Design of the Import Reinspection Scheduled Sampling Plan for Veterinary Drugs

I. Selecting and Ranking Candidate Compounds

The candidate veterinary drugs of concern selected by members of the Surveillance Advisory Team (SAT) for the import reinspection sampling plan (IRSP) are the same as those listed in the section, *Design of the Domestic Scheduled Sampling Plan for Veterinary Drugs*. Furthermore, in ranking drugs for inclusion in the IRSP, FSIS also employs the ranking scores generated for the domestic scheduled sampling plan. This is because FSIS does not have sufficient historical data on drugs in imported products to predict their violation rates; and because this is reinspection of product already inspected at the country of origination. However, if FSIS has reason to believe that a compound is being misused in a foreign country then it would add that compound/country pair to the IRSP.

II. Prioritizing Candidate Drugs

FSIS selects compounds and compound classes from the list of ranked veterinary drugs. The selection is based purely on their relative public health concern. FSIS and SAT decided that those compounds and compound classes that are a potential public health concern justify their inclusion in the 2008 NRP.

Once the high-priority compounds and compound classes were identified, FSIS applied other practical considerations to determine the compounds FSIS should sample. The principal consideration was the availability of laboratory resources, especially the availability of appropriate analytical methods within the FSIS laboratories. Where the laboratory resources were limited, FSIS decided that more resources should be allocated to test domestic products because imported products have been inspected previously by the country of origination. Based on these considerations, the following compounds are included in the 2008 FSIS scheduled sampling plan.

Antibiotics:

At present, the following antibiotics are quantitated using the 7-plate bioassay:
Tetracyclines: tetracycline, oxytetracycline, chlortetracycline (HPLC for identification, quantitation by bioassay).
Aminoglycosides: spectinomycin, hygromycin, streptomycin, dithydrostreptomycin, amikacin, kanamycin, apramycin, gentamycin, neomycin, tobramycin (LC/MS/MS for confirmation, quantitation of streptomycin, dihydrostreptomycin, gentamycin, and neomycin by bioassay).
Macrolides: Lincomycin, pirlymycin, clindamycin, tilmicosin, erythromycin, and tylosin are confirmed by LC/MS/MS. Tilmicosin is also quantitated by HPLC. Erythromycin and tylosin are quantitated by the bioassay.
Beta-Lactams: amoxicillin, ampicillin, cloxacillin, naficillin, cefazolin, DCCD, dicloxacillin, penicillin G, oxacillin, and desacetyl cephaprin (LC/MS/MS for confirmation, quantitation by bioassay for penicillin G and ampicillin).
Fluoroquinolones: ciprofloxacin, norfloxacin, danofloxacin, enrofloxacin, sarafloxacin, difloxacin, desethylene diprofloxacin, desmethyl danofloxacin (LC/MS/MS for confirmation).

Other Veterinary Drugs:

- Avermectins in FSIS Multiresidue Method (MRM) (doramectin, ivermectin and moxidectin)**.**
- Sulfonamides (sulfapyridine, sulfadiazine, sulfathiazole, sulfamerazine, sulfamethazine, sulfachloropyridazine, sulfadoxine, sulfamethoxypyridazine, sulfaquinoxaline, sulfadimethoxine,

sulfisoxazole, sulfacetamide, sulfamethoxazole, sulfamethizole, sulfanilamide, sulfaguanidine, sulfabromomethazine, sulfasalazine, sulfaethoxypyridazine, sulfaphenazole, and sulfatroxazole)

Banned Drugs:

- Chloramphenicol (Single compound method)

III. Identifying Compound/Production Class (C/PC) Pairs

SAT participants from the FDA identified, for each of the drugs and drug classes to be included in the 2008 NRP, production classes in which they had a concern. The results are presented in Table 6, *Product Classes Considered for Each Drug/Drug Class.* Compound/product class pairs included in the 2008 NRP are designated by a "●". Those compound/product class pairs that are of potential public health concern, but that are not included in the 2008 NRP because of laboratory resource constraints, are marked with a "○".

IV. Allocation of Sampling Resources

Egg Products

The samples for residue analysis for imported egg products are selected in a different manner than the other product classes. In order to establish a history of compliance with the U.S. requirements for each category of egg product, the first ten shipments from individual foreign establishments are subjected to 100 % reinspection. If the egg product is in compliance, the rate of inspection is reduced to a random selection of one reinspection out of eight product lots from each foreign establishment. This reinspection rate continues as long as the product is in compliance.

Animal Product Classes

Table 7**,** *Estimated Annual Amount (in pounds) of Product Imported*, lists the estimated amount of all the product classes imported into U.S. and includes the percentage of each of the product classes. The data for the product classes are obtained from the Automated Import Information System. The percent of each product class imported annually is calculated as shown in equation 7:

$$\%\ \text{Product Class Imported } (P_C) = \frac{\text{Amount Product Class Imported}}{\text{Total Product Imported}} \times 100 \qquad \text{Equation 7}$$

The relative sampling priority is obtained by multiplying the percent product class (P_C) by the drug scores obtained in Phase I, using equation 8.

$$\text{Relative Sampling Priority} = (P_C) \times \text{Drug Score} \qquad \text{Equation 8}$$

Based on the scores, one of the following sampling options is chosen: (1) high regulatory concern (300 samples/year) and (2) moderate regulatory concern (230 samples/year), low regulatory concern (90 samples/year)**.** These data are presented in Table 10, *Number of Drug Samples/Product Class,* in the column labeled "Number of Samples."

FSIS, in its IRISP, will not test (1) processed products from eligible foreign countries that also ship fresh products to the United States; and (2) processed products from countries that source all their raw materials from other foreign countries that are eligible to ship fresh product and are actively exporting to the United States. Processed beef from Australia, Brazil, Canada, Mexico, New Zealand, Uruguay, combination products (varied) and veal from Canada, lamb and meat from Australia, Canada and New Zealand, pork from Canada, Denmark, Mexico and Netherlands, chicken processed and turkey from Canada and Mexico and ducks/geese from Canada and France will not be sampled because the raw materials used are from countries that are eligible to ship raw products to the U.S.

If a product class represents less than one percent (by weight) of total combined U.S. imports of meat, poultry and egg products, then the total number of samples analyzed for any compound or compound class is eight times the number of countries from which that product is imported. For example, if veal fresh is imported from only three countries and the amount imported is 0.50 % relative to the total U.S. import, twenty four samples (3 countries X 8 samples) of veal fresh would be taken for each analysis, eight from each country.

The adjusted number of samples is listed in Table 10. The final number of samples for a compound/product class is obtained after the allocation of samples among different countries is completed. The final number of samples is listed in Table 10. The numbers in the table may vary slightly because of the rounding upwards or downwards of the samples.

Allocation of Samples among Different Countries

The total number of samples chosen for each compound/product class pair is subdivided among the different countries. The number of samples for each country is based on the relative amount of total product class imported: less than one percent and greater than one percent.

Allocation of Samples in Product Classes Whose Total Volume Imported is Less Than One Percent

If the amount of an import product class is less than one percent, eight samples per compound/compound class are taken from each country. The relative amounts of veal processed, lamb/mutton processed, goat fresh and processed, turkey fresh and processed, other fowl fresh and processed, varied combination fresh and processed, ratite fresh and guineas/squabs are less than one percent. In addition, if a country is exporting either fresh and processed products or sources all their raw materials from eligible sources then no residue samples are scheduled for processed products from that country. The unadjusted numbers of samples are listed in the columns labeled, "Unadjusted Number of Samples" in Tables 11-26. The adjusted numbers of samples per country/per product class is listed in the column labeled, "Final Number of Samples" in Tables 11-26.

Allocation of Samples in Product Classes Where the Total Volume Imported is Greater Than One Percent

For major product classes, the number of samples is allocated to each country depending upon the relative amount of product imported from that country. Table 8, *Estimated Annual Amount (in pounds) of Product Imported/Country,* lists the amount of product imported from each country. The percent of a

product class imported from a country is calculated as follows and is in Table 9, *Relative Annual Amount of Product Imported/Country.*

Percent Product Class Imported per Country ($P_{C/C}$) =

$$\frac{\text{Amount of Product Class from Country}}{\text{Total Amount of Product Class}} \times 100 \qquad \text{Equation 9}$$

Based upon the relative amount of product class imported per country, the number of samples that should be taken at the port-of-entry was calculated using the following formula:

$$\text{Unadjusted Number of Samples per Country } (U_{C/S}) = \text{Total Number of Samples} \times (P_{C/C})/100 \quad \ldots\text{Equation 10}$$

This is indicated in the column labeled "Unadjusted Number of Samples ($U_{C/S}$)," in Tables 11-26.

After determining the number of samples required from each country, each country with less than eight samples is assigned a minimum of eight samples. This is indicated in the column labeled "Adjustment #1" in Tables 11-26. The results of this adjustment are in the column labeled "Initial Adj #." If the total number of samples for a compound/product class resulted in more than the total number of samples allocated to that compound/product class pair, then a second adjustment had to be made, so that the total number of samples would be within an allocated number. This adjustment is made only to those countries from which greater than eight samples are to be taken. This adjustment is accomplished using the following equation:

$$\text{Number of Samples after Adjustment \#2} = (U_{C/S}) - \frac{(N \times P_{C/C})}{(P_{T/C})} \qquad \text{Equation 11}$$

where,

$N = (N_1) - (N_T)$
N_1 = Total Number of Samples after Adjustment #1
N_T = Total Number of Samples Allocated
$P_{T/C}$ = Total Percent of Product Class from the Countries That Had Greater Than Eight Samples
$P_{C/C}$ = Percent Product Class Imported Per Country
$U_{C/S}$ = Unadjusted Number of Samples

If a country is exporting both fresh and processed products or sources all their raw materials from eligible sources then no residue samples will be processed from that country. The final numbers of products sampled are indicated in Tables 11-26 in the column labeled "Final Adj.#."

