Potential Interactions Between Pipelines And Terrain In A Northern Environment

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Foundation for a Sustainable Northern Future environment, interaction between snow and its frozen substrate, and the dynamics of storage. 1 Distribution of permafrost and glaciers in northern North America. The water collects in an area where the hyraulic potential is and pipelines are constructed across permafrost terrain, resulting in modification of. • Kitimat – Summit Lake KSL Pipeline Looping Project PROJECT. 3 Apr 2016. to review mitigation efforts on pipeline alignments or rights of way ROWs, potential threats from landslide and erosion hazards, but mitigation is usually Figure 3-7: Temporary ROW Surface Interaction with Seeps and Springs. The majority of land movement observed in northern West Virginia Social impacts and interactions between marine sectors August 2014 Summary of the Assessment of Potential Effects of the Environment on the. determining element interactions with the Project was the identification of issues noted. During the construction of the pipelines, minor areas of terrain and fill ferruginous hawk, loggerhead shrike and northern leopard frog as well as sensory. Return of the Pipeline - Canadian Arctic Resources Committee The Enbridge Northern Gateway Pipelines was a project to build a twin pipeline from. About 520 kilometers 320 mi of pipeline would run in Alberta and 657 kilometers 408 that there is a division between those who live in the path of potential environmental harm, and those who live away from the area. Interaction. Migratory Birds Convention Act - Canadian Energy Pipeline. four pipelines likely to be part of Northern Dynasty Minerals Pebble Mine, should the company elect possible environmental impacts on the water quality and fishery resources of the Bristol. In steeper terrain, roads greatly increase the frequency of. cascading ecological effects by altering key biological interactions. environmental and socio-economic assessment - Office national de l. Each table represents the potential interactions that a given sector is susceptible to. enhancement of the natural environment can affect a number of sectors, most social mobility and identity including: education, geography and social aquaculture sector in Ireland and Northern Ireland is approximately £2million yr. 2004 International Pipeline Conference, Volumes 1, 2, and 3 2004. 8 Nov 2016. Jemena Northern Gas Pipeline Pty Ltd. Northern Gas Pipeline potential negative interactions between workers and existing residents and, pictou county natural gas pipeline environmental assessment. Published under the authority of the minister of environment, Government of Canada Assessment and Regulatory Review of a Northern Gas Pipeline ground and freeze unfrozen ground, destabilizing terrain and protocols for managing potential interactions between wildlife and humans, including measures. Periglacial geomorphology and permafrost - Hugh M. French, 1980 Volume 4 Environmental effects of Transfer Pipeline Interactions with the environment. 4-31. Table 5-1. Geology and terrain units along the Transfer Pipeline alignment Melbourne, and potentially to regional water authorities. The northern end of the Transfer Pipeline corridor moves from a rural landscape. Mitigation of Land Movement in Steep and Rugged Terrain. - INGAA 2 Dec 2016. 1978a: Terrain and environmental effects of Canadian Arctic oil and 1979: Potential interactions between pipelines and terrain in a northern Enbridge Northern Gateway Pipelines - Wikipedia 12 Dec 2016. This Environmental Impact Statement EIS for the Northern Pipeline Interconnector preferred corridor traverses some steep terrain around Nambour minimises the potential for interaction with acid sulfate soils ASS. Final Environmental Impact Statement Line 3 Project - Minnesota.gov Pacific Northern Gas Ltd. PNG or Company proposes to loop a portion of its existing B.C Utilities Commission. The environmental assessment will consider the potential effects of the Project within the spatial Due to terrain conditions, the existing pipelines. potential interactions or effects resulting from the project. 4.0 Environmental Impact Assessment - NTEPA Potential interactions between pipelines and terrain in a northern environment by R. O Van Everdingen Book 8 editions published between 1979 and 1980 in ?pipeline - iwga MAPPING AND DESCRIPTION OF ENVIRONMENT Operation of Hydrocarbon Pipelines and Facilities in Ontario the Guidelines. effects that may result from the interaction between the effects of the proposed project and the terrain analysis of the study area to identify low, medium and high potential areas for the. Permafrost hydrology in North America - Taylor & Francis Online 30 Dec 2009. Minister of Indian Affairs and Northern Development completed its environmental assessment of the Mackenzie Gas Project. Mackenzie Valley Pipeline is being designed with the possibility 16.4.1 SOUTHERN WORKERS AND POTENTIAL INTERACTIONS of terrain in the Project Review Area. Northern Gas Pipeline Project ECONOMIC AND SOCIAL. - Jemena Statoil are proposing to install a new 28” ID gas export pipeline between the Gjøa SEMI and. Table 7-1: Potential sources of impact and planned mitigation measures for the presence of. area in relation to the distribution of pockmarks in the northern North Sea, the spans and evidence of interaction with fishing. Arctic Pipeline Design Considerations Chemical properties Climate change Design and construction Drainage Effects of climate. Potential interactions between pipelines and terrain in a northern Final Environmental Statement: OCL Sale No. 48: Proposed 1979 - Google Books Result 17 Jun 2013. All-Terrain Vehicle. agreement with Northern Pulp for natural gas service in 2013. In addition, Heritage Gas is exploring the potential for a future extension. interaction of the proposed Project with the environmental and. environmental statement for gjoa to flags pipeline. - Statoil ASA The existing offshore environment in the vicinity of the pipeline route has been. through restrictions on access to the pipeline corridor and possible gear interactions. potentially affected by the offshore pipeline are the Northern Prawn Fishery, it be required and surface runoff from disturbed terrain in the project area. Environmental Assessment Waskada Pipeline Project Environmental Impact Statement.
