Supporting Statement – Part B

## MILK AND MILK PRODUCTS

OMB No. 0535-0020

## B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved during the last collection.

There are approximately 72,000 dairy operations in the United States. Monthly and quarterly <u>milk production</u> surveys consist of samples selected from each State's list of dairy producers. The list source in many States is maintained through the surveys and use of criteria (list frame development) letters. Supplemental list sources include the Brucellosis Ring Test List, Dairy Herd Improvement Association test records, and Agricultural Marketing Association regulated milk sources. Although the sample is randomly selected from the list of milk producers, the survey is a non-probability mail survey with phone follow - up to reach target responses. Mail returns from farmers are stratified by size of herd for summarization. Except for the large operators, the sample is rotated annually to reduce respondent burden.

The universe for <u>manufactured dairy products</u> is composed of producers, distributors, handlers, and processors of manufactured dairy products. There are about 1,100 plants currently in the universe. Approximately 100 of the 1,100 plants are required to respond to the monthly surveys (Public Law No. 106-532). The list is maintained using regulatory lists, license lists, trade association memberships, and information obtained during field travel. All plants in the universe are contacted at least once during the year. Those plants that report all of their manufactured products monthly are not required to report again on the annual survey. This survey is followed closely by the industry and the overall response rate exceeds 85 percent.

The <u>dairy product prices</u> universe consists of plants which produce over 1 million pounds of cheddar cheese, butter, dry whey, and/or nonfat dry milk. There are 76 cheddar cheese plants, 35 butter plants, 34 dry whey plants, and 42 nonfat dry milk plants (the sum of plants exceeds the Annual Validation total {160} due to some plants producing more than one type of product) currently in the universe. The weekly surveys are mandatory and response rate is 100 percent.

Milk and Milk Products Response Rates for 2007					
Survey	Sample Size	Freq.	Total Contacts	Total Responses	Response Rate
				Volu	ıntary Surveys
Milk Production					
Monthly States					
Jan	11,000	1	11,000	8,995	81.8%
Feb - Dec	4,500	11	49,500	39,996	80.8%
Quarterly States					
Jan	5,000	1	5,000	4,110	82.2%
Apr, Jul, Oct	3,200	3	9,600	7,750	80.7%
Manufactured Dairy Products	2/				
Monthly	800	12	9,600	7,220	75.2%
Annual	200	1	200	170	85.0%
Voluntary Subtotal	24,700		84,900	68,241	80.4%
Frequency			3.43725		
	Mar	ndatory S	urveys		
Manufactured Dairy Products	3/				
Monthly	100	12	1,200	1,200	100.0%
Dairy Product Prices					
Annual Validation	160	1	160	160	100.0%
Cheddar Cheese	30	52	1560	1560	100.0%
Butter	21	52	1092	1092	100.0%
Dry Whey	22	52	1144	1144	100.0%
Nonfat Dry Milk	38	52	1976	1976	100.0%
Survey Follow-up Materials 4/					
Verification (2%)	7	52	364	364	100.0%
Change Notification	370	.2	74	74	100.0%
Mandatory Subtota	370		7,570	7,570	100.0%
Frequency			20.45946		
Overall Tota	25,070		92,470	75,811	82.0%

 <sup>2/</sup> All products except dry whey and NF dry milk.
<sup>3/</sup> Dry whey and NF dry milk only.
<sup>4/</sup> These materials are sent to respondents in mandatory category–they are not additional respondents and are not included in sample size totals.

2. Describe the procedures for the collection of information including:

- statistical methodology for stratification and sample selection,
- estimation procedure, •
- degree of accuracy needed for the purpose described in the justification, •
- unusual problems requiring specialized sampling procedures •

<u>Milk production</u> surveys are conducted monthly in the 23 most important dairy States and quarterly (January 1, April 1, July 1, and October 1) in the 27 remaining States. Milk production questionnaires are mailed to the entire sample. States conduct a non-response follow-up to ensure that sample size is adequate in each stratum. In most states four strata are used for summarization.

<u>Manufactured dairy products</u> reports are received from all plants in States with only a few plants. In States with a large number of plants, all plants in the highest, "large plant," stratum are enumerated and a random sample is drawn from the smaller-sized strata.

<u>Manufactured dairy product price's</u> data are collected weekly by facsimile and web; followup telephone interviews are conducted for non-respondents. Data collection for cheddar cheese, butter, dry whey, and nonfat dry milk prices are limited to firms which are expected to produce 1,00,000 pounds or more of one of the targeted commodities. All operations producing more than one million pounds are selected to participate in this survey will be contacted once a year to complete an Annual Validation Survey. This survey serves three purposes: it is used as tool to determine which operations will need to complete the weekly questionnaires; it serves as a training tool (to help ensure that the respondent completes the weekly forms in a consistent and accurate manner); and it is used to document that the respondent understood the proper and accurate way to complete the weekly questionnaires.

3. Describe methods to maximize response rates and to deal with issues of nonresponse. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Indications from the <u>milk production</u> survey when read on time series charts are providing reliable indications. The 23 major dairy States account for approximately 92 percent of the nation's milk production.

Monthly estimates of <u>manufactured dairy products</u> are based upon returns from 70 percent of the dairy plants that account for 75-90 percent (depending on the product) of major manufactured dairy products.

Weekly estimates of <u>dairy products prices</u> are based on firms that produce approximately 80 percent of the cheddar cheese, butter, dry whey, and nonfat dry milk.

## 4. Describe any tests of procedures or methods to be undertaken.

There are no tests planned for these long-running surveys.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Survey design and methodology are determined by the Statistical Methods Branch, Statistics Division; Branch Chief is Dave Aune, (202)720-4008.

Sample sizes for each State are determined by the Sampling Branch, Census and Survey Division; Branch Chief is William Iwig, (202)720-3895.

Data collection is carried out by NASS State Statistical Offices; Deputy Administrator for Field Operations is Marshall Dantzler, (202)720-3638.

The NASS commodity statisticians in the Statistics Division, Livestock Branch are: Joe Gaynor (202) 690-2168 for Manufactured Dairy Product Prices; Jim Collom (202) 690-3236 for Manufactured Dairy Products; and Mike Miller (202) 720-3278 for Monthly Milk Production and Milk Prices. The Livestock Branch Chief is Dan Kerestes (202)720-3570. Commodity statisticians are responsible for coordination of sampling, questionnaires, data collection, data processing, State Field Office support, national and regional summaries, analysis, presentations to the Agricultural Statistics Board for final estimates, publication, and the Estimation Manual.

September, 2008