Clayton GROUP SERVICES

ATTACHMENT C

Telemetry Sensor Description and Response

The ERH system will include the following sensors: a high temperature sensor at the condenser outlet, a high level sensor in the vapor/liquid separator, and a high level sensor in the condenser holding tank. These sensors will identify a malfunction in the ERH system. A temperature switch, located on the outlet of the condenser, will shut down the system in the event of a high temperature reading. Additional temperature sensors will be installed at monitoring points in the subsurface. Condenser inlet and outlet vapor temperature sensors will be installed to measure airstream temperature. Blower outlet vapor temperature sensors will also be installed to measure outlet airstream temperature.

Vacuum sensors will be located at the inlet and outlet vacuums, and the discharge pressure of the blower will be monitored. Airstream flow will be measured in the same places as the vacuum sensors.

The sensors described above will be connected to a telemetry system so that in the event of a malfunction, Clayton will be notified of any problems in the remediation system, and can act upon them quickly to prevent them from becoming a concern to the community.

A discussion of potential scenarios where Clayton will be notified by the telemetry system, and the actions to be taken by Clayton to protect the community, are provided below:

- VOC emissions extracted from treatment systems could potentially exceed the thermal destruction capacity of the CATOX unit. The proposed CATOX unit is gas fired to ensure that operating temperatures are maintained and complete destruction of VOC vapors occurs. In instances where VOC concentrations are higher than expected, the thermal destruction temperatures in the CATOX unit will increase beyond the optimal operating range. Continued operation of the equipment beyond operating ranges will result in equipment failure and release of untreated vapors. When operating temperatures exceed the optimal range the sensors associated with the CATOX unit will send a remote signal that contacts the Clayton and TRS offices. The remote signal will identify the reason for the alarm and initiate a shutdown of the ERH/SVE system blowers, vacuum and CATOX unit. The remediation system will be restarted manually by a Clayton or TRS team member after the potential for a release has been mitigated.

- VOC emissions could potentially be released to the atmosphere if the operating ERH or SVE system loses its vacuum from its piping and/or pipe connections – for example, if there is a break in the vapor recovery manifold. The ERH and SVE systems will be equipped with a vacuum gauge on the system, which is interlocked with the ERH electrodes. If the

system senses a loss in pressure, the unit will send a remote signal that contacts the Clayton and TRS offices. The remote signal will identify the reason for the alarm and initiate a shutdown of the ERH electrodes. The system will be restarted manually by a Clayton or TRS team member after the loss in vacuum is identified and repaired. The CATOX unit will remain operational during the response period.

- The operating efficiency of the CATOX unit is essential to the destruction of the VOC vapors. As stated in this section, the CATOX unit is fired by natural gas. Thermal destruction temperatures can therefore not be met without natural gas a a fuel source. In the event that there is an interruption in gas service for any reason, the CATOX unit will send a remote signal that contacts the Clayton and TRS offices. The remote signal will identify the reason for the alarm and initiate a shutdown of the ERH, and/or SVE systems, system blowers, vacuum and CATOX unit. The system will be restarted manually by a Clayton or TRS team member after gas service has been re-established.

In each of the above situations, Clayton will mobilize to the site within 60 minutes of notification of shutdown and conduct indoor air monitoring to ensure that no fugitive vapors have entered the Atlantic Express Bus Company building.