

US EPA ARCHIVE DOCUMENT



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Pacific Southwest / Region 9



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## Risk Assessment at Evoqua Water Technologies

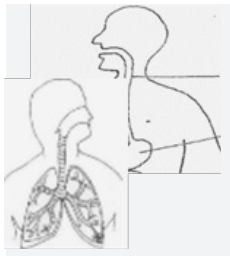
### Steps to Risk Assessment

#### Measure Emissions

At EPA's request, and under EPA's observation, Evoqua conducted tests in 2006 to determine the amounts of chemicals coming out of the facility's smokestack. Based on those tests, a Risk Assessment was conducted.



#### Identify Possible Exposure Routes

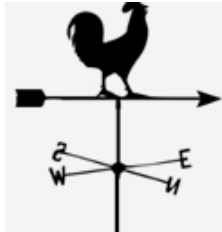


Based on input from EPA, the Risk Assessment considered exposures via:

- **Breathing** in of chemicals from the smokestack;
- **Eating** food or **touching** soils that have absorbed chemicals; and
- **Eating** fish potentially affected by chemicals in wastewater.

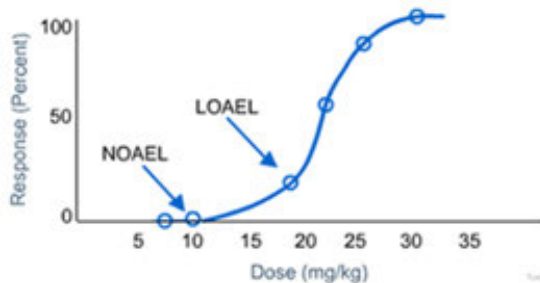
#### Determine Chemical Concentrations

The Risk Assessment determined the concentrations of chemicals through those exposure pathways which could reach human and animal populations.



#### Calculate Potential Impacts

Based on information from existing scientific studies with these chemicals, the Risk Assessment determines the potential impacts to humans and animals.



### Evoqua Quick Facts

#### What does the facility do?

The Evoqua facility treats spent carbon – a filtration material – by putting it in a furnace to remove contamination.

#### Where is the facility?

The facility is approximately a mile southeast of Parker, AZ.

#### How long has the Evoqua facility been around?

The Evoqua facility has been operating since 1992. But it has had different names throughout its lifetime including Siemens, US Filter, and Westates Carbon.

#### Why did EPA Require a Risk Assessment?

The Evoqua facility is regulated by EPA under the Resource Conservation and Recovery Act (RCRA) because it handles hazardous waste. A Risk Assessment is one way to make sure that the facility is operating safely.

#### What is EPA doing now?

EPA will also be making a decision about whether or not to issue a RCRA permit to allow the facility to continue managing hazardous waste. Such a permit would create additional requirements for operations at the facility.

### Risk Considerations

The Risk Assessment considered the following populations:

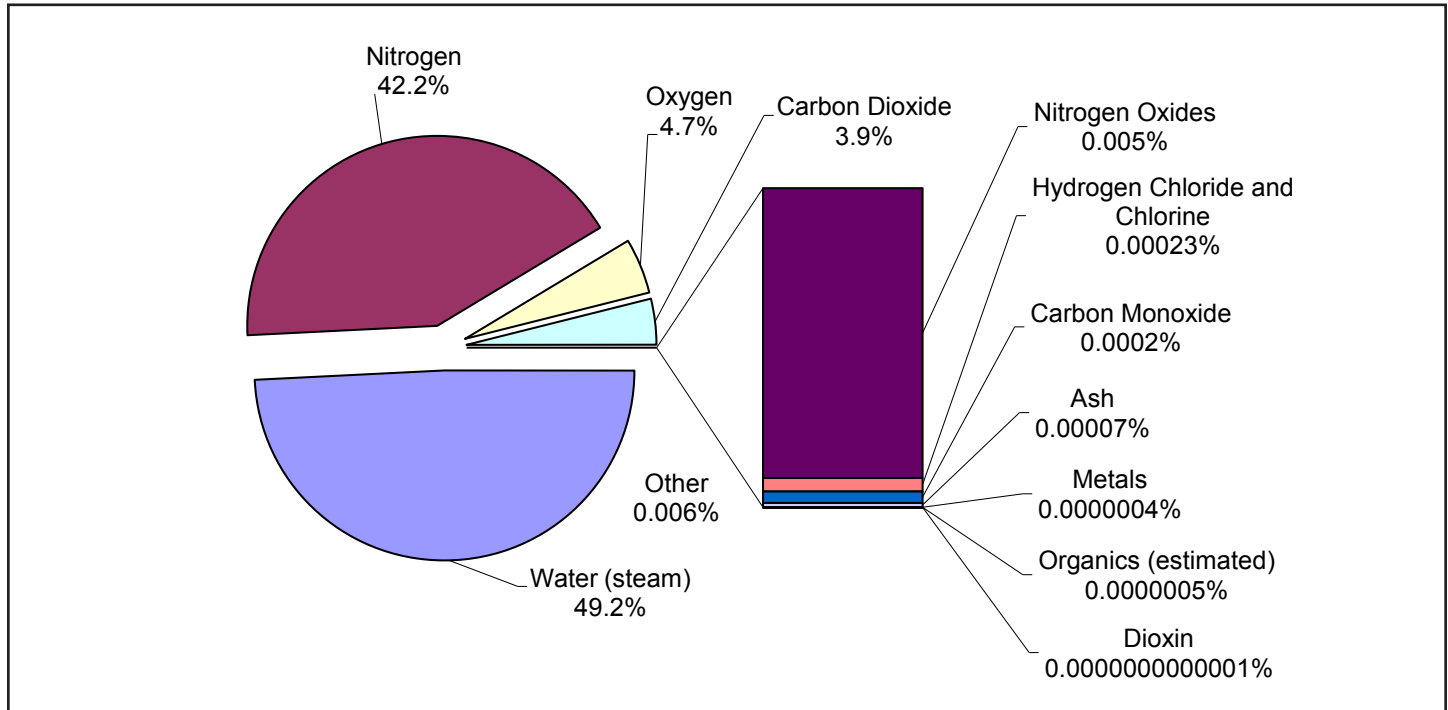
- Elderly
- Pregnant
- Children
- Facility Workers
- Farmers, Fishermen, and Hunters

**1 in 100,000** is EPA's threshold for unacceptable cancer risk at facilities like Evoqua. The Risk Assessment determined that the likelihood of developing cancer from the Evoqua facility's emissions is less than 1 in 1,000,000. When we apply the "1 in 100,000" threshold to a community with fewer than 100,000 residents (such as Parker with about 3,000 residents), we would expect less than 1

additional case of cancer to develop in that community from the facility's emissions over the course of a 70-year lifetime.

**With regard to this threshold, EPA has determined that impacts from long-term exposure to the Evoqua facility emissions are insignificant.**

## What Typically Comes Out of the Smokestack?



## Contacts

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The complete text of the risk assessment is available online at:

[www.epa.gov/az/evoqua](http://www.epa.gov/az/evoqua)