

Animal Disease Traceability Framework

Official Eartags – Criteria and Options

June 2011

This report summarizes the criteria and options for official identification eartags based on the draft content of the proposed traceability rule and other policy revisions being made to VS memorandums.

Minimum criteria for official identification eartags for individual animals:

- Imprinted with a nationally unique official animal identification number
- U.S. shield¹



Basic characteristics:

- Tamper evident, high retention
- Other characteristics defined through tag specification

Table 1. Official Identification Numbers for Individual Animals

Number	Format of Animal Number	Number Examples
National Uniform Eartagging System (NUES)	9 character - 2 State or Tribe code (see ADT General Standards for listing) - 3 alpha series - 4 digits in a chronological numerical series	23 ELV 4574 PA ELV 4574
	8 character - Swine and other species (except sheep and goats) o 2 numeric State code o 2 alphabetical series o 4 digits in a chronological numerical series	23 AB 4574
	- Sheep and goats (exclusive to scrapie program) o 2 alpha postal abbreviation o 2 alphabetical or alphanumeric series o 4 digits in a chronological numerical series	PA AB 4574 or PA A2 4574
Animal identification number (AIN)	- 15 digits; 840 is the first three digits (numeric code for USA) The use of ICAR manufacture codes and “USA” as the first three characters is permitted in a transition period being defined in the proposed traceability regulation.	840 003 123 456 789
Flock-based number with herd management number	- Flock identification number (maximum of 9 characters prefixed with State’s postal abbreviation) with a unique herd management number (up to 6 characters). Does not include I, O or Q except as part of a postal abbreviation.	MN0456 4275
Location-based number² with herd management number	- Either a premises identification number (PIN) or location identification number (LID) with a unique herd management number PINs have 7 character and LIDs may have 6, 7 or 8 characters and the herd management number may have up to 6 characters.	006ER2A 4275

¹ In the past, States that ordered NUES tags directly from the manufacturer have used the State postal abbreviation in lieu of the U.S. shield and the letters “VS” for Veterinary Services. The following text is being considered for the new traceability regulation; “Beginning 1 year after the effective date of the final rule, all official eartags applied to animals must bear the U.S. shield. The intent is to achieve an easy and consistent means to determine if an animal’s eartag is official per the *Code of Federal Regulations*. Official NUES eartags purchased by USDA will bear the letters “VS” for Veterinary Services. States or Tribes purchasing official NUES eartags will substitute their 2 character alpha code for “VS”.

² Location identifiers in the new traceability framework include both the premises identification number (PIN) issued through the PIN allocator and the Location Identification (LID) numbers administered by the State or Tribe.

Table 2. Summary of USDA Official Eartags (does not include official reactor tags, etc.)

Official Identification Eartags	General Explanation
Official Vaccination Eartag (Brucellosis) (See Table 3.)	<ul style="list-style-type: none"> - Restricted for use with bovine and bison calfhood brucellosis vaccination.
National Uniform Eartagging System (NUES) Tags (See Tables 4 and 5.)	<ul style="list-style-type: none"> - Commonly referred to as “Silver” or “Brite” tags. - Historically been used for disease testing and interstate movement. - VS Memorandum 578.12 revised March 15, 2011 to allow distribution to producers through State and Tribal authorities.
Animal identification number (AIN) “840” Tags (See Table 6.)	<ul style="list-style-type: none"> - Provided directly to producers from manufacturers [or their distributors], or to producers through accredited veterinarian or animal health official. Various sizes, shapes, colors. Visual only or with variable frequency RFID technology. The visual imprinting of the AIN on the tag is the official identifier for AIN tags with radio frequency technology. AIN tags may be imprinted with additional information for program identity, e.g., age, source programs. <p>Note: 840 AINs are also used in microchip implants for equine and other species.</p>
Sheep and goat tags (See Tables 7 and 8.)	<ul style="list-style-type: none"> - Serial and flock identification tags including scrapie flock certification program tags approved through the scrapie program and provided at no cost to producers, markets, veterinarians, etc., through State or AVIC offices. “840” tags are also provided for regulatory work in infected and exposed flocks. Producers may purchase customized flock identification or “840” tags from approved tag manufacturers.
Premises identification number (PIN) tags – Slaughter swine (See Table 9.)	<ul style="list-style-type: none"> - Imprinted with premises identification number. Various tags approved through authorized manufacturers.

