Instructions Instructions Instructions

PLEASE NOTE: The steps in this section may only be completed prior to the beginning of the model year in which you need to determine purchase requirements.
For example, the data needed for determining how much of the fleet in the 1999 model year is capable of being centrally fueled should have been gathered in the 1998 model year.

Instructions for the 1999 Model Year: All vehicles will be treated the same as if they are centrally fueled. Use the number in **3c** of **Section 1** to answer **4b** of **Section 1**.

There are two methods that may be used to determine if your fleet is capable of being centrally fueled. This section contains worksheets for **Method One**. An outline of **Method Two** is on ***page 2-16.***

The vehicles that will be discussed in this section are those in your fleet that currently are not centrally fueled.

The objective is to take the total number of vehicles in **Step 2-11** of this section (***page 2-14***) and use it to answer **Question 1-4** (***page 1-5***) in **Section 1**. The total number of vehicles in **Step 2-11** is the number of your non-centrally fueled vehicles that are "capable of being centrally fueled".

If you are a covered fleet, this section will result in the calculation of a ratio that will be used as a factor to **reduce purchase requirements** based on the ability or inability to accomodate central refueling for non-centrally fueled vehicles in the fleet.

Non-centrally fueled vehicles will be treated the same as centrally fueled vehicles when determining purchase requirements - unless this section is completed.

Instructions Instructions Instructions

Method One - Worksheet

Defining Your Fleet

_____ **Vehicles that are centrally fueled.** *(Covered)*
Number from **3b** ***(page 1-4)***

_____ **Vehicles that are not centrally fueled.**
Number from **3c** ***(page 1-4)***

Fleet operators must determine how many of the non-centrally fueled vehicles are capable of being centrally fueled.

Step 2-1:
Select a Sample Fleet

If the number of non-centrally fueled vehicles is:
- *20 or less,* you must choose a sample fleet of 5 vehicles.
- *21 or more,* your sample fleet must be 30% of that number.

Your sample fleet size is _____ vehicles.

Sample Fleet Checklist

Sample fleet must be:

✓ Chosen from the fleet of non-centrally fueled vehicles.

✓ Representative of the entire fleet of non-centrally fueled vehicles.

Example Example Example Example

Method One - Worksheet

Defining Your Fleet

14	**Vehicles that are centrally fueled.** *(Covered)* Number from **3b** ***(page 1-4)***
15	**Vehicles that are not centrally fueled.** Number from **3c** ***(page 1-4)***

Fleet operators must determine how many of the non-centrally fueled vehicles are capable of being centrally fueled.

Step 2-1:
Select a Sample Fleet

If the number of non-centrally fueled vehicles is:
- *20 or less,* you must choose a sample fleet of 5 vehicles.
- *21 or more,* your sample fleet must be 30% of that number.

Your sample fleet size is **5** vehicles.

Sample Fleet Checklist

Sample fleet must be:

✓ Chosen from the fleet of non-centrally fueled vehicles.

✓ Representative of the entire fleet of non-centrally fueled vehicles.

Step 2-2:
Choose Sample Weeks

Choose at least 2, but no more than 4, non-consecutive weeks during a 365 day period.

Sample Week Checklist

✓ Representative of the normal travel patterns for the fleet of non-centrally fueled vehicles.

✓ Consists of 7 consecutive days. (Do not record trips on days the vehicles are not in operation if your vehicles do not operate for 7 consecutive days.)

✓ All weeks are within the same 365 day period. *(For Example: April 1, 1998 - March 30, 1999)*

Week One: _____ (date)

Week Two: _____ (date)

Week Three: _____ (date) *optional*

Week Four: _____ (date) *optional*

These are your sample weeks for which travel logs will be kept to record vehicle activity.

Step 2-3:
Determine the Operational Range for the sample vehicles

The **operational range** is the distance a vehicle is able to travel on a round-trip under a single fueling. *(That is, the number of miles on a single tank of fuel.)*

Record the operational range for each vehicle:

Vehicle 1 _____

Vehicle 2 _____

Vehicle 3 _____

Vehicle 4 _____

Vehicle 5 _____

✓ Operational range cannot be less than 50% of the operational range of the fleet.

Use a separate sheet if your sample fleet is more than 5 vehicles.

Step 2-2: Choose Sample Weeks

Choose at least 2, but no more than 4, non-consecutive weeks during a 365 day period.

Sample Week Checklist

✓ Representative of the normal travel patterns for the fleet of non-centrally fueled vehicles.

✓ Consists of 7 consecutive days. (Do not record trips on days the vehicles are not in operation if your vehicles do not operate for 7 consecutive days.)

✓ All weeks are within the same 365 day period. *(For Example: April 1, 1998 - March 30, 1999)*

Week One: **September 13 - 19, 1998** (date)

Week Two: **October 11 - 17, 1998** (date)

Week Three: _____ (date) *optional*

Week Four: _____ (date) *optional*

These are your sample weeks for which travel logs will be kept to record vehicle activity.

