



Mackenzie Valley
Environmental Impact Review Board

GLOSSARY OF TERMS

Tlicho

Benchmark area

Recovery

Geologist

Hydrocarbon

Legislation

Cultural Retention

Boom and Bust Cycles

Migration

Copper

unemployment rate

Core Analysis

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Diverse languages and cultures in the North mean interpreters and translators have an important and challenging job.

Whether it's explaining what's been said or what's been written, superior translation is essential to ease understanding and ensure good decision-making.

The Mackenzie Valley Environmental Impact Review Board strongly believes in expert translation.

Keeping people in the know, in a language they understand, means proposed developments and the resulting effects on the surrounding environment and people are clear.

By building the capacity of interpreters and translators, communities, industry, government and regulators can be confident that what is being communicated has been accurately translated.

Since 2002, the Review Board has held five terminology workshops for the Mackenzie Valley aboriginal languages of Chipewyan, Tlicho, Gwich'in, North Slavey and South Slavey.

Indian and Northern Affairs Canada, the Mackenzie Valley Land and Water Board, the Protected Areas Secretariat and the Government of the Northwest Territories provided their support for these educational seminars.

At the workshops, translators discussed English words and ways to explain them in their aboriginal language. The result is this glossary of terms, a guide that contains English concepts and ideas and their aboriginal-language equivalents.

This glossary provides translations of terminology for the biophysical environment, the oil and gas industry, the mining industry, the human environment and the resource management system.

The translations included in this glossary may require further revisions depending on how the words are used during interpretation and translation.

Because the Review Board has not been able to work with and record each dialect, translators are encouraged to speak to elders and community experts for translations for which they are unsure. The glossary provides spaces for interpreters and translators to write in their own translations, correct errors, or add general notes.

And because translators were unable to complete entire lists of words for some entries, the English is also provided.

This glossary can also be downloaded from the Review Board's website, in the Reference Library, at **mveirb.nt.ca**.



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North Slavey

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Jonas Neyelle

Lucy Ann Yakeleya

South Slavey

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Sarah Gargan

Elizabeth Hardisty

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Fred Tambour

Joe Tambour



Legislation

Law

Ndègotłeh naàwo
(Tlicho)

Notes:

Federal Legislation

Laws of the Canadian Government

1. Sòmba nààledq nààwo-dettah
 2. Ndèts'ò k'àowodè nàawo-Rae
- (Tlicho)

Notes:

Territorial Legislation

Laws of the GNWT

Edzanè gha ndèts'ò k'ààwo nààwo
(Tlicho)

Notes:



Mackenzie Valley Resource Management Act

Law that says both government and aboriginal people will work together to protect the Mackenzie Valley land, water, air and living things.

Edzanèk'e naàwo ghàà ndè hoìdì
(Tlicho)

Notes:

Stewardship

Taking good care of resources, especially the land

Ndè hots'ìhdì gha goòla
(Tlicho)

Notes:

Protection

The things important to the area's value will remain safe from development for many years

Ndè hots'ìhdì gha goòla
(Tlicho)

Notes:



Conservation

Wise use of resources so they are available into future

Wek'enàhots'ehà
(Tlicho)

Notes:

Sustainable Development

Development that helps us now but will not hurt future generations

① *Where development meets the needs of the present generations without compromising the ability of future generations to meet their own needs*

1. Wet'à edets'eeda ha dîle
 2. Wet'à edakats'ede ha dîle
- (Tlicho)

Notes:

Globalization

Increasing economic ties between countries around the world

Hazhō nee gha
(Tlicho)

Notes:



Renewable Resources

Something that comes from the land and replenishes itself

① *For example: Wood products, fur-bearing animals and fish*

Ndè gots'o t'asìi nadeshe
(Tlicho)

Notes:

Non-renewable Resources

Something that comes from the land and cannot be replenished once taken

① *For example: Oil and gas, and minerals*

Ndè gots'q t'asìi nadeshe-le
(Tlicho)

Notes:

Protected Areas Strategy

With it, communities can protect special areas from development

1. Ndè wexoìdì gha eghàlahoda
2. Nààwo weghà ndè wexoìdì
(Tlicho)

Notes:



Conservation Value

Showing the importance of protecting an area compared to other areas

Ndè wet'ažà t'à wexoìdì
(Tlicho)

Notes:

Values

The important and useful things for the land, water, air or living things

Done nàawo wet'ažà wexoìdì
(Tlicho)

Notes:

Earth Cover Mapping

Satellite pictures of plants, put together to make a map of a large area

Yat'a ts'ò, It'qa dehshe ndè enìhtl'è
ìichì
(Tlicho)

Notes:



Ecoregion

A big area with its own type of land, water, weather and living things

① *There are 42 different ecoregions in the NWT*

Ndè necha ełek'èch'ahot'ı
(Tlicho)

Notes:

Ecological Representation

A sample of the big areas of land that are protected for research and monitoring

Ndè tsıwı ch'àà wexoıdı
(Tlicho)

Notes:

Core Representative Area

Small sample areas which do not have development

① *A core representative area is chosen from each of the 42 ecoregions in the NWT*

Ndè ııchı tsıwı ch'àà denahk'e wexoıdı
(Tlicho)

Notes:



Benchmark Area

An area for research where development is not allowed

Ndè wegodı weghà asıı wexè ìidza
(Tlicho)

Notes:

Landscape Unit

A small area with a one type of land

① *Usually a place where you would see a certain type of rock, soil and terrain*

Ndè necha-le ełek'ech'ahot'ı
(Tlicho)

Notes:

Special Element

Something special that only exists in a few places

① *For example: Hot springs, cliffs where falcons build their nests, whooping crane breeding habitat, and early open water areas*

Ndè ełek'ech'ahot'ı
(Tlicho)

Notes:



Simulation

Using a computer to predict what could happen

① *The use of a computer or mathematical model to predict what will happen in the future*

Satsq wet'à nadā asīl wek'èhoʔq
(Tlicho)

Notes:

Model (MARXAN)

A computer program that recommends what areas should be protected

① *It takes information about the land and calculates the information*

1. Weghà edī ɫ't'qa dehshe wegat'ɫ
2. Model (MARXAN)
(Tlicho)

Notes:

Hotspot

An area that has many values

① *When special values are mapped, hot-spots are areas on the map where many values overlap*

Ndè ɛlek'èch'ahot'ɫ denahk'e wet'azà
(Tlicho)

Notes:



Boundary

A line that divides up areas

Tł'1 nawhet'1
(Tlicho)

Notes:

Area of Interest

A special area that a community wants to have protected from development

① *These areas of interest are identified using the Protected Areas Strategy process*

Ndè wexoìd1 gha ìich1
(Tlicho)

Notes:

Candidate Protected Area

An area that the community has passed resolutions to protect using the Protected Areas Strategy

Ndè wexoìd1 gha ìich1 nàawo
(Tlicho)

Notes:



Interim Protection

The things important to an area's value will remain safe from development for a short time

① *This type of protection usually lasts 5 years*

Sıghàwa ts'ò ndè wexoìdı
(Tlicho)

Notes:

Third-party Interests

A person or company that the law says has the right to do work on that area of land

Taè t'à geekw'e t'à gıyatı naèta
(Tlicho)

Notes:

Sponsoring Agency

A government that has the power to protect and manage protected areas

Nààwo ghà k'ehogera
(Tlicho)

Notes:



Protected Area

An area that is protected by law from harm done by development

Ndè wexoìdì
(Tlicho)

Notes:

Network of Protected Areas

Many protected areas that are connected to each other

Elets'adats'edì t'à ndè wexoìdì nàawo
(Tlicho)

Notes:

Management Plan

A plan that says how they will manage the protected area

1. Ndè ìichì wexoìdì
2. Enjhtl'e ghà ndè wexoìdì
(Tlicho)

Notes:



Land Use Plan

On paper, it is written what activities are allowed on the land

Edàànı ndè k'e eghàlats'eda ha
(Tlicho)

Notes:

Mineral Potential

The chance they have of finding rich rocks in the area

Sòmba kwe dètı gòhı takò
(Tlicho)

Notes:

Hydrocarbon Potential

The chance they have of finding different types of oil and gas in the area

Tłe, dètı gòhı tahkò
(Tlicho)

Notes:



Conservation Area / Zone

An area where development is not allowed

Idaa gogha ndè ìichì wek'èhodi
(Tlicho)

Notes:

Special Management Area / Zone

An area partly protected but some development is allowed

Ndè ìichì edàànì wek'e eghàlahoda ha òìle
(Tlicho)

Notes:

Land Withdrawal

A selected area of land where development is not allowed right now

1. Ndè ìichì wek'e eghàlahoda ha-le
2. Ndè ehtò
(Tlicho)

Notes:



Prospecting Permit

Written permission to explore for rich rocks on the land

En̄htł'è ghà ndè ìichì
(Tlicho)

Notes:

Mineral Claim

An area of land that a prospector or mining company has rights to

Ndè ìichì (Sòmba kwe)
(Tlicho)

Notes:

Crown Rights

Federal government lands

① *Usually refers to surface or mineral rights.*

Ndè ndèts'ò k'aàwo naàwo tł'a wherq
(Tlicho)

Notes:



Call for Nominations

The government asks where companies want do oil and gas developments on government land

Laà gha ası ts'eèke
(Tlicho)

Notes:

Call for Bids

The government asks for money to do oil and gas developments on government land

1. Laà k'è sɔmba nèt's'èza
2. Sɔmba t'à laà gha edets'ehdza
(Tlicho)

Notes:

Surface Rights

The right to work on top of the land

Ndè kah ts'ò k'ats'edè
(Tlicho)

Notes:



Mineral Rights

Ownership of what is underneath that land

Ndè gotł'a ts'ò k'ats'ede or ndè gotł'a
gotł'à wheʔq
(Tlicho)

Notes:

Exploration Licence

Written permission to explore the land for oil or gas

1. T'ası hats'eta
2. Tłeh hàts'eta làà nıhtł'è
(Tlicho)

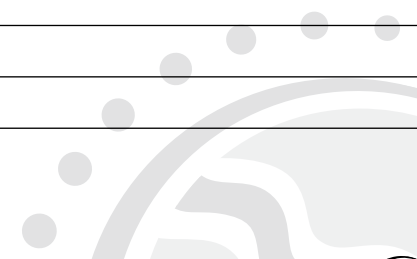
Notes:

Significant Discovery Licence

Written paper that shows oil and gas was found and allows one company the right to do oil and gas developments there

Sınıhots'ıʔa gha làà nıhtł'è
(Tlicho)

Notes:



Production Licence

Written permission to take out the oil and gas

Tleh hohlè gha làà n̄htl'è
(Tlicho)

