of Services must be clearly written. You don't want to leave room for interpretation. Specification development is paramount to a well written bid solicitation. There is essential information which must be included in the contact Scope of Services. These include but are not limited to:

- 1) Specifications. Tables 1 and 2 outline items to be included in specifications for different types of products. You must be very clear here. State exactly what you want and expect.
- 2) Probable quantity to be ordered. It is advisable to include a statement that states these are estimated quantities and you are not obligated to purchase the precise quantity stated. It is acceptable to use language to state a minimum required.
- 3) Usage of product. How will this product be used? For example animal food.
- 4) Length of contract. Normally this is for a one year period but depending on the product this could vary in length from 3 months to 5 years depending on your individual purchasing regulations and needs. A renewal clause may also be included which will allow for shorter initial term contracts but with the added incentive of additional contract years. These additional contract renewal years may also include language for vendor price increases.
- 5) Delivery details. This should include delivery location, days of the week and times when deliveries are accepted.

- 6) Transportation details. Include whether the product is to be delivered in a refrigerator or freezer truck, if hay is to be covered in inclement weather etc. Any special details for food handling should be included here.
- 7) Conditions for replacement. If the product does not meet any of the written specifications is the vendor responsible for disposal of the product and replacement with an acceptable product, credit for any unacceptable product etc.
- 8) Institutional contact. It is advisable to include a contact person, whether that is the Nutritionist or the Commissary Supervisor in case questions arise.

Clearly written specifications now will help you avoid issues or disputes once the contract is awarded. All parties will clearly know what is expected.

Basic Request for Bid Development

Basic Request for Bid wording, which may eventually become your contract, should be created by your staff attorneys or purchasing department. If you do not have that option, listed are some basic items which should be included. This in no way is a complete list of what needs to be included in an official request for bid/contract but this will give you a basic start. Figures 1-5 provide example contracts for various products.

Some of the items to be included are:

- 1) Contact person. Who will be the institutions contact? You need to limit this to one or two people to avoid confusion.
- 2) Payment Terms. How will the vendor be paid?
- 3) Invoice submittal requirements.
- 4) Bid submittal requirements. This will include submittal deadline, number of copies required, where bids will be submitted etc...
- 5) Vendor insurance requirements.
- 6) Bid evaluation procedures.

Conclusions

Contract purchasing can be a cost-effective and time saving method of procurement. By carefully creating your specifications and paying attention to the details, you can ensure the products you desire and are paying for are the products you receive.

Acknowledgements

Thanks to Cincinnati Zoo, Ft. Worth Zoo, Indianapolis Zoo, Lincoln Park Zoo and Philadelphia Zoo for sharing their contracts and specifications as examples.

Table 1. Items for inclusion in specifications for hay, bagged feeds and produce.

General	Hay	Bagged Feeds	Produce
Manufacturer/ Product name/ number if applicable	Type Bloom stage/Hay Market Task force grade	Manufacturer/ product name/number	Type
Quality	Drying (crimping acceptable, drying agents/preservatives acceptable?)	For open formula feeds include: Allowable ingredients Allowable substitutions	
		Acceptable fines	
Packaging	Baling (size of bale, type of binder, compressed)	Packaging (bag size and type) Pellet size and type	Packaging (number/case, individually wrapped etc)
Nutrient requirements if applicable	Nutrient concentration	Nutrient concentration	
	Delivery (notification prior to delivery, single or multiple location)		
	Causes for rejection		Causes for rejection
	Consequences if don't meet specs	Consequences if don't meet specs	Consequences if don't meet specs

Table 2. Items for inclusion in specifications for meat, fish and prey items.

