

PNG Public Safety Partners

PUBLIC SAFETY AWARENESS & INFORMATION PACKAGE

August 2021



PACIFIC NORTHERN GAS

A TriSummit Utilities Company



PNG CONTACT INFORMATION

Phone Number: 1-800-667-2297

Email: CustomerService@png.ca

24-hour Emergency Phone Number: 1-800-663-1173

Note: If you are contacting PNG about a concern with your natural gas services, such as gas odour or an emergency involving natural gas, do not e-mail us, please use the 24-hour emergency phone number listed above.

Call before you dig – BC ONE CALL: 1-800-474-6886

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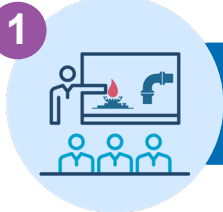
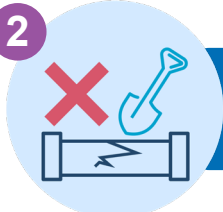
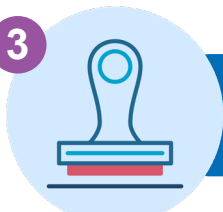

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PNG'S COMMITMENT TO SAFETY

PUBLIC SAFETY AWARENESS PROGRAM

At PNG, safety is our top priority. As part of our *Public Safety Awareness Program*, we proactively communicate and raise awareness about natural gas safety in the communities we operate and serve in. This is done through a series of initiatives, which promote natural gas safety – for both the *transmission pipeline* and *distribution system*.

The objectives of our Public Safety Awareness Program are to:

- 1 Inform, educate and raise awareness about natural gas safety – distribution and transmission lines
- 2 Reduce third party damage to PNG infrastructure
- 3 Endorse and support relevant initiatives supported by BC Common Ground Alliance, BC One Call, Technical Safety BC and WorkSafeBC
- 4 Monitor the effectiveness of public awareness activities, programs and policies

PUBLIC SAFETY PARTNERS

Through this *Public Safety Awareness & Information Package*, PNG is connecting with our Public Safety Partners to help ensure the protection and safety of the public.

As one of the various organizations, communities or other stakeholders PNG coordinates with during the response to an incident, we are providing you with important information regarding our operation and incident response protocols. This information includes emergency contact information, details of risks and hazards associated with natural gas pipelines, specifics on how PNG may notify your organization, and steps to take in the event of an emergency.

We are also reaching out to request your organization's support through confirmation of your emergency contact information, which will help to ensure we have the necessary information for a coordinated response.

In the event of an emergency, a coordinated response will help to ensure the safety of the public, the environment, and the economy. PNG's Public Safety Partners include:

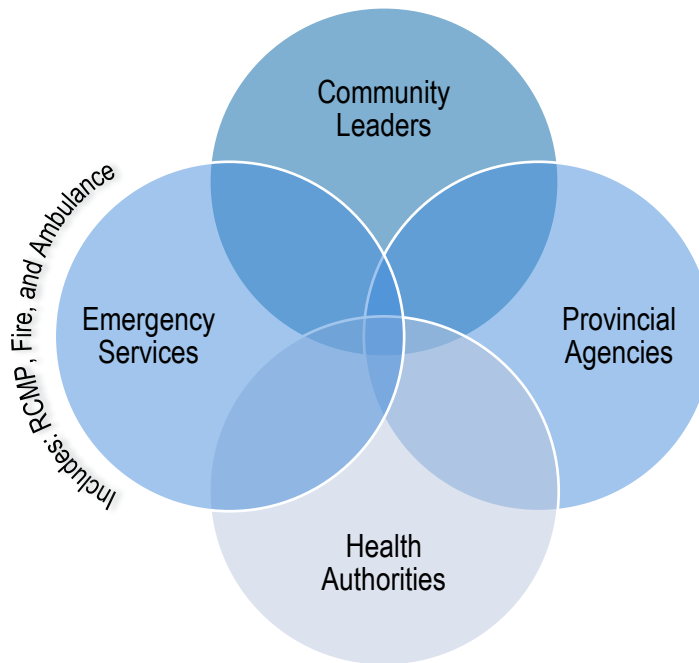


Figure 1 – Our Public Safety Partners

OVERVIEW

Pacific Northern Gas (PNG) Ltd. is a natural gas company located within Northern British Columbia (BC). With service extending from Prince Rupert on BC’s West Coast to the northeast of the province in the towns of Fort St. John, Dawson Creek and Tumbler Ridge, PNG is a leading energy provider for many communities. PNG owns and operates the natural gas distribution facilities (gas utility), delivering gas from our transmission system to homes and businesses in the various communities served. The transmission system provides more than 42,000 residential, commercial and industrial customers with natural gas daily.



