Emergency operations require significant physical activity. No member will be required to perform emergency operations beyond safe levels of physical or mental endurance. A rehabilitation area will be utilized at all working incidents to provide a staging area for on-scene personnel, an immediate source of personnel for rescue or aid, and an area for recovery and rehabilitation for emergency workers. Personnel rehabilitation using appropriate protocols in this area will decrease injury risk and enhance recovery for later emergency operations.

The rehabilitation area will be established by the Incident Commander at emergency scenes where there is a significant amount of physical labor to be performed in stabilizing and controlling a hazard or emergency. This includes training, working structure fires, prolonged operations in inclement weather, and hazardous materials operations where proximity suits are utilized.

The rehabilitation area will be established in a safe location. In general, it will be upwind from any emergency site with potential of smoke or hazardous materials and a sufficient distance from the affects of the operation to allow members to safely remove their personal protective equipment. It will be appropriately heated or cooled, and sheltered if raining or snowing. At working structure fire incidents, it will be near the air bottle refill area and the equipment resource area.

The resource area will be utilized by Fire and EMS personnel. It may also be used by law enforcement, other response personnel, and mutual aid personnel. It will be staffed by the EMS crew assigned to the incident who will perform health assessments and medical care, including appropriate screening for hazardous exposures.

An appointed Rehab Area Manager will be responsible for all rehabilitation operations. His/Her responsibility is to oversee provision of food, fluids, equipment, oxygen, and rehabilitation operations in the area. He/she will oversee the rehabilitation and availability for work of all emergency responders placed in this area. The rehabilitation area manager shall maintain the accountability of all personnel in the rehabilitation location and maintain appropriate records and documentation.

Members shall undergo rehabilitation following the use of a second 30-minute or 45-minute self-contained breathing apparatus (SCBA) cylinder, a single 60-minute SCBA cylinder, or 40 minutes of intense work without SCBA. A supervisor shall be permitted to adjust the time frames depending upon work or environmental conditions.

Rehabilitation efforts shall include the following:
1. Relief from climatic conditions
2. Rest and recovery
3. Active and/or passive cooling or warming as needed
4. Rehydration
5. Calorie and electrolyte replacement
6. Medical monitoring
7. Member accountability
8. Release

Rest and Recovery
Members shall rest for a minimum of 10 minutes after entering rehabilitation for the first time.
Members shall rest for a minimum of 20 minutes after meeting the SCBA criteria listed above.
Emergency medical services staff in rehabilitation shall have the authority, as delegated from the incident commander, to use their professional judgment to keep members in rehabilitation or to transport them for further medical evaluation or treatment.

Basic Life Support (BLS) shall be the minimum level of available care.

EMS staff will evaluate all persons arriving to the Rehab area. Each arriving member will be questioned regarding any medical symptoms or any injury resulting from incident work. Any injury or medical symptoms should be addressed immediately by the most highly trained and qualified EMS person available. Injury care will be provided, and an appropriate injury report will be completed.

The following vital signs shall be obtained for all members entering rehabilitation:

1. Temperature
2. Heart rate
3. Respiratory rate
4. Blood pressure
5. Pulse oximetry

Members with abnormal vital signs or symptoms shall be removed from active duty until cleared by the appropriate medical personnel. Vital sign measurements must be interpreted in context of the overall appearance and health status of the member.

Temperature
Elevated temperatures should raise the possibility of heat-related illness. Common temperature measuring techniques commonly underestimate core temperatures. A normal temperature cannot exclude the possibility of heat-related problems.

Heart Rate
The level of increase in a member’s heart rate will be relative to the amount of stress and the member’s overall physical conditioning. A member who has not achieved a heart rate of less than 100 beats per minute by the end of 20 minutes should not be released from rehab.

Respiratory Rate
By the end of 20 minutes, a member’s respiratory rate should be between 12 and 20 breaths per minute.

Blood Pressure
Upon recovery during rehabilitation, a member’s blood pressure should return to, or even be slightly lower than, their baseline. A member whose blood pressure is greater than 160 systolic and/or 100 diastolic should not be released from rehabilitation.

Pulse Oximetry
Members must obtain a normal pulse oximetry reading of greater than 94% prior to being released from rehabilitation.

Members exposed to fire smoke shall be assessed for carbon monoxide poisoning. Nonsmoker’s carboxyhemoglobin (COHb) levels are normally 0-5% and smokers are normally 5-10%. Symptoms above these levels can range from headach, nausea/vomiting, and confusion to arrhythmias, seizures and death.

Rehabilitation Disposition
Members shall be re-evaluated by EMS personnel prior to their release from rehabilitation.

Possible dispositions include:
1. Cleared for duty
2. Maintained in rehabilitation for further monitoring
3. Sent for more definitive medical evaluation/treatment