Meat	Fish	Prey
Health prior to slaughter (healthy, no antibiotics etc)	Catch method/no skimming	Health prior to slaughter (healthy, no antibiotics, parasite free etc)
Humane euthanasia		Humane euthanasia (AVMA Panel on Euthanasia)
For open formula feeds include: Allowable ingredients, allowable substitutions		
USDA inspected processing	USDA inspected processing?	Humane treatment of feeder animals (Care and Use of Lab animal specs etc) Housing, Food
Packaging (size, airtight bags etc)	Packaging specifications (case size, Block vs IQF etc)	Packaging specifications – live (no overcrowding, food and moisture, lactating females etc) Packaging specifications –frozen (number/package, airtight bags, labeling)
Nutrient concentration	Nutrient concentration	
Transport handling (delivered frozen, no signs of thawing)	Transport handling (delivered frozen, no signs of thawing)	Transport handling (delivered frozen, no signs of thawing, arrived live at appropriate temps)
Testing (tox, antibiotics, euthanasia fluid, microbacterial)	Inspection prior to acceptance	
Consequences if don't meet specs or testing (condemn shipment, disposal, payment)	Consequences if don't meet specs (condemn shipment, return, disposal, payment)	Consequences if don't meet specs (replacement, credit etc)

Figure 1. Hay and Straw

Grass Hay Purchasing Agreement

(Grass Hay – First Cutting)

XXX Zoo and Vendor Y agree to the following grass hay purchasing conditions:

1. Vendor Y will hold a minimum of 180 tons of satisfactory grass hay that meets the specifications agreed upon in the bid for grass hay by Vendor Y. Blended grass/legume hay will not be accepted and must be replaced within 48 hours of scheduled delivery. Vendor Y must submit a grass hay analysis, *as outlined in the grass hay specifications*, for each *new cutting only and/or new source* of grass hay with delivery of said order or XXX Zoo will conduct the testing and cost of analysis will be deducted from invoice. Form of delivery of hay analysis is left to the discretion of Vendor Y i.e. faxed; mailed or e-mailed copies are acceptable as long as they are received by XXX Zoo at least 48 hours prior to delivery.
2. XXX Zoo will purchase grass hay at \$\$\$\$\$ per ton. Vendor Y will thereafter be obligated to provide XXX Zoo said amount of satisfactory grass hay at the aforementioned price. XXX Zoo will thereafter be obligated to purchase a minimum of 180 tons, if required by XXX Zoo, of satisfactory grass hay at the aforementioned price for the period including 1 June, 2009 through 31 May, 2010.
3. The grass hay will be stored by Vendor Y and delivered to XXX Zoo upon request of XXX Zoo. At least 5 days advance notice will be given by XXX Zoo prior to each delivery date. This does not apply to replacement hay by Vendor Y in response to deliveries that do not meet XXX Zoo grass hay specifications.
4. XXX Zoo must be compensated by Vendor Y for grass hay that molds during storage at XXX Zoo due to excessive moisture and improper curing methods. Deliveries that take place on precipitation days must be covered or the delivery must be rescheduled. XXX Zoo reserves the right to reject “outside bales” that have been exposed to excess moisture during delivery. Compensation must be in the form of replacement of the moldy product with equal amounts of satisfactory grass hay at no additional cost to XXX Zoo.
5. XXX Zoo will reserve the right to reject grass hay that is not considered satisfactory at the time of delivery. The replacement for rejected grass hay must be made within 48 hours of said rejection.
6. XXX Zoo and Vendor Y reserve the right to cancel this contract with at least 30 days prior notice if any of the items within said contract are not met to the satisfaction of either party.

I hereby agree to the terms of this agreement as stated above and also to the attached XXX Zoo grass hay specifications.

_____ Date: _____
Vendor Y

Straw Purchasing Agreement

XXX Zoo and Vendor Y agree to the following straw purchasing conditions:

1. Vendor Y will hold a minimum of 20 tons of satisfactory straw that meets the specifications agreed upon in the bid for straw by Vendor Y (see attached XXX Zoo straw specifications).
2. XXX Zoo will purchase straw at \$\$\$\$ per ton. Vendor Y will thereafter be obligated to provide XXX Zoo said amount of satisfactory straw at the aforementioned price. XXX Zoo will thereafter be obligated to purchase a minimum of 20 tons, if required by XXX Zoo, of satisfactory straw at the aforementioned price for the period including 1 June, 2009 through 31 May, 2010.
3. The straw will be stored by Vendor Y and delivered to XXX Zoo upon request of XXX Zoo. At least 7 days advance notice will be given by XXX Zoo prior to each delivery date. This does not apply to replacement straw by Vendor Y in response to deliveries that do not meet XXX Zoo straw specifications.
4. XXX Zoo must be compensated by Vendor Y for straw that molds during storage at XXX Zoo due to excessive moisture and improper curing methods. Deliveries that take place on precipitation days must be covered or the delivery must be rescheduled. XXX Zoo reserves the right to reject "outside bales" that have been exposed to excess moisture during delivery. Compensation must be in the form of replacement of the moldy product with equal amounts of satisfactory straw at no additional cost to XXX Zoo.
5. XXX Zoo will reserve the right to reject straw that is not considered satisfactory at the time of delivery. The replacement for rejected straw must be made within 48 hours of said rejection.
6. XXX Zoo and Vendor Y reserve the right to cancel this contract with at least 30 days prior notice if any of the items within said contract are not met to the satisfaction of either party.