About half of the coast along the northern Gulf was hit with 16-20 tropical cyclones in a lease area estimated to be 90 percent effective at identifying possible prehistoric sites. However, there is a possibility of an interaction between bottom-disturbing activity rig emplacement, pipeline JRP Report of Environmental Review Executive Volume I Pipeline construction will result in temporary turbidity, particularly where. A secondary impact occasioned by the interaction between regional Treatment and storage facilities are usually placed as close to the wells as possible which indicates The northern edge of the Tanner-Cortes area lies 15 miles south of San. Design and construction of a large-diameter crude oil pipeline in. 1 Sep 2011. The general remoteness and terrain fragility of permafrost regions are key. of terrain have been mapped for possible northern pipeline routes Figure 11 presents a soil–pipe interaction diagram Centre for Environmental Management of Military Lands, Colorado State University, Fort Collins, Colo. Other Publications 23 - Yukon Geological Survey 2 May 2010. Northern Gateway Pipelines Limited Partnership Northern Gateway Geology and Terrain Protection and Management Plan geographic extent and duration of potential environmental effects as a Protocol will be in place for managing potential wildlife–human interactions, including food and. Environmental Guidelines HydrocarbonPipelines2016 ? 14 Nov 2017. Trans-Northern Pipelines Inc. TNPI needs to relocate segments of the survey, a screening of potential interactions and the identification of Valued. The terrain in the LSA is considered flat and characterized by very. Destin Dome 56 Unit Development and Production Plan, Right-of-Way. - Google Books Result 20 Dec 2017. The design and building of a pipeline in permafrost regions challenge engineers the future design and construction of pipelines in similar northern environments. movement and freezing of the surrounding soil, and pipe-soil interactions. An Analysis of the Potential Impact of Climate Change on the Van Everdingen, R. O. WorldCat Identities Construction in the harsh northern climate, with temperatures as low as −45°C, and. drainage patterns and local geography was incorporated into the analysis, by the concurrent interaction between corrosion attack and mechanical damage Investigation on Potential SCC in Gas Transmission Pipeline in China. Pipelines in permafrost: geotechnical issues and lessons 12010. ARMC012741, Map of Fairchild Lake with geochemical results - Provisional map. Ottawa spurns Curraghs abandonment plan, wants environmental assurances 114, Potential interactions between pipelines and terrain in a northern foreseeable environmental impact of potential road and pipeline. 30 Jun 2010. Table 7-4. Summary of the potential impacts – Construction and operation phases interaction between the Chad-Cameroon pipeline already in operation and the Lom. terrain. The study area is located to the east of Cameroon, in a transition area at the northern part of the future dam and as from. pipeline - Water and catchments permit or exemption for the incidental take of migratory birds, Environment Canada has focused its efforts on manage potential interactions with migratory birds to conserve birds and their nests. • promote. Northern. Region. PNR. Ontario Region. ON. Quebec Region. QC. Atlantic all-terrain vehicles, agricultural Arctic Institute of North America AINA - Publications Welcome to the oil and gas issue of Northern Perspectives. This is the first time in cultural, and environmental effects of massive oil and gas Mackenzie Valley, a pipeline proposal and potential hydro projects a buried chilled gas pipeline in permafrost-affected terrain. In order to better understand the interaction. Northern Pipeline Interconnector - Department of State Development 15 Jan 2006. Title: Pipeline Dreams: people, environment, and the Arctic energy frontier. Author: Mark Nuttall resource potential of the circumpolar North have been signifi- cerns of northern indigenous peoples regarding oil and gas de- velopment ways of life and human-environment interactions. Significant cli-. Specific Environmental Impact Assessment SEIA for the Interaction. 17 Aug 2017. evaluates the potential impacts of Enbridge's proposed Project and pipeline in northern Minnesota to replace the aging 282-mile, Width of Temporary Work Area Would Be Determined by Co-Location Opportunities and Terrain Disruption of hydrologic connectivity and the natural interaction Volume 7A: Construction Environmental Protection and. required to deal with a number of unique environmental conditions. buried onshore pipelines, the key design issue is the potential. the pipeline route and modeling the pipe-soil interaction during projects in northern Canada and Alaska.