

AFOEM Annual Training Meeting 2026
Worksite Visit Program

Mainstream Aquaculture
Pre-Visit Scenario | Registrar Copy

Site	Mainstream Aquaculture – Commercial Fish Farm
Focus	Environmental Water Pollution
Required PPE	Steel-cap safety footwear; high-visibility vest; safety glasses; long-sleeved clothing; hearing protection

Background

A suburban community on the outskirts of a city has recently seen the establishment of a large-scale commercial fish farm situated near a network of creeks that feed into a regional river system. Initially welcomed for its economic benefits and job creation, the facility has begun to draw scrutiny from residents after reports of murky water, unusual algal blooms, and a decline in local aquatic biodiversity. Community members have also raised concerns about strong odours and increased truck traffic, but most pressing are fears that waste products from the farm may be seeping into both surface waterways and the underlying groundwater.

Local advocacy groups have organized water testing initiatives. While the company maintains that it operates within regulatory standards, conflicting data from the testing initiatives and a lack of transparent monitoring have fuelled distrust. Public health officials are now under pressure to investigate potential exposure pathways, assess risks to drinking water safety, and determine whether current environmental protections are sufficient.

Discussion Questions

Q1 **Hazard Identification:** What are the potential environmental contaminants associated with commercial fish farming operations that could impact water quality in this scenario?

Notes:

Q2

Exposure Assessment: What are the likely pathways through which local residents could be exposed to these contaminants

Notes:

Q3

Health Risk Characterization: What short-term and long-term health effects might be associated with exposure to the identified contaminants?

Notes:

Q4

Environmental Monitoring: What types of environmental sampling and monitoring strategies would you recommend?

Notes:

Q5

Risk Management and Communication: What interventions and public health communication strategies would you propose to address community concerns and mitigate potential risks?

Notes:
