

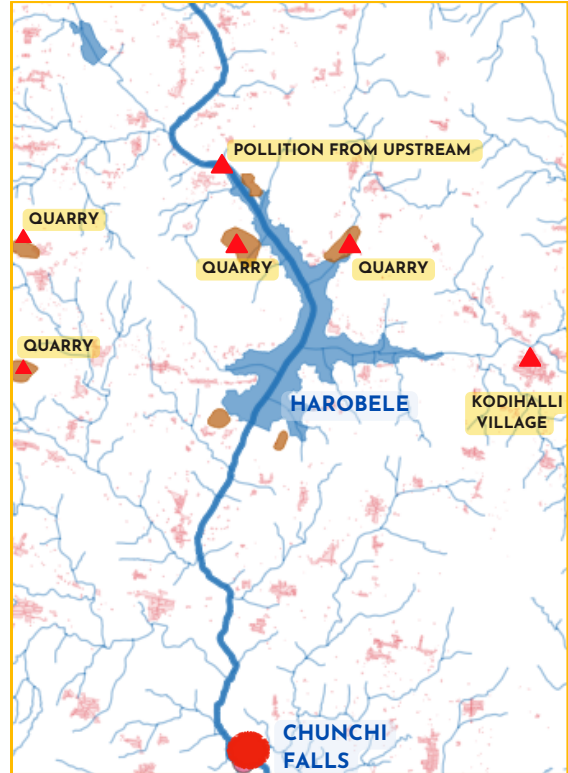
ARKAVATHI POLLUTION ANALYSIS

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 108, one of eight Arkavathi sites where Paani conducted sediment and water testing.

TESTING INFORMATION

SITE 108
SAI SPOORTHY HYDRO POWER PLANT, ARKAVATHI

29 FEB 2024



Pollution from upstream, agriculture, waste from built-up areas, and quarries contribute to the pollution at this site

- Quarry
- Built-up area
- Potential pollution sources
- Sampling location
- Drainage lines

APPROPRIATE USE FOR WATER AT SITE

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

CPCB Designated-Best-Use of Sample					
A	B	C	D	E	N/A
Due to a high onsite pH of 8.6, water tested at Site 108 was not suitable for drinking water without conventional treatment, bathing, fishing or irrigation per CPCB guidelines.					

ACTIVITIES AT SITE

Activity + Designated-Best Use		Points of Concern
Proposed Mokedatu - Drinking water project	C	While meets best use, do treatment plans address pollutants of concern?
Cauvery Wildlife Sanctuary	D	Pollution and pH may harm endemic species like Mahseer, and smooth coated otters
Irrigation of farmlands	E	Farm workers may be exposed to pollutants, crops may be contaminated, high pH may impact crop health

POLLUTANTS OF CONCERN

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

Cr(VI) Hexavalent chromium	Industrial Carcinogen causes cancer & skin irritation	66x above Canada Water Quality Guidelines (Aquatic Life)
DEHP Bis(2-ethylhexyl) phthalate	PAH plasticizer, damages liver & reproductive system	57x above US Recommended Water Quality Criteria (Human Health)
Hg Mercury	Poisonous Metal harms nervous, digestive, and immune systems	20x above Canada Sediment Quality Guidelines (Aquatic Life)
C₂₂H₁₄ Dibenz[a,h]anthracene	PAH causes skin & eye irritation	1136x above US Recommended Water Quality Criteria (Human Health)

KEY	Industry	Agriculture	Various sources
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SITE 108 IMAGES



Site view



Water diverted for hydro plant