Notes:

The candidate veterinary drugs of concern selected by members of the SAT for the IRSP are the same as those listed in the section, *Design of the Domestic Scheduled Sampling Plan for Veterinary Drugs.*

The number of samples/product class/country is discussed in the section, *Design of the Import Scheduled Sampling Plan for Pesticides.*

Table 6
Product Classes Considered for Each Drug/Drug Class
2008 FSIS NRP, Import Reinspection Sampling Plan

DRUG→	AB	AVM	AS	ß-A	CHMP	FLNX	FLF	NTM	SLF	THY	ZRL
Beef, fresh	●	●			●	●	●		●		
Beef, processed	○	●			○	○			●		
Horse, fresh	●								●		
Chicken, fresh	●		●		●			●	○		
Chicken, processed	○	○	●		○			○	○		
Goat, fresh	○	●									
Lamb/Mutton fresh	○	●							○		
Lamb/Mutton processed	○								○		
Other fowl fresh	●										
Pork, fresh	○		●	●					●		
Pork, processed	○		○	○					●		
Turkey, fresh	●		●		●				●		
Turkey, processed	○		●		○				●		
Veal, fresh	●	●		●	●	○			●	●	●
Veal, processed	○	○		○	○	○			○	○	○
Varied combination fresh	●								●		
Varied combination, processed	○								●		

Key
● = Compound/product class sampled in the 2008 FSIS IRSP
○ = Compound/product class pair of regulatory concern but not included in the plan because of resources
AB=Antibiotics;AVM=Avermectins, AS=Arsenicals; ß-A= beta agonist; CHMP=Chloramphenicol; RCT=Ractopamine; THY=Thyreostats; NTF= Nitrofurans; NTM=Nitroimidazoles; SLF=Sulfonamides; ZRL=Zeralenol

Table 7
Estimated Annual Amount of Product Imported
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCT	PRODUCT IMPORTED IN POUNDS	PRODUCT IMPORTED
Beef, fresh	2095899474	56.392%
Beef, processed	243208195	6.544%
Pork, fresh	840188103	22.69%
Pork, processed	187129415	1.674%
Veal, fresh	64058600	1.724%
Veal, processed	28721	01%
Lamb/Mutton, fresh	174066710	4.683%
Lamb/Mutton, processed	226440	09%
Goat, fresh	25695283	0.691%
Goat , processed	0	00%
Turkey , fresh	16399306	0.441%
Ratite, fresh	349212	08%
Chicken, fresh	67886794	1.827%
Chicken, processed	85685882	2.305%
Turkey, processed	12681450	0.341%
Other Fowl, fresh	4937489	0.133%
Other Fowl, processed	96772	03%
Varied combination, fresh	38846	01%
Varied combination, processed	20158957	0.537%
Guineas/squabs	178	4.789E-08
Total/country	3838735828	100%

Table 8
Estimated Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCTION CLASS	Argentina	Australia	Belgium	Brazil	Canada
Beef, fresh	0	666538313		35979	680038567
Beef, processed	48033972	2964410		148727367	22700360
Pork, fresh	0	56344			734632264
Pork, processed		0	899487		535567
Veal, fresh		11929649			2803551
Veal, processed		0			28721
Lamb/Mutton, fresh		127884250			421,148
Lamb/Mutton, processed		213269.00			6,298
Goat, fresh		24857297			
Turkey , fresh					16398204
Ratite, fresh		186284			
Chicken, fresh					67874387
Chicken, processed					71734439
Turkey, processed					5649718
Other Fowl, fresh					4721723
Other Fowl, processed					65803
Varied combination, fresh					38846
Varied combination, processed		14128			14776045
Guineas/squabs					178
Total	48033972	96067944	899487	148763346	1647657719

Table 8 (*continued)*
Estimated Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCTION CLASS	Chile	Costa Rica	Croatia	Denmark	Finland
Beef, fresh	177645	14088111			
Beef, processed					
Pork, fresh	1302363			83836979	2732228
Pork, processed			535567	18649715	
Veal, fresh					
Veal, processed					
Lamb/Mutton, fresh	8				
Lamb/Mutton, processed					
Goat, fresh					
Turkey , fresh					
Ratite, fresh					
Chicken, fresh					
Chicken, processed					
Turkey, processed					
Other Fowl, fresh					
Other Fowl, processed					
Varied combination, fresh					
Varied combination, processed					
Guineas/squabs					
Total	1480016	14088111	535567	102486694	2732228

Table 8 (*continued)*
Estimated Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCTION CLASS	France	Germany	Honduras	Hungary	Iceland	Ireland
Beef, fresh			916984			
Beef, processed						
Pork, fresh						4229911
Pork, processed	865	1131154		1319251		
Veal, fresh						
Veal, processed						
Lamb/Mutton, fresh					128371	
Lamb/Mutton, processed						
Goat, fresh						
Turkey , fresh						
Ratite, fresh						
Chicken, fresh						
Chicken, processed						
Turkey, processed						
Other Fowl, fresh	215766					
Other Fowl, processed	30969					
Varied combination, fresh						
Varied combination, processed						
Guineas/squabs						
Total	247600	1131154	916984	1319251	128371	4229911

Table 8 (*continued)*
Estimated Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCTION CLASS	Israel	Italy	Japan	Mexico	Netherland	New Zealand
Beef, fresh			81567	29843153		399723465
Beef, processed				6087736		3008816
Pork, fresh				3157420	5968414	114669
Pork, processed		7986975		11175793	1828487	
Veal, fresh						24093500
Veal, processed						
Lamb/Mutton, fresh						45632833
Lamb/Mutton, processed						108965
Goat, fresh				39338		798648
Turkey , fresh				1102		
Ratite, fresh						114669
Chicken, fresh				12407		
Chicken, processed	357312			13594131		
Turkey, processed	144012			6887720		
Other Fowl, fresh						
Other Fowl, processed						
Varied combination, fresh						
Varied combination, processed				5169643		
Guineas/squabs						
Total	501324	7986975	81567	75968443	7796901	473595565

Table 8 (*continued)*
Estimated Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

PRODUCTION CLASS	Nicaragua	N.Ireland	Poland	Spain	Sweden	UK	Uruguay
Beef, fresh	55396017						249059673
Beef, processed							11685535
Pork, fresh		1891930			888357	1377224	
Pork, processed			16565778	1583028			
Veal, fresh							
Veal, processed							
Lamb/Mutton, fresh							
Lamb/Mutton, processed							
Goat, fresh							
Turkey , fresh							
Ratite, fresh							
Chicken, fresh							
Chicken, processed							
Turkey, processed							
Other Fowl, fresh							
Other Fowl, processed							
Varied combination, fresh							
Varied combination, processed							
Guineas/squabs							
Total	55396017	1891930	16565778	1583028	888357	1377224	260745208

Table 9
Relative Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

Production Class	Argentina	Australia	Belgium	Brazil	Canada	Chile
Beef, fresh	0	31.80	0	0	32.45	0.01
Beef, processed	19.75	1.22	0	61.15	9.33	0
Pork, fresh	0	0.01	0	0	87.12	0.15
Pork, processed	0	0	1.45	0	0.86	0
Veal, fresh	0	18.62	0	0	43.77	0
Veal, processed	0	0	0	0	100	0
Lamb/Mutton, fresh	0	73.47	0	0	0.24	0
Lamb/Mutton, processed	0	64.92	0	0	1.92	0
Goat, fresh	0	96.74	0	0	0	0
Turkey , fresh	0	0	0	0	99.99	0
Ratite, fresh	0	61.90	0	0	0	0
Chicken, fresh	0	0	0	0	99.98	0
Chicken, processed	0	0	0	0	83.72	0
Turkey, processed	0	0	0	0	44.55	0
Other Fowl, fresh	0	0	0	0	95.63	0
Other Fowl, processed	0	0	0	0	68.00	0
Varied combination, fresh	0	0	0	0	100	0
Varied combination, processed	0	0.07	0	0	74.03	0

Table 9 *(continued)*
Relative Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

Production Class	Costa Rica	Croatia	Denmark	Finland	France	Germany
Beef, fresh	0.67	0	0	0	0	0
Beef, processed	0	0	0	0	0	0
Pork, fresh	0	0	9.94	0.32	0	0
Pork, processed	0	0.86	29.98	0	0.001	1.82
Veal, fresh	0	0	0	0	0	0
Veal, processed	0	0	0	0	0	0
Lamb/Mutton, fresh	0	0	0	0	0	0
Lamb/Mutton, processed	0	0	0	0	0	0
Goat, fresh	0	0	0	0	0	0
Turkey, fresh	0	0	0	0	0	0
Ratite, fresh	0	0	0	0	0	0
Chicken, fresh	0	0	0	0	0	0
Chicken, processed	0	0	0	0	0	0
Turkey, processed	0	0	0	0	0	0
Other Fowl, fresh	0	0	0	0	4.37	0
Other Fowl, processed	0	0	0	0	32.00	0
Varied combination, fresh	0	0	0	0	0	0
Varied combination, processed	0	0	0	0	0	0

Table 9 *(continued)*
Relative Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

Production Class	Honduras	Hungary	Iceland	Ireland	Israel	Italy	Japan
Beef, fresh	0.04	0	0	0	0	0	1.71E+12
Beef, processed	0	0	0	0	0	0	0
Pork, fresh	0	0	0	0.50	0	0	0
Pork, processed	0	2.12	0	0	0	12.84	0
Veal, fresh	0	0	0	0	0	0	0
Veal, processed	0	0	0	0	0	0	0
Lamb/Mutton, fresh	0	0	0.07	0	0	0	0
Lamb/Mutton, processed	0	0	0	0	0	0	0
Goat, fresh	0	0	0	0	0	0	0
Turkey , fresh	0	0	0	0	0	0	0
Ratite, fresh	0	0	0	0	0	0	0
Chicken, fresh	0	0	0	0	0	0	0
Chicken, processed	0	0	0	0	0.42	0	0
Turkey, processed	0	0	0	0	1.14	0	0
Other Fowl, fresh	0	0	0	0	0	0	0
Other Fowl, processed	0	0	0	0	0	0	0
Varied combination, fresh	0	0	0	0	0	0	0
Varied combination, processed	0	0	0	0	0	0	0

Table 9 *(continued)*
Relative Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

Production Class	Mexico	Netherlands	New Zealand	Nicaragua	N.Ireland
Beef, fresh	1.42	0	19.07	2.64	0
Beef, processed	2.50	0	1.24	0	0
Pork, fresh	0.37	0.71	0.01	0	0.22
Pork, processed	17.96	2.94	0	0	0
Veal, fresh	0	0	37.61	0	0
Veal, processed	0	0	0	0	0
Lamb/Mutton, fresh	0	0	26.22	0	0
Lamb/Mutton, processed	0	0	33.17	0	0
Goat, fresh	0.15	0	3.11	0	0
Turkey , fresh	0.01	0	0	0	0
Ratite, fresh	0	0	38.10	0	0
Chicken, fresh	0.02	0	0	0	0
Chicken, processed	15.87	0	0	0	0
Turkey, processed	54.31	0	0	0	0
Other Fowl, fresh	0	0	0	0	0
Other Fowl, processed	0	0	0	0	0
Varied combination, fresh	0	0	0	0	0
Varied combination, processed	25.90	0	0.57	0	0

Table 9 *(continued)*
Relative Annual Amount of Product Imported/Country
2008 FSIS NRP, Import Reinspection Sampling Plan

Production Class	Poland	Spain	Sweden	UK
Beef, fresh	0	0	0	0
Beef, processed	0	0	0	0
Pork, fresh	0	0	0	0
Pork, processed	0	0	0.10	0.16
Veal, fresh	26.63	2.54	0	0
Veal, processed	0	0	0	0
Lamb/Mutton, fresh	0	0	0	0
Lamb/Mutton, processed	0	0	0	0
Goat, fresh	0	0	0	0
Turkey , fresh	0	0	0	0
Ratite, fresh	0	0	0	0
Chicken, fresh	0	0	0	0
Chicken, processed	0	0	0	0
Turkey, processed	0	0	0	0
Other Fowl, fresh	0	0	0	0
Other Fowl, processed	0	0	0	0
Varied combination, fresh	0	0	0	0
Varied combination, processed	0	0	0	0

Table 10
Number of Drug Samples/Product Class
2008 FSIS NRP, Import Reinspection Sampling Plan