Table 3. Official Vaccination Eartag (Brucellosis)

Tag Information	Description
Program use	Brucellosis
Material type	Metal
Color	Orange <i>(APHIS 91-45-013 "Brucellosis Eradication: Uniform Methods and Rules", October 1, 2003)</i>
Species used on	Cattle and bison, applied to the right ear only
Information on the tag	<p>Front of tag</p> <ul style="list-style-type: none"> - 2 State code - "V" followed by 2 alpha characters in series - 4 numbers in a chronological numerical series <p><i>Example: 23VFE0578</i></p>
	<p>Back of tag</p> <ul style="list-style-type: none"> - "VAC" to reflect the brucellosis vaccination and U.S. shield
Additional printing specifications	"T" and "S" is used following the State code to avoid duplication of numbers when the "V" series has been completely used.
Issued/distributed to	State/Federal employees & accredited veterinarians performing official brucellosis vaccination
Distribution records/reporting	<p>Record of tags issued</p> <ul style="list-style-type: none"> • The date, receipt, and the first and last serial number of the tags issued should be recorded. <p>Record of tags applied</p> <ul style="list-style-type: none"> • Permanent record of tags applied. • Record of brucellosis vaccination (VS Forms 4-24 and 4-26)
Other comments	<p>CFR definitions:</p> <p>Official vaccination eartag. An APHIS approved identification eartag conforming to the alphanumeric National Uniform Eartagging System which provides unique identification for each animal. The eartag shall have a "V" followed by 2 letters and 4 numbers. States which require more official vaccination eartags than the number of combinations available in the "V" series of tags shall use a "T" or "S" followed by 2 letters and 4 numbers. Duplicate reissue of official vaccination eartags shall not be made more often than once each 15 years.</p>
How to obtain	State and Federal animal health officials, accredited veterinarians. For use only when bovine/bison calves are being vaccinated against brucellosis.



Table 4. National Uniform Eartagging System – NUES Tag
9-character Format
(Commonly referred to as a “Silver” or “Brite” tag)

Tag Information	Description
Program use	Not a specific disease program tag
Material type	Metal
Color	Silver
Species used on	Cattle most common. Acceptable for other species except sheep/goats.
Information on the tag	<p>Front of tag</p> <ul style="list-style-type: none"> - 2 numeric representing State code, or 2 alpha characters for State postal abbreviation - 3 alpha characters in an alphabetical series (omit “V” and “T” as first alpha in the series) - 4 digits in a chronological series <p>Example: 60 ABC 0502</p>
	<p>Back of tag</p> <ul style="list-style-type: none"> - U.S. shield - “VS” for Veterinary Services for eartags purchased by USDA - When eartags are purchased by States or Tribes, the 2 character State or Tribe alpha code will be substituted for “VS” <p><i>Note: APHIS VS will authorize NUES tag manufacturers to imprint the U.S. Shield on approved NUES tag for when States and Tribes obtain NUES tags direct from a manufacturer.</i></p>
Additional printing specifications	Printing other information is allowed as long as the print size specification of the required information is maintained.
Issued/distributed to	Federal & State animal health officials, accredited veterinarians. Distribution direct to producers from accredited veterinarians or State/Tribe Animal Health Officials is optional and determined by the State or Tribe.
Distribution records/reporting	Tag distribution records maintained by the State or Tribe. In some States, the administration of the NUES tags may be shared with the AVIC office. The Animal Identification Management System may be used for maintaining the distribution records.
Other comments	
How to obtain	Contact the State and Federal animal health officials, Tribal authority, or accredited veterinarians



Table 5. National Uniform Eartagging System – NUES Tag
8-character Format

Tag Information	Description
Program use	Not a specific disease program tag
Material type	Metal
Color	Silver
Species used on	Most commonly used on species with smaller ears (deer/elk, swine, etc., except sheep and goats).
Information on the tag	<p>Front of tag</p> <ul style="list-style-type: none"> - 2 numeric characters representing State code, or 2 alpha characters for State postal abbreviation - 2 alpha characters in an alphabetical series - 4 digits in a chronological series <p>Example: 23BG0575</p>
	<p>Back of tag</p> <ul style="list-style-type: none"> - U.S. shield - “VS” for Veterinary Services for eartags purchased by USDA - When eartags are purchased by States or Tribes, the 2 character State or Tribe alpha code will be substituted for “VS” <p><i>Note: APHIS VS will authorize NUES tag manufacturers to imprint the U.S. Shield on approved NUES tag for when States and Tribes obtain NUES tags direct from a manufacturer.</i></p>
Additional printing specifications	Printing other information is allowed as long as the print size specification of the required information is maintained.
Issued/distributed to	Federal & State animal health officials, accredited veterinarians. Distribution to producers through accredited veterinarians or State/Tribe Animal Health Officials is optional and determined by the State or Tribe according to VS Memorandum 578.12 revised March 15, 2011.
Distribution records/reporting	Tag distribution records maintained by the State or Tribe. In some States, the administration of the NUES tags may be shared with the AVIC office. The Animal Identification Management System may be used for maintaining the distribution records.
Other comments	
How to obtain	Contact the State and Federal animal health officials, Tribal authority , accredited veterinarians