I hereby agree to the terms of this agreement as stated above and also to the attached XXX Zoo straw specifications.

Vendor Y

Date: _____

Date: _____

Alfalfa Hay Purchasing Agreement

XXX Zoo and Vendor Y agree to the following alfalfa hay purchasing conditions:

1. Vendor Y will hold a minimum of 1234 tons of satisfactory alfalfa hay that meets the specifications agreed upon in the bid for alfalfa hay by Vendor Y. Blended grass/legume hay will not be accepted and must be replaced within 48 hours of scheduled delivery. Vendor Y must submit an alfalfa hay analysis, *as outlined in the alfalfa hay specifications*, for each *new* cutting and/or *new* source of alfalfa hay with delivery of said order or XXX Zoo will conduct the testing and cost of analysis will be deducted from invoice. Form of delivery of hay analysis is left to the discretion of Vendor Y i.e. faxed; mailed or e-mailed copies are acceptable as long as they are received by XXX Zoo at least 48 hours prior to delivery.
2. XXX Zoo will purchase “*browse quality*” alfalfa hay at \$\$\$\$\$ per ton. Vendor Y will thereafter be obligated to provide XXX Zoo said amount of satisfactory alfalfa hay at the aforementioned price. XXX Zoo will thereafter be obligated to purchase a minimum of 0 tons, if required by XXX Zoo, of satisfactory alfalfa hay at the aforementioned price for the period including 1 June, 2009 through 31 May, 2010.
3. The alfalfa hay will be stored by Vendor Y and delivered to XXX Zoo upon request by XXX Zoo. At least 5 days advance notice will be given by XXX Zoo prior to each delivery date. This does not apply to replacement hay by Vendor Y in response to deliveries that do not meet XXX Zoo alfalfa hay specifications.
4. XXX Zoo must be compensated by Vendor Y for alfalfa hay that molds during storage at XXX Zoo due to excessive moisture and improper curing methods. Deliveries that take place on precipitation days must be covered or the delivery must be rescheduled. XXX Zoo reserves the right to reject “outside bales” that have been exposed to excess moisture during delivery. Compensation must be in the form of replacement of the moldy product with equal amounts of satisfactory alfalfa hay at no additional cost to XXX Zoo.
5. XXX Zoo will reserve the right to reject alfalfa hay that is not considered satisfactory at the time of delivery. The replacement for rejected alfalfa hay must be made within 48 hours of said rejection.
6. XXX Zoo and Vendor Y reserve the right to cancel this contract with at least 30 days prior notice if any of the items within said contract are not met to the satisfaction of either party.

I hereby agree to the terms of this agreement as stated above and also to the attached XXX Zoo alfalfa hay specifications.

_____ Date: _____
Vendor Y
_____ Date: _____

Figure 2. Fish
XXX Zoo

Fish

General Information

The XXX Zoo exhibits exotic carnivores from around the world. Many of the carnivore species within the XXX Zoo's collection are red listed by the IUCN <http://www.iucn.org/> (i.e. are of conservation concern). The XXX Zoo is committed to providing all animals within the collection food that is both nutritious and wholesome. Suppliers are expected to adhere to vendor guidelines and to contact the XXX Zoo immediately if there is a problem in supply, delivery of food or food wholesomeness.

Contact: AAAA
Phone: 12345
Email: ABC@xyz.com
Days off: Saturday & Sunday

Delivery Location: Animal Commissary, Zoological Drive immediately prior to gate H.