Notes:

Landman

The oil company person who speaks with landowners for permission to drill

1. Tleh gha d̄q xè ndè xè sìgoh̄l̄
2. Tleh gha ndè xè sìgoh̄l̄ d̄q
(Tlicho)

Notes:

Landowner

The ones who own the land

① *This can be the government, aboriginal land claim organizations or individuals*

Ndè ts'it̄q naàwo
(Tlicho)

Notes:



Aboriginal Peoples

The descendants of the original peoples of Canada

Ḏone s̱ẖ
(Tlicho)

Notes:

Consultation

Seeking advice from aboriginal people before development goes ahead

① *Usually refers to the “duty to consult” by the government, but is also sometimes used to include the responsibility of industry and other organizations to seek aboriginal advice.*

E̱ex̱e̱ gots’edo/e̱eyatı ts’edı
(Tlicho)

Notes:

Settlement Area

An area of the Mackenzie Valley with a settled land claim

Nḏe̱ ñicẖ
(Tlicho)

Notes:



Settlement Lands

Lands that belongs to the land claim group

Ndè sìdlà
(Tlicho)

Notes:

Memorandum of Understanding (MOU)

Early document outlining how a relationship will work

Elek'èats'ıwq/elek'èhoòts'eèra naawo
(Tlicho)

Notes:

Access Agreement

Formal consent to carry out work on private lands

① *It is made between the developer and the owners of the land*

Enhtł'è t'à ndè k'e eghàlahòda gha
yatı hohlè
(Tlicho)

Notes:



Access and Benefit Agreements

Land access agreement required by law between the Dene and a company

Goxè ndè sùdlà k'èha gots'àzeèdì
(Tlicho)

Notes:

Royalty

Taxes on money made by a company from oil and gas

Ndè gotl'a t'à sɔmba hohlè
(Tlicho)

Notes:

Benefits Plan

A company's plan that is sent to the federal government and describes how the development will bring benefits

Sɔmba hohlè t'à gots'àgedì naàwo/
ndèts'ò k'aàwodeè, la t'à sɔmba hohlè
naàwo t'à, edaanì dɔ ts'àgedì gha yatì
getsì
(Tlicho)

Notes:



Environmental Impact Assessment

All the different instances a development proposal is looked at for possible bad changes to the land, water, air or living things

Edaanì laà t'à ndè xèidì ghò elexè
gots'edo
(Tlicho)

Notes:

Development

Work carried out on land or water

① *This term is meant for projects that require a water licence or land use permit*

Ndè k'e laa hohlè
(Tlicho)

Notes:

Development Proposal

The plan for a development the company wants permission to do

Ndè k'e laà hohlè gha yatì hohlè
(Tlicho)

Notes:



Self-assessment

Looking at how your development will change things

① *The developer usually does a self-assessment of its projects to prove that it will not harm the environment*

Whacho edenaawo hageeta
(Tlicho)

Notes:

Footprint

The amount of land the development will use

① *The land area occupied by the project, including all man made structures and any other land disturbances required to construct and operate the mine.*

Sòmbak'è gokèèk'èè
(Tlicho)

Notes:

Project Life Cycle Assessment

Looking at how the development will set-up, operate and clean up

Edaıwa gots'ò haanì goòzò ha
(Tlicho)

Notes:



Socio-economic Impact Assessment (SEIA)

Studying how way of life will change from new development

Nexè edəgode-le wexdədɪ
(Tlicho)

Notes:

Gender-based Assessment

Studying to see if men will feel different changes than the women will feel from new development

La t'ə dɔzhɪ ts'èko gɪxè ɫadɪ hoðɔq
agojà
(Tlicho)

Notes:

Reconnaissance

A first study of the area to learn a little bit about the rocks, land, water, air and living things that you can find there

Dakweɫə asɪɪ wedanata
(Tlicho)

Notes:



Spatial and Temporal Boundaries

The time limit and size limit of an area that they will study

1. Dawhàà gots'ò asıı wedanàts'eta ha dıle
2. Sadze ıızhı (Tlıcho)

Notes:

Baseline Conditions

Information that describes the way the environment or people are today, before the new development happens

① *Baseline conditions provide a benchmark against which to measure change; good baseline data could also identify strengths and weaknesses in the community*

La/naawo wexè hòewı kwe wendà-nahòeta
(Tlıcho)

Notes:

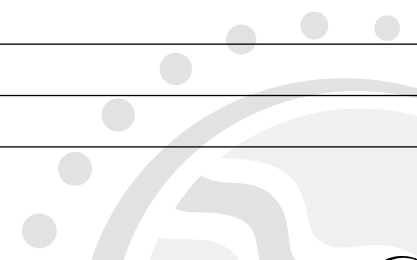
Primary Research

New information that is collected to answer a specific question

① *This kind of research can be collected through observation, interviews, surveys, focus groups, and community meetings*

Gndı/Nawo hàts'eta
(Tlıcho)

Notes:



Secondary Research

Information gathered from reports to answer a specific question

(i) Secondary source data include existing reports, statistics and other forms of information that have been generated for other reasons

Asìl dek'etl'è wenaawo hàts'eta
(Tlicho)

Notes:

Longitudinal Research

Studies done over time on the same population, to identify patterns of change

(i) This type of research helps to separate naturally occurring change in society from change that will likely occur from a development

Sawaà t̥ḁt'è t'asìl wexòedì t'à
wexiìdzà
(Tlicho)

Notes:

Trend

A pattern of change that is happening over the years

(i) An example of a trend is over the last ten years there has been a continual drop in suicides in a certain community

Łagwa ładł anagoòt'ł
(Tlicho)

Notes:



Quantitative Research

Research that describes the way something is by looking at the numbers

(i) An example would be the community has 3 community hunts a year, with an average of 25 caribou and two moose being harvested per hunt

Asìl nàetà wenaawo hageta
(Tlicho)

Notes:

Qualitative Research

Research that describes the way something is, based on the opinions, behaviours and experiences of people

(i) An example would be the observation that the fall hunt includes everyone from the community, and the setting provides an opportunity for knowledge to be passed down between generations. It makes the community feel more unified

Edàanì hoò?q ha sìl wexàts'èta
(Tlicho)

Notes:

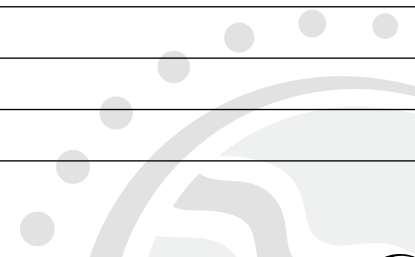
Key Informants

Important community people to talk to when researching changes

(i) These people can be leaders, social workers, elders etc

Amìl wets'ò hòelì ts'ò gogende
(Tlicho)

Notes:



Community Surveys

Asking the same questions to a number of people and recording their answers in order to understand some aspect(s) of their lives

① *Different types of surveys include population, sample, random, stratified*

Ḏone dazeèke
(Tlicho)

Notes:

Local Knowledge

Information about the past and present way of life for the community that can be known by both aboriginal and non-aboriginal long term residents

① *For example: Social workers, teachers, and others who have been in the community for a long time may hold local knowledge*

Ḏone edenaawo k'eèzhq̱
(Tlicho)

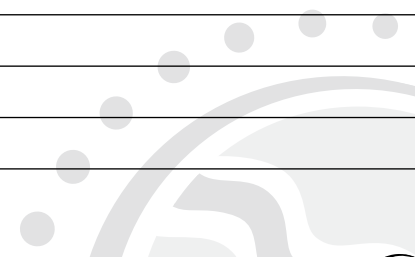
Notes:

Traditional Knowledge

Aboriginal knowledge about the people, the land, water, living things and the culture

W̱haedq̱ naàwo
(Tlicho)

Notes:



Community-based Assessment

The community does its own research

① *This can happen before any developments are proposed, or in response to a new development proposal*

Kòta edegha asìi hageeta
(Tlicho)

Notes:

Case Study

An example from experience somewhere else

Ìnee edàanì weghàlagìda t'à
wek'èhòdzò
(Tlicho)

Notes:

Valued Components

Things that are important to the community, family or person

① *For example: Caribou are often considered valued components by communities*

Asìi naawo kòta gha wet'aà
(Tlicho)

Notes:



Indicator

Something that shows whether or not something is changing

(i) For example: The unemployment rate in a community is an indicator for economic well-being. Housing indicators are another type of indicator that will show if people can afford housing, if the houses are good enough and if there is enough houses

Asìl ladi at'ì t'à wek'èhòdzò
(Tlicho)

Notes:

Appropriate Indicator

The numbers that do the best job of describing and measuring the important changes in the community

(i) For example: If a community feels the unemployment rate in a community is the best indicator for economic well-being, then it will be an “appropriate” indicator

Asìl gigha wet'aà wexòedi
(Tlicho)

Notes:

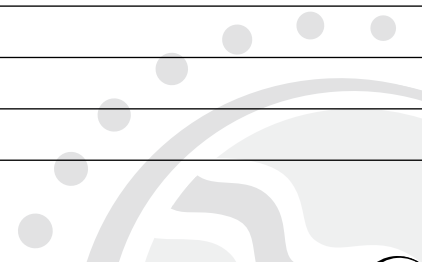
Determinants

Factors that make something happen; things that cause something

(i) Determinants of good health include good schooling and time on the land

T'asìl ts'ìrò at'ì
(Tlicho)

Notes:



Co-occurrence

Showing that two things are happening at the same time, even though one might not be causing the other to happen

① *For example: Increased drinking in a community can be shown to have changed in the time a new mine has been in existence. This does not necessarily mean that the mine caused drinking any more than the drinking caused the mine to open*

Asìl nàke ełeghàà agoot'ı

(Tlicho)

Notes:

Induced

Caused by

Wets'ıhı̀ò

(Tlicho)

Notes:

Causal Factor

An activity that makes changes happen

① *For example: If a new road can be shown to contribute directly to population increases or increases in hunting access, it is a causal factor in that change*

Asìl wets'ı̀ò hagoot'ı

(Tlicho)

Notes:



Mental Mapping

Drawing out thoughts using boxes and lines to show how a development's parts are connected to different impacts

Edàanì asìì hazhò ełexèxìdì ha
wegoòt'ı
(Tlıcho)

Notes:

Matrix

A chart to show how things are connected

① *A cause-effect matrix is a chart that allows us to shows what different parts of a development cause changes to different parts of day to day life*

Nıhtł'è weghàà edàanì t'asìì wexìdì ha
sıì wek'èhodzò
(Tlıcho)

Notes:

