

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

TESTING INFORMATION

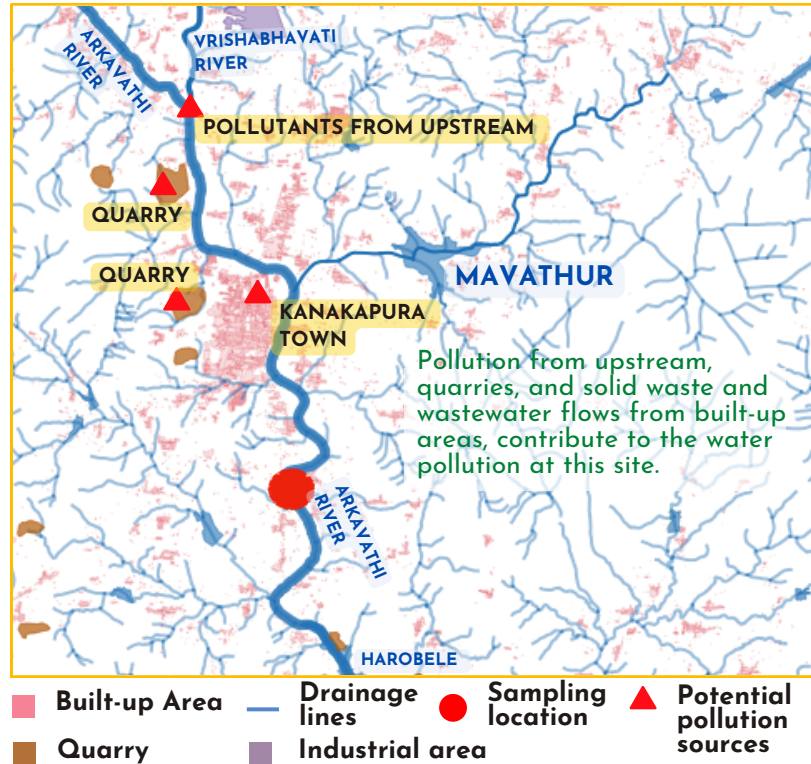
SITE 107



T. BEKUPPE,
ARKAVATHI



29
FEB
2024



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 |
|--------------|--------------|--------------|--------------|----------|----------------|





Due to high Ammonia and Biochemical Oxygen Demand* (3 day), water sampled at site 107 was only suitable for irrigation per CPCB guidelines.

ACTIVITIES AT SITE

| Activity + Designated-Best Use | | Points of Concern |
|--------------------------------|----------|--|
| Irrigation of farmlands | E | While meets best use, farm workers may be exposed to pollutants, and crops may be contaminated |

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 |  | 133x above Canada Water Quality Guidelines (Aquatic Life) |
| DEHP Bis(2-ethylhexyl) phthalate | PAH plasticizer, damages liver & reproductive system |  | 43x above US Recommended Water Quality Criteria (Human Health) |
| Hg Mercury | Poisonous Metal harms nervous, digestive, and immune systems |  | 11x above Canada Sediment Quality Guidelines (Aquatic Life) |
| C₂₂H₁₄ Dibenz[a,h]anthracene | PAH causes skin & eye irritation |  | 2497x above US Recommended Water Quality Criteria (Human Health) |

SITE 107 IMAGES





Water hyacinth infested river channel




River channel

KEY

 Industry

 Agriculture

 Various sources