Figure 2 – PNG Service Areas Map

WHAT IS NATURAL GAS?

Natural gas is a naturally occurring mixture of hydrocarbon gases and vapors, mostly consisting of methane (CH₄). In its natural state, natural gas is odorless, colourless, lighter than air, and produces very few emissions. It is considered the cleanest fossil fuel because of its clean-burning qualities and, when used properly, is a safe and convenient energy source. PNG adds a chemical odorant called “mercaptan” to natural gas, which makes it smell like rotten eggs. This addition helps to make gas leaks easier to detect.

As PNG is a critical infrastructure service provider, any impact on our infrastructure could cause a disruption to an organizations’ ability to operate if it is dependent on natural gas services. Some of the services natural gas is used for include:



Figure 3 – Examples of Natural Gas Uses

TYPES OF PNG PIPELINES

The image below illustrates the natural gas system from production to end-users.

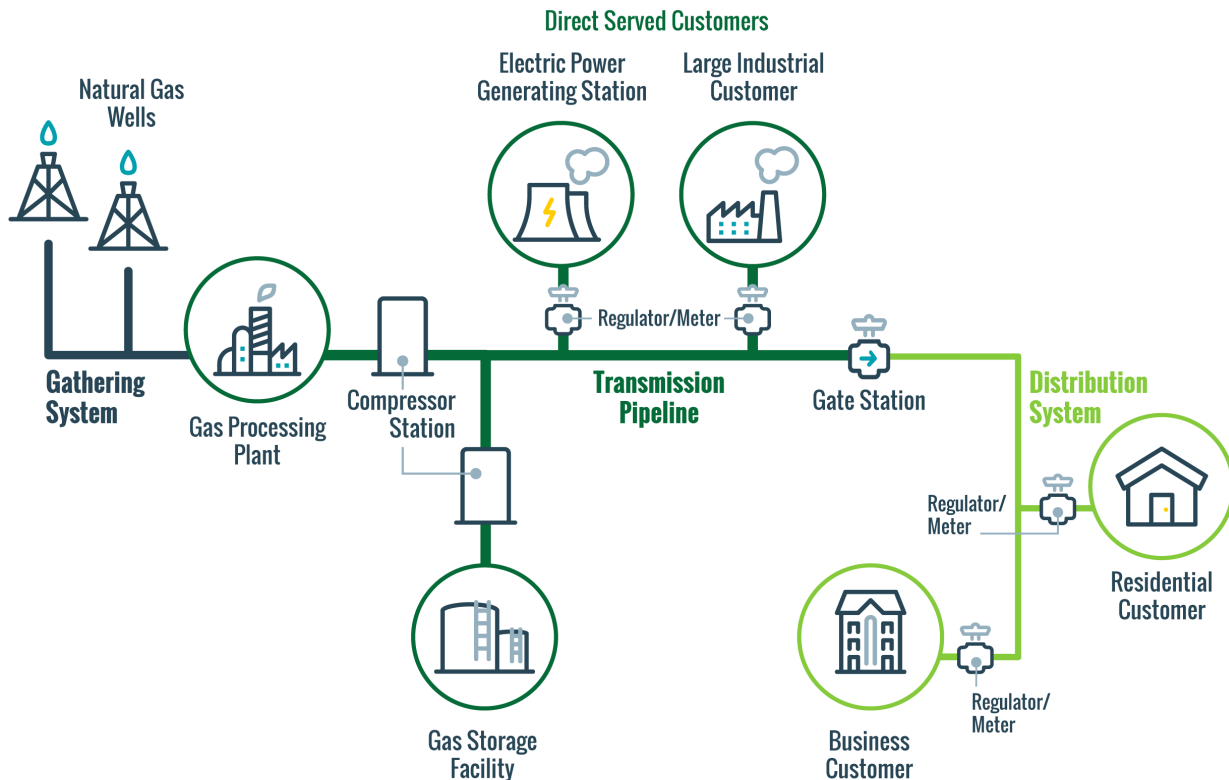


Figure 4 – Natural Gas Delivery System

PNG operates both **transmission pipelines**, as well as **distribution systems**, which feed end customers.