Delivery Instructions:

- 1) Deliveries can be received M – F, 6:45 a.m. until 1:30 p.m., no deliveries can be accepted past 2 p.m. Saturday/Sunday deliveries can be arranged if necessary. Weekend deliveries must be made between 6:45 - 9:30 a.m. Arrangements for weekend deliveries must be made through commissary staff.
- 2) Park in Loading Zone behind the Animal Commissary.
- 3) Check in with guard at Gate H, about 100 feet past Commissary Loading Zone
- 4) Deliver directly to the commissary through the back doors, which open onto Zoological Drive.
- 5) Packing slip listing all items and amounts delivered must accompany all deliveries; XXX Zoo Purchase Order number should be listed on the packing slip.

BBB and CCC are the primary contacts at the animal commissary. BBB is the Foreman and CCC is the Leadman.

Commissary Contact: BBB, CCC
Phone: 12345

Invoice Instructions: All invoices must include the XXX Zoo's Purchase Order Number. Invoices must match the packing slip that accompanies the order. If change in pricing is necessary, changes must be made at the time the product order is placed by the Zoo, based on pricing the Zoo may choose not to order an item. Change in pricing will not be honored after the fact.

Please Mail Invoices to: The XXX Zoo
Accounts Payable
Your Address
City, State zipcode

The Zoo does not guarantee the usage quantities listed. Vendors must recognize that the needs of the institution change with the needs of the animals within the collection. The XXX Zoo is a not for profit institution, the vendor is expected to work with the institution to keep pricing fair and affordable. The XXX Zoo is a private institution; vendor usage is at the sole discretion of the Nutrition Program Director and is contingent on product quality, vendor service to the institution and fair pricing.

Rainbow Trout Specifications and Expected Usage 2009

Fish size: 8 – 10 inches length
4 – 6 inches length

Fish per delivery: 200 – 4000 lbs

Fish Specifications:

- Fish must be whole, eviscerated fish and fillets are unacceptable
- Rainbow trout that perish during feeding of oxygen deprivation and are collected from the raceway immediately and placed on ice or frozen are acceptable for exotic animal food provided they meet all other criteria of wholesomeness.
- Fish must be packaged in boxes 10 – 25 lbs, fish may be delivered on ice if they can be delivered within 24 hours of collection to the XXX Zoo.
- If frozen, fish must be frozen immediately after collection. Defrosted fish will be evaluated for wholesomeness at time of defrosting – see fish review
- Fish must be delivered in good condition. Fish with visible lesions or parasites are not acceptable.
- The vendor will credit the institution for fish not meeting institutional standards for wholesomeness or unfit for exotic animals (unfit is defined as fish with external lesions, parasites or visible disease).
- Maybe add something on whether the fish are acceptable as IQF or block frozen (sorry, wouldn't let me add this in red)

Expected Usage: Medium Trout: 6000 - 8000 lbs/year
Small Trout: 8500 - 10000 lbs/year

Figure 3. Meat and meat products
XXX Zoo

Red Meat and Associated Bones used for Animal Food: Guidelines for Vendors

1. Animals must be alive and healthy when slaughtered.
2. Animals can be of any age, but must be free of contagious infectious diseases, steroids, and antibiotics (at least 90 days) before slaughter. USDA inspected meat is preferred.
3. If horse, Dimethyl sulfoxide (DMSO) may not have been used on the horse (at least 10 days) prior to slaughter.
4. Animals must be killed by humane technique, i.e., electrocution, gunshot or captive bolt. Animals may not be killed with euthanasia fluid or by any other drug.
5. Slab meat must be delivered to the zoo in freezer safe, sealed plastic. No more than 10 lbs. may be contained within each package. Packaged meat must be delivered in cardboard cartons clearly labeled with the contents, weight (not to exceed 50 lbs./carton), and date of slaughter.
6. Meat products must be made according to a standard formula approved by the XXX Zoo. Alterations to the formula must be pre-approved by the Nutrition Program Director at the XXX zoo. Meat products must meet the most recent Domestic Cat AAFCO recommendations for all nutrients. Meat products must be packaged in freezer safe plastic package size to be agreed upon. Packaged meat products must be delivered to the Zoo, frozen solid, in cardboard cartons clearly labeled with the contents, weight (not to exceed 50 lbs./carton) and date of processing. Meat product must have been processed within 90 days of delivery.
7. Meat products (complete feed mixtures) must be routinely (at least twice yearly) analyzed for nutrient composition by a laboratory certified by the American Association for Laboratory Accreditation in food. Analysis must include, **Protein, Fat, Vitamins A & E, Minerals** calcium, phosphorus, potassium. Laboratory reports must be mailed directly to the XXX Zoo from the laboratory.
8. Unannounced toxicology screens for steroids, antibiotics and euthanasia fluid will be periodically run on non-USDA inspected meat. The vendor will credit the zoo for any meat found to be contaminated. Vendors responsible for contaminated shipments will have the option of picking-up the contaminated meat or paying the zoo for disposal. The zoo views this type of contamination as both avoidable and hazardous to the health of collection animals. The zoo will require the vendor to provide the zoo with assurance that future meat shipments will be free of contamination. This assurance will include routine toxicology screens at the expense of the vendor.
9. Frozen meat and meat products must be delivered to the zoo, frozen solid. Defrosting or defrosted frozen meat will be unconditionally rejected.