No of Countries	Production Class	Drug	% Product Imported	Score	RSP	No. of Samples	Unadjusted No. of Samples	Final No of Samples
11	Beef, fresh	Antibiotics	56.4	15	819	300	300	300
1	Chicken, fresh	Antibiotics	1.8	15	27	16	16	16
0	Horse, fresh	Antibiotics	0	15	0	8	8	8
12	Pork, fresh	Antibiotics	20.6	15	310	230	230	230
2	Turkey, fresh	Antibiotics	0.43	15	6	90	16	16
1	Varied combination, fresh	Antibiotics	0.006	15	0	8	8	8
3	Veal, fresh	Antibiotics	1.67	15	25	90	90	90
2	Other fowl, fresh	Antibiotics	0.13	15	1.95	16	16	16
2	Other fowl, processed	Antibiotics	0	15	0.045	16	16	0
1	Chicken, fresh	Arsenic	1.8	4.5	8	16	16	16
3	Chicken, processed	Arsenic	2.2	4.5	10	8	8	8
12	Pork, fresh	Arsenic	20.6	4.5	93	90	90	96
2	Turkey , fresh	Arsenic	0.43	4.5	2	16	16	16
3	Turkey, processed	Arsenic	0.33	4.5	1	24	24	8
11	Beef, fresh	Avermectins	56.40	14	764	300	300	300
7	Beef, processed	Avermectins	6.34	14	89	60	60	60
2	Goat, fresh	Avermectins	0.7	14	10	90	24	24
5	Lamb/Mutton, fresh	Avermectins	4.50	14	63	90	90	90
3	Lamb/Mutton, processed	Avermectins	0.010	14	0	90	32	0
3	Veal, fresh	Avermectins	1.67	14	23	90	90	90
12	Pork, fresh	B-agonist	1.60	2.75	4	90	90	96
3	Veal, fresh	B-agonist	1.67	2.75	5	90	90	90

Table 10 (*continued)*
Number of Drug Samples/Product Class
2008 FSIS NRP, Import Reinspection Sampling Plan

No of Countries	Production Class	Drug	% Product Imported	Score	RSP	No. of Samples	Unadjusted No. of Samples	Final No of Samples
11	Beef, fresh	Chloramphenicol	56.4	0	0	96	96	96
1	Chicken, fresh	Chloramphenicol	1.80	0	0	16	16	16
2	Turkey , fresh	Chloramphenicol	0.43	0	0	16	16	16
3	Veal, fresh	Chloramphenicol	1.67	0	0	90	90	90
11	Beef, fresh	Florfenicol	56.4	0	0	88	88	88
11	Beef, fresh	Flunixin	56.4	7	382	141	88	88
1	Chicken, fresh	Nitroimidazoles	1.80	4.5	8	16	16	16
11	Beef, fresh	Sulfonamides	56.4	6.34	346	300	300	300
7	Beef, processed	Sulfonamides	6.34	12	76	60	60	60
0	Horse, fresh	Sulfonamides	0	12	0	8	8	8
12	Pork, fresh	Sulfonamides	20.65	12	248	230	230	230
12	Pork, processed	Sulfonamides	4.57	12	55	64	64	64
2	Turkey , fresh	Sulfonamides	0.43	12	5	90	16	16
3	Turkey, processed	Sulfonamides	0.33	12	4	24	24	8
1	Varied combination, fresh	Sulfonamides	0.006	12	0	8	8	8
3	Varied combination, processed	Sulfonamides	0.50	12	6	90	32	16
3	Veal, fresh	Sulfonamides	1.67	12	20	90	90	90
1	Veal, processed	Sulfonamides	0.001	12	0	90	24	0
3	Veal, fresh	Thyreostats	1.67	7	12	90	90	90
3	Veal, fresh	Zeranol	1.67	12	20	90	90	90
	Total					**3525**	**3076**	**2968**

Table 11
Number of Samples/Product Class – Pork, Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Sulfonamides	% product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final No of Samples
Belgium	1.45	1	8	8
Canada	0.86	1	0	0[1]
Croatia	0.86	1	8	8
Denmark	30.00	27	0	0[1]
France	0.01	0	8	8
Germany	1.82	2	8	8
Hungary	2.12	2	8	8
Italy	13.00	12	8	8
Mexico	18.00	16	0	0[1]
Netherlands	3.00	3	0	0[1]
Poland	27.00	24	8	8
Spain	2.70	2	8	8
Total	**100**	**91**	**64**	64

Table 12
Number of Samples/Product Class – Mutton/Lamb, Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Avermectins	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Australia	65	8	0	0[1]
Canada	1.9	8	0	0[1]
New Zealand	33.2	8	0	0[1]
Total	**100**	**24**	**0**	**0**

Table 13
Number of Samples/Product Class – Turkey Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Canada	99.999	8	8	8
Mexico	0.001	8	8	8
Total	100	16	16	16
Sulfonamides	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	99.999	8	8	8
Mexico	0.001	8	8	8
Total	100	16	16	16
Chloramphenicol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	99.999	8	8	8
Mexico	0.001	8	8	8
Total	100	16	16	16
Arsenicals	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	99.999	8	8	8
Mexico	0.001	8	8	8
Total	100	16	16	16

Table 14
Number of Samples/Product Class – Turkey Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Arsenicals	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	44.55	8	0	0[1]
Israel	1.13	8	8	8
Mexico	54.32	8	0	0[1]
Total	**100**	**24**	**8**	**8**
Sulfonamides	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	44.55	8	0	0[1]
Israel	1.13	8	8	8
Mexico	54.32	8	0	0[1]
Total	**100**	**24**	**8**	**8**

Table 15
Number of Samples/Product Class – Varied Combination Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%Product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust # 1**	**Final Adj**
Canada	**100**	**8**	**8**	**8**
Sulfonamides	**%Product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust # 1**	**Final Adj**
Canada	**100**	**8**	**8**	**8**

Table 16
Number of Samples/Product Class – Horse Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	**100.00**	**8**	**8**	**8**
Sulfonamides	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Canada	**100.00**	**8**	**8**	**8**

Table 17
Number of Samples/Product Class – Other Fowl Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%Product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust # 1**	**Final Adj**
Canada	96	8	8	8
France	4	8	8	8
Total	**100**	**16**	**16**	**16**

Table 18
Number of Samples/Product Class – Varied Combination Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Sulfonamides	**%Product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust # 1**	**Final Adj**
Australia	0.07	8	8	8
Canada	74	8	0	0[1]
Mexico	25.9	8	8	8
New Zealand	0.57	8	8	8
Total	**100**	**32**	**24**	**24**

Table 19
Number of Samples/Product Class – Veal Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	**100**	**90**	**90**	**90**
Avermectins	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	100	90	90	90
B-agonist	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	38
Total	**100**	**90**	**90**	**90**
Sulfonamides	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	**100**	**90**	**90**	**90**
Thyreostats	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	**100**	**90**	**90**	**90**
Zeranol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	**100**	**90**	**90**	**90**
Chloramphenicol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Final Adj**
Australia	19	17.1	13	13
Canada	44	39.6	38	38
New Zealand	37	33.3	39	39
Total	**100**	**90**	**90**	**90**

Table 20
Number of Samples/Product Class – Other Fowl Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%Product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust # 1**	**Final Adj**
Canada	**100**	**8**	**8**	**0**[1]

Table 21
Number of Samples/Product Class – Beef, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%product (Pc/c)**	**Uc/s=300*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	96	0	96	82	82
Brazil	0.001	0.003	8	8	8	8
Canada	32	96	0	96	82	82
Chile	0.001	0.003	8	8	8	8
Costa Rica	0.7	2.1	8	8	8	8
Honduras	0.04	0.12	8	8	8	8
Japan	0.001	0.003	8	8	8	8
Mexico	1.5	4.5	8	8	8	8
New Zealand	19	57	0	57	49	49
Nicaragua	2.6	7.8	8	8	8	8
Uruguay	12	36	0	36	31	31
Total	**99.843**	**300**	**56**	**341**	**300**	**300**
Sulfonamides	**%product (Pc/c)**	**Uc/s=300*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	96	0	96	82	82
Brazil	0.001	0.003	8	8	8	8
Canada	32	96	0	96	82	82
Chile	0.001	0.003	8	8	8	8
Costa Rica	0.7	2.1	8	8	8	8
Honduras	0.04	0.12	8	8	8	8
Japan	0.001	0.003	8	8	8	8
Mexico	1.5	4.5	8	8	8	8
New Zealand	19	57	0	57	49	49
Nicaragua	2.6	7.8	8	8	8	8
Uruguay	12	36	0	36	31	31
Total	**99.843**	**300**	**56**	**341**	**300**	**300**
Avermectins	**%product (Pc/c)**	**Uc/s=300*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	96	0	96	82	82
Brazil	0.001	0.003	8	8	8	8
Canada	32	96	0	96	82	82
Chile	0.001	0.003	8	8	8	8
Costa Rica	0.7	2.1	8	8	8	8
Honduras	0.04	0.12	8	8	8	8
Japan	0.001	0.003	8	8	8	8
Mexico	1.5	4.5	8	8	8	8
New Zealand	19	57	0	57	49	49
Nicaragua	2.6	7.8	8	8	8	8
Uruguay	12	36	0	36	31	31
Total	**99.843**	**300**	**56**	**341**	**300**	**300**

Table 21*(continued)*
Number of Samples/Product Class – Beef, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Chloramphenicol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	28.8	0	29	12	12
Brazil	0.001	0.0009	8	8	8	8
Canada	32	28.8	0	29	12	12
Chile	0.001	0.0009	8	8	8	8
Costa Rica	0.7	0.63	8	8	8	8
Honduras	0.04	0.036	8	8	8	8
Japan	0.001	0.0009	8	8	8	8
Mexico	1.5	1.35	8	8	8	8
New Zealand	19	17.1	0	17	8	8
Nicaragua	2.6	2.34	8	8	8	8
Uruguay	12	10.8	0	10	8	8
Total	**99.843**	**90**	**56**	**141**	**96**	**96**
Florfenicol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	28.8	0	29	12	8
Brazil	0.001	0.0009	8	8	8	8
Canada	32	28.8	0	29	12	8
Chile	0.001	0.0009	8	8	8	8
Costa Rica	0.7	0.63	8	8	8	8
Honduras	0.04	0.036	8	8	8	8
Japan	0.001	0.0009	8	8	8	8
Mexico	1.5	1.35	8	8	8	8
New Zealand	19	17.1	0	17	8	8
Nicaragua	2.6	2.34	8	8	8	8
Uruguay	12	10.8	0	10	8	8
Total	**99.843**	**90**	**56**	**141**	**96**	**88**
Flunixin	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	32	28.8	0	29	8	8
Brazil	0.001	0.0009	8	8	8	8
Canada	32	28.8	0	29	8	8
Chile	0.001	0.0009	8	8	8	8
Costa Rica	0.7	0.63	8	8	8	8
Honduras	0.04	0.036	8	8	8	8
Japan	0.001	0.0009	8	8	8	8
Mexico	1.5	1.35	8	8	8	8
New Zealand	19	17.1	0	17	8	8
Nicaragua	2.6	2.34	8	8	8	8
Uruguay	12	10.8	0	10	8	8
Total	**99.843**	**89.8587**	**56**	**141**	**88**	**88**

