

## Results of Survey Non-Response Validation Exercise

Follow-up interviews with survey non-respondents were conducted to identify whether a potential bias in the survey response rate exists. This effort involved contacting by telephone a sample of survey non-respondents for those industries that exhibited relatively low response rates, and asking the following questions about the facility's oil storage operations:

- Whether the facility stores oil in quantities above the capacity thresholds used in the survey;
- The estimated total amount of oil delivered or produced at the facility;
- Whether the facility has a plan for preventing oil spills; and
- Whether the facility has experienced an oil spill in the past year.

**Exhibit A** presents the results of the follow-up telephone calls to non-respondents according to the four questions asked. To determine whether there appears to be a reporting bias among non-respondents, these results were compared to the responses obtained from the survey. **Exhibit B** presents the results of this comparison. As the comparison shows, the characteristics of facilities contacted during the follow-up telephone calls are similar to that provided in the survey. For most criteria, survey non-respondents answered the follow-up questions in roughly the same proportion as the survey respondents (e.g., the ratio of facilities that meet the storage capacity thresholds in the survey and the follow-up telephone calls are consistent).

One difference between the survey and the follow-up telephone calls involves the amount of oil delivered or produced at a facility, which is less than that reported in the survey for all but two industry strata. However, given the relatively small number of facilities contacted during the follow-up telephone calls, a single facility may affect this estimate significantly. For example, in the Oil Production industry stratum (SIC 131), one follow-up contact reported annual production at 12.6 million gallons per year, which significantly increases the average annual amount of oil delivered or produced per facility. Therefore, this variation may not be sufficient to demonstrate non-respondent bias.

The only other notable difference appears to be in the Colleges industry stratum (SIC 822), where the number of facilities that meet the storage capacity thresholds is larger in the follow-up telephone calls than in the survey. This difference, however, may be explained by the fact that the methodology for validating survey non-response was not statistically derived, which may result in a wide margin for error in the follow-up sample. Moreover, the Colleges industry stratum represents only a small fraction of the total universe of regulated facilities and typically is combined with other consumption industries when performing analyses of the survey results.

Therefore, based on these results, the survey results are believed to be unbiased according to the criteria established for the follow-up telephone calls (e.g., storage capacity, quantity of oil delivered, existence of a prevention plan, and occurrence of a spill).

**Exhibit A:  
RESULTS OF NON-RESPONDENT VALIDATION CALLS**

Industry (SIC) <sup>1</sup>	Target Sample Size	No. of Facilities Reached	No. of Exempt Facilities	No. of Non-Exempt Facilities	Avg. Quantity Delivered/Produced <sup>2</sup>	No. of Facilities With Written Plan	No. of Spills Reported
Farms (01/02)	50	39	37	2	9,000	0	0
Coal Mining/Nonmetallic Mineral Mining (12/14)	10	10	5	5	154,400	4	0
Oil Production (131)	10	13	6	7	2,400,511	6	2
Contract Construction (16)	10	10	10	0	--	--	--
Food & Kindred Products (20)	10	10	10	0	--	--	--
Other Manufacturing (20-39)	10	10	10	0	--	--	--
Railroad Fueling (401)	10	10	8	2	600,000	2	0
Bus Trans. (411/413/414/417)	10	10	10	0	--	--	--
Trucking & Warehouse/Water Transp. Services (42/449)	10	10	10	0	--	--	--
Air Transportation (458)	10	10	9	1	NA	1	0
Pet. Bulk Stations/Terminals (5171)	10	10	3	7	1,409,000	4	0
Gasoline Service Stations (554)	10	10	10	0	--	--	--
Vehicle Rental (751)	10	10	10	0	--	--	--
Hospitals (806)	10	10	8	2	NA	2	0
Education (821)	10	10	9	1	NA	0	0
Colleges (822)	10	11	5	6	513,250	4	1
Military Installations (97)	10	10	8	2	1,290,500	2	0

<sup>1</sup> The following industries were not included in the follow-up telephone survey due to high response rates: Chemical & Allied Products (SIC 28), Petroleum Refining (SIC 29), Primary Metal Industries (SIC 33), Pipelines (SIC 46), Electric Utility Plants (SIC 491), and Fuel Oil Dealers (SIC 5983).

<sup>2</sup> The average amount of oil delivered or produced reflects an annual average for those facilities that were able to provide this information.

**NA** Not available (i.e., the facility contact did not know the information requested).

**Exhibit B:  
COMPARISON OF FACILITY RESPONSES TO THE FOLLOW-UP AND ORIGINAL SURVEYS**

Industry <sup>1</sup>	Meets Storage Capacity (%)		Avg. Quantity Oil Delivered		Has Prevention Plan (%)		Spill Within Year (%)	
	Survey	Follow-Up	Survey	Follow-Up	Survey	Follow-Up	Survey	Follow-Up
Farms (01/02)	0.11	0.05	30,284	9,000	0.03	0.00	0.006	0.00
Coal Mining/Nonmet. Mineral Mining (12/14)	0.47	0.50	114,791	154,400	0.67	0.80	0.056	0.00
Oil Production (131)	0.73	0.54	399,508	2,400,511	0.58	0.86	0.068	0.28
Railroad Fueling (401)	0.30	0.20	6,279,767	600,000	0.83	1.00	0.063	0.00
Air Transportation (458)	0.29	0.10	10,313,768	NA	0.57	1.00	0.103	0.00
Pet. Bulk Stations/Terminals (5171)	0.64	0.70	22,032,986	1,409,000	0.82	0.67	0.055	0.00
Hospitals (806)	0.19	0.20	53,136	NA	0.00	1.00	0.00	0.00
Education (821)	0.14	0.10	49,821	NA	0.09	0.00	0.009	0.00
Colleges (822)	0.26	0.50	827,253	513,250	0.00	0.67	0.20	0.16
Military Installations (97)	0.26	0.20	8,027,693	1,290,500	1.00	1.00	0.417	0.00

<sup>1</sup> The industries provided in this table include only those where one or more facilities were non-exempt based on the follow-up telephone survey.

NA Not available (i.e., the facility contact did not know the information requested).