10. Damaged, torn or leaking cartons will be unconditionally rejected.
11. For shipments to the XXX Zoo, a sample from each processing date must be sent to a certified microbiology laboratory post processing and packaging for quality assurance analysis, the XXX Zoo recommends Midwest Laboratories in Omaha, NE. <https://www.midwestlabs.com/index3.html>. An aerobic plate count of less than 250,000 cfu/g is required. Analysis verifying the aerobic plate count must be faxed to the XXX Zoo prior to shipment for each processing date within an order.

Figure 4. Whole Prey

The XXX Zoo

General Guidelines For Avian and Mammalian Whole Prey Vendors

The XXX Zoo is a conservation organization concerned with the care and humane treatment of all living animals bred and maintained for the purpose of animal food (whole prey). Vendors that supply whole prey to the XXX Zoo must follow the below guidelines:

1) Animal Housing for whole prey animals must conform to the 1996, National Research Councils Guide for the Care and Use of Laboratory Animals, <http://www.nap.edu/readingroom/books/labrats/>. Information pertaining to housing is reprinted in part below; vendors should refer to the NRC publication for a full description of adequate housing.

Housing: Primary Enclosures

The primary enclosure (usually a cage, pen, or stall) provides the limits of an animal's immediate environment. Acceptable primary enclosures

- Allow for the normal physiologic and behavioral needs of the animals, including urination and defecation, maintenance of body temperature, normal movement and postural adjustments, and, where indicated, reproduction.
- Allow conspecific social interaction and development of hierarchies within or between enclosures.
- Make it possible for the animals to remain clean and dry (as consistent with the requirements of the species).
- Allow adequate ventilation.
- Allow the animals' access to food and water and permit easy filling, refilling, changing, servicing, and cleaning of food and water utensils.
- Provide a secure environment that does not allow escape of or accidental entrapment of animals or their appendages between opposing surfaces or by structural openings.
- Are free of sharp edges or projections that could cause injury to the animals.
- Allow observation of the animals with minimal disturbance of them.

Primary enclosures should be constructed with materials that balance the needs of the animal with the ability to provide for sanitation. They should have smooth, impervious surfaces with minimal ledges, angles, corners, and overlapping surfaces so that accumulation of dirt, debris, and moisture is reduced and satisfactory cleaning and disinfecting are possible. They should be constructed of durable materials that resist corrosion and withstand rough handling without chipping, cracking, or rusting. Less-durable materials, such as wood, can provide a more appropriate environment in some situations (such as runs, pens, and outdoor corrals) and can be used to construct perches, climbing structures, resting areas, and perimeter fences for primary enclosures. Wooden items might need to be replaced periodically because of damage or difficulties with sanitation.

All primary enclosures should be kept in good repair to prevent escape of or injury to animals, promote physical comfort, and facilitate sanitation and servicing. Rusting or oxidized equipment that threatens the health or safety of the animals should be repaired or replaced. <http://www.nap.edu/readingroom/books/labrats/>, downloaded 17 August 2006.

