UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

APPENDIX G
EBT Detail Transactions File Specifications

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G.1. Compressed Files containing submission files

1. File format: ZIP
2. ASCII Encoded
3. File Naming Standards:

<Processor Site Name>_<YYYY><MM><Submission Sequence Number>[Optional Replacement Indicator].ZIP

<Processor Site Name> Processor Site sending submissions with spaces replaced by hyphens (i.e., XYZ-Corp)

NOTE: <Processor Site Name> used here should match Header/Trailer value

<YYYY>	Four digit year
<MM>	Two Digit Month with leading zeroes (01 – 12)
<Submission Sequence Number>	See next section for values.
[Optional Replacement Indicator]	"Rn" when included indicates file is a replacement and includes a replacement sequence number (starting at one (1)) for the submission file already provided.

Examples:

XYZ-Corp_20060901.ZIP
ABC-Corp-GA_20060900.ZIP
XYZ-Corp_20060901R1.ZIP Example replacement compressed file

NOTE: "Replacement" Compressed Files contain only those submission files being replaced. When submissions are provided daily, each "day" of replacement compressed files must be provided separately.

Example:

XYZ-Corp_20060901R1.ZIP – would contain all submissions for 9/1/2006 being replaced.
XYZ-Corp_20060902R2.ZIP – would contain all submissions for 9/2/2006 being replaced.

File contents will be all submissions for the recipient state managed by site.

Example: ABC-Corp-GA_20060901.ZIP would contain the following:

DC20060901.DAT
MD20060901.DAT
VA20060901.DAT

G.2. Submission Files Enclosed in Compressed File

1. File Format: Fixed Record Length; Fixed Column width; records Delimited by Carriage Return (Hex "0D") Linefeed (Hex "0A") characters
2. ASCII Encoded
3. File Naming Standards:

<Recipient State><YYYY><MM><Submission Sequence Number>[Optional Replacement Indicator].DAT

<Recipient State>	State Abbreviation of State, Territory, or District of Columbia
<YYYY>	Four digit year
<MM>	Two digit month with leading zeroes (01 – 12)
<Submission Sequence Number>	See next section for values
[Optional Replacement Indicator]	"Rn" when included indicates file is a replacement and includes a replacement sequence number (starting at one (1)) for the submission file already provided.

Examples:

MD20060901.DAT
GU20060900.DAT
VA20060901R1.DAT Example replacement submission file

Sequence Number	
00	Monthly Submissions
01 – 31	Daily Submissions

Submission File Record Sequence

Header Record
Detail Transaction Record 1
Detail Transaction Record 2
Detail Transaction Record 3
:
:
:
Detail Transaction Record n
Trailer Record

Table G-1 - EBT Submission Header and Trailer Record Specification

Description	Starting Position	Length	Type	Comments	Update Status
Recipient State	1	2	Alpha	Alphabetic Abbreviation (i.e., VA) of state providing benefits to enclosed recipients	No Change
Redemption Year	3	4	Numeric	Four digit year (i.e., 2006) representing year in which enclosed transactions were conducted	Increased from 2 digits
Redemption Month	7	2	Numeric	Two digit month Values: 01 – 12 representing the month in which enclosed transactions were conducted	No Change
Sequence Number	9	2	Numeric	Two digit sequence number (See Table 1) of submission	New
Number of transactions included	11	9	Numeric	Number of transaction records included (does not include header/trailer records in count). "Header Record" may contain a value of zero, but Trailer Record MUST contain valid count	No Change
EBT Vendor Site Name	20	30	Alphanumeric	Name of submitting vendor site with spaces replaced by hyphens (not State Agency) [i.e., JP-Morgan_Site-1, eFunds-Site-2, etc.]	No Change
File generation date	50	8	Date	Date file generated in CCYYMMDD format	No Change
Period Start Date	58	8	Date	Starting date for enclosed transactions in CCYYMMDD format	No Change
Period Start Time	66	6	Time	Starting time for enclosed transactions in HHMMSS 24 hour format (GMT)	New
Period End Date	72	8	Date	Ending Date for enclosed transactions in CCYYMMDD format	No Change
Period End Time	80	6	Time	Ending time for enclosed transactions in HHMMSS 24 hour format (GMT)	New
Site Time Zone Offset	86	2	Numeric	Number of hours that processing site is offset from GMT (i.e., EST value is 05)	New
Site Daylight Savings Time Indicator	88	1	Numeric	0 – Operating on Standard Time 1 – Operating on Daylight Savings time	New
Record Delimiter	89	2	CrLf	Carriage Return ASCII Hex Value 0D Linefeed ASCII Hex Value 0A	No Change