Step 2-3: Determine the Operational Range for the sample vehicles

The **operational range** is the distance a vehicle is able to travel on a round-trip under a single fueling. *(That is, the number of miles on a single tank of fuel.)*

Record the operational range for each vehicle:

Vehicle 1 **300 miles**

Vehicle 2 **300 miles**

Vehicle 3 **300 miles**

Vehicle 4 **300 miles**

Vehicle 5 **300 miles**

To simplify the example, a standard 300 mile operational range has been chosen for the sample vehicles.

✓ Operational range cannot be less than 50% of the operational range of the fleet.

Use a separate sheet if your sample fleet is more than 5 vehicles.

Step 2-4:
Keep Travel Logs

The purpose of the travel log is to determine whether the vehicle travel patterns are such that the vehicles *could* be centrally fueled.

Travel Log Checklist

✓ Origination point of each trip. Each time the vehicle leaves the origination point ("Home Base"), it is beginning a new trip.
- *If a fleet **does not** have access to a central fueling facility,* the origination point is the fleet operating facility.
- *If a fleet **does** have access to a central fueling facility,* the origination point is the central fueling facility.

✓ Street address of each destination point before returning to the origination point.

✓ Odometer reading at each destination point.

A blank travel log to record your information is on *page 2-8.* Please make a copy to keep in each of your sample vehicles.

Travel Log Process

1. Record the origination address.
2. Record the destination address.
3. Record the miles traveled to the destination.
4. Record the odometer reading.
5. Record the miles for the total trip (round-trip miles, starting and ending at "home-base").
6. Record the total miles driven for the day (total miles from each trip).
7. Record the capable miles for the day.

Capable Miles are the ***miles that could still be driven using vehicles that are fueled only at a central location.*** These are the total number of miles for the day, not exceeding 50% of the operational range. For example:

- If the operational range is 300 miles, and the total mileage for the day is 55, the Capable Miles are 55.
- If the operational range is 300 miles, and the total mileage for the day is 175, the Capable Miles are 150 *(50% of the operational range.)*

Step 2-5:
Total the Daily Miles

Total the daily miles for the week.
Refer to the sample travel log.

Step 2-6:
Total the Capable Miles

Total the capable miles driven for the week.
Refer to the sample travel log.

Step 2 - 4: Keep Travel Logs

Week:	September 13 - 19
Vehicle (VIN):	Vehicle One
Beginning Odometer:	1058

		Origination	Destination					
Day	**Trip Number**	**Address**	**Address**	**Miles Traveled**	**Odometer**	**Total Trip**	**Total Day**	**Capable Miles**
Monday	**Trip #1**	Station*	House #1	10	1068			
		House #1	House #2	5	1073			
		House #2	Station	15	1088	30	**30**	**30**
Tuesday	**Trip #1**	Station*	House #3	75	1163			
		House #3	Station*	75	1238	150		**150**
	Trip #2	Station*	House #4	25	1263			
		House #4	Station*	25	1288	50	**200**	**50**
Wednesday	**Trip #1**	Station*	House #5	140	1428			
		House #5	House #6	20	1448			
		House #6	Station*	120	1568	280	**280**	**150**
Thursday	**Trip #1**	Station*	House #7	100	1668			
		House #7	Station*	100	1768	200	**200**	**150**
Friday	**Trip #1**	Station*	House #8	15	1783			
		House #8	House #9	35	1818			
		House #9	House #10	40	1858			
		House #10	Station*	30	1888	120	**120**	**120**
						Total	**830**	**650**

* This is the refueling station - location that the fleet is operated from. Each time a vehicle leaves the station (the origination point), they are beginning a new trip.

Step 2 -5: Total the Daily Miles

Step 2-6: Total the Capable Miles

Example Example Example Example Example

Travel Log

Week:

Vehicle (VIN):

Beginning Odometer:

		Origination	Destination					
Day	Trip Number	Address	Address	Miles Traveled	Odometer	Total Trip	Total Day	Capable Miles

Total

Make Copies of this page for each sample vehicle.

Blank Page

Step 2-7:
Repeat for all vehicles

Repeat Steps 2-1 through 2-6 for each vehicle in your sample fleet.

Step 2-8:
Calculate totals for the Sample Fleet

Calculate the "total miles" and "capable miles" for each sample week. Record the information in the Weekly Miles Table below.

Vehicles (VIN)	Week 1		Week 2		Week 3		Week 4	
	Total Miles	Capable Miles	Total Miles	Capable Miles	Total Miles	Capable Miles	Total Miles	Capable Miles
Weekly Totals								

Make copies of this page if you operate a larger fleet.

Step 2-7:
Repeat for all vehicles

Repeat Steps 2-1 through 2-6 for each vehicle in your sample fleet.

Step 2-8:
Calculate totals for the Sample Fleet

Calculate the "total miles" and "capable miles" for each sample week. Record the information in the Weekly Miles Table below.

Data from Step 2-5 — Data from Step 2-6

Vehicles (VIN)	Week 1		Week 2		Week 3		Week 4	
	Total Miles	Capable Miles	Total Miles	Capable Miles	Total Miles	Capable Miles	Total Miles	Capable Miles
Vehicle 1	830	650						
Vehicle 2	350	70						
Vehicle 3	120	120						
Vehicle 4	90	90						
Vehicle 5	80	80						
Weekly Totals	1470	1010						

Make copies of this page if you operate a larger fleet.