Transmission Pipeline

PNG’s **transmission pipeline** carries natural gas to supply the natural gas utility.

The pipeline operates at higher pressure and ranges in diameter from the size of an empty toilet paper roll to the size of a large bale of hay (101 mm to 1,212 mm).

Transmission pipelines are typically constructed from pressure tested steel pipe and installed within a right-of-way, which is granted by a landowner or legally acquired by PNG. Once the pipeline right-of-way has been established, PNG is entitled to use the land for the construction, operation and maintenance of our pipeline. Right-of-ways where PNG pipelines are located are marked by above-ground signs similar to the image shown here.



Distribution System

PNG's **distribution system** delivers natural gas service to residential, commercial and industrial users. These gas lines range in diameter from smaller than a dime to that of a pop bottle (12.7 mm to 152.4 mm), operate at lower pressure and are typically constructed from polyethylene/plastic pipe.

REGULATORY OVERSIGHT

BC Oil and Gas Commission

The BC Oil and Gas Commission (OGC) is the regulator for PNG's **transmission pipeline** system (operating in excess of 700 kPa). The *Oil and Gas Activities Act* and its regulations include provisions regarding the safe operation of oil and gas operations and the prevention of uncontrolled or inappropriate releases of substances in the environment. These provisions are complemented by the activities of other agencies, legislation and national safety standards to ensure adequate protection of people, the environment and property.

In the event of an incident, which impacts or has the potential to impact PNG's **transmission pipeline**, the Commission provides oversight of emergency response actions undertaken by, or on behalf of, a permit holder, including PNG. The OGC ensures permit holders meet their responsibilities to control incidents potentially affecting people and the environment and to mitigate the consequences of the event.

Technical Safety BC

Technical Safety BC oversees the safe installation and operation of technical systems and equipment, including PNG systems operating at less than 700 kPa (i.e., the **distribution system**). Technical Safety BC administers the *Safety Standards Act* and associated regulations that apply throughout British Columbia.

Technical Safety BC may take a monitoring role in an incident involving PNG's **transmission pipeline**.

OPERATIONAL SAFETY

In addition to periodic internal inspection, the PNG **transmission pipeline** is routinely patrolled by air and land to check for corrosion, leaks, vegetation and development encroachment. The **transmission pipeline** is protected by an external coating and a cathodic protection system, which inhibits external corrosion. PNG utilizes a 24-hour per day Gas Control Centre with computer control of our **transmission pipeline**, commonly referred to as SCADA (Supervisory Control and Data Acquisition), to aid in the safe operation of our system.

PIPELINE DAMAGE PREVENTION

Public safety is an ongoing initiative, and PNG relies on the support of local governments and Indigenous communities. The most common cause of pipeline breaches is third-party damage.

To help support pipeline safety and prevent third-party pipeline damage...

PNG will...



Help excavator operators **obtain written permission** for any construction or excavation activity across or near the pipeline.



Identify the **exact location of the buried pipeline**, which can only be verified by an authorized PNG field representative.



Provide **guidelines for excavation** with mechanical equipment **or blasting** near our pipelines.



Provide an **authorized PNG field representative** during construction or excavation activity occurring close to a pipeline.

To help support pipeline safety and prevent third-party pipeline damage...

Your organization or community can...



Be aware of any construction activity in or near your community. Local officials should alert the pipeline company if they see or become aware of unauthorized or dangerous activity near a pipeline. They should not hesitate to contact PNG at **1-800-663-1173**.



Require and promote that excavators and landscapers working in your community **contact BC One-Call before digging** to request the location of the pipeline, and other buried utilities. BC One-Call: **1-800-474-6886** or **www.bconecall.ca**



Advise and encourage excavators, landscapers, or other construction personnel to immediately **report any pipeline damage**, including scrapes, dents, or exposed areas of pipe so that the damage can be inspected and repaired as needed.



Inform and educate members of the community and your organization about the signs of a potential pipeline leak and the location of any pipelines.



Review emergency response procedures for your community or agency. Liaise with PNG for discussions when reviewing or updating emergency response procedures.



Local government, emergency services, and people who live and work near PNG's **transmission pipeline** are encouraged to familiarize themselves with the pipeline's right-of-way. PNG installs permanent signs, called pipeline markers, along the pipeline right-of-way.