Impact Pathways

Showing the connection between parts of a development and its impacts on the people or the land

① *For example: 2 week in/2 week out work schedules could be a pathway to potential family problems*

Ełek'èda wexìdì
(Tlıcho)

Notes:



Direct Impacts

Changes that happen specifically because of a new development

(i) *For example: Increased job opportunities and increased levels of incomes for project employees*

Asìl hohlè t'à goxiìdì
(Tlicho)

Notes:

Indirect Impacts

Secondary changes that are caused after direct changes happen from a development

(i) *These are sometimes called spin-off effects; an example of an indirect impact is increased business opportunities, or increased needs for particular services because of increased income from new jobs at a mine*

Asìl hohlè t'axq goxiìdì
(Tlicho)

Notes:

Perceived Risk

Peoples' concerns about risks from a development, whether the risk is likely to happen or not

(i) *For example: The public's perceived risk of flying in an airplane is often higher than driving, even though driving statistically is more dangerous*

T'asì ghq nanìts'edè
(Tlicho)

Notes:



Impact Equity

The idea that those most likely to suffer from bad changes should also get to share equally in the good changes from a new development

(i) *For example: Making sure that if a family has to pay higher costs for groceries because of a new development that there is a higher incomes to offset the rise in prices*

Hazhō ɛlexèt'e wet'àhòts'eh?à
(Tlicho)

Notes:

Intergenerational Equity

Protecting resources to share with future generations

(i) *This concept is linked to sustainable development and conservation*

Ida gogha wek'èts'èdì
(Tlicho)

Notes:

Resilience

The ability of people, animals or the environment to recover from or resist bad change

(i) *For example: When a community is able to keep its language strong despite modern influences because they invest in language programs*

Asìl dezhi xò wetets'eèdè
(Tlicho)

Notes:



Vulnerability

Things that might make it more likely for people, animals or the environment to experience bad change or not take advantage of good change

(i) *For example: If a community has low levels of basic education, that makes it difficult to get jobs in new developments that require high school educations*

Asìl dezhi t'à wetets'eèdè haàdì
(Tlicho)

Notes:

Limits of Manageable Change

The most something should be allowed to change before it becomes too late to stop or fix it

(i) *For example: A community or government may decide that in order to maintain access to health services, there will be a nurse for every X number of people in the community; if the population grows beyond this, more nurses would be required*

Ìka whi-le gokwe asìl nezì-le sùl
sìnats'ehzì
(Tlicho)

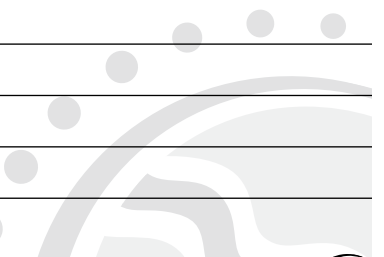
Notes:

Residual Impacts

Amount of impact (bad change) left over after we try to fix them

Edeèghàà sùdla-le
(Tlicho)

Notes:



Futures Foregone

What would have to be given up in the future in order to take advantage of development today

① *For example: The loss of river recreation and traditional land use after the building of a dam*

D11 dzeè ayì ghalats'èda t'à ɪda gha
wedets'eèts1
(Tlicho)

Notes:

Cumulative Effects Assessment

Studying all the changes from developments, that have happened or will happen to the land, water, air or living things over many years

T'as1 ndè xèid1 ha wedanagetah
(Tlicho)

Notes:

Sustainability Assessment

Looking at whether a development will change people's future ability to live a good life, not just trying to avoid too many bad changes

ɪda ahsì ɪla d11 dzeè laanì goxè hoòʔqa
gha wek'ahoòta
(Tlicho)

Notes:



Salvageable Materials

Things they can reuse

① *For example: Materials or equipment recovered from the dismantling or demolition of the plant, buildings or structures, which can be removed from the site and re-cycled or re-used in another location*

Notes:

Cost-benefit Analysis

Studying to see if something is worth doing after balancing what it will cost what will be gained

Ahsĩ asli wet'aæà ha wek'aèta
(Tlicho)

Notes:

Risk Analysis

Studying what might happen and how big a change it will bring

Ndè gotleh hàgeta
(Tlicho)

Notes:



Precautionary Principle

A belief that when the possible bad change is unacceptable, we should stop it from happening even if we aren't sure it will happen

① *For example: Even if there is only a small chance that teenage suicide rates will go up because of a new development, action still needs to be taken to avoid that from happening*

T'asagodech'àà wegho dadaàgeèdi
(Tlicho)

Notes:

Zero Tolerance

Strictly follow the rules; no second chances

Wech'àot'q
(Tlicho)

Notes:

No Net Loss

Replace habitat you take from the fish with new habitat

① *A term found in Canada's Fisheries Act; it requires fish habitat replacement on a project-by-project basis.*

Notes:



Proactive

Acting to make change before something bad happens

Ḏone gha nàdahowho/nàhots'ehdè
(Tlicho)

Notes:

Adaptive Management

Always looking for better ways to work

Nààwo gèèhdza hagèèta
(Tlicho)

Notes:

Polluter Pays Principle

A belief that a company is responsible for fixing bad changes that its operations cause

Edèk'è senàgogehꞖ
(Tlicho)

Notes:



Alternative Energy Sources

A way to make power from things that replenish

① *Energy sources that are not yet commonly used, such as wind power, solar power, hydrogen power*

T'as11 1ad1 wet'à 11dikò hohlè
(Tlicho)

Notes:

Ground Truthing

Researchers going back and talking to the community to confirm whether their study's results are correct

Ahs1 gond1/naawo ehkw'1 l1 ha kòta
dagogehke
(Tlicho)

Notes:

Social Impacts

Changes to the way people live as individuals, families or communities

Edàanì dōne edegeèda g1k'èzhq-le ajà/
edàanì dōne edegeèda 1ad1 at'1
(Tlicho)

Notes:



Cultural Impact

Something that affects a community's values, beliefs or spiritual objects/places

(i) The relationship with the land and time on the land, the ability to harvest wildlife and other resources, and the maintenance of traditional language, inter-generational relationships, laws and way of life

Edàanì dōne naawo xè ładł at'ł
(Tlicho)

Notes:

Economic Impacts

Changes to the way people make a living and share their resources

(i) Economic impacts include both impacts on wage and traditional economies

Edàanì sōmba gok'ìtl'ì
(Tlicho)

Notes:

Impact Benefit Agreement (IBA)

Contracts between developers and aboriginal communities that promise to provide certain benefits to communities from a new development in exchange for them supporting the development

IBA, la hohlè k'èha gots'àzeèdì
(Tlicho)

Notes:



Compensation

Paying people affected by a bad change

T'asagoòdzà t'à k'èha gots'àzeèdì
(Tlicho)

Notes:

Socio-economic Agreement (SEA)

Agreements between developer,
government (and possibly other groups)
that ensure commitments are
implemented

Sqmba hohlè ha yatı hohlè
(Tlicho)

Notes:

① *Socio-economic Monitoring Agreement
are SEAs that include the ability to
monitor the changes in a community*

Developer

The ones who want to do the work

Amù wetł'ah laà hohlè ha
(Tlicho)

Notes:



Development Application

A form filled out to ask for official permission for a development

(i) A developer submits this application when it needs a land use permit or water licence for a development

Ndè eyits'q tı t'a eghàlats'èda gha enhtl'è
(Tlicho)

Notes:

Mackenzie Valley Land and Water Board

The ones who sit on a board and give written permission for developments

(i) This board does preliminary screening and issues the licences and permits for developments

Mackenzie Valley ndè eyits'q tı gha k'àdee
(Tlicho)

Notes:

Preliminary Screening

A quick, first look at a proposed development to decide if it should be studied more

(i) Usually done by the land and water boards to decide if the development application should be sent to environmental assessment before issuing a licence or permit

Laà nhtl'è gòòchı kwe nhtl'è k'aetah
(Tlicho)

Notes:



Permit

Written permission to use land or water for a development

Laà en̄htl'è
(Tlicho)

Notes:

Land Use Permit

Written permission to use the land for a development

① *The permit outlines what specific activities can and cannot take place*

Ndè k'e eghàlats'eda gha laà n̄htl'è
(Tlicho)

Notes:

Water Licence

Written permission to use water for a development

① *A license permitting the use of waters or the deposit of waste, or both*

1. T1 t'à eghàlats'eda gha en̄htl'è
2. Tì n̄htl'è
(Tlicho)

Notes:



Potentially-affected Community

A community that needs to be studied to see if a new development might change it

Ahsì kòta wexèidì ha hòonì
(Tlicho)

Notes:

Directly-affected Community

A community that a new development will most likely change for the good or bad

La ts'ìdò kòta ładì ajà
(Tlicho)

Notes:

Adverse Impacts

Effects from a new development that make life worse

① *Also known as negative impacts; for example, people having to leave their families for work*

Asìì ładì at'ì t'à goxìidì
(Tlicho)

Notes:



Beneficial Impacts

Effects from a new development that makes life better

① *Also known as positive impacts. An example is more income for families*

Asìl wet'à hots'ehwhì ha goxìdì
(Tlicho)

Notes:

Local Government

Leaders of an official city, town, hamlet or charter community

Kòta k'àdeef
(Tlicho)

Notes:

Referral

A decision to take a closer look for possible bad changes to the land, water, air or living things

Nìhtl'è wek'anohotah
(Tlicho)

Notes:



Might

Something has a reasonable chance of happening

Edahxq tahkò
(Tlicho)

Notes:

Impact on the Environment

Changes to the land, water, air or living things from a development

Laà t'à ndè xèɪɪɪɪ
(Tlicho)

Notes:

Public Concern

People's concerns about possible bad changes the proposed development will make to the land, water, air or living things

Kòta asìì ghq nanɪdɛdɛ
(Tlicho)

Notes:



Environmental Assessment

Looking at a proposed development to make sure there are no bad changes to the land, water, air or living things

Ndè xèìdì ch'aà wedanahotah naàwo
(Tlicho)

Notes:

Mackenzie Valley Environmental Impact Review Board

The ones who sit on a board and look closely at proposed developments to make sure there are no bad changes to the land, water, air or living things.