Sequence Numbers

00	Monthly Submissions
01 – 31	Day of Submission (i.e., 15 for 15th of month)

G.3. Header/Trailer Record Contextual Requirements

1. Header Record must be first record in submission file.

2. Trailer Record must be last record in submission file.

3. Trailer Record must have the number of transactions enclosed in submission file (count does not include number of Header/Trailer Records).

4. Period Ending Date and Time must be later than Period Starting Date and Time and all transactions included in submission must have Date and Time values that fall between the start and end values provided on Header/Trailer record.

5. On Daily Submissions, Time between Period Start Date and Time and Period Ending Date and Time must constitute no more than 24 hours.

6. While the specific value of "Name of Submitting Vendor" column is not critical it must allow specific Point of Contact to be identified so that automated notifications can be implemented.

Examples:

a. For vendors with single host site, a single value must be used for all submission files submitted by that vendor. (i.e., "XYZ-Corp").

b. For vendors with multiple host sites or with points of contact responsible for a subset of states serviced by vendor company, a unique designator must be used.

ABC Corp Site	State(s) Responsible for	Example Value for column
Atlanta, GA	DC, MD, VA	ABC-Corp-GA
Boston, MA	NY, NH, MA, ME	ABC-Corp-MA

Example (Daily Submission Header):

```
----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8----+----9
DC20060204000000000XYZ-Corp                    20060205200602040000002006020423595905 1
```

Description	Value
Recipient State	DC
Redemption Year	2006
Redemption Month	02
Sequence Number	04
Number of transactions included	000000000
Site Name of EBT Vendor	XYZ Corp
File generation date	2006 02 05
Period Start Date	2006 02 04
Period Start Time	00 00 00

Description	Value
Period End Date	2006 02 04
Period End Time	23 59 59
Site Time Zone Offset	05 (ET)
Site Daylight Savings Time	1
Record Delimiter	Hex 0D0A

NOTE: The symbol "□" is used as a representation for the non-printable carriage return and linefeed characters used to delimit each record.

Example (Monthly Submission Header):

```
----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8----+----9
DC20060200000000000XYZ-Corp                    20060301200602010000002006022823595905 1□□
```

Description	Value
Recipient State	DC
Redemption Year	2006
Redemption Month	02
Sequence Number	00
Number of transactions included	000000000
Site Name of EBT Vendor	XYZ Corp
File generation date	2006 03 01
Period Start Date	2006 02 01
Period Start Time	00 00 00
Period End Date	2006 02 28
Period End Time	23 59 59
Site Time Zone Offset	05 (ET)
Site Daylight Savings Time	1
Record Delimiter	Hex 0D0A