HAZARDS & RISKS

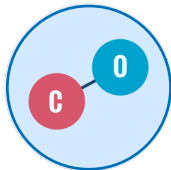
SPECIFIC HAZARDS AND RISKS OF NATURAL GAS

Although emergency incidents are rare, there are hazards and risks associated with natural gas releases.



Asphyxiation

The methane component of natural gas, when released, may displace oxygen and could lead to suffocation.



Carbon Monoxide Poisoning

Carbon monoxide (CO) is a colourless, odourless and toxic gas that is produced when fuels such as natural gas or propane are burned **incompletely**. Incomplete combustion can happen if there is a lack of fresh air, or if dirt and debris collect in the burner.

If carbon monoxide is inhaled, it depletes oxygen in the red blood cells, resulting in specific symptoms. Depending on the amount inhaled and the length of time of exposure, symptoms can include the following:

- Chronic headaches;
- Nausea;
- Drowsiness;
- Impaired judgment; and
- Loss of coordination.

Exposure to high amounts of carbon monoxide can lead to unconsciousness, brain damage and death. If carbon monoxide poisoning is suspected, take the following steps:

- Move the person to fresh air right away; and
- Call for medical assistance.

The risk of carbon monoxide poisoning from natural gas appliances is very low.

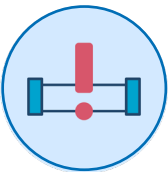


Explosion

Natural gas is a highly flammable substance. During an incident, such as a gas leak, there is the potential that the gas could catch fire and/or cause an explosion.

When a leak occurs, PNG personnel use air monitors to detect Lower Explosive Limit (LEL) levels to determine a safe Hazard Planning Zone (HPZ) (see *Hazard Planning Zone (HPZ)*). The LEL is the lowest concentration (percentage) of a gas or vapor in the air, capable of producing a flash of fire in the presence of an ignition source.

- If air monitoring results show LEL levels of between 0% and 10%, levels will be continuously monitored but pose no serious threat of ignition.
- Any LEL levels greater than 10% are considered unsafe and require evacuation from the area, as well as continuous monitoring to assess the situation accurately. The HPZ will be determined in relation to these LEL levels to ensure public and personnel safety.





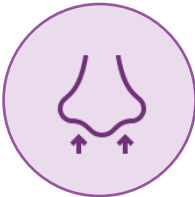
Service Disruptions

In the event an incident occurs, there could be a disruption in utility service. This could cause a loss of heat or hot water for PNG's customers. As a result, response capabilities to an incident could also be impacted.

DETECTING A GAS LEAK

Natural gas has specific characteristics, which can assist Public Safety Partners, and the public, in detecting a leak.

Possible observations in the event of a gas leak include:

Detection	Observation
	<ul style="list-style-type: none"> • Steam-like cloud • Unexpected frost on the ground • Dirt blowing from the ground • Bubbling in wet areas • Patches of dying or discoloured vegetation • Stained or melted snow/ice over the pipeline areas • Dry area in wet ground • Flames coming from the ground if the leak has ignited
	<ul style="list-style-type: none"> • Unusual hissing, whistling or roaring sounds
	<ul style="list-style-type: none"> • Smell similar to rotten eggs or sulphur

IN CASE OF A NATURAL GAS LEAK...

If you suspect a gas leak, here is what you should do:

If you smell rotten eggs (the sulphur-like odor of natural gas), hear the hiss of escaping gas, or otherwise suspect a gas leak, here is what you should do:



Leave the area immediately. If inside, leave the building immediately; leaving the door open and any windows that may already be open.

Don't smoke, light matches, operate electrical switches including your cell phone or telephone, or create any other source of ignition.



When clear of the immediate area, use a nearby phone to call the PNG 24-hour emergency line at **1-800-663-1173**, or notify Emergency Services at **9-1-1**.

RESPONSE

PNG'S RESPONSE APPROACH

PNG defines emergencies as “*a present or imminent event that requires prompt coordination of actions concerning persons or property to protect the health, safety or welfare of people, or to limit damage to property or the environment.*” A scale of severity is used to classify the incident.

PNG utilizes an all-hazards approach to emergency management. This means our emergency management plans and practices provide a common response protocol to follow in the event of any emergency, with hazard-specific procedures and other supporting tools and resources to supplement, as required.