① *This board does environmental assessments and makes a recommendation to the Minister for developments*

Mackenzie Valley ndè xèìdì ch'aà
naàwo ghàà eghàlagèda gha k'àdee
(Tlicho)

Notes:

Rules of Procedure

Rules to follow when the board does its business

Naàwo eghàlats'eda
(Tlicho)

Notes:



Development Description

Written details of what the development will be like and the changes it might have on the land, water, air or living things

Edaanì laà hohlè gha n̄htl'è
(Tlicho)

Notes:

Public Registry

The place where they file the documents for the assessment

① *This registry is available to the public to see*

En̄htl'è whela k'èè
(Tlicho)

Notes:

Scoping

They are deciding what parts of the development they should look at most carefully

Laà wedanats'etah
(Tlicho)

Notes:



Terms of Reference

Instructions to the company on what to write about when describing their proposed development and its possible changes to the land, water, air or living things

En̓htł'è weghàà eghàlahòda
(Tlicho)

Notes:

Work Plan

The schedule for the way they will look at the proposed development

En̓htlè weghaà eghàlahòda gha
(Tlicho)

Notes:

Party

People or organizations who sign up to be a part of studying the proposed development

Amù gixè̀ìdì ha sù ndè ghò gogede
(Tlicho)

Notes:



Information Request

Written questions

God1 ts'ek'e
(Tlicho)

Notes:

Expert Advisor

A trained and knowledgeable person who gives advice

Naàwo k'èzòdò
(Tlicho)

Notes:

Public Hearing

Meeting held with everyone to talk about the proposed development

Kòta done xè łegehdì
(Tlicho)

Notes:



Commitment

A public promise to do something

① *For example: During an environmental assessment, a developer promises to hire an environmental monitor when doing its work, that is called a commitment*

Deyatı goghàgeṛà
(Tlicho)

Notes:

Likely

Something that has a better chance of happening than not happening

① *More than 50% of the time it will happen*

Edahxq sqqmı
(Tlicho)

Notes:

Significance

A large amount of bad change that needs to be minimized because it will probably happen to an important part of the environment

① *The Review Board must consider the significance of likely adverse impacts of a development in its Report of Environmental Assessment*

Asıı nezı-le sıı sıàts'ehṛı
(Tlicho)

Notes:



Suggestion

An idea by the Review Board to fix bad changes the development will make. These ideas do not legally need to be followed.

① *These are written in the Review Board's Report of Environmental Assessment*

D11 haanì wets'ìdzà
(Tlicho)

Notes:

Measures

Written rules that will stop or lessen the developments bad changes to the land, water, air or living things. These rules are legal and must be followed.

① *The Review Board writes measures in its reports that developers, governments and other groups have to follow if the development goes ahead*

Esagodech'àà naawo ghàà eghàlahòda
(Tlicho)

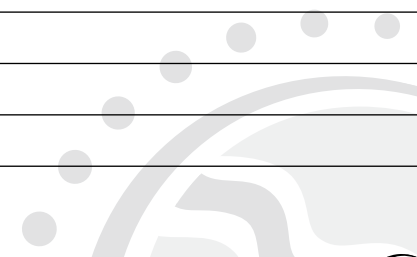
Notes:

Environmental Impact Review

A special panel of people looking at a proposed development in more detail to make sure there are no bad changes to the land, water, air or living things

Ndè xè1d1 ha wedanahotah
(Tlicho)

Notes:



Cooperation Agreements

Written agreement to work together

① *For example: Set up for the Joint Impact Review of the Mackenzie Gas Project*

Elexè eghàlats'èda yatı ts'ehtsı
(Tlicho)

Notes:

Preliminary Information Package

A written document that gives the plan for how the JRP will look at the pipeline

Laà wèhoiwì kwe nıhtl'è hohlè
(Tlicho)

Notes:

NWT Water Board

The ones who sit on a board and give written permissions for using water for developments in the Inuvialuit Settlement Region

Edzanèk'e gha tı gha k'àde
(Tlicho)

Notes:



Environmental Impact Study

The company looks to see how its development will change the land, water, air or living things and what can be done to stop bad changes

Ndè xèıdı ch'aà wegho godı nagehtsı
(Tlicho)

Notes:

Participant

Ones who share their views or concerns during an impact assessment process

Done xè
(Tlicho)

Notes:

Intervener

People or organizations who sign up to be a part of examining the proposed development during a Panel Review

Ndè ghō dāzehke dō
(Tlicho)

Notes:



Panel Hearing

Public meeting with ones who sit on a panel

Kòta łegehdì
(Tlicho)

Notes:

Responsible Authority

The part of government that must protect that part of the land, water, air, or living things from bad changes

① *A responsible minister could be the Minister of Environment if that department has to issue a license or permit for the proposed development*

K'ade wetł'a hò?ò
(Tlicho)

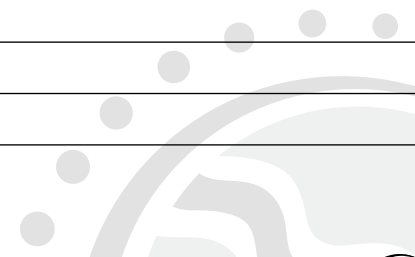
Notes:

Responsible Minister

The government leader responsible for making the decision

Ndèts'ò k'aàwodee wetł'a hò?ò
(Tlicho)

Notes:



National Energy Board

The ones who sit on a board and make decisions about oil and gas developments

Canada gha tleh gha k'ade
(Tlicho)

Notes:

Regulatory Review

Looking at the development so they can write up the written permissions

Laà n̄htl'è hohlè gha wek'anahotah
(Tlicho)

Notes:

Regulators or Regulatory Authorities

The ones who give written permission for developments on the land or water

① *Usually government or land and water boards*

Laà n̄htl'è hohlè gha k'ade
(Tlicho)

Notes:



Enforcement

Making people obey a law or rule

Nààwo wek'ezats'it'e ha hoʔo
(Tlicho)

Notes:

Inspector

Person who makes sure the
development is following the rules

Asì k'aehtadq
(Tlicho)

Notes:

Monitoring

Keeping track of changes that are
happening to the land, water, air or
living things

Wehoidi
(Tlicho)

Notes:



Monitoring Agency

The group whose job it is to watch for and report bad changes

Notes:

Progressive Reclamation

They fix the land, water, air and living things while they work

① *It is a type of reclamation that is done during the construction and operation phases of a mine prior to final closure.*

Notes:

Reclamation

Fixing the land after a development is done there

Ndè sinaàᓃᓴ
(Tlicho)

Notes:



Site Reclamation

Restoring the area back to nature

Ndè sɪnàʔɪ
(Tlicho)

Notes:

Notes:

Notes:



Socio-economic Environment

What life is like for the community or person

(i) Includes economic activity, social relations, well-being and culture

Sqmba hohlè t'à edàanì dōne gixè
hoò?o
(Tlicho)

Notes:

Boom and Bust Cycles

A cycle where a strong economy or big development project creates lots of money and jobs for a short period of time, followed by a period of little money and few jobs

Hqotsa sqmba hohlè eyitl'ahq dawhìdì
anàhòt'l
(Tlicho)

Notes:

Multiplier Effect

How money or jobs boost the economy and create more money and jobs

(i) This can be jobs or income; an example of the multiplier effect is when a mine creates 10 high paying jobs, which then causes an additional 15 other jobs outside of the mine to be created by other businesses

Dōne t'ò sqmba lq hohlè
(Tlicho)

Notes:



Labour Market

The number of people available and willing to work compared to the number and type of jobs available

Ahsì dọ la xeètłọ
(Tlicho)

Notes:

Employment Rate

The percentage of people who have jobs

① *For example: Of 100 working age people, if 50 are working, and the rest are not working, the employment rate is 50%*

Dọne edàatłọ laètọ
(Tlicho)

Notes:

Participation Rate

The percentage of people who work or are looking for work

① *For example: Of 100 working age people, if 50 are working and 25 are looking for work, the participation rate is 75%*

Dọne edàatłọ la hàeta
(Tlicho)

Notes:



Unemployment Rate

The percentage of people who want to work in the wage economy and are willing and able to work but don't have jobs

① *For example: Of 75 people participating in the economy, if 19 can't find work, the unemployment rate is 25% (If you don't have a job, and you aren't looking for one, you aren't considered "unemployed")*

Ḏone eḏaaṯḻo la̱eṯo-le
(Tlicho)

Notes:

Employee Retention

The ability to keep workers employed with your company

La gha ḏo k'ègeèḏi
(Tlicho)

Notes:

GINI Coefficient

A number showing whether people in a community have similar or different incomes

① *A zero means that everyone makes the same amount of money; a 1 would mean that one person made all the money*

Hazẖo ̱̱ex̱et'̱e s̱omba hoẖḻe wex̱òeḏi
(Tlicho)

Notes:



Vocation

Job/career you are trained for

La gha hoghàgoòhtq
(Tlicho)

Notes:

Mobility

Ability to move from place to place

① *Workers are mobile if they have high skills; they have many work options*

K'ehots'ehwho
(Tlicho)

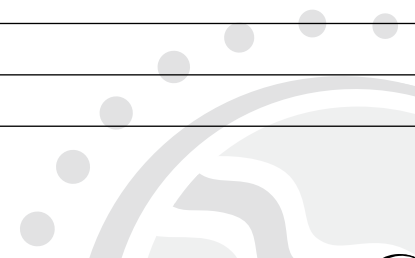
Notes:

In-migration

New people moving to the community

Dq ładł gotageède/gots'òtaède
(Tlicho)

Notes:



Inflation Rate

A number showing whether things are getting more expensive because there is too much money chasing too few goods and services

Asìl edànìhtì at'ì
(Tlicho)

Notes:

Consumer Price Index

A number that shows how the price of common things that people buy has changed

① *They calculate this number by looking at the cost of a “bundle of goods” families buy over a certain period of time*

Asìl edàetì wexoèdì
(Tlicho)

Notes:

Gross Domestic Product (GDP)

The cost of all the products made and services offered in a region

Sqmba k'ètł'q t'à sqmba edets'etsì
(Tlicho)

Notes:



Genuine Progress Indicators (GPI)

Numbers that measure money, environment, culture and health to show how good life is for a group of people

① *These indicators look at how damaging the environment costs the government money to fix and compares that to the profits that the development will create. The difference shows whether “progress” or positives actually happen because of the development*

Asìl t'à goxè edę goð?o
(Tlicho)

Notes:

Subsistence Economy

Traditional economy

Ndè k'e edets'eèda
(Tlicho)

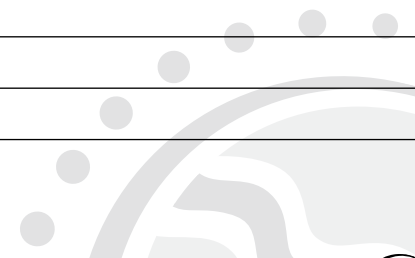
Notes:

Harvesting

Hunting, trapping, fishing, gathering berries and other plants as an aboriginal right

Dechjìnnì deghàlats'eda
(Tlicho)

Notes:



Life Skills Training

Teaching someone skills that help them do well in day-to-day life

Edegeèda ha hoghàweètq
(Tlicho)

Notes:

Cultural Retention

Ability to keep culture strong

Naawo ts'ìtq
(Tlicho)

Notes:

Cultural Maintenance and Transmission

Making sure the traditional values and way of life of a cultural group stay strong

① *This can happen by passing on traditions and knowledge between generations*

Dqne naawo ts'ìtq
(Tlicho)

Notes:



Quality of Life

How good someone feels their life is

Edàanì edets'eèda
(Tlicho)

Notes:

Population Health Model

Looking at all the things that make us healthy or sick

① People who have a higher level of education and higher incomes usually are healthier. In this model, it is believed that health is not just about air, water and food quality and physical safety

Dōne edàanì endaa s11 wek'aeta
(Tlicho)

Notes:

Community Wellness

How healthy a community is

① To be healthy isn't just medical health. It includes a person's link to nature, sense of community, strong cultural identity, level of addictions, etc.