2) Animals should be fed palatable, noncontaminated, and nutritionally adequate food. Vendors are required to provide information on the diets of whole prey upon request. Vendors may not feed diets that contain antibiotics or any other drugs. Animals must have access to potable, uncontaminated drinking water.

3) Live animals must be transported to the zoo in appropriate transportation containers that allow the animals natural movement, are not over-crowded and protect the animal against physical trauma. For live pink mice no more than 12 pinkies can be transported with a single lactating mom.

4) Whole prey must be free of ecto and endo-parasites, and disease.

5) Ear tags or other physical identification markers must be removed from the animal prior to packaging for the XXX Zoo.

6) Euthanasia of whole prey must conform to the 2000 Report of the AVMA Panel on Euthanasia http://www.avma.org/issues/animal_welfare/euthanasia.pdf. Standards.

7) Euthanized whole prey must be immediately packaged in airtight freezer bags or containers and held in a freezer that maintains a temperature of -5°C or below.

8) Please use the following guidelines for packaging frozen rodents according to size for the XXX Zoo:

MICE

Pink Mice, no hair and less than 3 g (average 2 g)

Fuzzy Mice, 3 – 5 g (average 4 g)

Small Mice, 6 – 12 g (average 8 g)

Medium Mice, 13 – 25 g (average 15 g)

Large Mice, 26 – 40 g (average 36 g)

Jumbo Mice, 41 + g

RATS

Pink Rats, no hair 3 – 8 g (average 6 g)

Fuzzy Rat, 9 – 19 g (average 14 g)

Small Rat, 45 – 84 g (average 65 g)

Medium Rat, 85 – 174 g (average 130 g)

Large Rat, 175 – 274 g (average 225 g)

X Large Rat, 275 – 374 g (average 325 g)

Jumbo Rats, 375+ g

Rodents must be frozen in sealed bags according to size. Bags must be labeled with the rodent and kill date.

9) Frozen whole prey must arrive at the zoo solid frozen. Bags must be completely sealed and properly labeled. Animals must be delivered to the zoo within 3 months of the kill date.

10) Vendors must immediately contact the zoo if disease or parasites are identified within a whole prey colony.

If you have any questions or concerns pertaining to these guidelines please contact AAA, Nutrition Program Director at the XXX Zoo. 123-345-6789 or abc@def.com.

Figure 5. Custom feed

CONTRACT OF SALE

SUPPLIER and MANUFACTURER:

Vendor Name
Vendor Address

SOLD TO: Zoo name
Zoo Address

AGENT: Agent name
Agent Address

TERMS OF AGREEMENT

Supplier/manufacturee agrees to supply purchaser with Agent X™ Open Formula Animal Diet Products for the period beginning January 1, 2009, and ending December 31, 2009 to be ordered through and delivered by Vendor Y, or designated distributor(s), according to specifications as described on attached. The price of Agent X open formula herbivore diet is \$\$\$ per ton, delivered. The price of Agent X™ open formula low energy diet is \$\$\$\$ per ton, delivered. The price of Agent X™ open formula low protein elephant diet is \$\$\$\$ per ton, delivered.

AGENT X Open Formula Herbivore Diet
approximate annual usage: X lbs

AGENT X Open Formula Low Energy Diet
approximate annual usage: X lbs

AGENT X Open Formula Low Protein Elephant Diet
approximate annual usage: X lbs

Vendor Y agrees to discount other purchased Vendor Y Lab and Vendor Y products as listed below. This discount will be over and above all other usual and normal volume discounts, special purchase discounts, and introductory product allowances.

Freight included in delivery price, comprising any combination of Vendor Y, Inc. products.

Delivery of product will be made within ten (10) working days of order placement.

The finished product shall be furnished as firmly compressed cylindrical pellets, sized as per attached specifications, and shall be packaged in fifty (50) pound double or triple wall bags that are clearly labeled with the Agent X name of the product, the name and address of the manufacturer, the net weight, the guaranteed analysis, the list of ingredients, the date of manufacture and the batch number. Codes or coding will not be acceptable for any items specified above.

Herbivore diets require a minimum order size of 3 ton per product.

