

COON RAPIDS FIRE DEPARTMENT	RE: BREATHING AIR MONITORING	#
SUGGESTED OPERATING GUIDELINES	DATE: FEBRUARY 2007	

SCOPE:

This guideline shall be used whenever CRFD Personnel are using Self-Contained Breathing Apparatus. The purpose of this policy is to reduce the possibility of injury or death due to personnel running out of air in a hazardous atmosphere.

DEFINITIONS:

The following definitions are used in this SOG;

- INCIDENT COMMANDER: Individual assuming overall control of an incident. Also known as the IC.
- SEMS: Scott Electronic Management System.
- SEMS OFFICER: Individual assigned the responsibility of monitoring and operating the SEMS base unit.
- PAR: Personnel Accountability Report.
- RIT: Rapid Intervention Team
- The POINT OF NO RETURN – A position or distance within a hazardous environment at which you have just enough air to return to a clean air (safe) atmosphere. Once passed, crews stop becoming part of the solution and start becoming part of the problem.

PROCEDURE:

1. Firefighters will notify the Incident Commander via radio when any team member's 3/4 full cylinder (approximately 3,300 psi.) indicator light activates (one green light glowing in the heads-up facepiece display). This verbal report will also include a Personnel Accountability Report (PAR) on the condition of the team members, as well as a status (progress or lack of) report.
2. Firefighters will notify the Incident Commander via radio when any team member's 1/2 full cylinder (approximately 2,200 psi.) indicator light activates (yellow light flashing slowly in the heads-up facepiece display). At this time all members of the team will push the "Withdraw Button" on their SEMS pressure gauge unit and will immediately exit the hazardous atmosphere. This verbal report will also include a Personnel Accountability Report (PAR) on the condition of the team members, as well as a status (progress or lack of) report.
3. Firefighters will notify the Incident Commander via radio when any team member's 1/4 full cylinder (set at 1,000 psi.) indicator light activates (red light flashing rapidly in the heads-up facepiece display along with activation of the Vibralert). At this time all members of the team will continue to exit the hazardous atmosphere. The Incident Commander will ensure that the members of this team are accounted for and will ensure the Rapid Intervention Team (RIT) is alerted to the situation.

EXCEPTIONS:

1. It is the responsibility of the Incident Commander to evaluate the time needed to safely evacuate a structure, and he/she shall reduce the working time of the firefighters when necessary to

ensure their return to a safe environment prior to the 1/4 full cylinder indicator light and Vibralert activation. (The point of no return)

2. When mutual aid departments are operating at a scene under the command of the CRFD, the Incident Commander shall determine the designed duration of their breathing apparatus and reduce this working time by 1/2 to ensure an exit safety factor. (i.e. firefighters using 30 minute air paks will be required to exit after 15 minutes of use). It is suggested that an accountability officer or the SEMS officer track these personnel to ensure compliance.
3. The Incident Commander may allow the team members to continue working until the 1/4 full cylinder indicator light activates under the following conditions:
 - a. The fire is declared under control.
 - b. A structural evaluation is made by Incident Commander to determine that there no structural collapse or entanglement hazard, the crew's visibility is not impaired, and a personnel accountability report indicates that the crew is intact and able to continue. (It is intended that this would only occur when light overhaul, fire investigation, or difficult ventilation operations require the use of SCBA to complete).
 - c. Upon activation of the 1/4 full cylinder (set at 1,000 psi.) indicator light and Vibralert all members of the team will push the "Withdraw Button" on their SEMS pressure gauge unit and will immediately exit the hazardous atmosphere.

The Incident Commander will verbalize his/her permission to continue to the crew via radio, and will also verbalize that the crew is to exit upon activation of the 1/4 full cylinder indicator light and Vibralert.

MONITORING THE CREWS:

When in use, the Scott Electronic Management System (SEMS) will be used to monitor compliance with this SOG, and also to enhance safety for all team members. The SEMS Officer will monitor for compliance by the team, and will immediately advise the Incident Commander or Operations Chief of any infractions and/or emergency conditions which threaten the health and/or safety of our personnel and/or mutual aid personnel.

SOG EFFECTIVENESS:

Breathing air monitoring procedures will be discussed as a part of any post incident analysis for an incident which required the use of Self-Contained Breathing Apparatus. Any recommendations for improving or modifying this SOG will be forwarded to the chief of the department.