Kòta nezì gixè hoòzò
(Tlicho)

Notes:



Autonomy

Ability to make our own choices

Edeghe naawo ts'ehts₁
(Tlicho)

Notes:

Dependency

Rely on others to survive

Wet'ahòòts'ehzà/wet'q edeèts'eda
(Tlicho)

Notes:

Social Cohesion

How close people feel to each other and
how well they live with one another

Elexeta edets'eèda
(Tlicho)

Notes:



Social Capital

The relationships between people, their skills, and the cultural values among a group of people that make them strong

Ḍone neẓı̄ ɛlex̣è eghàlàede t'à gınaawo
natso
(Tlicho)

Notes:

Social Infrastructure

Services offered in the community to make it strong or promote community wellness

① *This includes, community agencies, services, and facilities and other social support measures necessary for adequate functioning of that community*

K'aadè gıt'à neẓı̄ hoòʔq
(Tlicho)

Notes:

Capital

Things of value which can be used to make life better

① *Some examples include money, property, relationships, education etc*

Aṣı̄ı̄ wet'à eghàlats'èda goht'q
(Tlicho)

Notes:



Heritage Resources

Important things or places that show the history and culture of people

Whaedq naàwo
(Tlicho)

Notes:

Demographics

The characteristics that describe a group of people

① *For example: age, sex, education levels, income are all used to show how people compare to each other - economically, socially and culturally*

Ilè dq kaza nàeta
(Tlicho)

Notes:

Functional Literacy

Being able to read and write well enough to do everyday activities

N̄htł'è k'ets'eèzhq
(Tlicho)

Notes:



Sexually-transmitted Infections (STIs)

Any illness or disease spread from person to person through sex

Elexèts'ehk'è t'à tada goxìdì/elexè
ats'et'ᑭ tada/elet'ats'et'ᑭ

(Tlicho)

Notes:

Incarceration

In prison; in jail

Dq wedàetq

(Tlicho)

Notes:

Fetal Alcohol Spectrum Disorder

When the development of an unborn baby is affected because the mother drank alcohol while pregnant

① *Effects can vary from mild to severe, and can result in learning and behaviour problems*

Kòtì tada t'à dqelᑭ

(Tlicho)

Notes:



Core Need

Not being able to afford good enough housing

Asìl dets'eèdlì
(Tlicho)

Notes:

Poverty Line

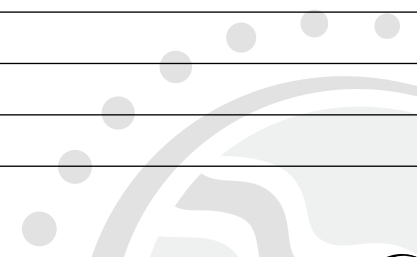
The amount of money someone needs to earn in a year to not be considered poor by the government

① *In Canada as a whole in 2004, a rural family of 4 with income of less than \$26,015 didn't have to pay income taxes, as they were considered to be below the poverty line*

Sqmba lq gha eghàlats'eda-le t'à dq
eteet'ì k'èè naità
(Tlicho)

Notes:

Notes:



Geology

Looking at the way rocks are made

Kwè naàwo

Tlicho

Notes:

Geologist

A person who studies the way rocks are made

1. Kwè kaeta dɔ

2. Kwè naàwo k'ezɔ dɔ
(Tlicho)

Notes:

Geochemistry

Studying what the rocks are made of

Kwe wenaèdì ghàdetɔ

(Tlicho)

Notes:



Geophysics

Studying how rocks act

① *For example: Whether the rocks are magnetic, radioactive or how well they transfer electricity, etc.*

Sòmba kwe kaʔà ghàdetò
(Tlicho)

Notes:

Geophysical Survey

Studying the land to see what is underground based on how the rocks act

1. Kwe kaʔà wenaèdì wedanats'eta
2. Kwe ìdìkò wets'ò elì
(Tlicho)

Notes:

Samples

Studying chips of rocks from drilling to check for oil and gas or rich rocks

Ndè gotleh gha wek'aeta
(Tlicho)

Notes:



Core

A piece of rock that comes from drilling and is tested

Kwè naedo
(Tlicho)

Notes:

Core Analysis

They study to find out what the rock is made of

Kwè naedo k'àeta
(Tlicho)

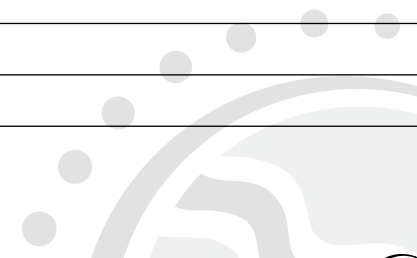
Notes:

Permafrost

Ground that is always frozen

① *A permanently frozen layer below the surface in cold regions of a planet*

Notes:



Active Layer

The ground on top of permafrost

Ndè kanagoył
(Tlicho)

Notes:

Surficial Material

Things left behind on the land

1. Ndè goka whatsq edeghàlada
(whaat'à lanì)
2. Asıı ndè ka ɹàila
(Tlicho)

Notes:

Fossil

Animals or plants from the past trapped
in old rocks

Kwè xıhshq
(Tlicho)

Notes:



Erosion

Wearing away the land with water, ice or wind

Edeghàlada t'a nààzha
(Tlicho)

Notes:

Subsurface

Under the surface of the land

Ndè gotl'a
(Tlicho)

Notes:

Stratification

Forming layers

① *The sequence of rocks on top of each other*

Kwe ełekadawhela
(Tlicho)

Notes:



Bedrock

The layer of solid rock underneath the ground

Ndè gotl'a kwe nḡa
(Tlicho)

Notes:

Canadian Shield

The large area of rock that spreads out from Hudson Bay

(i) It is the plateau area of Canada that extends south and east from Hudson Bay. It contains some of the oldest rocks on Earth, and is rich in minerals

1. Canada k'ezhı kwe edèdlı nḡa
2. Kwe nèè
(Tlicho)

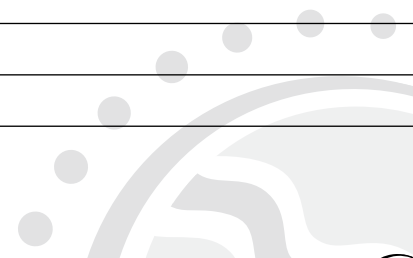
Notes:

Mineral

Rocks are made of these

(i) A substance, which may or may not be of economic value, and it occurs naturally in the earth.

Notes:



Indicator Minerals

Rocks that give hints that rich rocks might be found there

Weghà sòm̐ba kwe wegoit'à
(Tlicho)

Notes:

Kimberlite

The type of rock where diamonds are found inside

Notes:

Hardrock

Rocks that are very hard

① *Minerals or rock (such as quartz, copper, zinc, uranium) which can be mined only by blasting and drilling*

Kwe dezhì
(Tlicho)

Notes:



Diamond

Valuable, very hard, clear rock

ʔeja kwe, kwe sade,
(Tlicho)

Notes:

Gold

Valuable yellow metal

Kwe dekwo
(Tlicho)

Notes:

Arsenic

A poisonous metal in some rocks

Kwe wenaèdì naèdìlǫ edèèdlǫ
(Tlicho)

Notes:



Silver

Valuable white metal

Sòmba dego
(Tlicho)

Notes:

Copper

A reddish metal that is softer than most metals

① *A common metal that can be molded and is good for high heat temperatures and electricity*

Sòmba kwe dekwo
(Tlicho)

Notes:

Nickel

A shiny silver metal used to make steel stronger

① *A silver-white metal that can be molded and is strong.*

Notes:



Cobalt

Shiny white-silver metal they find in rocks with nickel

Satsq kwe sahxl làànì
(Tlicho)

Notes:

① *A shiny silver-white metal that occurs with iron and nickel and is used to make steel stronger*

Lead

Soft, grey metal often used to make bullets

Notes:

Iron

Metal that rusts

① *A metal found in rocks and looks dark brown from rust.*

Notes:



Quartz

The white veins in the hard rock

Notes:

Quarry

A place where they mine rocks above ground

Kwegwì k'è
(Tlicho)

Notes:

Shale

Flat rocks that break apart

① *A rock formed by the joining of clay, mud, or silt, having a smooth structure and made of minerals*

Kwe t'qa
(Tlicho)

Notes:



Sulphurous Rock

Rocks containing sulfur

Dege lò làànı Kwe
(Tlicho)

Notes:

Sulphide Minerals

Sulphur in the rocks

Dege lò làànı Kwe
(Tlicho)

Notes:

Red Mud

Mud that is red

Ehtł'è dek'ò
(Tlicho)

Notes:

① *It is red because of the iron in the rocks.
It is made from heating and processing
rocks that has gold, arsenic etc.*



Potash

A mineral used in fertilizer

① *Any of the potassium salts, such as potassium chloride*

Notes:

Quicksand

Wet sand that you sink in when you step on it

① *Sand that has a lot of water mixed in it and cannot support the weight of anything that steps in it*

Ehtł'ètòò
(Tlicho)

Notes:

Sandstone/Mudstone

A rock made from sand that has hardened

Notes:



Hydrology

Studying the way water moves

① *The science of water, its properties, and movement over and under the land*

T1 k'etl'o nààwo
(Tlicho)

Notes:

Water Balance

Measuring the amount of water going in and out of a place

T1 edàtlq haètł'1 xè edàtlq k'ehòw1
(Tlicho)

Notes:

Watershed

Water in the area that drains into rivers and streams

① *The area of land drained by a river/ stream and its tributaries. Also a body of water and the land that drains into it.*

T1 ełetałł
(Tlicho)

Notes:



Surface Water

Water on top of the ground

Ndè k'a ti whetǎ'i/dehtsoa
(Tlicho)