Table 22
Number of Samples/Product Class – Beef Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Sulfonamides	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Argentina	19.8	27	0	27	20	20
Australia	1.22	1.098	8	8	0	0[1]
Brazil	61.15	55.035	0	0	40	40
Canada	9.33	8.397	0	0	0	0[1]
Mexico	2.5	2.25	8	8	0	0[1]
New Zealand	1.23	1.107	8	8	0	0[1]
Uruguay	4.8	4.32	8	0	0	0[1]
Total	**100.03**	**72.207**	**32**	**51**	**60**	**60**
Avermectins	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Argentina	19.8	27	0	27	20	20
Australia	1.22	1.098	8	8	0	0[1]
Brazil	61.15	55.035	0	0	40	40
Canada	9.33	8.397	0	0	0	0[1]
Mexico	2.5	2.25	8	8	0	0[1]
New Zealand	1.23	1.107	8	8	0	0[1]
Uruguay	4.8	4.32	8	0	0	0[1]
Total	**100.03**	**72.207**	**32**	**51**	**60**	**60**

Table 23
Number of Samples/Product Class – Chicken Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Canada	99.98	8		8	8	8
Mexico	0.018	8		8	8	8
Total	**100**	**16**		**16**	**16**	**16**
Arsenicals	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Canada	100	8		8	8	8
Mexico	0.018	8		8	8	8
Total	**100**	**16**		**16**	**16**	**16**
Chloramphenicol	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Canada	100	8		8	8	8
Mexico	0.018	8		8	8	8
Total	**100**	**16**		**16**	**16**	**16**
Nitroimidazole	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Canada	100	8		8	8	8
Mexico	0.018	8		8	8	8
Total	**100**	**16**		**16**	**16**	**16**

Table 24
Number of Samples/Product Class – Chicken Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

Arsenicals	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Canada	83.7	75.33	8	0	0	0[1]
Israel	0.42	0.378	8	8	8	8
Mexico	16	14.4	8	0	0	0[1]
Total	**100.12**	**90**	**24**	**8**	**8**	**8**

Table 25
Number of Samples/Product Class – Mutton/Lamb Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Avermectins	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Australia	73.5	66.15	66	66	43	43
Canada	0.24	0.216	0	8	8	8
Chile	0.004	0.0036	0	8	8	8
Iceland	0.1	0.09	0	8	8	8
Mexico	0.01	0.009	0	8	8	8
New Zealand	26.2	23.58	23	23	15	15
Total	**100**	**90.0486**	**89**	**121**	**90**	**90**

Table 26
Number of Samples/Product Class – Pork Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

Antibiotics	%product (Pc/c)	Uc/s=230*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Australia	0.01	0.023	1	8	8	8
Canada	87	200.1	200	200	135	135
Chile	0.1	0.23	1	8	8	8
Denmark	10	23	21	21	15	15
Finland	0.3	0.69	1	8	8	8
Ireland	0.5	1.15	1	8	8	8
Mexico	0.37	0.851	1	8	8	8
Netherlands	3	6.9	1	8	8	8
N. Ireland	0.22	0.506	1	8	8	8
New Zealand	0.01	0.023	1	8	8	8
Sweden	0.1	0.23	1	8	8	8
United Kingdom	0.16	0.368	1	8	8	8
Total	101.77	230	231	301	230	230
Arsenicals	**%product (Pc/c)**	**Uc/s=90*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	0.01	0.023	1	8	8	8
Canada	87	200.1	200	200	8	8
Chile	0.1	0.23	1	8	8	8
Denmark	10	23	21	21	8	8
Finland	0.3	0.69	1	8	8	8
Ireland	0.5	1.15	1	8	8	8
Mexico	0.37	0.851	1	8	8	8
Netherlands	3	6.9	1	8	8	8
N. Ireland	0.22	0.506	1	8	8	8
New Zealand	0.01	0.023	1	8	8	8
Sweden	0.1	0.23	1	8	8	8
United Kingdom	0.16	0.368	1	8	8	8
Total	**101.77**	**230**	**231**	**301**	**96**	**96**

Table 26 *(continued)*
Number of Samples/Product Class – Pork Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

B-agonist	**%product (Pc/c)**	**Uc/s=230*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	0.01	0.023	1	8	8	8
Canada	87	200.1	200	8	8	8
Chile	0.1	0.23	1	8	8	8
Denmark	10	23	21	8	8	8
Finland	0.3	0.69	1	8	8	8
Ireland	0.5	1.15	1	8	8	8
Mexico	0.37	0.851	1	8	8	8
Netherlands	3	6.9	1	8	8	8
N. Ireland	0.22	0.506	1	8	8	8
New Zealand	0.01	0.023	1	8	8	8
Sweden	0.1	0.23	1	8	8	8
United Kingdom	0.16	0.368	1	8	8	8
Total	**101.77**	**230**	**231**	**96**	**96**	**96**
Sulfonamides	**%product (Pc/c)**	**Uc/s=230*(Pc/c)/100**	**Adjust #1**	**Initial Adj**	**Adjust # 2**	**Final Adj**
Australia	0.01	0.023	1	8	8	8
Canada	87	200.1	200	200	135	135
Chile	0.1	0.23	1	8	8	8
Denmark	10	23	21	21	15	15
Finland	0.3	0.69	1	8	8	8
Ireland	0.5	1.15	1	8	8	8
Mexico	0.37	0.851	1	8	8	8
Netherlands	3	6.9	1	8	8	8
N. Ireland	0.22	0.506	1	8	8	8
New Zealand	0.01	0.023	1	8	8	8
Sweden	0.1	0.23	1	8	8	8
United Kingdom	0.16	0.368	1	8	8	8
Total	**101.77**	**230**	**231**	**301**	**230**	**230**

[1] There will be no sampling of processed products from countries that also ship fresh products to the United States or source their raw material from other foreign countries that are eligible to ship fresh product and are actually exporting to United States

Design of the Domestic Scheduled Sampling Plan for Pesticides

I. Selecting and Ranking Candidate Pesticides

The candidate pesticides of concern were selected by members of the Surveillance Advisory Team (SAT) from the Environmental Protection Agency (EPA). The candidates selected for the 2008 NRP are presented in Table 27, *Scoring Table for Pesticides*. Because the Food Safety and Inspection Service (FSIS) prioritizes which *analyses* should be conducted, compounds that are, or are likely to be, detected by the same analytical methodology have been grouped together.

Compound Scoring

Using a 4-point scale (4 = high; 3 = moderate; 2 = low; 1 = none), members of the SAT scored each of the pesticides in each of the following categories. Note that some of these categories differ from those used for the veterinary drugs:

- FSIS Historical Testing Information on Violations
- Regulatory Concern
- Pre-slaughter Interval
- Bioconcentration Factor
- Endocrine Disruption
- Toxicity

Definitions of each of these categories, and the criteria used for scoring, appear below in the section, "*Scoring Key for Pesticides*."

The results of the compound scoring process are presented in Table 27. Where compounds were grouped together, the score assigned to each category is the highest score for all members of the group.

Compound Ranking

1. Background

   Using *Equation 1*[1]:

   Risk = Exposure x Toxicity
   = Consumption x Residue Levels x Toxicity
   = Consumption x "Risk per Unit of Consumption"

FSIS employed risk assessment techniques and principles to obtain a ranking of the relative public health concern represented by each of the candidate compounds or compound classes. However, unlike the case with veterinary drugs, FSIS does not have historical data on a sufficient range of different pesticide compounds or compound classes to predict violation scores (and thus risk per unit of consumption) using a regression equation. Therefore, a somewhat different approach (although related to that used for the veterinary drugs) was necessary to estimate the "Risk per Unit of Consumption" term.

1 See the Section, *Design of the Domestic Scheduled Sampling Plan for Veterinary Drugs.*

2. Rating the Pesticides According to Relative Public Health Concern

The categories of "Regulatory Concern," "Pre-slaughter Interval" and "Bioconcentration Factor" were employed as predictors of risk per unit of consumption from pesticides in animal products. As indicated above, the "Regulatory Concern" category reflects EPA's professional judgment of the likelihood that a compound or compound class will exceed EPA's level of concern in meat, poultry, or egg products. Thus, it combines residue level and toxicity information. As with the "Withdrawal Time" category for veterinary drugs, the "Pre-slaughter Interval" category is expected to correlate with residue level because longer pre-slaughter intervals are less likely to be properly observed. When the pre-slaughter interval is not observed, the carcass may contain violative levels of residues since the time necessary for sufficient metabolism and/or elimination of the pesticide may not have passed. Bioconcentration is a measure of the extent to which a pesticide concentrates within the fat deposits of animals. Pesticides that bioconcentrate are more likely to accumulate to higher levels within animal tissue, which is expected to increase the potential for human exposure.

The "Toxicity" category reflects both the dose required to achieve a toxic effect and the severity of that effect. Because the numerical value assigned to toxicity is independent of other parameters, it can be used directly as a term in *Equation 1*.

EPA assigns a value to regulatory concern, pre-slaughter interval and bioconcentration factor to each pesticide compound or class of compounds. These values are multiplied by a weighted average and then by the toxicity value to give an estimate of the relative risk per unit of consumption, as shown in *Equation 12*.

Equation 12

Relative Public Health Concern

= Estimated relative risk per unit of consumption x *modifier for* "Lack of FSIS Testing Information on Violations"
= Estimated relative exposure x Relative toxicity x *modifier for* "Lack of FSIS Testing Information on Violations"
= Weighted average of {"Regulatory Concern," "Pre-slaughter Interval," "Bioconcentration factor"} x "Toxicity."

Comparing *Equation 12* to *Equation 3*, it can be seen that the "Weighted average of {'Regulatory Concern,' 'Pre-slaughter Interval,' "Bioconcentration factor'}" has been used in place of "Predicted or Actual Score for 'FSIS Historical Testing Information on Violations'." Endocrine Disruption" was not included in *Equation 12*, because scores for this category were not available for most of the pesticides.

The pesticides in Table 27 are rated according to their relative public health concern by combining the scoring categories presented in *Equation 12* using a weighting formula. The formula is presented in *Equation 13* and in Table 27. FSIS selected this formula, based on a consensus about the relative importance of each modifier, and of how much each modifier should be allowed to alter the underlying risk-based score for Relative Public Health Concern. The value of the selected mathematical formula is that it formalizes the basis of FSIS's judgement. This enables others to observe and understand the adjustments that were made, and it ensures consistency in how these adjustments were applied across a wide range of compounds.

Equation 13

Relative public health concern rating, pesticides = ((2*R+P+B)/4))*T

Where: R = score for "Regulatory Concern"
P = score for "Pre-slaughter Interval"
B = score for "Bioconcentration Factor"
T = score for "Toxicity."

In *Equation 13*, the variable for regulatory concern (R) is given twice as much weight as the pre-slaughter interval (P) and bioconcentration factor (B) because FSIS considers regulatory concern to be more of a direct measurement of exposure.

Equation 13 for pesticides and *Equation 4* for veterinary drugs have been normalized to give the same maximum value so that their values appear to be comparable. However, because Equation 13 uses variables that are derived from terms (scoring categories) that are not the same as the terms used in *Equation 4*, their scores are not comparable. The scores for the pesticides and drugs were normalized to provide a rough comparison between these two different categories of compounds.