Step 2-9: Determine the Ratio of vehicles capable of being centrally fueled

For each week, divide the "capable miles" by the "total miles".

The result is a ratio of the number of total milesdriven to the number of miles that are capable of being centrally fueled. This ratio will be used as a factor to reduce purchase requirements based on the ability or inability to accomodate central refueling.

Weekly totals of **"Total Miles"** and **"Capable Miles"** from **Step 2-8, *page 2-10.***

Week One
(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 1)

Week Two
(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 2)

Week Three
(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 3)

Week Four
(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 4)

Step 2-10: Determine the Average Ratio

Divide the ratios for each week by the number of weeks to determine the Average Ratio.

If **Two** Sample Weeks:

Ratio1 _____ + Ratio2 _____ ÷ 2 = _____ (Average Ratio)

If **Three** Sample Weeks:

Ratio1 _____ + Ratio2 _____ + Ratio3 _____ ÷3 = _____ (Average Ratio)

If **Four** Sample Weeks:

Ratio1_____ + Ratio2_____ + Ratio3_____ + Ratio4 _____÷ 4 = _____ (Average Ratio)

The Average Ratio will be used when determining Purchase Requirements if you are a covered fleet.

*Use only one of the equations in **Step 2-10** -- the one that corresponds to the number of weeks of recorded data in the travel log.*

Example Example Example Example

Step 2-9: Determine the Ratio of vehicles capable of being centrally fueled

For each week, divide the "capable miles" by the "total miles".

The result is a ratio of the number of total milesdriven to the number of miles that are capable of being centrally fueled. This ratio will be used as a factor to reduce purchase requirements based on the ability or inability to accomodate central refueling.

Weekly totals of **"Total Miles"** and **"Capable Miles"** from **Step 2-8, *page 2-10.***

Totals from step 2-8, page 2-11

Week One

(Total Capable) 1010 ÷ (Total Miles) 1470 = .69 (Ratio 1)

Week Two

(Total Capable) 977* ÷ (Total Miles) 1550* = .63 (Ratio 2)

Week Three

(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 3)

Week Four

(Total Capable) _____ ÷ (Total Miles) _____ = _____ (Ratio 4)

**** assumed values for sample fleet data***

Step 2-10: Determine the Average Ratio

Divide the ratios for each week by the number of weeks to determine the Average Ratio.

If **Two** Sample Weeks:

Ratio1 **.69** + Ratio2 **.63** ÷ 2 = **.66** (Average Ratio)

If **Three** Sample Weeks:

Ratio1 _____ + Ratio2 _____ + Ratio3 _____ ÷3 = _____ (Average Ratio)

If **Four** Sample Weeks:

Ratio1_____ + Ratio2_____ + Ratio3_____ + Ratio4 _____÷ 4 = _____ (Average Ratio)

The Average Ratio will be used when determining Purchase Requirements if you are a covered fleet.

*Use only one of the equations in **Step 2-10** -- the one that corresponds to the number of weeks of recorded data in the travel log.*

Step 2-11: Determine the number of vehicles that are capable of being centrally fueled

Multiply the Average Ratio by the number of non-centrally fueled vehicles.

Average Ratio _____

Non-Centrally Fueled **x** _____

Capable of Being Centrally Fueled **=** _____

Round down to the nearest whole number.

Average Ratio = Step 2-10, *page 2-12*
Non-Centrally Fueled = From "Defining Your Fleet", *page 2-2*

Use the number of vehicles that are Capable of Being Centrally Fueled.

The total number of vehicles that you have in this step are the number of non-centrally fueled vehicles that are capable of being centrally fueled and will now be counted as covered vehicles by the CFFP.

Example Example Example Example

Step 2-11: Determine the Number of Vehicles that are Capable of Being Centrally Fueled

Multiply the Average Ratio by the number of non-centrally fueled vehicles.

Average Ratio **.66** _____

Non-Centrally Fueled **x 15**

Capable of Being Centrally Fueled = (9.9) **9.0**

Round down to the nearest whole number.

Average Ratio = Step 2-10, *page 2-13*
Non-Centrally Fueled = From "Defining Your Fleet", *page 2-2*

Use the number of vehicles that are Capable of Being Centrally Fueled.

The total number of vehicles that you have in this step are the number of non-centrally fueled vehicles that are capable of being centrally fueled and will now be counted as covered vehicles by the CFFP.

Method Two

Fleet operators may select their own algorithm subject to review by the Georgia Environmental Protection Division (EPD).

Contact the EPD at (404) 363-7028.

Complete the travel logs for the sample weeks, recording the destinations and trip miles as in method one. Calculate the number of miles traveled within the operational range after these trips are completed. This calculation is based on a reasonable algorithm approved by the EPD for the destination.

Vehicle driver must keep a record of all destinations, on a trip basis and in the order which they were made.