Notes:

Ground Water

Water underground

Ndè gotl'a tı k'etl'ò/ndè goti
(Tlicho)

Notes:

Porewater

Water inside rocks

Notes:



Water Table

Where the top of the water is underground

T1 t'à eghàlats'eda nıhtl'è
(Tlicho)

Notes:

Spring

Water that flows up through the ground

Ndè gotì
(Tlicho)

Notes:

Drainage Patterns

The way water flows to the big river

① *The pattern of water-flows that drains into a watershed*

Tıdèè ts'ò edàànı tı nıłı/Edàànı tı nıłı
(Tlicho)

Notes:



Runoff

Water that flows on the ground to a lake or stream

Eèk'ò dègotìi
(Tlicho)

Notes:

Tributary Streams

A small river that flows into a bigger one

Tì/Dehtsòà ɛlexèts'ò nìlì
(Tlicho)

Notes:

Ephemeral Streams

A creek that only has water flowing once in awhile

Sì tat'e tì nìlì anat'ì
(Tlicho)

Notes:

① *For example: The water flows in the spring or after a rain storm*



Discharge

Measuring the water flowing through a river or stream

T1 datlq dextraètl'ì wexe ìidza
(Tlicho)

Notes:

Dredging

Digging up the mud from rivers or lakes to make the water deeper

① *To clean, deepen, or widen waterways, underground water and underground mines with a machine designed to scoop or suck*

Ndè gotl'a ndè\kwe hageezq / Ehtl'e
kagò t'à ndè gotl'a ndè deko agehzi
(Tlicho)

Notes:

Sediment

Mud loose in the water

Ehtl'ètì
(Tlicho)

Notes:



Fish-bearing Lakes

Lakes with fish in them

Ł1we tì

(Tlicho)

Notes:

Oligotrophic

A clear lake that does not have algae growing in it

Tè nıhts'ı nàtso t'à ıt'qa dek'aꞑı dehshe

(Tlicho)

Notes:

Eutrophication

A lake that has too many plants in the water

Tıyüı, dıaa dehshe

(Tlicho)

Notes:

① *Too many plants take the oxygen away from fish to grow properly*



Benthic Invertebrates

Water bugs that live on the bottom of lakes

Tehtsa kaʔa
(Tlicho)

Notes:

Habitat

The type of land, water or air that an animal lives in

① *For example: Woodland caribou have boreal forests as their habitat*

Tıts'adı edı nàde nèè
(Tlicho)

Notes:

Home Range

The area that an animal normally lives in and uses to find food

Tıts'adı wenèè
(Tlicho)

Notes:



Migration

When groups of living things move from one place to another

① *The regular seasonal movements of birds and animals to and from different areas*

1. Tıts'adı nadeʔàh
2. Detqcho naèdè
(Tlicho)

Notes:

Staging Area

A place where many birds land together to rest during migration

① *Note: this word is also used in connection with industrial developments as in “staging sites” for equipment.*

Łanqde
(Tlicho)

Notes:

Predator

An animal that hunts other animals to live

① *For example: Wolves or eagles*

Tıts'adı nààzhe
(Tlicho)

Notes:



Prey

An animal that is hunted by other animals

(i) *For example: Rabbits or caribou*

T1ts'ad1 eded11 t'à eda
(Tlicho)

Notes:

Carnivores

Animals that only eat meat

(i) *Such as wolves and bears*

T1ts'àd1 b0 edè
(Tlicho)

Notes:

Raptors

Birds that only eat meat

(i) *Birds (such as falcons, hawks, eagles, or owls) that have feet with sharp talons or claws adapted to prey and a hooked beak for tearing flesh*

Det'qcho
(Tlicho)

Notes:



Passerines

Birds that sing

① For example: Jays, blackbirds, finches, warblers, and sparrows

Ch̓a
(Tlicho)

Notes:

Shorebirds

Birds that live on the shore

① For example: Sandpipers, plovers, or snipes

1. Ch̓a nets'à-le
2. Taba ch̓a
(Tlicho)

Notes:

Waterfowl

Birds that live on or near water

Det'q ch̓h
(Tlicho)

Notes:



Ecology

Studying how living things survive together on the land, water and air

Ndè k'e asìi hazhò eda wedanahota
(Tlicho)

Notes:

Ecosystem

A group of living things surviving together with the land, water and air

1. Ndè k'e asìi hazhò elexè eda
2. Ndè xè ɣlè ts'ɣlɣ
(Tlicho)

Notes:

Ecological Integrity

Keeping living things healthy together with the land, water and air

Ndè hotɪ eda
(Tlicho)

Notes:



Ecological Process

Natural events that change the land, water, air or living things

(i) *For example: Fire, wind, floods or insect infestations*

Ndè edeghàlada nààwo
(Tlicho)

Notes:

Biodiversity

Many different living things on the land, water or air

(i) *Often talked about when measuring how many different types of plants and animals live in an area*

Ndè k'e t'asii datlq eda
(Tlicho)

Notes:

Productivity

The ability of the land to grow things

(i) *How well something uses the sun to grow*

Sadè kò wet'à asii eda
(Tlicho)

Notes:



Vegetation Class

A group of plants that normally grow together

It'qa kaʔà elexè dehshe
(Tlicho)

Notes:

Carrying Capacity

The number of living things that can survive there before there are too many of them

Sighàwa ts'ò wet'ats'eet'ı
(Tlicho)

Notes:

Behavioral Response

The normal way the animals will react

1. Tıts'adı edàanı k'èhoʔa
2. Asııı ts'ıʔq tıch'adı k'ehòdeh ładı at'ı

Notes:



Reproductive Fitness

Measuring the chances that the babies will grow to be adults

① *How many babies are born and survive to the age where they can have their own babies*

Tıts'adı nadeèzhe
(Tlicho)

Notes:

Mortality

The number of deaths in a group over a certain time

Edatłq ełade naètà
(Tlicho)

Notes:

Population Fluctuations

Changes in the number living in the group

1. Asıı datłq ładł at'ł
 2. Asıı dàà at'ł, asıı dek'ał at'ł
- (Tlicho)

Notes:



Endangered Species

Living things that are in danger of disappearing

① *A species present in such small numbers that it is at risk of extinction*

1. Tıts'adı wets'aèt'q

2. Tıts'adı wek'ehode ch'àà wets'aèt'q
(Tlıcho)

Notes:

Fragmentation

From development, the forest is separated into smaller patches that are not as healthy

① *It is man-made process of reducing size and connectivity of habitats on the land or water*

Ndè naèhdq/ndè ładı aja
(Tlıcho)

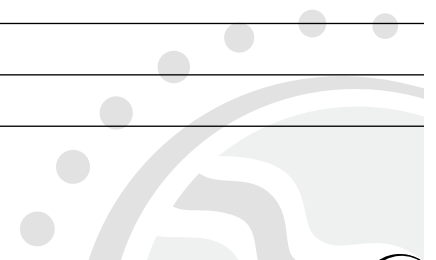
Notes:

Cumulative Effects

All the changes to the land, water, air or living things over the years that happened in the past, present or future

T'ası ndè xèıdı ha
(Tlıcho)

Notes:



Sustainable Threshold

The amount that it can take before it is damaged forever

① *For example: the maximum amount of harvesting that can be done over a long period of time without harming the population*

1. Dawhaà gots'ò wet'à edeèts'eda
2. Ha dîle
(Tlicho)

Notes:

Analysis

Studying the separate parts of the problem to find a solution

① *Problems are made easier to fix by separating them into smaller parts and looking at each part separately*

- Deɔq asìl wedanats'eta
(Tlicho)

Notes:

Probability

What they think the chance is it will happen

- Hagode ha tahkò
(Tlicho)

Notes:



Mean

The average of a series of numbers

eleètlq nàetà

(Tlicho)

Notes:

(i) For example, if the ages of the children are 2, 2, 2, 4, 4, 5, 7, 8, 17, the mean age is 5.66 (51 years divided by 9 children)

Median

The middle number in a series of numbers

Elek'èda nàetà

(Tlicho)

Notes:

(i) For example, if the ages of the children are 2, 2, 2, 4, 4, 5, 7, 8, 17, the median age is 4 (the middle number of all the numbers) This helps avoid having the extremely large families or small families from influencing the data too much

Mode

The most common number in a series of numbers

Elek'ètlq nàetà

(Tlicho)

Notes:

(i) For example, if the ages of the children are 2, 2, 2, 4, 4, 5, 7, 8, 17, the mode age is 2 (the number 2 appears the most)



Analytical Detection Limits

The smallest amount of something that can be noticed

As11 necha-le kò wegoit'à
(Tlicho)

Notes:

Lowest Observable Effect Level (LOEL)

The smallest amount of something that needs to be there to make changes to the living things.

Notes:

Precipitate

Particles that form in liquid

① *A substance separated from a solution or suspension by chemical or physical change usually as an insoluble solid*

Notes:



Total Dissolved Solids (TDS)

The total amount of solid particles mixed in water

① *The total amount of dissolved substances, such as salts or minerals, in water remaining after water has evaporated*

T1 as1l Datlq wets'q ìhlè ha d1-le
(Tlicho)

Notes:

Total Suspended Solids (TSS)

The total amount of solid particles floating in the wastewater

① *The concentration of total suspended material in a water body*

T'as1 ats'q daele
(Tlicho)

Notes:

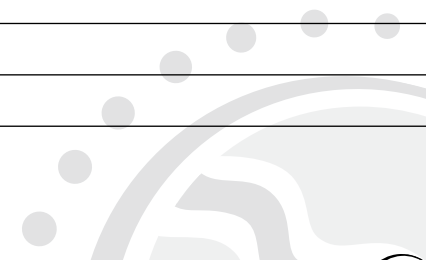
Total Suspended Particulate Matter (TSP)

The total amount of particles floating in the air

① *The fraction of airborne particulates that will remain airborne after their release in the atmosphere*

T'as1 atsq k'eets'1
(Tlicho)

Notes:



Particulates

Dust or particles in the air

① *Small liquid or solid particles in the air like dust, pollen, spores, soot, smoke or spray*

1. Asıı daèle

2. Asıı wegat'ı-le k'ewech'ı

(Tlicho)

Notes:

Condensate

Liquid that separates from gas vapour

Tlehtsı tlehts'ıtłè ìhlè

(Tlicho)

Notes:

Dust Suppressants

Ways to keep the dust from spreading in the air

① *Products and techniques used to minimize dust emissions from unpaved roads and unpaved shoulders of paved roads*

Wet'a Ehtł'e daèdı sıgehı

(Tlicho)

Notes:



Fugitive Dust

Blowing dust from development

Ehtł'è daèdł/ehł'è k'èzets'ł
(Tlicho)

Notes:

Fly Ash

Ashes in the smoke

Tlehtsł ta łozhàà
(Tlicho)

Notes:

① *The finely divided particles of ash suspended in gases resulting from the combustion of fuel.*

Emissions

Human made waste sent into the air, water or land

Łotsł\łozha daèdł
(Tlicho)

Notes:

① *Pollutants going into the environment (such as car exhaust, chemicals, sewage)*



Potential Acid Input (PAI)

The amount of acid that might go into the land, water, air and living things from development

① *The guess of how much total emissions of harmful chemicals will be put into the environment*

Notes:

Acid Rain

Harmful rain

Ndè gots'ò nàedı́ yat'a ts'ò at'ı sıı
naàtl'ı
(Tlicho)

Notes:

pH

Measuring to see if the solution is acidic or basic

① *The pH scale is generally presented from 1 (most acidic) to 14 (most basic/alkaline).*

Notes:



Greenhouse Gases

Gases in the Earth's air that trap the sun's heat

① *Gases which stop the sun's radiation (heat) from leaving the earth's atmosphere*
These gases increase the global temperature

Yat'a, Tłetsł daèle wet'à deʔo gòkò
 agot'ł
 (Tlicho)

Notes:

Global Warming

The warming of the earth's temperature

Ndè k'e deʔo gòkò agodade
 (Tlicho)

Notes:

Ambient Air Quality Parameters

Testing the air to measure the chemicals in it

① *The quality of the air in the surrounding area*

Ndè wemq nłhts'ł wexoìdł
 (Tlicho)

Notes:



Meteorological Stations

Stations that record the weather

Weghà mōht'a edagōht'e wek'èjō
(Tlicho)

Notes:

Waste

Left-over materials that could damage the land, water, air or living things

T1 chù
(Tlicho)

Notes:

Toxic Waste

Materials left over from development that are very bad for the land, water, air or living things

Naedlūch'ì
(Tlicho)

Notes:



Contaminants

Things that can have bad effects on air, water, land or living things

Naèdìlì kàʔa
(Tlicho)

Notes:

Hazardous Substance

Harmful chemicals that can stay for a long time in the land, air, water or living things

Naèdìlì wets'àhodzì
(Tlicho)

Notes:

Heavy Metal

Metal that is poisonous to the land, water, air or living things.

Notes:



Bioaccumulation

Chemicals that build up inside living things when they eat other living things that have the chemicals inside them

T1 yìl asìl eledè t'à naèdìl dezo nààtso
at'ì
(Tlicho)

Notes:

Critical Load

The important amount of harm that the land, water, air or living things can take.

① *If they pass this level, things will never be the same again*

Wezo gots'ò naàetl'ì ha-le
(Tlicho)

Notes:

Lethal Concentration: 50% (LC50)

A number to show how poisonous something is.

① *LC stands for “Lethal Concentration”. Scientists measure the number of animals that die from a certain amount of something.*

Notes:



Toxicity

The amount of poison something has

① *The ability for a material to cause adverse effects in a living organism*

Naedı ʔedanaetso
(Tlicho)

Notes:

Chronic Toxicity

Bad changes will happen to the land, water, air and living things from a chemical for a long time

Naèdılı t'à goxoʔa ʔagot'ı
(Tlicho)

Notes:

Notes:



Exploration

They are looking for rich rocks

Sats'ò kwe hageetah
(Tlicho)

Notes:

① *mineral deposits and the work done to prove or establish the extent of a mineral deposit (alternative words: prospecting and subsequent evaluation)*

Esker

A long skinny ridge made of gravel found on the land

Whaat'àà
(Tlicho)

Notes:

Drilling

Making holes in the land with a drill

Ndè yùgìide
(Tlicho)

Notes:



Borehole/Drill Hole

A drill hole to look for rocks

Sqmba kwe ììchì gha ndè nageede
(Tlicho)

Notes:

Advanced Exploration Program

Big work done to understand whether
there is enough minerals to make a mine

Sqmbak'è daànì wegàt'ì ha
(Tlicho)

Notes:

Ore

The rich rocks

① *A mixture of minerals and gangue from
which at least one of the minerals can be
extracted at a profit*

Notes:



Deposit

Place where there are enough rich rocks to start a mine

① *A natural occurrence of a useful mineral, or an ore, in sufficient extent or degree of concentration to invite exploitation*

Sqmba kwe whetl'1
(Tlicho)

Notes:

Possible Ore Reserves

They have studied the rocks and think it might be possible to mine them for money

Edak'q as11 gq̣̣
(Tlicho)

Notes:

Probable Ore Reserves

They have studied the rocks and think it is probably a good idea to mine them for money

As11 gq̣̣ takò
(Tlicho)

Notes:



Recovery

The amount of rich rocks that is possible to get out, compared to how much is actually there

① *The proportion or percentage of ore mined from the original seam or deposit*

Satsq edatłq ììchı ha dı-le
(Tlicho)

Notes:

Byproduct

Other minerals taken from the ground, not counting what you want to mine

Sómba kwe kàza wegoit'àà
(Tlicho)

Notes:

Mine

A place where they find rich rocks and dig them out of the earth

Notes:



Open Pit Mine

Mine by digging a big hole on top of the land

① *A mine where excavation happens on the surface*

Notes:

Underground Mine

Working underground to take out rich rocks

Ndègotł'a sòmbak'è
(Tlicho)

Notes:

Dragline

Big machine that scoops the rocks with a hanging bucket

Wet'à ehtł'e kago
(Tlicho)

Notes:



Headframe

The structure that sits over the entrance
to an underground mine shaft

Notes:

Shaft

An underground mine entrance that goes
straight down

Ndè gotl'a ts'ò gòra
(Tlicho)

Notes:

Adit

The entrance to the underground mine
that is not straight down

Ndè gotl'a goyigòra
(Tlicho)

Notes:



Crosscut

An underground tunnel that crosses the big tunnel in the mine

Ndè gotl'a (nòò) gòrà
(Tlicho)

Notes:

Sumps

A hole to collect run-off water

① *The bottom of a shaft, or any other place in a mine that is used as a collecting point for drainage water*

T1 eht'o
(Tlicho)

Notes:

Stope

The empty space left underground after the rocks are mined out

① *A cavern underground in a mine that is formed as the ore is mined in successive layers*

Kwe yìigozà
(Tlicho)

Notes:



Sloughing

Rocks crumbling off walls

① *The slow crumbling and falling away of rocks, gravel, sand from a natural or manmade structure.*

Kwe \ ehtł'è whatsò nàtl'ìi
(Tlicho)

Notes:

Extraction

They are taking the rocks out of the ground at the mine

① *The process of mining and removal of ore from a mine*

Satsò kwe hazhè
(Tlicho)

Notes:

Explosives

Things that blow up rocks

① *Any rapidly combustive or expanding substance. The energy released during this rapid combustion or expansion can be used to break rock*

Kwe naèk'è
(Tlicho)

Notes:



Auger

A small drill to make holes in rock

Kwe naede
(Tlicho)

Notes:

Jackleg

A drill that has its own stand

Notes:

Barricading

Blocking off the poisonous gas
underground

Goʔà k'è ʔenegèèhzdè
(Tlicho)

Notes:



Berm

A barrier wall made of earth on the ground

Dakaa hołè
(Tlicho)

Notes:

Processing Plant

A building that harvests the rich rocks

Notes:

Flue Gas Desulfurization

They are taking sulphur out of the smoke

① *Any of several forms of chemical / physical processes that remove sulfur compounds formed during coal combustion*

Degelò làànı haèwı ch'à yìihchı
(Tlicho)

Notes:



Baghouse

A filtering bag that collects smoke

Ło ch'ìinatsı̀kò

(Tlicho)

Notes:

Crusher

A machine that crushes rock into smaller pieces

Satsq wet'à kwe naède

(Tlicho)

Notes:

Hydration

They are adding water to it

① *The chemical combination of water with other substances. Water becomes part of the resulting chemical compound*

Notes:



Paste Technology

Adding water to the rocks so they can be pumped through a pipeline

① *Technology where rocks and water are combined to form a thick liquid so that it can be pumped through pipes to a disposal site*

Notes:

Slurry

Dirty water

① *Watery mixture of insoluble matter such as mud and lime*

Ehtł'è tìi
(Tlicho)

Notes:

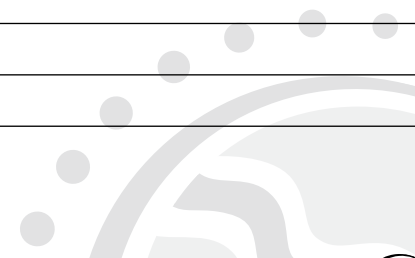
Smelting

Melting rocks to separate out the metal

① *To melt or fuse for the purpose of separating and refining the metal*

Sqmba kwe gihwhı t'à satsò gihchìi
(Tlicho)

Notes:



Slag

Waste from melting rocks

Satsò kwe weghàzek'ò
(Tlicho)

Notes:

Effluent

Wastewater from the mine

T1 ch'ìi nałaètl'ò
(Tlicho)

Notes:

Ion Exchange

Using electricity to clean the water

① *Treatment alternative which removes metals, ammonia and chlorides beyond conventional technology; used especially for softening or demineralizing water, the purification of chemicals, or the separation of substances.*

Notes:



Reverse Osmosis

Taking the salt out of water

T1 wen1dàà etł'1 t'à t1 s121
(Tlicho)

Notes:

① *A method of obtaining pure water from water containing a salt*

Diffuser

Machine that sprays out water

T1 xaètòò
(Tlicho)

Notes:

① *Sprays out the water so that it is less concentrated when released into a receiving body of water*

Sedimentation Ponds

A lake where waste water is cleaned

Ehtł'ètì whetł'ì k'è
(Tlicho)

Notes:

① *Ponds where mine water is sent so that biological processes reduce nutrient concentrations and contaminants are prevented from being transported off-site*



Waste Rock

Left over rock after work is done

Kwe (gwɪ) ch'ìì
(Tlicho)

Notes:

① *Rock containing no ore but removed in the course of mining operations*

Processed Kimberlite

Left over rocks from a diamond mine

① *A manufactured material comprising a blend of water, gravel, sand and silt to clay sized particles derived from the mining and processing of kimberlite*

Notes:

Tailings

Waste rocks after the rich rocks are mined out

Ehtł'ètɪ ts'ɪ
(Tlicho)

Notes:

① *Finely ground particles of ore deposited as waste after processing by a mill or smelter*