Table G-2 - EBT Transaction Record Specification

Description	Starting Position	Length	Type	Comments	Update Status
FNS Retailer ID Number	1	7	Numeric	Valid FNS Number identifying retailer	No Change
Retailer State Location	8	2	Alpha	State Abbreviation for retailer location	No Change
POS Terminal Id	10	8	Alphanumeric	ID (unique within retailer) of POS Terminal with trailing blanks	No Change
House Account Number	18	14	Alphanumeric	Account number that identifies household of card bearing recipient with trailing blanks	No Change
Card Account Number	32	19	Alphanumeric	Account Number on card stock used in transaction with trailing blanks	No Change
Transaction Date	51	8	Date	Date Transaction Completed in CCYYMMDD format (based on GMT)	Changed to GMT
Transaction Time	59	6	Time	Time in HHMMSS 24 hour format (in GMT)	Changed to GMT
Transaction Amount	65	6	Numeric	Transaction Amount in 9999V99 (assumed 2 decimal places) [i.e., 123456 to represent $1234.56]	No Change
Transaction Sign	71	1	+ or -	+ to designate credit to recipient - to designate debit to recipient Ignored for Balance Inquiry type transactions	No Change
EBT Program	72	2	Numeric	00 – Food Stamp Program	No Change
Transaction Type	74	2	Numeric	10 – Purchase 20 – Refund/Return 30 – Void last transaction 40 – Balance Inquiry	No Change
Transaction Method	76	1	Numeric	0 – Electronic Swipe 1 – Manual/Key Entered 2 – Paper Voucher (Settled) 3 – RFID/Pay by Touch 4 – Paper Voucher (Authorization)	Method Changes
Store & Forward Indicator	77	1	Numeric	0 – Not a store & forward 1 – Denied 2 – Partially Approved 3 – Fully Approved	New
Response Code	78	3	Alphanumeric	Indicator for accepted or rejected transactions (see Table 2 for valid entries)	Enhanced for ANSI X9.58 - 2002
Available Balance prior to transaction	81	6	Numeric	Balance Amount in 9999V99 (assumed 2 decimal places) [i.e., 123456 to represent $1234.56]	No Change

Description	Starting Position	Length	Type	Comments	Update Status
Filler	87	2	N/A	Contents Ignored	Filler Reduced
Record Delimiter	89	2	CrLf	Carriage Return ASCII Value 0D Linefeed ASCII Value 0A	No Change

Table G-3 - Valid Response Code Combinations

New Response Code	ANSI Code[1] (bit 039)	Response Description	Old Response Code Value
000	00	Accepted/Approved	000
151	51	Insufficient funds	110
161	61	Return exceeds benefit authorization	
155	55	Invalid PIN/PIN not selected	120
175	75	PIN Tries Exceeded	121
102	02	Bad FNS Status for Merchant	130
103	03	Invalid Merchant	
141	41	Lost Card	140
143	43	Lost/Stolen Card	
141	42	No Account	141
152	52	No Account on File	
154	54	Expired Card	142
156	56	Card Number not found	150
159	59	Fraud (Return Card)	151
162	62	Restricted Card	152
105	05	General Denial	160
1A1	A1	Invalid Voucher ID/Invalid Authorization Number	180
1A2	A2	Approval Code does not match voice approval code	
1A3	A3	Amount is greater than voice approval code	
1A4	A4	Original voice authorization not found for card holder	
1A5	A5	FNS number does not match original voice authorization	
1A6	A6	Item already cleared	
106	06	Invalid Transaction	
112	12	Invalid Transaction Type	
113	13	Invalid Amount Field	
114	14	Invalid Card Number	
119	19	Re-enter Transaction	180
123	23	Unacceptable Transaction Fee	
130	30	Format Error	
131	31	Card has Invalid ISO Prefix	
140	40	Function Not Available	
157	57	Transaction not permitted to cardholder	
158	58	Invalid Transaction	
176	76	Key Synchronization Error	
180	80	Voucher Expired	
186	86	Invalid Security Code	

[1] From the "ANSI X9.58-2002 Financial transaction messages – Electronic Benefit Transfer (EBT) – Food Stamps"

New Response Code	ANSI Code[1] (bit 039)	Response Description	Old Response Code Value
192	92	Transaction destination cannot be found for routing	
190	90	Processor not logged on	190
191	91	Authorizer Not Available	190
196	96	System malfunction	
1S5	S5	Pin not selected	

G.4. Transaction Record Contextual Requirements

1. FNS Number and Retailer State Location must match FNS STARS system provided values.

2. Transaction Date and Time must be between Header/Trailer Record Period Start Date and Time and Period Ending Date and Time.

3. “Accepted/Approved” (Response Code = “000”) Purchase (Transaction Type = “10”) transactions must have Amount value no more than Available Prior Balance value.

4. “Accepted/Approved” (Response Code = “000”) Balance Inquiry (Transaction Type = “40”) must have Available Prior Balance Value and Amount must be zero ($0.00).