Table 6. Animal Identification Number (AIN) Tags

Tag Information	Description
Program use	Applicable for all official identification requirements
Material type	Plastic: With or without RFID
Color	Various colors
Species used on	Various sizes and shapes. Eartags are approved separately and specify for which species they can be used. Either ear application, but left ear recommended to avoid conflict with placing of brucellosis calfhood vaccination tattoo in right ear of female bovine/bison eligible calves.
Information on the tag For describing 2-piece tags, the designation of “Tag Piece A,” is the piece attached to the inside of the animal’s ear (visual from the front of the animal). “Tag Piece B” is the piece attached to the outside of the animal’s ear (visual from behind the animal).	Tag Piece A: Inside of ear; visible from the front of the animal <ul style="list-style-type: none"> - U.S. shield - 15-digit code with 840 as first 3 digits (numeric code for USA) - Manufacturer’s logo or trademark (printed or impression of) Tag Piece B: Outside the ear; visible from behind the animal <ul style="list-style-type: none"> - U.S. shield - UNLAWFUL TO REMOVE - Imprinting the AIN on the back piece of the tag is optional <p><i>Note: Print specification for swine tags is different due to species anatomical differences in providing functional visibility of information imprinted on swine tags.</i></p>
Additional printing specifications	All tags have minimum print size specifications for required information imprinted on the tags. Other information, most applicable to the panel tags, may be imprinted on the tag if it does not reduce the readability of the required information. <p>Tags with RFID must have all 15 digits of the AIN printed on the tag pieces that contain the transponder.</p>
Issued/distributed to	USDA approves all AIN devices and allocates AIN only to authorized manufacturers that use the numbers on their approved devices. <p>AIN manufacturers distribute tags through AIN managers with whom they have an agreement and directly to State/Federal animal health officials. AIN manufacturers may be AIN managers.</p>
Distribution records/reporting	The entity (animal health officials or AIN manufacturer or managers) that provides the tag to the producer is responsible for having the distribution records entered/submitted to the Animal Identification Management System (AIMS). Likewise, if the tag is distributed to an AIN distributor, the distribution record is to be submitted to the AIMS. When issued for sheep and goats, the tag record must be administered through the scrapie program tag application of AIMS. <p>A premises identification number (PIN) or Location Identifier (LID) of the farm or ranch is required and is used for reporting the distribution record to the Animal Identification Management System.</p>
Other comments	Tag pairs displaying the same AIN (duplicate AINs) are available for application

	to the same animal only (combination of visual tags or visual and RFID).
How to obtain	AIN managers representing authorized AIN tag manufacturers (contact AIN manufacturers for information on their AIN managers). APHIS has limited inventory of AIN tags available to State and Tribal animal health officials and AVICs for disease program activities.