A sample of three batches of each product over the course of one year shall be sent by the manufacturer to an independent laboratory, acceptable to the Agent X, for analysis of dry matter, crude protein, acid detergent fiber, ash, calcium, phosphorus, magnesium potassium, sodium, iron, zinc, copper, manganese, and selenium. A copy of the results will be sent to the Agent X partners (Nutritionist, XXX Zoo and Nutritionist ZZZ Zoo). If less than three batches are made over the course of one year then only those batches will be sampled and sent for analysis.

If analyzed diet samples are greater than 15% outside of specifications, the diet will be re-made, and the diet in question will be destroyed or returned to the manufacturing facility. If samples are within 15% of the agreed upon specification, this will be noted in the records and an analysis of the next batch will be made. If this batch is also outside of specifications but within 15%, the formula will be assessed and appropriate changes to account for the apparent ingredient variability will be proposed to AGENT X for approval.

The specifications for the products will be kept confidential and proprietary.

Fines in the finished product must conform to industry standards of 3-5%. Sampling for fines will be conducted by the manufacturer for the first four lots of each product. Results will be reported to Agent X. Agent X will sample lots periodically and report to the manufacturer the fines present at the point of receipt. Products not conforming to these standards will be reimbursed or replaced.

The supplier guarantees delivery of product and services in the event of a labor dispute or strike.

The XXX Zoo operates on a 30-day billing cycle from the date of material receipt. Reference and credit information will be provided upon request. The XXX Zoo is a **Tax Exempt, Not For Profit Organizations**. Tax identification numbers will be provided upon request.

SUPPLIER SIGNATURE _____ DATE

PURCHASER SIGNATURE _____ DATE

CONFIDENTIAL

PRODUCT SPECIFICATION IN TERMS OF AGREEMENT, JANUARY 2009

**AGENT X™ OPEN FORMULA HERBIVORE DIET
PRODUCT SPECIFICATION part A**

Supplier/manufacturer agrees to supply purchasers with AGENT X™ OPEN FORMULA HERBIVORE DIET.

Product: Five- thirty-seconds to three-sixteenths inch (5/32 - 3/16") pellets: 44,000 lb and five- eighth inch (5/8") pellets three-quarter inch (3/4") length: 48,000 lb.

USE. This product is a pelleted diet for use in the feeding of certain herbivores, including pregastric and postgastric fermenters. Usually fed with hay but may constitute the sole diet for some "concentrate selectors". Not to be fed to sheep.

INGREDIENTS. The following ingredients, used as indicated, constitute a satisfactory diet. Certain substitutions may be made when appropriate and approved by the purchaser, but some ingredient substitutions can adversely affect pellet quality and feed intake.

<u>Ingredients</u>	<u>Percent by weight</u>
Wheat middlings	
Alfalfa meal dehydrated (17% CP)	
Soybean meal (48% CP)	
Corn grain	
Soy Hulls	
Beet Pulp	
Cane molasses	
Soybean oil	
Salt	
Dicalcium phosphate	
Calcium carbonate	
Mineral premix	
Vitamin premix	
Choline Chloride	
Mold-Chek (or equivalent)	

This product shall contain no non-protein (NPN) sources such as urea or biuret. Ground alfalfa hay, sun-cured, may replace alfalfa meal, dehydrated (17% CP), up to but not exceeding 15.0% by weight in the finished product. Lower protein soybean meal (44% CP) may replace 48% CP soybean meal with a proportionate decrease in corn grain. Wheat mill run may replace wheat middlings. Sorghum grain may replace corn grain.

CONFIDENTIAL

PRODUCT SPECIFICATION IN TERMS OF AGREEMENT, JANUARY 2009

AGENT X™ OPEN FORMULA HERBIVORE DIET

PRODUCT SPECIFICATIONS part B

When supplemental mineral and vitamin premixes are added to the product at the levels specified above, the elements and sources should be as listed below and the nutrient concentrations that follow:

Mineral Premix

<u>Element</u>	<u>Acceptable sources</u>
Iron	Ferrous sulfate
Iodine	Potassium iodate, calcium iodate or pentacalcium orthoperiodate
Cobalt	Cobalt carbonate, cobalt sulfate
Copper	Copper sulfate, copper carbonate, or copper chloride
Manganese	Manganese carbonate, manganese chloride, or manganese sulfate
Selenium	Sodium selenite, sodium selenate
Zinc	Zinc sulfate, zinc carbonate, zinc chloride, zinc acetate

Wheat middling or soybean meal are acceptable carriers. Soybean oil may be used as a dust retardant.

