

# The Rocking Dead

## Genre

Ensembles are (ostensibly) trapped in the Great Smoky Mountains National Park as rock stars risen from the grave descend upon the campsite and damage the only path out! The natural water supply is limited to a single, contaminated stream, and bottled water supplies are running low. To survive *The Rocking Dead*, ensembles must apply their environmental engineering expertise and design a water filtration system.

## Artists

Ensembles beset by *The Rocking Dead* can include up to four members.

## Instruments

Ensembles should bring the following PPE:

- safety glasses
- gloves
- dust masks

“Contaminants” will consist solely of food-grade materials (e.g. coffee grounds, corn starch). Please notify [conference organizers](#) in advance if you have allergies.

## Tracks

### *Surviving*

Water will be readily available from the “contaminated stream.” Some materials and a map of the “campsite” (competition area) will be provided in the “safe zone”. Other materials, such as aggregates, membranes, minerals, and organics will be found throughout the campsite.

Ensembles will construct a small water filtration system and produce no less than 8 fluid ounces of filtered water. Emergency drinking water receptacles should contain no more than 64 fluid ounces of filtered water. Ensembles may freely test their filtration systems using the contaminated water before filling the emergency drinking receptacle.

Ensembles will have three hours to return the completed water filtration system and the emergency drinking receptacle to the safe zone. Given circumstance, however, ensembles are welcome to deliver their work soon as possible.

Ensembles that fail to produce 8 ounces of filtered water or do not attempt to filter the water using at least one medium will be disqualified. Disqualified ensembles will automatically receive zero score.

### *Time Score - 20% of Total Score*

Judges will rank ensembles by time taken to return the system and receptacle. The ensemble that returns in the shortest time will receive the maximum possible time score, and the ensemble that completes returns in the longest time will receive one-half of the maximum possible time score.

### *Quantity Score - 20% of Total Score*

Judges will rank ensembles by volume of filtered water stored in the emergency drinking receptacle. The ensemble with the greatest volume will receive the maximum possible quantity score, and the ensemble with the lowest volume will receive one-half of the maximum possible quantity score. Ensembles producing more than 64 fluid ounces of filtered water will receive the same score as ensembles producing 64 fluid ounces.

Parameter	Target Value(s)
pH	6.75 to 7.25 (within range)
Turbidity	0 NTU (minimize)
Absorbance	0 (minimize)
Dissolved Oxygen	0 mg/L (minimize)

*Table 1 - Quality Score Parameters*

*Quality Scores - 15% of Total Score Each (60% of Total Score Combined)*

Judges will rank ensembles by deviation from the target value(s) for each listed parameter (see Table 1). The the ensemble that achieves the smallest deviation from the target value will receive the maximum possible respective quality score, and ensemble that achieves the largest deviation from the target value will receive the one-half of the maximum possible respective quality score.

**Notes**

Direct any RFIs to [conference organizers](#). This section will be updated to include RFI responses.