Figure 1. AIN Tags






AIN Panel Tag (Visual Only)	AIN RF Button Tags	AIN RF Panel Tags
		
Example of "Logo" AIN Tag	Paired AIN Visual/RFID Tag Set	
		

Table 7. Flock Identification Tags

Tag Information	Description
Program use	<ul style="list-style-type: none"> - Scrapie eradication program - Applicable for all official identification needs of sheep or goats; however, tags must be applied in accordance with scrapie program application and recordkeeping requirements.
Material type	Plastic or metal
Color	USDA-provided tags are white or blue (slaughter only). Producers can purchase tags in various colors.
Species used on	Sheep and goats
Information on the tag For describing 2-piece tags, the designation of "Tag Piece A," is the female piece typically attached to the inside of the animal's ear (visual from the front of the animal). "Tag Piece B" is the male piece typically attached to the outside of the animal's ear (visual from behind the animal).	Plastic – Tag Piece A: Inside of ear; visible from the front of the animal <ul style="list-style-type: none"> - U.S. shield - Flock identification number (maximum of 9 characters with first two the State abbreviation) - Unique herd management number (maximum of 6 characters) - Manufacturer's logo or trademark (printed or impression of) Plastic – Tag Piece B: Outside the ear; visible from behind the animal <ul style="list-style-type: none"> - U.S. shield - UNLAWFUL TO REMOVE - May include the flock identification number (maximum of 9 characters with first two the State abbreviation) and/or unique herd management number
	Metal single piece – Front of tag <ul style="list-style-type: none"> - Flock identification number (maximum of 8 characters with first two the State abbreviation) Metal single piece – Back of tag <ul style="list-style-type: none"> - U.S. shield - Unique herd management number up to 6 digits in a chronological series Example: PA0575 4567
Additional printing specifications	May include customized printing in addition to the required printing on producer purchased tags. May include "SFCP" (Scrapie Flock Certification Program) when issued to participating producers.
Issued/distributed to	Producers who own flocks
Distribution records/reporting	Distributed through AIMS directly from approved tag manufacturer to producer
Other comments	Mandatory USDA identification program for sheep and goats. Producers in the voluntary SFCP program may have tags imprinted with SFCP. All sheep over 18 months of age; sexually intact sheep under 18 months of age that are sold for breeding or exhibition; sheep sold unrestricted, sheep not in slaughter channels; and sheep that have lambed or are pregnant. Sexually intact goats not in slaughter channels of any age that do not meet the requirements to be considered low risk commercial goats, such as those that are registered, sold for commercial milk production, sold or used for exhibition or commingled with sheep.

How to obtain

Producers order tags through AVIC or State office or purchase directly from approved tag manufacturers.

Flock Identification Tags



XX represents State postal code.

Table 8. Scrapie Program Serial Tags

Tag Information	Description
Program use	-Scrapie program - Applicable for all official identification needs of sheep or goats; however, tags must be applied in accordance with scrapie program application and recordkeeping requirements.
Material type	Plastic or metal
Color	White for sheep and goats eligible to move as breeding animals and blue for “slaughter only” animals
Species used on	Sheep and goats
Information on the tag For describing 2-piece tags, the designation of “Tag Piece A,” is the female piece typically attached to the inside of the animal’s ear (visual from the front of the animal). “Tag Piece B” is the male piece typically attached to the outside of the animal’s ear (visual from behind the animal).	Tag Piece A: Inside of ear; visible from the front of the animal <ul style="list-style-type: none"> - U.S. shield - 8 characters - State postal abbreviation followed by a letter and number or a number and a letter, then 4 numbers (Examples: PAA12345 or PA1A2345) - Manufacturer’s logo or trademark (printed or impression of) Tag Piece B: Outside the ear; visible from behind the animal <ul style="list-style-type: none"> - U.S. shield - UNLAWFUL TO REMOVE Metal single piece – Front of tag <ul style="list-style-type: none"> - 8 characters - State postal abbreviation followed by two letters and 4 numbers (Example: PABG0575) Metal single piece – Back of tag <ul style="list-style-type: none"> - State postal abbreviation and U.S. shield Metal – inside tag, tag company name
Additional printing specifications	Blue tags are printed with “SLAUGHTER ONLY,” “MEAT ONLY,” or “MEAT” on the back or male part.
Issued/distributed to	Markets, dealers, veterinarians, feedlot operators and others who do not own flocks
Distribution records/reporting	Distributed through AIMS
Other comments	Mandatory USDA identification program for sheep and goats. All sheep over 18 months of age; sexually intact sheep under 18 months of age that are sold for breeding or exhibition; sheep sold unrestricted, sheep not in slaughter channels; and sheep that have lambed or are pregnant. Sexually intact goats not in slaughter channels of any age that do not meet the requirements to be considered low risk commercial goats, such as those that are registered, sold for commercial milk production, sold or used for exhibition, or commingled with sheep.
How to obtain	Producers order tags through AVIC or State office.