5. Store & Forward transactions with "Denied" Indicator ("1") must have appropriate Response Code (i.e., "151" [Insufficient Funds]).

6. Store & Forward transactions with "Partially Approved" Indicator ("2") must have the amount approved in the Amount field.

7. “Accepted/Approved” (Response Code = “000”) Void Last Transaction (Transaction Type = “30”) must immediately follow “Accepted/Approved” (Response Code = “000”) Purchase (Transaction Type = “10”) or Refund (Transaction Type = “20”) being reversed and the following encoding must be followed:
   a. FNS Number values must match.
   b. Household Account values must match.
   c. Card Number values must match.
   d. POS Terminal ID values must match.
   e. Absolute value of Amount values must match.
   f. Balance Prior to Transaction must be consistent with card holder's activity.

Example Purchase reversed by Void Last:

```
----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8----+----9
:
1234567VA34263601YYYYYYYYYYYY  XXXXXXXXXXXX1069   20060206181415010280-001000000028142  □□
1234567VA34263601YYYYYYYYYYYY  XXXXXXXXXXXX1069   20060206183751010280+003000000017862  □□
:
```

Table G-4 - Transaction Record Values

Description	Record 1 Value	Record 2 Value
FNS Retailer ID Number	1234567	1234567
Retailer State Location	VA	VA
POS Terminal Id	34263601	34263601
House Account Number	YYYYYYYYYYYY	YYYYYYYYYYYY
Card Account Number	XXXXXXXXXXXX1069	XXXXXXXXXXXX1069
Transaction Date	20060206 (2006-02-06)	20060206 (2006-02-06)
Transaction Time	181415 (18:14:15)	183751 (18:37:51)
Transaction Amount	010280 ($102.80)	010280 ($102.80)
Transaction Sign	-	+
EBT Program	00	00
Transaction Type	10 (Purchase)	30 (Void Last)
Transaction Method	0 (Electronic)	0 (Electronic)
Store and Forward Indicator	0 (Not store and Forward)	0 (Not store and Forward)
Response Code	000 (Accepted)	000 (Accepted)
Available Balance prior to transaction	028142 ($281.42)	017862 ($178.62)
Filler	blank	blank
Record Delimiter	0D0A	0D0A

8. "Rejected" (Response Code between "102" and "1S5") where all authentication credentials have been met (authorized retailer, valid card number and PIN, etc.) must have Transaction Amount and Available Balance Prior to Transaction values encoded.

   Example (Rejected due to Insufficient Funds):

```
----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8----+----9
:
1234567VA34263601YYYYYYYYYYYY  XXXXXXXXXXXX1069   20060206181415028242-001000151028142  □□
:
```

Table G-5 – Rejected Record Values

Description	Value
FNS Retailer ID Number	1234567
Retailer State Location	VA
POS Terminal Id	34263601
House Account Number	YYYYYYYYYYYY
Card Account Number	XXXXXXXXXXXX1069
Transaction Date	20060206 (2006-02-06)
Transaction Time	181415 (18:14:15)
Transaction Amount	028242 ($282.42)
Transaction Sign	-
EBT Program	00
Transaction Type	10 (Purchase)
Transaction Method	0 (Electronic)
Store and Forward Indicator	0 (Not store and Forward)

Description	Value
Response Code	151 (Rejected – NSF)
Available Balance prior to transaction	028142 ($281.42)
Filler	blank
Record Delimiter	0D0A

G.4.1 Sample Submission Contents

Record Type	Record Number	----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8----+----9
Header	1	DC20060204000000000XYZ-Corp 20060205200602040000002006020423595905 1
Detail	2	1234567VA34263601YYYYYYYYYYY XXXXXXXXXXXX1069 20060204181415010280-001000000028142 1
Detail	3	1234567VA34263601YYYYYYYYYYY XXXXXXXXXXXX1069 20060204183751010280+003000000017862 1
	:	
	:	
Detail	785	1234568DC34263601ZZZZZZZZZZZZ XXXXXXXXXXXX1092 20060204181415028242-001000151028142 1
Trailer	786	DC20060204000000784XYZ-Corp 20060205200602040000002006020423595905 1