Managing a pipeline emergency has the potential to be a large and complex task. Each pipeline emergency is unique in terms of:

- Incident size;
- Location;
- Density of at-risk population;
- Weather conditions; and
- Number of responding organizations.

HAZARD PLANNING ZONE (HPZ)

A Hazard Planning Zone (HPZ) is the geographical area within which persons, property, or the environment may be affected by an incident based upon the hazards associated with natural gas being released from a *transmission pipeline*. The HPZ is used for planning purposes and, in the event of an incident, to identify the initial zone for immediate response actions.

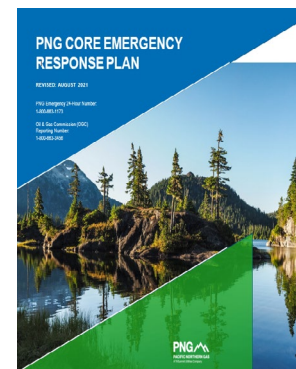
The HPZ is dependent upon the type of product (natural gas) released, the size of the pipe impacted, along with the quantity and pressure of the gas. The initial Hazard Planning Distance for PNG's *transmission pipeline* is 115m.

*Important note – the concept of HPZ does not apply to natural gas **distribution systems**.*

COORDINATED RESPONSE

In the event of an incident impacting or potentially impacting PNG operations, we have an Emergency Response Plan (ERP) in place, which would be activated to guide response and incident management activities.

We conduct regular emergency exercises to validate our emergency plans and provide an opportunity to practice response and incident management activities.



PNG's Emergency Response Plans can be viewed at:
<https://png.ca/emergency-response-plans/>

Public Safety Partner Involvement and Notification

PNG relies on our Public Safety Partners to promote and support our public safety initiatives. Strong relationships help to ensure an effective response in the event of an emergency.

How your organization is affected in the event of an incident will likely depend on your involvement in the response and your reliance on the critical service PNG infrastructure provides.

Specific Public Safety Partner involvement during an incident response will depend on the scale of the incident and whether it involves the PNG distribution system or transmission pipeline.

PNG's emergency response plans and practices differ and are influenced by different regulatory requirements for the distribution system and transmission pipeline.



The information on the following pages outlines how PNG notifies and coordinates with our various Public Safety Partners in the event of an incident.

Emergency Services (RCMP, Fire, Ambulance)

Involvement

In the event of an incident impacting PNG's *distribution system* or *transmission pipeline*, a coordinated response will be carried out between PNG, emergency services, and other involved agencies.

A Unified Command is formed when each agency involved identifies its own Incident Commander. Incident Commanders work in coordination with one another while maintaining authority of their own agency and area(s) of responsibility.

Notification

The PNG Call Centre may be notified of an incident involving our infrastructure by emergency services or a member of the public.

If emergency services have been notified of an incident related to PNG infrastructure:

1. Call the PNG 24-hour emergency line at 1-800-663-1173.

If emergency services have arrived at the scene of an incident related to PNG infrastructure:

1. Leave the area or building immediately, leaving the door open and any windows that may already be open.
2. Call the PNG 24-hour emergency line at 1-800-663-1173.

Alternatively, PNG may call 9-1-1 to request the support of emergency services upon arrival at the site of an incident.

Municipalities and Regional Districts

Involvement

In the event of an incident impacting PNG's *distribution system* or *transmission pipeline*, PNG may coordinate with municipalities and regional districts to activate their emergency plan(s) to support the management of consequences or impacts of the incident by exercising their authority to issue public safety measures.

Notification

PNG will utilize the contact information contained within our emergency response plan(s) to notify emergency coordinators for relevant municipalities and regional districts. PNG maintains contact information for those communities it provides natural gas to (distribution service) as well as those which fall within the Hazard Planning Zone of the *transmission pipeline*.

Indigenous Communities

Involvement

In the event of an incident impacting PNG's *distribution system* or *transmission pipeline*, in collaboration with PNG, Indigenous communities may need to activate their emergency plan(s) to help manage any consequences or impacts. Communities may need to exercise their authority to issue public safety measures.

Notification

PNG will utilize the contact information contained within our emergency response plan(s) to notify Indigenous communities if there is an incident impacting or potentially impacting the community or traditional territory.

PNG maintains contact information for those communities it provides natural gas to (distribution service) as well as those which fall within the Hazard Planning Zone of the *transmission pipeline*.

