

National Human Exposure Assessment Survey (NHEXAS)

Region 5 Study

Quality Systems and Implementation Plan for Human Exposure Assessment

Research Triangle Institute
Research Triangle Park, NC 27079
Cooperative Agreement CR 821902

Field Operations Protocol

RTI/ACS-AP-209-084

Title: Vehicle Operations and Maintenance

Source: Research Triangle Institute

U.S. Environmental Protection Agency
Office of Research and Development
Human Exposure & Atmospheric Sciences Division
Human Exposure Research Branch

Notice: The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), partially funded and collaborated in the research described here. This protocol is part of the Quality Systems Implementation Plan (QSIP) that was reviewed by the EPA and approved for use in this demonstration/scoping study. Mention of trade names or commercial products does not constitute endorsement or recommendation by EPA for use.

FIELD OPERATIONS PROTOCOL	RESEARCH TRIANGLE INSTITUTE POST OFFICE BOX 12194 RESEARCH TRIANGLE PARK, NC 27709-2194	RTVACS-AP-209-084 Page 1 of 10
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TITLE: VEHICLE OPERATIONS AND MAINTENANCE

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<u>STATUS:</u>	IN PROGRESS:	<input type="checkbox"/>
	DRAFT:	<input type="checkbox"/>
	FINAL VERSION:	<input checked="" type="checkbox"/>

REVISIONS:

No.	Date	No.	Date
0	†	6	
1		7	
2		8	
3		9	
4		10	
5		11	

† Effective date of this version is the date of the last approval signature;
revision 0 is the original version.

VEHICLE OPERATION AND MAINTENANCE

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1.0 SCOPE AND APPLICATION

This protocol is designed to guide the regular use and general maintenance of vehicles for use in the National Human Exposure Assessment Survey (NHEXAS). This protocol covers the following ACS vehicles; Winnebago Brave (RV), Chevrolet Suburban, and Wells Cargo trailer.

2.0 VEHICLE USE

Use of the vehicles will be in accordance with RTI Policies and Procedural Manual Number 6200 "RTI and Personal Vehicles" (appended) with the following change: A vehicle log will be kept for each vehicle only for repair, service and maintenance entries. A daily mileage log will not be kept. Other minor deviations may be needed to accommodate field study usage.

3.0 VEHICLE MAINTENANCE

Maintenance schedules for each vehicle will be followed according to the manufacturer's recommendation subject to project scheduling and Field Supervisor direction. Each vehicle will contain a Vehicle Maintenance and Service Log (Figure 1) which is to be filled in with each service. Maintenance of all components (furnaces, water heater, generator etc.) of the RV is also required according to manufacturer recommendations. A notebook containing all of the RV equipment manufacturer's manuals will be kept in the RV for reference. A notebook containing all trailer equipment and manuals will be kept in the trailer for reference.

4.0 VEHICLE OPERATION

4.1 Winnebago Brave

- 4.1.1 Before moving the Winnebago the driver must check and be sure all electrical lines, plumbing lines and hydraulic jacks are disconnected or raised and stored

properly. The driver must also check that all outside compartments are closed and all outside accessories (awnings, antennas, steps, etc.) are secured for transport. The main propane storage tank valve must be closed. The TV antenna must be lowered.

- 4.1.2 Before moving the Winnebago the driver must secure all items inside the coach for transport. All items must be properly secured to prevent property damage and injury to passengers.
- 4.1.3 While driving the Winnebago the driver must be aware of the height of the vehicle (11'6") and caution must be used for passing under low objects. The total height of the vehicle including air conditioners and antennas should be posted inside the vehicle for the driver's reference.
- 4.1.4 When the Winnebago is parked for extended use the vehicle should be leveled using the hydraulic jacks.
- 4.1.5 Follow all procedures for vehicle and system use as described in the vehicle and systems manuals.

4.2 Wells Cargo Trailer

- 4.2.1 The Wells Cargo trailer is only to be pulled by vehicles with adequate trailering capabilities (capacity of at least 6000 lbs and an electronic brake control unit).
- 4.2.2 It is the responsibility of the driver to insure that the trailer is connected to the tow vehicle correctly before towing.
- 4.2.3 The weight of the trailer and tow vehicle must not exceed the trailer, vehicle or hitch manufacture ratings hitch.
- 4.2.4 The main propane storage valve (s) must be closed before moving the trailer. The electrical cord must be properly stowed.
- 4.2.5 Follow all procedures for vehicle and system use as described in the manuals.

4.3 Suburban and Other Passenger Vehicles

- 4.3.1 Always stow equipment to prevent shifting or movement that could result in damage to the equipment or personal injury.
- 4.3.2 Follow all procedures for vehicle and system use as described in the vehicle manuals.

5.0 SAFETY AND SECURITY

5.1 Safety

- 5.1.1 Read, understand, and follow all cautions and warnings in the vehicle and systems manuals. Request clarification or guidance from the Field Supervisor if there are any safety items you do not fully understand.
- 5.1.2 Never work with hazardous or potentially hazardous materials (acids, solvents, biological products, etc.) unless at least one other staff member is present at the work site.
- 5.1.3 Never use any flammable solvents in a vehicle while any propane appliances or furnaces are in use. Thoroughly ventilate the vehicle after use of flammable solvents before lighting any propane appliances.
- 5.1.4 The driver is responsible for following all traffic laws.
- 5.1.5 The RV, and any vehicle pulling the trailer, are less maneuverable and require more stopping distance than regular passenger vehicles. The driver should always allow adequate following distance and drive at speeds that are appropriate for the traffic and roads. The driver must make every effort to avoid situations that would require abrupt stopping or avoidance maneuvering.
- 5.1.6 Snow and ice may create hazardous driving conditions. The RV and trailer should not be driven on roads covered with snow or ice. The Suburban, in 4-wheel drive, may be driven under some snow and ice conditions. The vehicle driver will decide when driving conditions become unsafe. Driving should not be done in blizzard conditions. A safety kit with blankets, water, and flares must be carried during winter months.
- 5.1.7 In the case of any vehicle accident the following must be done. If necessary, provide first-aid and obtain emergency medical assistance. Contact local or state police; a police report must be filed. Obtain insurance information, names, and addresses from the drivers of any other vehicle involved in the accident. Contact the Field Supervisor or appropriate RTI staff as soon as

possible. Prepare and transmit to the Field Supervisor or another Project Manager at RTI a brief written report describing the accident, injuries, and vehicle damage.

- 5.1.8 Never transport a study participant without prior approval from the Field Supervisor.

5.2 Security

- 5.2.1 Always lock all vehicle doors when you leave the vehicle.
- 5.2.2 When working in the RV or trailer while in public areas (such as parking lots) lock the doors while working in the vehicle. This may also be appropriate in some campgrounds.
- 5.2.3 Except when actually driving, the trailer should be secured to prevent theft.
- 5.2.4 Keep expensive equipment (computers, printers, copiers, TVs, etc.) out of sight as much as possible while using the RV. Blinds or window covers should always be down while not working in the vehicle.
- 5.2.5 Whenever possible, work with another staff member.

VEHICLE MAINTENANCE AND SERVICE LOG

VEHICLE: _____

Date	Name	Mileage	Service Performed	Service Performed At

Figure 1. Vehicle maintenance and service log.

POLICIES AND PROCEDURES MANUAL

RESEARCH TRIANGLE INSTITUTE

SUBJECT: RTI AND PERSONAL VEHICLES

Number 6200
Page 1 of 3 Pages
Effective Date February 1, 1993
Supersedes:
Number 6200 Date 5/1/89

POLICY REGARDING RTI VEHICLES

RTI vehicles are used for various business purposes both on and off campus. Employees driving RTI vehicles are expected to exercise proper care and handling of the vehicle assigned to them and to use them only for business purposes.

1. All drivers of "on-road" vehicles must possess a valid driver's license for the state(s) or country(s) in which the vehicle is operated. The Office of Purchasing will request from the driver's supervisor annual verification that a valid license is in effect. This request will be made in conjunction with the annual vehicle registration and inspection.

If an employee whose job requires a valid driver's license loses the right to drive, the Institute may provide the employee non-driving duties, if feasible and if notified at the time of loss of privilege. Failure to notify the immediate supervisor of such loss can result in disciplinary action, including termination.

2. All drivers are expected to adhere to all applicable motor vehicle laws in the state(s) or country(s) in which the vehicle is operated. Courtesy and defensive driving tactics should be displayed at all times.

Drivers using Institute roads should be cognizant of their use by pedestrians/cyclists and of all posted regulations.

