

# ARKAVATHI POLLUTION ANALYSIS

With government proposals to expand treatment and use of Arkavathi River water in Bangalore, it is important to identify, monitor, and stop the spread of harmful pollutants. The results below show trends in pollution at site 106, one of eight Arkavathi sites where Paani conducted sediment and water testing.

## TESTING INFORMATION

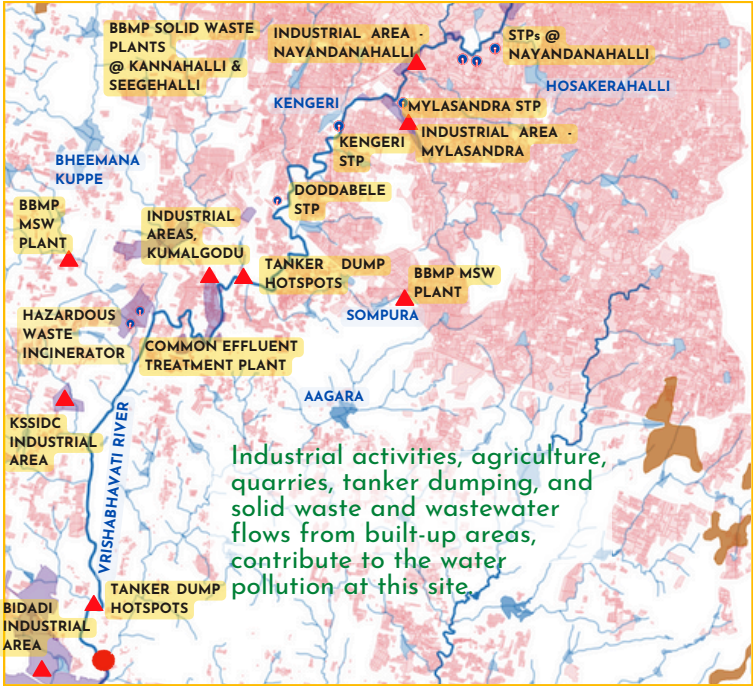
SITE 106



SHYANUMANGALA BRIDGE, VRISHABHAVATHI



29 FEB 2024



-  Built-up Area

 Drainage lines

 Sampling location

 Potential pollution sources
-  Quarry

 Industrial area

## POLLUTANTS OF CONCERN

Water and soil tested at this site did not meet international standards for pollution due to high amounts of chemicals including:

F-  
Flouride

Mineral

increases risk of skeletal fluorosis and teeth discoloration

307x above

Canada Water Quality Guidelines (Aquatic Life)

Cd  
Cadmium

Toxic Metal

carcinogen, toxic to kidneys and respiratory system

12x above

Canada Sediment Quality Guidelines (Aquatic Life)

Hg  
Mercury

Poisonous Metal

harms nervous, digestive, and immune systems

20x above

Canada Sediment Quality Guidelines (Aquatic Life)

C<sub>22</sub>H<sub>14</sub>  
Dibenz[a,h]anthracene


PAH


causes skin & eye irritation


1515x above

US Recommended Water Quality Criteria (Human Health)



 Industry

 Agriculture

 Various sources

## APPROPRIATE USE FOR WATER AT SITE

Water tested was only suitable for Central Pollution Control Board Class E

CPCB Designated-Best-Use of Sample

A	B	C	D	E	N/A
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Due to high Ammonia and Biochemical Oxygen Demand\* (3 day) and extremely low Dissolved Oxygen (DO), water sampled at site 106 was only suitable for irrigation per CPCB guidelines.

## ACTIVITIES AT SITE

Activity + Designated-Best Use		Points of Concern
Irrigation of fodder for cattle	E	While meets best use, pollutants could cause contamination of milk and impact cattle and consumers
Irrigation of farmlands	E	While meets best use, farm workers may be exposed to pollutants, and crops may be contaminated

SITE 106 IMAGES



Water sampling at site



Water sample taken from site