



Hazard Resilience Strategies

Contamination

Air Pollution
Soil Contamination
Water Contamination

Air Pollution ^{1 2 3}

- Ensure businesses are encouraged to reduce air pollution and increased temperatures by reducing non-essential use of air conditioners which use power and emit heat.
- Ensure community-based air pollution exercises have taken place in the schools and community-at-large (e.g., table-top or full-scale exercises)
- In case of extended air pollution, ensure there are plans to allow residents to evacuate to a designated shelter outside of the community
- Ensure most residents check regularly with weather forecasting agencies such as Environment Canada
- Ensure most residents have received education regarding air pollution and know strategies to reduce exposure to polluted air, such as by remaining inside.
- Ensure the community encourages community members and businesses to temporarily stop or reduce their emission of pollutants if there is serious air pollution, such as not driving or reducing vehicle usage.
- Ensure the community encourages increased green spaces, the planting of shade trees and use of light-coloured building and road surfaces.
- Ensure the community has a “no idling” in your vehicle for more than one minute policy.
- Ensure the community has identified “at risk” individuals to air pollution (e.g., those with asthma).
- Ensure the community encourages and enforces industries to reduce carbon emissions.
- Ensure there is a warning system in place to notify community residents of potential air pollution including from forest fires.
- Ensure there is a warning system in place to notify police, fire and ambulance personnel of potential air pollution including from forest fires
- Ensure there is a warning system in place to notify transient, migrant and homeless people of potential air pollution including from forest fires

- Ensure existing homeless shelters have made provisions for increased capacity, hazard specific conditions and evacuation procedures to other emergency shelters located outside of the community.

Soil Contamination ^{4 5}

- If levels of contaminants are discovered in soils above baseline levels or at levels that pose risks to public health and the environment, ensure the community requires repairs or adjustments to the pollution source and/or removal of soil contaminants by the polluter, future developer or government.
- Ensure the community has identified and implemented appropriate soil contamination removal techniques, such as physical barriers that prevent contaminants migrating into groundwater, soil excavation, soil flushing, adding soil amendments, and bioremediation.
- Ensure the community has regular inspections of potential polluting facilities and testing of surrounding soils and enforces compliance.
- Ensure the community has well designed landfills and regularly tests for water contamination seeping from the landfill.
- Ensure the community is working with the Department of National Defence to ensure that all explosives and metals are removed from old military training sites.
- Ensure the community is working with the owners of past and existing firing ranges to ensure that all ammunition and metals are removed from the site.
- Ensure the community monitors the number and type of pesticides and fungicides that are used by farmers and encourages eco-sustainable methods of controlling pests.
- Ensure the community prevents soil contamination by controlling the placement of potentially polluting facilities and chemical storage areas through zoning and designations.
- Ensure the community regulates the number and type of pesticides and fungicides that can be used by residents and encourages eco-sustainable methods of controlling pests.

Water Contamination ^{6 7}

- If levels of contaminants are discovered in groundwater above baseline levels or at levels that pose risks to public health and the environment, ensure the community requires repairs or adjustments to the pollution source and/or removal of water contaminants by the polluter, future developer or government.
- Ensure the community has adequate storm sewage and human sewage treatment systems to prevent water contamination.
- Ensure the community has identified and implemented appropriate techniques to remove groundwater contaminants, such as injecting oxygen into the groundwater to speed degradation of organic pollutants, placing porous treatment walls in front of a contaminated plume, or pumping out and treating the groundwater.
- Ensure the community has regular inspections and testing of irrigation systems and farmland water sources and enforces compliance.
- Ensure the community has regular inspections and testing of residential and business septic systems and well water.
- Ensure the community has regular inspections of potential polluting facilities and testing of groundwater and enforces compliance.

- Ensure the community has well designed landfills and regularly tests for water contamination seeping from the landfill.
- Ensure the community prevents humans from accessing natural water shed areas.
- Ensure the community prevents water contamination by controlling the placement of potentially polluting facilities and chemical storage areas through zoning and designations.
- Ensure there is a warning system in place to notify community residents and visitors of potential boil water and “do not drink” advisories.
- Ensure there is a warning system in place to notify police, fire and ambulance personnel of potential boil water and “do not drink” advisories.

References

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