3. The driver is responsible for all tickets or other fines incurred for failure to obey applicable vehicle laws.
4. Operators of "off-road" vehicles (e.g., forklifts, tractors, heavy equipment, boats) are expected to adhere to all applicable regulations (e.g., forklift operator certification) pertaining to the safe operation of the vehicle.
5. Only Institute employees, clients, or business visitors should ride in Institute vehicles.

VEHICLE OPERATION AND MAINTENANCE

1. RTI vehicle maintenance is the responsibility of the supervisor of the Department/Center to which the vehicle is assigned. The Office of Purchasing coordinates the annual registration and inspection of vehicles.

When repair services or materials (front end alignment, tires, etc.) are required, an approved purchase requisition (RTI 8A) should be forwarded to the Office of Purchasing. Specific information must be noted as follows:

- License plate number.
 - RTI vehicle number.
 - Vehicle make/model description.
 - Current mileage.
- 2. The vehicle operator is responsible for maintaining adequate fluid levels in the vehicle (oil, radiator fluid, brake fluid, window-wash solution, etc.) and for the cleanliness of the vehicle's interior. The operator should inspect the vehicle daily, emptying ash trays and cleaning where appropriate.
- 3. A log is to be maintained for each vehicle and should include, as a minimum, daily beginning and ending mileage, oil and fuel purchases, repairs, destination for off-campus trips, and driver's name. The driver also should note any vehicle problems (brakes, handling, unusual noises, etc.) in the log and report them to the supervisor so that corrective action can be taken. The supervisor should review the log periodically to ensure that preventive maintenance is performed in a timely and routine fashion and that operating costs are not becoming excessive (e.g., oil consumption).
- 4. All gasoline purchases should be made as economically as possible. Regular unleaded gasoline from self-service pumps should be used when available and applicable.

Gasoline credit cards are assigned by Accounting to employees who are frequent vehicle users. Although billings are made directly to the Institute, employees using the credit cards are responsible for all purchases made. Receipts are required for all purchases and will include a notation of the account to be charged, vehicle license plate number, and user's signature. RTI credit cards are to be used for business purposes only.

- 5. Vehicles must not be left running while unattended. The keys must be removed and the parking brake properly set.

ACCIDENTS AND INSURANCE

- 1. There is a pamphlet in the glove compartment of each Institute vehicle that provides drivers with written guidelines for use in the event of an accident. In summary: (a) obtain police and medical help as necessary; (b) obtain identification regarding the other vehicle(s) and person(s) involved in the accident; (c) cooperate with the police; and (d) do not make statements regarding who is at fault or promises regarding insurance coverage.

As soon as possible, the driver should report the accident to his/her supervisor and RTI Security, who will provide copies of the accident report to Personnel and to the Institute's insurance manager.

2. The Institute maintains an insurance program that protects the Institute and its employees for damages caused by Institute vehicles on official business.

Primary coverage for property damage and/or personal injuries to others resulting from the use of an employee's car for business purposes is provided by the employee's individual insurance policy.

3. Employees assigned to Department of Defense (DoD) contracts who are involved in an accident or unsafe practice while operating an Institute vehicle may be required to take a test at any time to determine the presence of illegal drugs (Policy and Procedure Memo Number 2140).

OTHER

1. Defensive driving courses are held periodically at RTI through the Office of Safety and Occupational Health. Employees whose job duties require driving Institute vehicles are encouraged to attend.
2. Institute vehicles are subject to inspection at all times.
3. Problems with private vehicles (flat tires, towing, etc.) are the responsibility of the individual owner. However, employees are encouraged to report emergency problems to Security, who can, as time permits:
 - Provide cables for jump-starting.
 - Assist in unlocking vehicle doors when keys are locked inside.
 - Call a towing company of the employee's choice.
 - Provide entry to a building for employee to use telephone.

Emergency telephones that ring directly to Security are located outside Institute buildings as follows:

- East Institute Drive near Bays 5 and 6 of Services Building.
 - Front of Ragland Building on Hill Building side.
 - Sidewalk between Buildings 3 and 6.
 - Front of Herbert Building at laboratory end.
4. All employees should register their vehicles with the Security Office. A small identification decal for display on the left-rear bumper will be provided. This decal assists Security in protecting vehicles that belong to RTI staff members.