In Summary Table III (see page 8), *Rank and Status for Pesticides*, the pesticides with the top Relative Public Health Concerns Scores are ranked by their rating scores, as generated using the selected weighting scheme given in *Equation 13*. The scores presented in Summary Table III enable FSIS to bring consistency, grounded in formal risk-based considerations, to its efforts to differentiate among a very diverse range of pesticides and pesticide classes in a situation that is marked by minimal data on relative exposures**.** These rankings do not account for differences in exposure due to differences in overall consumption. Data on relative consumption are applied subsequently, in Phase IV, when relative exposure values for each compound/production class (C/PC) pair are estimated.

II. Prioritizing Candidate Pesticides

Once the SAT completed ranking the pesticides according to their relative public health concern, the ranking scores were used to select compounds for the 2008 NRP. Using professional judgment, SAT participants decided that the pesticide compounds and compound classes that received a ranking of 23 or greater, as shown in Summary Table III, represent a potential public health concern that is sufficient to justify their inclusion in the 2008 NRP.

Once these high-priority compounds and compound classes had been identified, it was necessary for FSIS to apply considerations beyond those related to public health to determine the compounds that would be sampled. The principal consideration that was not related to public health was the availability of laboratory resources, especially the availability of appropriate analytical methods within the FSIS laboratories. Based on this constraint, only the chlorinated hydrocarbon/chlorinated organophosphate (CHC/COP) compound class can currently be included in the NRP. There are 29 compounds in this compound class that FSIS will analyze for quantity and chemical identity. There are 18 additional compounds that will only be identified. The compounds are:

aldrin, alpha-BHC, chlorfenvinphos, chlorpyrifos, cis-chlordane, trans-chlordane, coumaphos-S, p,p'-DDT, p,p'-DDE, dieldrin, PCB 1254, PCB 1260, endosulfan II, endosulfan sulfate, endrin, endrin ketone, heptachlor, heptachlor epoxides, hexachlorobenzene, 2,2',4,4',5,5' hexabromobiphenyl, lindane, methoxychlor, mirex, trans-nonachlor, oxychlordane, ronnel, stirophos (tetrachlorvinphos), p, p'-TDE, toxaphene, captan*, carbophenothion*, chlordene*, chlorpyrifos-methyl*, dichlofenthion*, endosulfan I*,

halowaxes*, kepone*, linuron*, phosalone*, polybrominated biphenyls*, polybrominated diphenyl ethers*, beta-BHC*, delta-BHC*, coumaphos-O*, o,p'-DDT*, o,p'-DDE*, and o,p'-TDE* (*identification only; not quantitated)

The sampling status of each compound or compound class in the 2008 scheduled sampling plan is provided in Summary Table III. For each highly ranked compound or compound class that was not scheduled for inclusion in the 2008 NRP, a brief explanation of the reason for its exclusion is provided. This table will be used to identify future method development needs for pesticides for the FSIS NRP.

It can be seen that a number of highly ranked pesticides could not be included in the 2008 NRP due to methodological limitations. FSIS will apply methodology capable of capturing chlorinated hydrocarbons and chlorinated and non-chlorinated organophosphates when such methodology can be implemented.

III. Identifying the Compound/Production Class (C/PC) Pairs

The CHC/COP class includes pesticides that may be present in the foods animals eat, creating the potential for the occurrence of "secondary residues" (i.e., residues that are not the result of direct treatment) in all classes of animals. Other compounds within this class (such as the PCBs) are environmental contaminants to which any animal may be exposed.

Since the 2006 NRP, FSIS has suspended scheduled sampling testing for CHCs and COPs for the following production classes: minor species (ducks, geese, ratites, rabbits, squab, and bison); young chickens; market hogs; steers; young turkeys; mature chickens; bulls; formula-fed veal; mature turkeys; roaster pigs; and bob veal. Not scheduling these species will allow FSIS to focus those resources on the development of methodologies in areas that are of high public health concern. FSIS will continue sampling for CHCs and COPs as a means of scheduled sampling for the occurrence of accidental contamination incidents.

IV. Allocation of Sampling Resources

Since only the CHC/COP compound class will be included in the 2008 NRP, this phase is relatively straightforward. FSIS has sufficient analytical capability to implement CHC/COP analysis in all production classes. To establish a relative sampling priority for each C/PC pair, the ranking score for the CHC/COPs were calculated (Table 27) and multiplied by the estimated relative percent of domestic consumption for each production class (presented in Table 3) and shown in *Equation 14*. This is identical to *Equation 6*, which was used to calculate the relative sampling priorities for the veterinary drugs:

Equation 14

$$(\text{Rel. sampling priority})_{C/PC} = (\text{Ranking score})_{C} \times (\text{Est. rel. \% domestic consumption})_{PC}$$

As stated above for veterinary drugs, *Equation 14* is analogous to the equation used to estimate risk in *Equation 1*, in which risk per unit of consumption is multiplied by consumption. While the results of *Equation 14* do not constitute an estimate of risk, they provide a numerical representation of the relative public health concern associated with each C/PC pair, and thus can be used to prioritize FSIS analytical sampling resources according to the latter. Note that the risk ranking provided by *Equation 14* is based upon average consumption across the entire U.S. population, rather than upon maximally exposed individuals.

A ranking of the C/PC pairs within this single compound class could be obtained merely using the estimated relative percent of domestic consumption for each production class. In other words, the *rank order and the relative magnitude of the score* assigned to each of the C/PC pairs within this compound class is not changed by multiplying all the relative consumption values by the ranking score, since the ranking score is a constant term. Nevertheless, to maintain a rough parity between the sampling numbers assigned to the veterinary drugs and those assigned to the pesticides, all of the relative consumption figures were multiplied by the ranking score for the CHC/COP compound class. The initial sample number was chosen to be 300 animals regardless of the priority score. This sampling level provides 95% confidence in detecting a residue violation if the violation rate is 1% or higher. The results are presented in Table 28, *Pesticide Compound/Production Class Pairs, Sorted by Sampling Priority Score, with Adjusted Number of Analyses*.

Adjusting Relative Sampling Numbers

Adjusting for historical data on violation rates of individual C/PC pairs

Extensive FSIS historical testing information on violations, subdivided by production class, is available for the CHC/COP compound class. This information has been used to further refine the relative priority of sampling each C/PC pair. Table 28 lists the priority score calculated by multiplying the total number of samples analyzed by FSIS in each production class under its scheduled sampling plan (i.e., random sampling only)for the period 01/01/1997 -12/31/2006 and the percent of samples found to be violative (i.e., present at a level in excess of the action level or regulatory tolerance; or, for those compounds that are prohibited, present at any detectable level). Using these data, the following rules were applied to adjust the sampling numbers:

1. Less than 300 samples from the C/PC pair tested over the 10 year period: +1 level (i.e., increase by one sampling level, e.g., from 230 samples to 300 samples).
2. At least 300 samples tested over the 10-year period, violation rate and violations were found during CY 2007, or the violation rate is greater than or equal to 0.25% ($\geq$ 0.25%) during 01/01/1997-12/31/2006, decrease the sampling level using Statistical Table in Appendix III.
3. At least 300 samples tested over the 10-year period, violation rate = 0.00%, maintain the initial sampling level.
4. The maximum number of samples to be scheduled for testing is 300.

An exception to these rules is:

> For the 2008 NRP, FSIS has suspended scheduled sampling testing for for CHCs and COPs for the following production classes: minor species (ducks, geese, ratites, rabbits, squab, and bison); young chickens; market hogs; steers; young turkeys; mature chickens; bulls; formula-fed veal; mature turkeys; roaster pigs; and bob veal.

All of the above adjustments were applied. The sampling numbers obtained following these adjustments are listed in Table 28 under the heading, "First Adjust," (initial adjusted number of samples).

Adjusting for laboratory capacity

No adjustment for laboratory capacity was necessary for the 2008 NRP.

Adjustment for the Number of Slaughter Facilities

An adjustment to the total number of scheduled samples was made based on the number of production facilities (Table 28). For this adjustment, FSIS considered the total number of production facilities (USDA Inspected Establishments for 2004) for each production class. If the total number of production facilities for a production class was found to be low relative to other production classes, the total number of scheduled samples was reduced for that production class. The number of samples selected for the reduction was based on FSIS professional judgment. If the number of facilities is less than 100, the number of scheduled samples was adjusted down by 1 level (if 300 were assigned initially, decrease to 230 samples). Based on these parameters, the number of scheduled samples was adjusted for the following production classes: "Formula-fed veal", "Bob Veal", "Young Turkeys", "Mature Chickens", and "Mature Turkeys." No adjustment was made for the minor species (bison, ducks, rabbits, geese, squab, and ratites) since these minor species are suspended from pesticide testing for the 2008 NRP.

V. Scoring Key for Pesticides

FSIS Historical Testing Information on Violations (01/01/1997 -12/31/2006)

Violation rate scores were calculated by two different methods, A and B, using violation rate data from FSIS random sampling of animals entering the food supply:

Method A: Maximum Violation Rate. Identify the production class exhibiting the highest average violation rate (the number of violations over the period from 1997-2006, divided by the total number of samples analyzed). Score as follows:

4 = > 0.5%
3 = 0.25% - 0.5 %
2 = 0.07% - 0.24%
1 = < 0.07%
NT = Not tested by FSIS.
NA = Tested by FSIS, but violation information does not apply.

Method B: Violation Rate Weighted by Size of Production Class. For each production class analyzed, multiply the average violation rate (defined above) by the relative consumption value for that class (weight annual U.S. production for that class, divided by total production for all classes for which FSIS has regulatory responsibility). Add together the values for all production classes. Score as follows:

4 = > 0.08%
3 = 0.035% - 0.08%
2 = 0.003% - 0.034%
1 = < 0.003%
NT = Not tested by FSIS.
NA = Tested by FSIS, but violation information does not apply.

The final score is determined by assigning, to each pesticide or pesticide class, the greater of the scores from Method A and Method B.

It can be seen that Method A identifies those pesticides that are of regulatory concern because they exhibit high violation rates, independent of the relative consumption value of the production class in which the violations have occurred. Method B identifies those pesticides that may not have the highest violation rates, but would nevertheless be of concern because they exhibit moderate violation rates in a relatively large proportion of the U.S. meat, poultry, and egg products. By employing Methods A and B together, and assigning a final score based on the highest score received from each, both of the above concerns are captured.

Regulatory Concern

These scores represent EPA's professional assessment of the extent to which the acute or chronic dietary exposure to this compound may exceed EPA's level of concern. For compounds other than carcinogens, this was determined by comparing a compound's Acute or Chronic Population Adjusted Dose (PAD) (whichever was lower) to the estimated level of exposure. The Acute and Chronic PAD's are calculated as follows:

The Acute Reference Dose (Acute RfD) is an estimate (with uncertainty spanning an order of magnitude or greater) of a single oral exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects.

The Chronic Reference Dose (Chronic RfD) is an estimate (with uncertainty spanning an order of magnitude or greater) of a daily oral exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime.

The Acute and Chronic RFD's are calculated by dividing the No Observed Adverse Effect Level (NOAEL) (i.e., the highest dose that gave no observable adverse effect) or the Lowest Observed Adverse Effect Level (LOAEL) (i.e., the lowest dose at which an adverse effect was seen) by Uncertainty Factors (UF). UF's are used to account for differences between different humans (intraspecies variability) and for differences between the test animals and humans (interspecies extrapolation). If the LOAEL is used, an additional UF is required.