Scrapie Program Serial Tags



Table 9. Premises Identification Number (PIN) Tag for Slaughter Swine

Tag Information	Description
Program use	Swine
Material type	Plastic
Color	Industry has recommended and is using pink.
Species used on	Slaughter swine
Information on the tag For describing 2-piece tags, the designation of “Tag Piece A,” is the piece attached to the inside of the animal’s ear. “Tag Piece B” is the piece attached to the outside of the animal’s ear.	Tag Piece A: <ul style="list-style-type: none"> - U.S. shield - UNLAWFUL TO REMOVE
	Tag Piece B: <ul style="list-style-type: none"> - State postal abbreviation or Tribe 2 character alpha code ¹ - PIN - U.S. shield - UNLAWFUL TO REMOVE - Manufacturer’s logo or trademark (printed or impression of) - Barcode of corresponding PIN on the reverse side.
Additional printing specifications	All tags have minimum print size specifications for required information imprinted on the tags. Other information may be imprinted on the tag if it does not reduce the readability of the required information. The herd management number is optional.
Issued/distributed to	Swine producers
Distribution records/reporting	Manufacturers report distribution of tags by product code to APHIS VS.
Other comments	If a PIN tag includes a unique within-herd management number that is imprinted by the manufacturer to ensure its permanency, the tag would also qualify as an official eartag for interstate movement of individual animals.
How to obtain	Producers may obtain direct from authorized manufacturers.



Tag Piece B ²
(Back of ear)



Inside of Tag Piece B ²
(Not in View while tags is on the pig)



Tag Piece B ³
(Inside of ear)

¹ State postal abbreviation imprinted on PIN tags shipped from manufacturer after August 1, 2009. Since Tribes do not have postal abbreviations, APHIS will reserve a 2 character alpha code upon request.

² The piece attached to the outside of the animal’s ear

³ The piece attached to the inside of the animal’s ear

Table 10. State and Tribe Codes

Sort by Name			Sort by Numeric Code		
Alabama	AL	64	Maine	ME	11
Alaska	AK	96	New Hampshire	NH	12
American Samoa	AS	99	Vermont	VT	13
Arizona	AZ	86	Massachusetts	MA	14
Arkansas	AR	71	Rhode Island	RI	15
California	CA	93	Connecticut	CT	16
Colorado	CO	84	New York	NY	21
Commonwealth of the N. Marianas	MP	98	New Jersey	NJ	22
Connecticut	CT	16	Pennsylvania	PA	23
Delaware	DE	50	Ohio	OH	31
Florida	FL	58	Indiana	IN	32
Georgia	GA	57	Illinois	IL	33
Guam	GU	97	Michigan	MI	34
Hawaii	HI	95	Wisconsin	WI	35
Hualapai Tribe	HT	78	Minnesota	MN	41
Idaho	ID	82	Iowa	IA	42
Illinois	IL	33	Missouri	MO	43
Indiana	IN	32	North Dakota	ND	45
Iowa	IA	42	South Dakota	SD	46
Kansas	KS	48	Nebraska	NE	47
Kentucky	KY	61	Kansas	KS	48
Louisiana	LA	72	Delaware	DE	50
Maine	ME	11	Maryland	MD	51
Maryland	MD	51	Virginia	VA	52
Massachusetts	MA	14	West Virginia	WV	54
Michigan	MI	34	North Carolina	NC	55
Minnesota	MN	41	South Carolina	SC	56
Mississippi	MS	65	Georgia	GA	57
Missouri	MO	43	Florida	FL	58
Montana	MT	81	Virgin Islands (U.S.)	VI	59
Navajo Nation	NN	77	Kentucky	KY	61
Nebraska	NE	47	Tennessee	TN	63
Nevada	NV	88	Alabama	AL	64
New Hampshire	NH	12	Mississippi	MS	65
New Jersey	NJ	22	Arkansas	AR	71
New Mexico	NM	85	Louisiana	LA	72
New York	NY	21	Oklahoma	OK	73
North Carolina	NC	55	Texas	TX	74
North Dakota	ND	45	Navajo Nation	NN	77
Ohio	OH	31	Hualapai Tribe	HT	78
Oklahoma	OK	73	Montana	MT	81
Oregon	OR	92	Idaho	ID	82
Pennsylvania	PA	23	Colorado	CO	84
Puerto Rico	PR	94	New Mexico	NM	85
Rhode Island	RI	15	Arizona	AZ	86
South Carolina	SC	56	Utah	UT	87
South Dakota	SD	46	Nevada	NV	88
Tennessee	TN	63	Washington	WA	91
Texas	TX	74	Oregon	OR	92
Utah	UT	87	California	CA	93
Vermont	VT	13	Puerto Rico	PR	94
Virgin Islands (U.S.)	VI	59	Hawaii	HI	95
Virginia	VA	52	Alaska	AK	96
Washington	WA	91	Guam	GU	97
West Virginia	WV	54	Commonwealth of the N. Marianas	MP	98
Wisconsin	WI	35	American Samoa	AS	99