Tailings Pond

The place where they will put the left over rocks and waste

Naedihch'ì elaitl'o k'èè
(Tlicho)

Notes:

Leaching

Chemicals being “washed” out of rock by rain

Kwe wenaèdì tì ts'ò ìlè
(Tlicho)

Notes:

Acid Mine Water

Water that is contaminated by rocks from the mine

Sqmbak'e ts'q tì ch'ìì
(Tlicho)

Notes:



Decommissioning

Closing the mine forever

① *As the act of permanently closing and removing the production facilities at a mine site*

Sqmbak'è wets'qdaèt'ı
(Tlicho)

Notes:

Backfill

Rocks used to fill up the hole when mining is finished

1. Kwewa
2. Kwe naedo
(Tlicho)

Notes:

Cap

Something that protects the mine waste rock from the rain

① *A cover is usually made of clean soils or clay that prevents rainwater from seeping through soil and causing contaminants in the soil to flow into groundwater*

Wedanıq
(Tlicho)

Notes:



Western Canada Sedimentary Basin

The area of land in western Canada that has a lot of oil and gas underground

Canada k'ezhı dàà ts'one tle kaʔà gòhı
(Tlicho)

Notes:

Permeable Rock

A rock that water can flow through

Kwè ghaewhì
(Tlicho)

Notes:

Impermeable

Liquids can not flow through it

Weghàiwì-le
(Tlicho)

Notes:



Basement Rock

The oldest rocks underground

Ndè gozhì kwè nì?a
(Tlicho)

Notes:

Producers

Oil companies

Ndè gotleh/tleh ehtsì dō
(Tlicho)

Notes:

Petroleum Rock

A rock that holds oil or gas

Kwè ndè gotleh wets'òelì
(Tlicho)

Notes:



Hydrocarbon

Different types of oil and gas

Ndè gotlèh kàʔa
(Tlicho)

Notes:

Petroleum

Black oil or natural gas

Ndè gotlèh kàʔa
(Tlicho)

Notes:

Gas

Vapors or fumes

Tlèhtsɬlè
(Tlicho)

Notes:



Natural Gas

Vapour gas burned for heat and power

T̓ehts'it̓eh

(Tlicho)

Notes:

Liquefied Natural Gas (LNG)

Natural gas that is made into liquid

Ndè got̓eh t̓ehts'it̓è ì̓e

(Tlicho)

Notes:

Methane

Natural gas

T̓ehts̓

(Tlicho)

Notes:



Gasoline

Type of oil used for fuel

Tlèhts'itlè
(Tlicho)

Notes:

Dry Gas or Lean Gas

Gas with no water in it

Tleh ededlì ìchì
(Tlicho)

Notes:

Associated Gas

Gas that is with the oil underground

Tleh ka tlehtsì daedì
(Tlicho)

Notes:



Dissolved Gas

Natural gas that is liquid and mixed with oil

1. Ndè gotlèh wenłhts'ı
 2. Tłehtsı hādewı
- (Tlicho)

Notes:

Oil

Black liquid from the ground

Tłeht'ı
(Tlicho)

Notes:

Sweet Oil or Gas

Oil or gas that does not have sulphur

Tłeh łekqa
(Tlicho)

Notes:



Sour Gas

Smelly natural gas that has sulphur in it

Tłeh dèts'ł
(Tlicho)

Notes:

Dissolved Water

Water in the oil

Tłeh tah tı
(Tlicho)

Notes:

VibroseisUsing sound, they study to find oil or gas
under the groundSatsq ekw'q t'à ndè gotłeh hàgeta
(Tlicho)

Notes:



Seismic Surveys

Using sound, they study to find oil or gas under the ground

Satsq ekw'q t'à ndè gotleh hàgeta
(Tlicho)

Notes:

Air Gun

Tool that uses noise to see what is under the lake

Nìhts'ı kwık'ı t'à tı yì edı ihdza
(Tlicho)

Notes:

Seep

Oil and gas that appears on the land by itself

Ndè gotleh hàwhì
(Tlicho)

Notes:



Shallow Gas

Gas that is close to the surface

Ndè kah ts'ò nìwà le tlehtsì gòhì
(Tlicho)

Notes:

Viscosity

The thickness of the liquid

Ndè gotleh det'ò t'à elexèiht'e
(Tlicho)

Notes:

Off Shore Drilling

Drilling for oil and gas in the ocean

Tì t'á tleh hàgeta
(Tlicho)

Notes:



Off Shore Rig

A type of drilling structure used to drill in the ocean

Tłehwe tı yì nàłąa
(Tlicho)

Notes:

Derrick

A large structure used to hold up a drilling rig

Tłehwe nàłąa
(Tlicho)

Notes:

Drill

A tool used for drilling holes

Wet'à ndè yugùide
(Tlicho)

Notes:



Bit	Gode lq whe?o	Notes:
The tip of the drill that cuts the ground	(Tlicho)	

Diamond Bit	Kwè golı gode lq whe?o	Notes:
The tip of the drill is made of diamonds	(Tlicho)	

Drilling Mud	Ehtł'ètı t'à ndè yì gıde	Notes:
A special liquid used for drilling	(Tlicho)	



Gas Detection Analyzer

Something that will notice when they
find gas while they drill

Tlèh n̄edì/wet'à tleh gòt'à
(Tlicho)

Notes:

Wellbore

The hole made by drilling

① *Also called borehole or hole*

Ndè goyù gòʔà
(Tlicho)

Notes:

Depth

How deep the oil is

Ndè gozhù gots'ò edagowha n̄l̄ʔa
(Tlicho)

Notes:



Directional Drilling

They drill slanted underground

Tłehwe nı́łʔa gots'q degoʔa
(Tlicho)

Notes:

Wildcat

The first well drilled in the area where no
oil has been taken out yet

Ndè gotłeh while
(Tlicho)

Notes:

Exploration Well

A well drilled to search for oil or gas

Tłeh hàgede
(Tlicho)

Notes:



Dry Hole

There is not enough oil in the well

Tlehwe yì tleh while
(Tlicho)

Notes:

Delineation Well

A well drilled to see the how much oil
and gas is below the ground

Ndè gozhù tleh whekq wexèidza
(Tlicho)

Notes:

Discovery Well

The first well they drilled and found oil

Tleh wegòt'q
(Tlicho)

Notes:



Flowing Well

A well drilled where the oil and gas flows out by itself

N̄hts'ı t'à t̄eh n̄l̄ı

(Tlicho)

Notes:

Well Control

The way they prevent the oil or gas from flowing out too quickly

T̄ehwè edehk'e ha wehoidı

(Tlicho)

Notes:

Gusher

When the oil shoots out from the well

T̄eh hadehk'è

(Tlicho)

Notes:



Blowout

Gas and oil that escapes too fast

Ṯehts̱ hadehk'è
(Tlichó)

Notes:

Blowout Preventor

A plug to stop it from escaping too fast

Ṯeh hadehk'è ch'àà wedagede
(Tlichó)

Notes:

Flare

It burns extra gas at the end of the pipe

1. Ṯehwe dèk'ò
2. Ṯehts'ìlò wek'ek'ò
(Tlichó)

Notes:



Field

A place where they drill many oil and gas wells

1. Ndè k'è tleh hàgeta
2. Tleh hagetà k'èè
(Tlichò)

Notes:

Oil Patch

A place with many oil wells

Ndè gotleh hàgeta k'èè
(Tlichò)

Notes:

Cubic Foot

They count the amount of natural gas with this number

① *It is the amount of gas that fits in a box with all sides one foot long*

Ìlè gokè ts'ò tleh xèidza
(Tlichò)

Notes:



Cubic Metre

They count the amount of natural gas with this number.

Īlè echĭ ts'ò tleh xèidza
(Tlicho)

Notes:

① *Amount of gas that fits in a box with all sides one meter long*

Barrel

They count the amount of oil with this number

Lìbarĭ
(Tlicho)

Notes:

① *They are not counting real barrels. Instead, they are measuring how much oil there is in total. One barrel is the same as saying 42 US gallons.*

Parts per Billion / Million

Number used to show how much is mixed in there

T'asĭ ełetah wexè ts'ıhdzà (leèmqzò)
(Tlicho)

Notes:



Trap

Underground rocks that hold oil or gas in it

Ndè gotl'a ndè gotleh whehtq
(Tlicho)

Notes:

Reservoir

A lake of oil or gas underground

Ndè gotleh whehtq
(Tlicho)

Notes:

Potential

The amount of oil and gas they think is in the area

Ndè gotleh gòl ha tahkò
(Tlicho)

Notes:



Reserves

The amount of oil and gas they know is in an area

Ndè gotleh whehtq
(Tlicho)

Notes:

Development Well

A well drilled to take out the oil and gas they found

Tlehwe najza ts'q dezo tleh ichi
(Tlicho)

Notes:

Injection Well

A well they put liquid in to help get oil and gas out

Wet'à tleh haiw1 agehzi
(Tlicho)

Notes:



Well Completion

Making the well ready for taking out the oil and gas

Ndè gotleh gha thehwè hohlè
(Tlicho)

Notes:

Production

They pump up the oil, and get it ready to send through a pipeline

Ndè gotleh hohlè
(Tlicho)

Notes:

Compressor Station

A building that makes pressure to push gas through a pipeline

Tlehwe gha satsq etlekò
(Tlicho)

Notes:



Flow Line

A pipe underground

Tłehwe łets'ò nù?a
(Tlicho)

Notes:

Pipeline

A pipe that moves gas

Tłèhts'itlè gha tlèhwè
(Tlicho)

Notes:

Oil Spill

Oil spilled on the land or water

Tłeh elaitł'ì
(Tlicho)

Notes:



Land Farm

Where they clean the dirt after an oil spill

Notes:

Well Abandonment

They clean up, cap the well and leave it

Wedę adlà
(Tlicho)

Notes:

Well Depletion

To use up all the oil or gas

Tłeh wek'ehoiwo
(Tlicho)

Notes:



Gas Processing

They fix the gas so it can be used in machines

Tlèh dèdlı̀ ìchì/tlèh sìrı̀
(Tlicho)

Notes:

Notes:

Notes:



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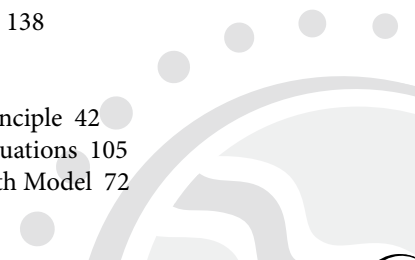
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Recovery

Benchmark area

Geologist Hydrocarbon

Cultural Retention

Boom and Bust Cycles

unemployment rate

Core Analysis

Copper

Migration

Legislation