RfD = (NOAEL or LOAEL)/Total UF

The Acute and Chronic Population Adjusted Dose (PAD) are the Acute and Chronic RfD, respectively, modified by the FQPA Safety Factor:

Acute or Chronic PAD = (Acute or Chronic RfD)/FQPA Safety Factor

The acute and chronic dietary risks are expressed as a percentage of the Acute or Chronic PAD. A dietary risk of 100% of the Acute or Chronic PAD (*whichever is lower*) is the target level of exposure that should not be exceeded (i.e., the estimated risk associated with any exposure that is less than 100% of the PAD has been judged not to be of concern). In the following, "PAD" is the lower of the Acute and Chronic PAD's.

4 = PAD exceeded or carcinogenic.

3 = Close to PAD.

2 = Exposure estimated to be a low percentage of PAD.

1 = Exposure estimated to be a very low percentage of PAD.

Pre-Slaughter Interval

A numerical value of 1, 2, 3 or 4 is assigned by EPA to pesticides for the category "Pre-Slaughter Interval" (Table 27). Pesticides in this category have been accepted for direct dermal application and have a minimum pre-slaughter interval, which is the interval between the last dermal application and the time of slaughter. FSIS determines a value for a pesticide in this category as follows:

- A value of 4 is assigned when dermal application is permitted and the pre-slaughter interval is 1 day or greater.
- A value of 3 is assigned when dermal application is permitted and the pre-slaughter interval is 0 days.
- A value of 2 is assigned when dermal application is not permitted, but the treatment of premises (e.g., holding cells, feedlots, barns, etc.) is permitted.
- A value of 1 is assigned when neither dermal application nor premise treatment are permitted.

Bioconcentration Factor

A numerical value of 1, 2, 3 or 4 is assigned by EPA to pesticides for the category "Bioconcentration Factor" (Table 27). Bioconcentration is a measure of a compound's relative affinity for fat, as measured by the $K_{o/w}$. The $K_{o/w}$ is defined as the logarithm of the partition coefficient between octanol and water ($\log P_{o/w}$). Compounds that have a high affinity for octanol (and thus a high $K_{o/w}$) tend to bioaccumulate in body fat. A bioconcentration value is determined according to the following criteria:

- A value of 4 is assigned if the $\log K_{o/w}$ is greater than 3.
- A value of 3 is assigned if the $\log K_{o/w}$ is between 2 and 3.
- A value of 2 is assigned if the $\log K_{o/w}$ is between 1 and 2.
- A value of 1 is assigned if the $\log K_{o/w}$ is less than 1.

Endocrine Disruption

A numerical value of 3 or 4 (or NT if not tested) is assigned by EPA to pesticides for the category "Endocrine Disruption" (Table 27). Endocrine disruption is a measure of the extent to which the compound changes endocrine function and causes adverse effects to individual organisms and/or their progeny, or to organism populations and subpopulations. A value for endocrine disruption is assigned as follows:

- A value of 4 is assigned if endocrine disruption is likely.
- A value of 3 is assigned if endocrine disruption is suspected.

- NT is reported if the compound has not been tested.

Toxicity

A numerical value of 1, 2, 3 or 4 is assigned by EPA to pesticides for the category "Toxicity" (Table 27). The toxicity value represents EPA's professional judgment of the toxicity of the compound, including both the dose required to achieve a toxic effect, and the severity of the toxic effect. In the following, "RfD" is the lower of the Acute and Chronic RfD's. [An explanation of Acute and Chronic RfD is provided in the description of Regulatory Concern, above.] A value for toxicity is determined as follows:

- A value of 4 is assigned if the pesticide compound is a cholinesterase inhibitor, carcinogen or has a low RfD.

- A value of 3 is assigned if the pesticide compound has a low RfD.

- A value of 2 is assigned if the pesticide compound has a medium RfD.

- A value of 1 is assigned if the pesticide compound has a high RfD.

Table 27
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Benzimidazole Pesticides – compounds in FSIS benzimidazole MRM[6]	Not Tested[7]	3	1	4	3	4	11.0
Carbamates in FSIS Carbamate – compounds in the FSIS MRM[8]	Not Tested	4	4	2	3	4	14.0
Carbamates – compounds not in the FSIS carbamate MRM[9]	Not Tested	4	1	3	Not Available	4	12.0
Chlorinated hydrocarbons and chlorinated organophosphates (CHCs and COPs) – compounds in the FSIS CHC/COP MRM[10]	3	4	4	4	Not Available	4	16.0
Chlorinated organophosphates and organophosphates (COPs and OPs) not in the FSIS CHC/COP MRM[11]	Not Tested	4	4	4	Not Available	4	16.0
Synthetic Pyrethroids – compounds in the FSIS Synthetic Pyrethrin MRM[12]	Not Tested	3	4	4	3	4	14.0
Triazines – compounds in the FSIS triazine MRM[13]	Not Tested	4	2	3	4	4	13.0
Triazines – compounds not in the FSIS triazine MRM[14]	Not Tested	4	4	3	4	4	15.0
1-(2,4-dichlorophenyl)-2-(1H-imidazole-1-yl)-1-ethanol	Not Tested	3	4	4	Not Available	4	14.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
1,1-(2,2-dichloroethylidene) bis(4-methoxybenzene)	Not Tested	3	4	4	Not Available	4	14.0
1,1,3,3,-tetrakis(2-methyl-2-phenylpropyl) -1,3-dihydroxydistannoxane	Not Tested	2	1	4	Not Available	3	6.8
1-methoxy -4-(1,2,2,2-tetrachloroethyl)benzene)	Not Tested	3	4	4	Not Available	4	14.0
1-methyl cyromazine	Not Tested	3	4	2	Not Available	4	12.0
2-((2-ethyl-6-methylphenyl)-amino) -1-propanol	Not Tested	3	1	3	3	4	10.0
2-(1-hydroxyethyl) -6-ethylaniline	Not Tested	4	1	3	3	4	12.0
2-(4-((6-chloro-2-benzoxazolyl)oxy) phenoxy)propanoic acid	Not Tested	3	1	4	Not Available	4	11.0
2,3-dihydro-3,3-dimethyl -2-oxo-5-benzofuranyl methyl sulfonate	Not Tested	2	1	2	Not Available	2	3.5
2,4-D	Not Tested	3	2	1	3	2	4.5
2,5-dichloro-4-methoxyphenol	Not Tested	1	1	2	Not Available	3	3.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
2,6-diethylaniline	Not Tested	4	1	3	3	4	12.0
2,6 DIPN	Not Tested	1	1	1	Not Available	1	1.0
2-aminobenzimidazole	Not Tested	3	1	2	3	4	9.0
2-amino-n-isopropylbenzamide	Not Tested	3	1	2	Not Available	3	6.8
2-carboxyisopropyl-4-(2,4-dichloro)-5-isopropoxyphenyl)-1,3,4-oxadiazolin-5-one	Not Tested	3	1	4	Not Available	4	11.0
2-hydroxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methyl sulfonate	Not Tested	2	1	2	Not Available	2	3.5
2-t-butyl-4-(2,4-dichloro-5-hydroxyphenyl)-delta 2-1,3,4-oxadiazolin-1,3,4,5-one	Not Tested	3	1	4	Not Available	4	11.0
3-(1-(2,4-dichlorophenyl)-2-(1H-imidazole-1-yl)ethoxy)-1,2-propane diol	Not Tested	3	4	4	Not Available	4	14.0
3-(2-chloro-4-hydroxyphenyl)-6-(2-chlorophenyl)-1,2,4,5-tetrazine	Not Tested	3	1	1	Not Available	4	8.0
3-(3,4-dichlorophenyl)-1-methoxyurea	Not Tested	3	2	3	Not Available	4	11.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
3,4-Dichloroaniline	Not Tested	3	2	3	Not Available	4	11.0
3,4-dichlorophenylurea	Not Tested	3	2	3	Not Available	4	11.0
3-carboxy-5-ethoxy-1,2,4-thiadiazole	Not Tested	3	1	4	Not Available	3	8.3
3-t-butyl-5-chloro-6-hydroxymethyluracil	Not Tested	1	1	1	Not Available	3	3.0
4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone	Not Tested	3	1	3	3	4	10.0
4-chloro-2-trifluoromethylaniline	Not Tested	3	1	4	Not Available	3	8.3
4-hydrocythidiazuron	Not Tested	2	1	2	Not Available	4	7.0
6-chloro-2,3-dihydro-3,3,7-trimethyl-5H-oxazolo(3,2a)pyrimidin-5-one	Not Tested	1	1	1	Not Available	3	3.0
6-chloro-2,3-dihydro-7-hydroxymethyl-3,3-dimethyl-5H-oxazolo(3,2-a)pyrimidin-5-one	Not Tested	1	1	1	Not Available	3	3.0
6-chloro-2,3-dihydro-benzoxazol-2-one	Not Tested	3	1	4	Not Available	4	11.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
6-chloronicotinic acid	Not Tested	3	1	1	Not Available	3	6.0
6-chloropicolinic acid	Not Tested	1	1	4	Not Available	3	5.3
6-methyl-2,3-quinoxalinedithiol	Not Tested	3	1	2	Not Available	4	9.0
Abamectin	Not Tested	2	1	4	Not Available	4	9.0
Abamectin delta 8,9 geometric isomer	Not Tested	2	1	4	Not Available	4	9.0
Acifluorfen, amino analog	Not Tested	3	1	2	Not Available	3	6.8
Alachlor	Not Tested	4	1	3	3	4	12.0
Allophanate	Not Tested	3	1	2	Not Available	4	9.0
Amicarbazone	Not Tested	1	1	2	Not Available	2	2.5
Aminomethylphosphonic acid	Not Tested	1	2	1	Not Available	1	1.3

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Aminopyralid	Not Tested	1	2	1	Not Available	2	2.5
Arsanilic acid	Not Tested	4	1	4	Not Available	4	13.0
Azoxystrobin	Not Tested	1	1	3	Not Available	2	3.0
Azoxystrobin Z isomer	Not Tested	1	1	3	Not Available	2	3.0
Benoxacor	Not Tested	1	1	3	Not Available	4	6.0
Bensulfuron methyl ester	Not Tested	Not Available	1	1	Not Available	2	1.0
Bentazon, 6-hydroxy bentazon, 8-hydroxy bentazon	Not Tested	3	1	2	Not Available	3	6.8
Bifenthrin	Not Tested	3	1	4	Not Available	4	11.0
Bifenthrin, 4'-hydroxy	Not Tested	3	1	4	Not Available	4	11.0
Bispyribac-sodium	Not tested	1	1	4	Not Available	2	3.5