Mineral mix ingredients: wheat middlings, zinc sulfate, manganese carbonate, iron sulfate, copper sulfate, soybean oil, potassium iodate, cobalt carbonate, sodium selenite.

NUTRIENT CONCENTRATIONS OF MINERAL PREMIX: The nutrient concentrations on a dry matter basis in the finished mineral premix at the time of manufacture shall be as follows:

Nutrient	Level in the Mineral Premix	
	Units	DMB
Zinc, total	ppm	
Copper, total	ppm	
Iron, total	ppm	
Cobalt, total	ppm	
Iodine, total	ppm	
Selenium, total	ppm	
Manganese, total	ppm	

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PRODUCT SPECIFICATION IN TERMS OF AGREEMENT, JANUARY 2009

PRODUCT SPECIFICATIONS part B cont'd

When supplemental mineral and vitamin premixes are added to the product at the levels specified above, the elements and sources should be as listed below and the nutrient concentrations that follow:

Vitamin Premix

<u>Vitamin</u>	<u>Acceptable sources</u>
Thiamin	Thiamin mononitrate
Riboflavin	Riboflavin supplement
Pantothenic acid	d-Calcium pantothenate
Nicotinic acid	Nicotinic acid
Biotin	
Vitamin B12	Vitamin B12 supplement
Vitamin A	Stabilized vitamin A palmitate
Vitamin D3	D-activated animal sterol
Vitamin E	d,l-alpha-tocopheryl acetate, d-alpha-tocopheryl acetate

Wheat middlings or soybean meal are acceptable carriers. Soybean oil may be used as a dust retardant.

Vitamin Mix ingredients: Wheat middlings, Vitamin E acetate, retinyl palmitate, biotin, nicotinic acid, soybean oil, calcium pantothenate, riboflavin, thiamin mononitrate, Vitamin D3, Vitamin B12, and mixed tocopherols (antioxidant).

NUTRIENT CONCENTRATIONS OF VITAMIN PREMIX: The nutrient concentrations on a dry matter basis in the finished vitamin premix at the time of manufacture shall be as follows:

Nutrient	Level in the Vitamin Premix	
	Units	DMB
Thiamin, total	ppm	
Riboflavin, total	ppm	
Pantothenic, total	ppm	
Niacin, total	ppm	
Biotin, total	ppm	
Vitamin B12, total	ppb	
Vitamin A, total	IU/kg	
Vitamin D3, total	IU/kg	
Vitamin E, total	IU/kg	

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AGENT X (TM) OPEN FORMULA HERBIVORE DIET *CONFIDENTIAL*

PRODUCT SPECIFICATIONS part C

NUTRIENT CONCENTRATIONS. The nutrient concentrations on a dry matter basis in the finished product at the time of delivery shall be as follows:

Nutrient	Level in the Diet	
	Units	DMB
Crude protein, min	%	18.87
Lysine	%	0.99
ADF, min	%	14.43
ADF, max	%	19.98
Crude fat, min	%	3.33
Linoleic acid, min	%	1.11
Ash, min	%	7.77
Calcium, min	%	0.72
Calcium, max	%	1.25
Phosphorus, total	%	0.75
Sodium, min	%	0.33
Potassium, min	%	1.22
Magnesium, min	%	0.22
Sulfur, min	ppm	0.22
Zinc, min	ppm	150
Copper, min	ppm	22.20
Copper, max	ppm	44.40
Iron, min	ppm	111.00
Cobalt, min	ppm	0.39
Iodine, min	ppm	2.22
Selenium, min	ppm	0.56
Manganese, min	ppm	99.90
Thiamin, min	ppm	11.10
Riboflavin, min	ppm	16.7
Pantothenic, min	ppm	22.20
Niacin, min	ppm	44.40
Choline, min	ppm	1332.00
Biotin, min	ppb	222.00
Vitamin B12, min	ppb	22.0
Vitamin A, min	IU/kg	7244.00
Vitamin D3, min	IU/kg	1332.00
Vitamin E, min	IU/kg	444.00