Emergency Management BC (EMBC)

Involvement

When an incident occurs, which impacts or has the potential to impact PNG's *transmission pipeline*, PNG will work in conjunction with EMBC to communicate the risks and/or potential risk(s) posed to local governments, Indigenous communities, provincial ministries, industry, critical infrastructure operators, and/or non-government organizations.

PNG may request EMBC to arrange a 'coordination call' to enable PNG to provide situation updates.

Information shared during the coordination call may include:

- Incident situation: location, magnitude and potential impacts;
- Consequences (actual and potential), including communities affected;
- Initial/ongoing response status including mitigation measures being taken; and
- Addressing questions from participants.

If boat traffic is common on a river/lake within the Hazard Planning Zone, PNG, in collaboration with EMBC, will request to halt boat traffic and restrict access.

Notification

In the event of an incident involving the *transmission pipeline*, PNG will contact the Incident Reporting Line at 1-800-663-3456, in accordance with the ERP.

PNG will request the call handler specifically notify the EMBC Regional Manager and provide an explanation of the actual, or potential, impacts to the utility.

BC Oil and Gas Commission

Involvement

In the event of an incident impacting PNG's *transmission pipeline*, the Commission provides oversight of emergency response actions undertaken by, or on behalf of, PNG.

The role of the OGC during an incident can include:

- Overseeing the PNG response to the incident;
- Establishing communication with PNG;
- Confirming the incident level with PNG;
- Approving the downgrade of incident level;
- Confirming ignition decision with PNG, if time permits;
- Issuing road closure orders upon request from PNG; and
- Liaising with government agencies.

Notification

The OGC requires **notification** from PNG in the event of an incident impacting the *transmission pipeline*. The incident reporting requirements and timeline for notification depend on the severity of the incident; notification must be received within one hour for more serious incidents or within 24 hours for minor incidents.

The OGC has reporting regulations and specific incident level criteria to determine the severity of an incident.

Technical Safety BC

Involvement

In the event of an incident impacting PNG's *distribution system*, Technical Safety BC may be notified.

Technical Safety BC may have a monitoring role in an incident involving the *transmission pipeline* system (infrastructure operating in excess of 700 kPa) unless pressure equipment is involved.

Notification

PNG will notify Technical Safety BC if any of the following occur during an incident:

- Injury or loss of life;
- Fire or explosion;
- Incident involves pressure equipment;
- Significant interruption, or potential interruption of distribution service to customers as a result of an incident involving infrastructure operating in excess of 700 kPa; or
- Media attention, including digital, print and social media.

WorkSafe BC

Involvement

In the event of an incident that resulted in a death or an injury, or had the potential to cause serious injury, one or more WorkSafeBC officers may come to the incident site to conduct an investigation. WorkSafeBC may investigate to determine why the incident happened, gather information about industry trends, and provide recommendations to prevent future incidents.

Notification

PNG must immediately notify WorkSafeBC of the occurrence of any accident that resulted in:

- Serious injury that required medical intervention;
- Fatality to any PNG employee, contractor, or third party;
- Fire;
- Accident (human-caused) involving a break of the transmission pipeline;
- Structural failure of a building;
- Significant system damage caused by a third party or PNG; or
- Major release of a hazardous substance that posed serious risk to the health of workers.

Transportation (Critical Infrastructure)

Involvement

To ensure the safety of the public, closure of transportation routes may be required. This includes roads and railways, as well as airspace and waterways.

In the event of an incident, PNG will notify the appropriate contact, with the expectation that the necessary/appropriate actions to limit access will be taken, as required.

Notification

Airports: Airports located within 2 km of an incident will be notified by PNG immediately.

Airspace: Airspace restrictions, such as a closure of the airspace above the incident site or for a certain radius from the release (a no-fly zone), may be required. PNG, in collaboration with NAVCANADA, and in accordance with the NOTAM procedure (found in the ERP), will determine appropriate safety measures.

Railway: If there is a railway within the Hazard Planning Zone, rail companies will be notified by PNG to halt trains on that track.

Waterway: If boat traffic is common on a river/lake within the Hazard Planning Zone, PNG, in collaboration with EMBC, will request to halt boat traffic and restrict access.