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Bis(trichloromethyl)disulfide	Not Tested	3	1	4	Not Available	4	11.0
Boscalid	Not Tested	2	1	3	Not Available	2	4.0
Bromoxynil	Not Tested	3	1	1	Not Available	4	8.0
Buprofezin	Not Tested	2	1	4	Not Available	3	6.8
Butafenacil	Not Tested	1	1	4	Not Available	2	3.5
Butylamine, sec-	Not Tested	2	1	2	Not Available	2	3.5
Cacodylic acid	Not Tested	3	3	3	3	4	12.0
Captan epoxide	Not Tested	3	1	4	Not Available	4	11.0
Carboxin	Not Tested	3	1	2	Not Available	4	9.0
Carboxin sulfoxide	Not Tested	3	1	2	Not Available	4	9.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Carfentrazone Ethyl	Not Tested	1	1	4	Not Available	1	1.8
CGA 150829	Not Tested	2	1	1	Not Available	4	6.0
CGA 161149	Not Tested	1	1	1	Not Available	3	3.0
CGA 171683	Not Tested	2	1	1	Not Available	4	6.0
CGA 195654	Not Tested	1	1	1	Not Available	3	3.0
Chlorfenapyr	Not Tested	1	1	2	Not Available	4	5.0
Chlorobenzilate	Not Tested	3	1	4	Not Available	3	8.3
Chloroneb	Not Tested	1	1	2	Not Available	3	3.8
Chloroneb, hydroxy-	Not Tested	1	1	2	Not Available	3	3.8
Chlorsulfuron	Not Tested	3	1	2	Not Available	3	6.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Chlorsulfuron, 5-hydroxy-	Not Tested	3	1	2	Not Available	3	6.8
Clethodim	Not Tested	Not Available	1	2	Not Available	3	2.3
Clothiodin	Not Tested	1	1	1	Not Available	1	1.0
Clofencet	Not Tested	1	1	2	Not Available	3	3.8
Clofentezine	Not Tested	3	1	1	Not Available	4	8.0
Cloprop	Not Tested	1	1	1	Not Available	3	3.0
Clopyralid	Not Tested	1	2	1	Not Available	2	2.5
Compound 125670	Not Tested	2	1	2	Not Available	2	3.5
CP 101394	Not Tested	4	1	3	3	4	12.0
CP 108064	Not Tested	4	1	3	3	4	12.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
CP 108065	Not Tested	4	1	3	3	4	12.0
CP 108267	Not Tested	4	1	3	3	4	12.0
CP 51214	Not Tested	4	1	3	3	4	12.0
Cyclanilide	Not Tested	3	1	4	Not Available	4	11.0
Cyclohexylstannoic acid	Not Tested	2	1	2	Not Available	4	7.0
Cyfluthrin	Not Tested	4	4	2	Not Available	3	10.5
Cyhalothrin, lambda-	Not Tested	4	4	2	Not Available	4	14.0
Cyhexatin	Not Tested	2	1	2	Not Available	4	7.0
Cyromazine	Not Tested	3	4	2	Not Available	4	12.0
Dalapon	Not Tested	2	2	2	Not Available	3	6.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Deltamethrin	Not Tested	3	2	4	Not Available	3	9.0
Dialifor	Not Tested	3	1	4	Not Available	4	11.0
Dialifor oxon	Not Tested	3	1	4	Not Available	4	11.0
Dicamba	Not Tested	3	2	3	Not Available	4	11.0
Dicyclohexyltin oxide	Not Tested	2	1	2	Not Available	4	7.0
Difenoconazole	Not Tested	4	1	4	Not Available	3	9.8
Difenzoquat	Not Tested	1	1	1	Not Available	4	4.0
Diflubenzuron	Not Tested	3	4	4	Not Available	2	7.0
Diflufenzopyr	Not Tested	1	1	2	Not Available	4	5.0
Dimethenamid	Not Tested	2	1	1	Not Available	2	3.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Dimethipin	Not Tested	1	1	1	Not Available	3	3.0
Dioxathion	Not Tested	3	1	3	Not Available	4	10.0
Diphenamid	Not Tested	3	1	1	Not Available	3	6.0
Diphenamid, desmethyl	Not Tested	3	1	1	Not Available	3	6.0
Diphenylamine	Not Tested	3	3	4	Not Available	3	9.8
Dipropyl isocinchomerate	Not Tested	3	4	4	Not Available	2	7.0
Diquat dibromide	Not Tested	1	1	3	Not Available	4	6.0
Diuron	Not Tested	3	2	3	Not Available	4	11.0
Dodine	Not Tested	2	1	1	Not Available	3	4.5
Emamectin	Not Tested	2	1	4	Not Available	3	6.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Esfenvalerate	Not Tested	3	4	3	Not Available	3	9.8
Ethalfluralin	Not Tested	3	1	2	Not Available	4	9.0
Ethephon	Not Tested	3	1	1	Not Available	2	4.0
Ethofumesate	Not Tested	2	1	2	Not Available	2	3.5
Ethoxyquin	Not Tested	4	2	4	Not Available	2	7.0
Etoxazole	Not Tested	4	1	4	Not Available	4	13.0
Etridiazole .	Not Tested	4	1	4	Not Available	3	9.8
ETU	Not Tested	3	1	2	3	4	9.0
Famoxadone	Not Tested	2	1	3	Not Available	2	4.0
Fenamidone	Not Tested	2	1	3	Not Available	2	4.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Fenarimol	Not Tested	1	1	4	Not Available	3	5.3
Fenarimol metabolite B	Not Tested	1	1	4	Not Available	3	5.3
Fenarimol metabolite C	Not Tested	1	1	4	Not Available	3	5.3
Fenbuconazole	Not Tested	4	1	4	Not Available	3	9.8
Fenbutatin Oxide	Not Tested	2	1	4	Not Available	3	6.8
Fenhexamid	Not Tested	2	1	4	Not Available	2	4.5
Fenoxaprop ethyl	Not Tested	3	1	4	Not Available	4	11.0
Fenpropathrin	Not Tested	4	1	1	Not Available	3	7.5
Fenridazon	Not Tested	2	1	2	Not Available	3	5.3
Fipronil	Not Tested	3	4	4	Not Available	4	14.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Flonicamid	Not Tested	1	1	2	Not Available	1	1.3
Fluazifop-butyl	Not Tested	3	1	2	Not Available	3	6.8
Flucarbazone-sodium	Not Tested	1	1	1	Not Available	1	1.0
Fludioxanil	Not Tested	1	1	4	Not Available	1	1.8
Flufenacet (thiafluamide)	Not Tested	3	1	4	Not Available	3	8.3
Flufenoxuron	Not Tested	2	1	4	Not Available	4	9.0
Fluoxastrobin	Not Tested	2	1	3	Not Available	2	4.0
Fluridone	Not Tested	2	1	2	Not Available	3	5.3
Fluroxypyr	Not Tested	2	1	1	Not Available	2	3.0
Fluthiacet-Methyl (CGA-248757)	Not Tested	1	1	1	Not Available	1	1.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Flutolanil	Not Tested	2	1	4	Not Available	2	4.5
Fluvalinate	Not Tested	4	1	4	Not Available	3	9.8
Gamma-cyhalothrin	Not Tested	3	3	4	Not Available	3	9.8
Glufosinate-Ammonium	Not Tested	1	2	1	Not Available	3	3.8
Glyphosate	Not Tested	1	2	1	Not Available	1	1.3
Glyphosate-Trimesium	Not Tested	1	1	1	Not Available	2	2.0
Halosulfuron	Not Tested	1	1	2	Not Available	2	2.5
Hexazinone	Not Tested	3	1	2	Not Available	3	6.8
Hexythiazox	Not Tested	3	1	3	Not Available	4	10.0
HOE-061517	Not Tested	1	2	1	Not Available	3	3.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
HOE-099730	Not Tested	1	2	1	Not Available	3	3.8
Imazalil	Not Tested	4	4	4	Not Available	4	16.0
Imidacloprid	Not Tested	3	1	1	Not Available	3	6.0
IN-A3928	Not Tested	3	1	2	Not Available	3	6.8
IN-B2838	Not Tested	3	1	2	Not Available	3	6.8
Indoxacarb (DPX-MP062)	Not Tested	4	1	4	Not Available	4	13.0
IN-T3935	Not Tested	3	1	2	Not Available	3	6.8
IN-T3936	Not Tested	3	1	2	Not Available	3	6.8
IN-T3937	Not Tested	3	1	2	Not Available	3	6.8
Iprodione	Not Tested	3	1	3	Not Available	4	10.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Iprodione isomer	Not Tested	3	1	3	Not Available	4	10.0
Iprodione metabolite	Not Tested	3	1	3	Not Available	4	10.0
Iprodione metabolite 2	Not Tested	3	1	3	Not Available	4	10.0
Isoxaflutole	Not Tested	4	1	3	Not Available	3	9.0
Kresoxim-methyl	Not Tested	4	1	4	Not Available	3	9.8
Maleic hydrazide	Not Tested	3	1	4	Not Available	1	2.8
Mancozeb	Not Tested	3	1	2	3	4	9.0
Maneb	Not Tested	3	1	2	3	4	9.0
MB 45950	Not Tested	3	4	4	Not Available	4	14.0
MB 46136	Not Tested	3	4	4	Not Available	3	10.5

