UCCS Anti-Idling Guidelines

PROCEDURES

 **A. Idling Reduction:**

The following limitations are to be followed for any vehicle operating on the UCCS campus and for any UCCS fleet vehicle whenever in operation.

1. No person shall allow a vehicle to idle for more than five (5) minutes in any one-hour period unless:

(1) The ambient outside air temperature has been less than twenty (20) degrees Fahrenheit for each hour of the previous twenty-four (24) hour period; or

(2) The latest hourly ambient outside air temperature is less than ten (10) degrees Fahrenheit.

2. Vehicles shall never be left idling when unattended. Colorado Revised Statute 42-4-1206, more commonly known as the "puffer" law, allows law enforcement officers across the state to immediately ticket individuals who have left a vehicle running unattended for any period of time.

**B. Idling Exceptions:**

Exceptions to this guideline have been identified for the following circumstances:

a) When idling for up to twenty minutes in any sixty-minute period if the ambient temperature is less than ten degrees.

b) When it remains motionless because of highway traffic, an official traffic control device or signal, or at the direction of a law enforcement officer;

c) When the driver is operating defrosters, heaters, or air conditioners or is installing equipment only to prevent a safety or health emergency, and not for rest periods;

d) In the case of a law enforcement, emergency, public safety, or military vehicle, or any other vehicle used to respond to an emergency, when it is responding to an emergency or being used for training for an emergency, and not for the convenience of the vehicle operator;

e) When necessary for required maintenance, servicing, or repair of the vehicle;

f) During a local, state, or federal inspection verifying that the equipment is in good working order if required for the inspection;

g) During the operation of power take-off equipment if necessary for operating work-related mechanical or electrical equipment;

h) In the case of an armored vehicle, when a person is inside the vehicle to guard its contents or during the loading or unloading of the vehicle;

i) University shuttle busses. See Attachment C.

j). University Police vehicles due to the quantity of electronics required inside the vehicle.

 RESPONSIBILITY

 These guidelines apply to all departments and include faculty, staff, and students.

.ATTACHMENTS:

A. Colorado House Bill 11-1275

<http://enginesoff.com/pdfs/Colorado-HB11-1275.pdf>

B. Colorado Revised Statute 42-4-1206

<http://enginesoff.com/pdfs/Colorado-42-4-1206.pdf>

 C. Exemption of UCCS Shuttle Busses

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**Retarders**

All UCCS Shuttle buses are equipped with electronic retarders to assist the braking systems on the 7 percent grade hill driven every 25 minutes, 16 hours per day.  This is essentially a large electronic magnet system that helps the braking system dramatically.  Twelve years of operation on this hill, 16 hours per day and only 2 sets of brake pads have had to be replaced on our buses.

The batteries are used quite heavily with this kind of system.  So to avoid draining the batteries buses have to high idle at each end of the route to help charge up the batteries.

**Temperature**

The high idle is also used for comfort and temperature control.  In the warmer months the buses are climbing the 7 percent grade on Austin Bluffs with 32 passengers and the engine heats to above 200 degrees.  When it arrives at Centennial Hall the high idle draws more air in to help cool the engine and helps the A/C system work better.  During the cooler months, the use of the high idle and restricting some of the air flow into the radiator helps the engine operate warmer so that the heating system can work more efficiently in the cabin.  The cabin area of the buses are a significantly large area to keep in a reasonable temperature range with passenger doors being opened and closed every 7 to 10 minutes, thereby dropping the temperature.

**Maintenance**

If buses are turned on and off every 7 to 10 minutes there is a higher likelihood of increased maintenance issues.

Estimated cost (including labor) for parts more likely to fail are: \*

Solenoid  $175.00; Batteries $400.00; Starters  $1200.00;

Tow costs for buses are $250.00 and result in loss of service and productivity issues while vehicle is in repair shop.

**Regeneration**

Regeneration system is a federal mandated system on all commercial diesels. It is designed to help engines burn cleaner.  When the engine starts to clog up, the controls on the dash indicate that the system needs to be regenerated.  If not addressed the engine will be forced to a slow speed and then the engine will shut off requiring towing and void of warranty. There are only two ways to regenerate.  One involves opening up the engine on the freeway to blow out the engine, something we almost never have time to do or the other is run the regeneration system while idling.  When the system is operating it also runs at a very high idle and can cause you to be doing this for anywhere from 1 minute to 40 minutes depending on how bad the engine is clogged up.

UCCS Transportation is supportive of reducing emissions and ensuring good air quality on the campus. Biofuel (B5) is used when available and in warmer months. The shuttle fleet will be idled at the minimum times needed to address the issues identified above. This will be revisited as technology changes. Any inquiries regarding this document or shuttle bus management should be directed to Russ Wilcox, UCCS Transportation Manager.

\*Source for repair estimates: Terry Key, manager of Freightliner repair shop in Fountain CO. Information for this document provided by UCCS Transportation Manager