Ministry of Transportation and Infrastructure (MoTI)

Involvement

PNG's *transmission pipeline* is typically installed in a right-of-way. This right-of-way may be on, or adjacent to, land/infrastructure under the responsibility of MoTI, including highways, roadways, bridges and other infrastructure.

In the event of a *transmission pipeline* incident, which may require highway closures or may cause damage or interruption to both PNG and MoTI infrastructure, PNG will coordinate with MoTI for support with:

- Managing highway closures and re-openings;
- Communicating highway closures, detours, and delays;
- Conducting repairs as well as design and implementation of contingency strategies, where the pipeline right-of-way and MoTI infrastructure parallel.

Notification

In the event of an incident, PNG will promptly notify MoTI if the incident involves, or affects, a primary or secondary highway, and/or the *transmission pipeline* HPZ is located within the right-of-way of an arterial highway.

Health Authorities (Northern Health & First Nations Health Authority)

Involvement

In the event of an incident, PNG will look to the Northern Health Authority to support in the emergency response with the following duties and response capabilities:

- Providing health advice and safety information for any health care or special care facility and for the more vulnerable residents;
- Monitoring health effects of the incident to ensure appropriate data is collected and investigate such health effects;
- Providing advice to the regional and/or provincial government on the actual or potential health effects of the incident;
- Enforcing and regulating Public Health Regulations.

In the event of an incident, PNG may request the First Nations Health Authority to collaborate, coordinate, and integrate with the Northern Health Authority's health programs and services to assist Indigenous communities impacted by the incident.

Notification

PNG will notify relevant health authorities that an incident has occurred. PNG will also share actual/possible impacts and consequences to the public in the vicinity, as well as information related to impacts to the utility (heat, hot water).

This communication between PNG and the health authorities will enable each agency to assess risk and conduct pre-planning to address impacts to health facilities and the public.

Health Emergency Management BC (HEMBC)

Involvement

In the event of an incident, PNG will coordinate with HEMBC for collaboration and assistance with:

- Providing Subject Matter Expert representatives from relevant health authorities to communicate and coordinate air monitoring data, to enhance and expedite public safety assessments and protective measures;
- Coordinating between health authorities' communications personnel and PNG Information Officer on public messaging and media releases related to public health; and
- Continual collaboration with the PNG Liaison Officer.

Notification

See [Health Authorities](#) section on the previous page.

Ministry of Forests, Lands Natural Resource Operations and Rural Developments (FLNRORD)

Involvement

PNG will coordinate with FLNRORD when an incident occurs related to our [transmission pipeline](#) for assistance with:

- Closing parks or areas where natural resources may be affected by the incident;
- Managing park or area closures for the duration of the incident; and
- Monitoring and responding to wildfires.

In the event of a wildfire that presents a risk to PNG infrastructure, PNG and FLNRORD will work together to protect responders and to mitigate wildfire damage to PNG infrastructure and service as PNG is classified as 'critical infrastructure' and is considered a priority.

Notification

The Ministry of Forests, Lands and Natural Resource Operations will be promptly notified by PNG of any incident that occurs in the spring or summer season if the incident contributes to the risk of, or directly causes, wildfire.

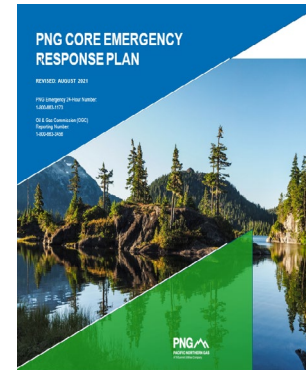
IN CLOSING

ONGOING PARTNERSHIPS

PNG values the knowledge and support offered by each of our Public Safety Partners. Continuing to strengthen our partnerships and build upon our collaborative public safety initiatives helps to ensure a coordinated and successful response in the event of an emergency.

For more information regarding PNG's emergency response, please look at the Emergency Response Plans section on our website:

<https://png.ca/emergency-response-plans/>



You may also contact PNG at:

Phone: 1-800-667-2297

Email: CustomerService@png.ca

To report emergencies, contact **1-800-663-1173**.

YOUR EMERGENCY CONTACT INFORMATION

We would like to confirm that we have the correct emergency contact information on file for your organization.

Please submit your current emergency contact information by completing the form provided in the distribution email or by sending your current emergency contact information to recordsadmin@png.ca, including:

- Point of Contact (Name, Title)
- Organization
- Contact Phone Number
- Contact Email