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
MB 46513	Not Tested	3	4	4	Not Available	4	14.0
MCPA	Not Tested	1	1	1	Not Available	4	4.0
Mepiquat chloride	Not Tested	3	1	1	Not Available	4	8.0
Mesosulfuron-methyl	Not Tested	1	1	1	Not Available	1	1.0
Metconazole	Not Tested	4	1	4	Not Available	4	13.0
Methoprene	Not Tested	2	1	3	Not Available	2	4.0
Methoxychlorolefin	Not Tested	3	4	4	4	4	14.0
Methoxyfenozide	Not Tested	2	1	3	Not Available	2	4.0
Methyl 3,5-dichlorobenzoate	Not Tested	3	1	4	Not Available	3	8.3
Metiram	Not Tested	3	1	2	3	4	9.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Metolachlor	Not Tested	3	1	3	3	4	10.0
Metsulfuron Methyl	Not Tested	1	1	1	Not Available	2	2.0
Myclobutanil, myclobutanil alcohol metabolite, myclobutanol dihydroxy metabolite	Not Tested	3	1	2	Not Available	2	4.5
N-(3,4-dichlorophenyl)-N'-methylurea	Not Tested	3	2	3	Not Available	4	11.0
N-(4-chloro-2-trifluoromethylphenyl)-propoxyacetamide	Not Tested	3	1	4	Not Available	3	8.3
Nicotine	Not Tested	1	1	3	Not Available	4	6.0
Nitrapyrin	Not Tested	1	1	4	Not Available	3	5.3
Norfluraxon, desmethyl-	Not Tested	3	1	1	Not Available	4	8.0
Norflurazon	Not Tested	3	1	1	Not Available	4	8.0
Novaluron	Not Tested	2	1	3	Not Available	2	4.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
N-phenylurea	Not Tested	2	1	2	Not Available	4	7.0
NTN33823	Not Tested	3	1	1	Not Available	3	6.0
NTN35884	Not Tested	3	1	1	Not Available	3	6.0
Octyl bicycloheptene dicarboximide (MGK-264)	Not Tested	3	4	4	Not Available	3	10.5
Oxadiazon	Not Tested	3	1	4	Not Available	4	11.0
Oxyfluorfen	Not Tested	3	1	4	Not Available	4	11.0
Oxythioquinox	Not Tested	3	1	1	Not Available	4	8.0
Paraquat dichloride	Not Tested	3	1	1	Not Available	4	8.0
PB-7	Not Tested	2	1	1	Not Available	4	6.0
PB-9	Not Tested	2	1	2	Not Available	4	7.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Phosalone oxon	Not Tested	4	1	3	Not Available	4	12.0
Picloram	Not Tested	1	2	1	Not Available	2	2.5
Piperonyl butoxide	Not Tested	3	4	2	Not Available	3	9.0
PP 890	Not Tested	3	4	2	Not Available	4	12.0
Primisulfuron-methyl	Not Tested	2	1	1	Not Available	4	6.0
Prohexadione-ca1cium	Not Tested	1	1	1	Not Available	1	1.0
Propanil	Not Tested	1	1	3	Not Available	4	6.0
Propargite	Not Tested	3	1	2	Not Available	3	6.8
Propargite	Not Tested	3	1	2	Not Available	3	6.8
Propiconazole metabolite CGA 118244	Not Tested	4	1	3	Not Available	4	12.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Propiconazole metabolite CGA 91305	Not Tested	4	1	3	Not Available	4	12.0
Propoxycarbazone	Not Tested	1	1	1	Not Available	1	1.0
Propyzamide	Not Tested	3	1	4	Not Available	3	8.3
Prosulfuron	Not Tested	1	1	3	Not Available	3	4.5
Prothioconazole	Not Tested	4	1	4	Not Available	4	13.0
Pymetrozine	Not Tested	1	1	1	Not Available	1	1.0
Pyraclostrobin	Not Tested	3	1	4	Not Available	3	8.3
Pyrazon	Not Tested	3	1	1	Not Available	4	8.0
Pyrazon metabolite A	Not Tested	3	1	2	Not Available	4	9.0
Pyrazon metabolite B	Not Tested	3	1	2	Not Available	4	9.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Pyrethrin I	Not Tested	2	4	4	Not Available	3	9.0
Pyridaben	Not Tested	2	1	2	Not Available	4	7.0
Pyrimethanil	Not Tested	2	1	3	Not Available	2	4.0
Pyriproxifen	Not Tested	1	1	4	Not Available	1	1.8
Pyrithiobac-Sodium	Not Tested	2	1	4	Not Available	2	4.5
Quinclorac	Not Tested	2	1	2	Not Available	2	3.5
Resmethrin	Not Tested	3	1	3	Not Available	4	10.0
Quizalofop-ethyl	Not Tested	1	1	1	Not Available	1	1.0
SD 31723	Not Tested	2	1	4	Not Available	3	6.8
SD 33608	Not Tested	2	1	4	Not Available	3	6.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
SD 54597	Not Tested	3	4	3	Not Available	3	9.8
Sethoxydim	Not Tested	2	1	2	Not Available	2	3.5
Sethoxydim hydroxylate sulfone	Not Tested	2	1	2	Not Available	2	3.5
Sethoxydim sulfoxide	Not Tested	2	1	2	Not Available	2	3.5
Sodium acifluorfen	Not Tested	3	1	2	Not Available	3	6.8
Spinosad	Not Tested	3	1	4	Not Available	1	2.8
Spirodiclofen	Not Tested	2	1	4	Not Available	2	4.5
Spiromesifen	Not Tested	2	1	4	Not Available	2	4.5
Sulfosulfuron	Not Tested	2	1	1	Not Available	2	3.0
Sulfuryl Fluoride	Not Tested	3	1	1	Not Available	4	8.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
TCP=3,5,6-trichloro-2-pyridinol	Not Tested	3	2	1	Not Available	4	9.0
Tebuconazole	Not Tested	4	1	2	Not Available	3	8.3
Tebufenozide	Not Tested	3	1	4	Not Available	3	8.3
Tebuthiuron	Not Tested	2	1	2	Not Available	3	5.3
Teflubenzuron	Not Tested	Not Available	1	Not Available	Not Available	Not Available	0.0
Tepraloxydim	Not Tested	2	1	2	Not Available	2	3.5
Terbacil	Not Tested	1	1	1	Not Available	3	3.0
Tetraconazole	Not Tested	4	1	4	Not Available	4	13.0
Tetradifon	Not Tested	1	1	2	Not Available	4	5.0
Thiacloprid	Not Tested	3	1	2	Not Available	3	6.8

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Thiamethoxam	Not Tested	4	2	1	Not Available	4	11.0
Thidiazuron	Not Tested	2	1	2	Not Available	4	7.0
Thiophanate methyl	Not Tested	3	1	2	Not Available	4	9.0
THPI	Not Tested	3	1	4	Not Available	4	11.0
Topramezone	Not Tested	1	1	1	Not Available	1	1.0
Tralkoxydim	Not Tested	2	1	2	Not Available	2	3.5
Triadimefon	Not Tested	3	1	4	Not Available	4	11.0
Triadimefon metabolite KWG 1323	Not Tested	3	1	4	Not Available	4	11.0
Triadimefon metabolite KWG 1342	Not Tested	3	1	4	Not Available	4	11.0
Triadimefon metabolite KWG 1732	Not Tested	3	1	4	Not Available	4	11.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound / Compound Class	*Historical Testing for Violations (V)*	*Regulatory Concern[1] (R)*	*Pre-Slaughter Interval[2] (P)*	*Bioconcen-tration[3] (B)*	*Endocrine Disruption[4]*	*Toxicity[5] (T)*	*(((2*R)+P+B)/4)*T*
Triadimenol (for metabolites see triadimefon)	Not Tested	3	1	4	Not Available	4	11.0
Triasulfuron	Not Tested	1	1	1	Not Available	3	3.0
Triazole alanine	Not Tested	4	1	3	Not Available	4	12.0
Triazole acetic acid	Not Tested	4	1	3	Not Available	4	12.0
Triclopyr	Not Tested	3	2	1	Not Available	4	9.0
Trifloxystrobin	Not Tested	2	1	3	Not Available	2	4.0
Triflumazole	Not Tested	4	1	4	Not Available	3	9.8
Triflumizole	Not Tested	4	1	4	Not Available	4	13.0
Triphenyltin hydroxide	Not Tested	1	1	4	Not Available	4	7.0
WAK4103	Not Tested	3	1	1	Not Available	3	6.0

Table 27 (*continued)*
Scoring Table for Pesticides
2008 FSIS NRP, Domestic Scheduled Sampling Plan

[1] Scores for regulatory concern, *R*, are provided by EPA.
[2] Scores for withdrawal time *P*, are provided by EPA.
[3] Scores for bioconcentration factor are provided by EPA.
[4] Scores for endocrine disruption are provided by EPA.
[5] Scores for toxicity are provided by EPA.
[6] 5-Hydroxythiabendazole, benomyl (as carbendazim), thiabendazole
[7] Not Tested = not scheduled for sampling by FSIS during the 10 year period, 01/01/1997 - 12/31/2006.
[8] Aldicarb, aldicarb sulfoxide, aldicarb sulfone, carbaryl, carbofuran, carbofuran 3-hydroxy
[9] Carbaryl 5,6-dihydroxy, chlorpropham, propham, thiobencarb, 4-chlorobenzylmethylsulfone,4-chlorobenzylmethylsulfone sulfoxide
[10] Aldrin, alpha-BHC, chlorfenvinphos, chlorpyrifos, cis-chlordane, trans-chlordane, coumaphos-S, p,p'-DDT, p,p'-DDE, dieldrin, PCB 1254, PCB 1260, endosulfan II, endosulfan sulfate, endrin, endrin ketone, heptachlor, heptachlor epoxides, hexachlorobenzene, 2,2',4,4',5,5' hexabromobiphenyl, lindane, methoxychlor, mirex, trans-nonachlor, oxychlordane, ronnel, stirophos (tetrachlorvinphos), p, p'-TDE, toxaphene, captan, carbophenothion, chlordene, chlorpyrifos-methyl, dichlofenthion, endosulfan I, halowaxes, kepone, linuron, phosalone, polybrominated biphenyls, polybrominated diphenyl ethers, beta-BHC, delta-BHC, coumaphos-O, o,p'-DDT, o,p'-DDE, and o,p'-TDE.
[11] Azinphos-methyl, azinphos-methyl oxon, chlorpyrifos, diazinon, diazinon oxon, diazinon met G-27550, dichlorvos, dimethoate, dimethoate oxon, dioxathion, ethion, ethion monooxon, fenthion, fenthion oxon, fenthion oxon sulfone, fenthion oxon sulfoxide, fenthion sulfone, fenthion sulfoxide, malathion, malathion oxon, naled, phosmet, phosmet oxon, pirimiphos-methyl, trichlorfon, tetrachlorvinphos, tetrachlorvinphos-4 metabolites, acephate, methamidophos, chlorpyrifos-methyl, fenamiphos, fenamiphos sulfoxide,fenamiphos sulfone, fenamiphos sulfoxide desisopropyl, fenamiphos sulfone desisopropyl, isofenphos, isofenphos oxon, isofenphos desisopropyl, isofenphos oxon desisopropyl, methidathion, ODM, parathion (ethyl), parathion oxon, parathion methyl, parathion methyl oxon, phorate, phorate oxon, phorate oxon sulfone, phorate oxon sulfoxide, phorate sulfone, phorate sulfoxide, profenofos, sulprofos, sulprofos oxon, sulprofos oxon sulfone, sulprofos oxon sulfoxide, sulprofos sulfone, sulprofos sulfoxide, tribufos (DEF).
[12] Cypermethrin, cis-permethrin, trans-permethrin, fenvalerate, zeta-cypermethrin.
[13] Atrazine, simazine, propazine, terbuthylazine
[14] Atrazine, chloro metabolites, metribuzin, metribuzin DADK, metribuzin DA, metribuzin DK, amitraz, amitraz 2,4-DMA metabs., desdiethyl simazine, desethyl simazine, simazine chloro metabs.

Table 28
Pesticide Compound/Production Class Pairs, Sorted by Sampling Priority Score, with Adjusted Number of Analyses
2008 FSIS NRP, Domestic Scheduled Sampling Plan

Compound Class	*Production Class*	*Priority Score*	*Unadjusted Number of Samples*	*First Adjustment*[1]	*Second Adjustment*[2]	*Third Adjustment*[3]	*Final*[4]
CHCs/COPs	Heifers	113.58	300	300	300	300	300
CHCs/COPs	Beef cows	28.05	300	300	300	300	300
CHCs/COPs	Dairy cows	22.21	300	300	300	300	300
CHCs/COPs	Sows	16.13	300	230	230	230	230
CHCs/COPs	Lambs	2.56	300	300	300	300	300
CHCs/COPs	Boars/stags	1.38	300	230	230	230	230
CHCs/COPs	Goats	0.43	300	230	230	230	230
CHCs/COPs	Heavy calves	0.18	300	300	135	135	135
CHCs/COPs	Sheep	0.11	300	230	230	230	230
Totals			**2,700**				**2,255**

[1] Adjustment based on FSIS Historical Testing Information. Sampling levels were decreased based on the rules described in the section, *Design of the Domestic Scheduled Sampling Plan for Pesticides*.
[2] Adjustment for Laboratory Capacity as discussed in the section, *Design of the Domestic Scheduled Sampling Plan for Pesticides*
[3] Adjustment for Production Volume as discussed in the section, *Design of the Domestic Scheduled Sampling Plan for Pesticides*
[4] Final adjustment numbers were obtained following an assessment of laboratory capacity and production volume. In addition, FSIS has suspended scheduled sampling for CHCs/COPs in bob veal, horses and minor species (ducks, ratites, geese, rabbits, and squab) since the 2006 NRP