



ᓄᓇᑭᑦ ᐃᑦᑎᓕᓕᓐᓂᐃᑦ ᑲᑎᓚᓐᓂᓐᑎᑦ ᐅᐃᓐᓂᑦᑎᑦ ᓐᓂᓐᓂᓐᓂᓐᓂᓐ #125486

Quarry in Pangnirtung

ᐅᐃᓐᓂᑦᑎᑦ

New

ᓐᓂᓐᓂᓐᓂᓐᓂᓐ:

ᐱᓕᓕᓐᓂᓐᓂᓐᓂᓐ

Pits and Quarries

ᓐᓂᓐᓂᓐᓂᓐᓂᓐ:

ᐅᑦᓂᓐᓂᓐ ᐅᐃᓐᓂᑦᑎᑦᐃᓐᓂᓐᓂᓐ: 9/19/2019 10:05:56 AM

Period of operation: from 0001-01-01 to 0001-01-01

ᑲᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ: from 0001-01-01 to 0001-01-01

ᐱᓕᓕᓐᓂᓐᓂᓐᓂᓐ:

Rita Sewornu

Government of Nunavut - CGS

P O Box 145

Cape Dorset NU X0A0C0

Canada

ᐅᓐᓂᓐᓂᓐᓂᓐ: 8678973619, ᓐᓂᓐᓂᓐ:

Operations Phase: from 2019-10-25 to 2029-10-25

$$\Lambda \subset \mathbb{N} \triangleleft \mathbb{N} \xrightarrow{\sigma} \mathbb{N}^{\mathbb{N}} \supset \mathbb{C}$$

ᐱ ᑦ	ᖃᓄᐃᑦᑐᑦ ᐱᑕᐲᐊᖃᖅᐊᖃᑦ	ᑭᐊᑦ ᓄᐱᑦᐃᑦ	ᑐᐋᐃᐣᐊᑦ ᓄᐱᑦ ᖃᓄᖃ ᐊᑐᐣᐃᑦᐊᖃ ᑦᐣᐣᐲᐊᑦᐣᓂᐊᖅ	ᐃᑦᐋᖅᐣᖃᖅᐳᐊᐊᑦᐊᑦᐊᑦ ᐃᓄᖅ ᐱᐊᖃᐣᐊᖃᐣᑦᐊᑦ ᐣᐊᑦᐣᐣᐊᖃᐣᖅ	ᖃᓂᓂᖅᐊᖅ ᓄᐱᑕᑦᐣᐊᑦ ᐊᑦᐣ ᐋᑐᑦᐣᑦᐳᐊᑦ ᑦᐣᓂᑦ
Quarry_1	Quarry/Borrow pit	Commissioners	Not known - site currently zoned as Industrial	No known historical site on the lot	Site about 1 km from the community and apart from being located within the 100 ft water strip, it is not near any protected area

መረጥፊ ለረዕሳቸው ማረጋገጫ ለሰጡት ሰነዶች ማረጋገጫ ለሰጡት ሰነዶች

မေ့ဇာတ်နိဂုံး	အမည်	မေ့ဇာတ်နိဂုံး	မေ့ဇာတ်နိဂုံး
မေ့ဇာတ်နိဂုံး	Eric Lawlor	Hamlet of Pangnirtung	2019-08-06

[illegible]

$a^{\dagger}r_1^a r_2^b \wedge c_{\mu} d_{\nu} e^{\rho} f^{\sigma} g^{\tau} h^{\eta} i^{\theta} j^{\phi} k^{\psi} l^{\chi} m^{\zeta} n^{\delta} o^{\epsilon} p^{\gamma} q^{\alpha} r^{\beta} s^{\omega} t^{\iota} u^{\kappa} v^{\lambda} w^{\xi} x^{\eta} y^{\theta} z^{\phi}$

South Baffin

[illegible]

ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ	ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ	ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ	ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ/ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ	ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ
ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ ᐱᑦᓴᐅᑦᓴᐅᑦᓴᐅᑦ	This site is located near the ocean however, it is not anticipated that the quarry activities will require water uses or deposit of waste into the waters	Not Yet Applied		
Government of Nunavut, Community Government & Services	Once NIRB approves the quarry, CGS will enter into a Quarry Administration agreement with the Hamlet. This agreement will give the Hamlet control of the quarry and will allowed them to issue permits	Active		
Hamlets and Municipalities	Hamlet of Pangnirtung currently approves land application and CGS issue quarry permit. When the quarry is screened and a Quarry Administration Agreement is signed, the Hamlet will approve and issue quarry permit .	Not Yet Applied		

Project transportation types

Transportation	Length of Use
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Type		
Land		

Project accomodation types

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$\triangleleft^b C d^c$
$$\Delta^b C d_c n_\sigma \Delta^q \sigma^q$$

ለፍጥነት ማረጋገጫ ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ	ፍጥነት ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ	ፍጥነት ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ	ፍጥነት ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ	ፍጥነት ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ
Quarry/Borrow pit	ፍጥነት ማስፈጸሚያ ማስፈጸሚያ ማስፈጸሚያ	5	Bins will be placed on site to collect waste. The quarry site is located about a block away from the community dump	No additional treatment will be done

4^e 0 7 2 3 0 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038

These site will be used to extract aggregate (Sand, Gravel, riprap and silt) to be used for construction projects in the community of Pangnirtung. Stockpiling of aggregate may occur in the event that a project requires aggregate but will not be permanent. A road already exists to the site so construction of a road is not required. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. Once the sites are depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable aggregate. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust, sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any). No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's (dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. The Municipality's contact information is as follows: ATTN: Eric Lawlor Municipality of Pangnirtung P.O. Box 253 Pangnirtung, NUXOC ORPH: (867) 473-8953

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION 11: Municipal Development

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The quarry site is not designated as protected neither is it close to parks or protected area. The ground is pretty level and stable. Generally, the dominant surface unit consists of colluvium made of sand and gravel layers up to 4 m thick on top of pre-existing washed till deposits below the marine limit. A thin peat layer (5 to 25 cm) overlies the colluvial deposit. Affected by periglacial processes such as gelifluction lobes and frost boils, ice wedges occasionally present in the near surface permafrost.

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The tundra around Pangnirtung is home to vibrant dwarf rosy coloured fireweed and fluffy Arctic cotton. You may also see: purple bladder campion pink clusters of wintergreen Arctic purple saxifrage yellow marsh saxifrage Arctic daisies mauve harebells yellow Arctic poppy star chickweed

ᐱᓪᓇ ᐱᑦᑎᐅᑦ ᑦᑲᓄᐱᑦ)ᑦᑕᓕᓕᓂᓄᑦ: ᐱᓄᑦᓕᓂᑦᑭᓄᑦᐱᑦᑕᑦᐱᑦᑕᓂᓄᑦᑭᓄᑦᐱᑦᑕᑦ

Site not located near archaeological and cultural historic sites. The quarry will contribute to the socio-economic development of Pangnirtung by providing the community with aggregates for constructional works.

Miscellaneous Project Information

[illegible]

These site will be used to extract aggregate (Sand, Gravel, riprap and silt) to be used for construction projects in the community of Pagnirtung. Stockpiling of aggregate may occur in the event that a project requires aggregate but will not be permanent. A road already exists to the site so construction of a road is not required. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. Once the sites are depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable aggregate. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust, sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any). No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's

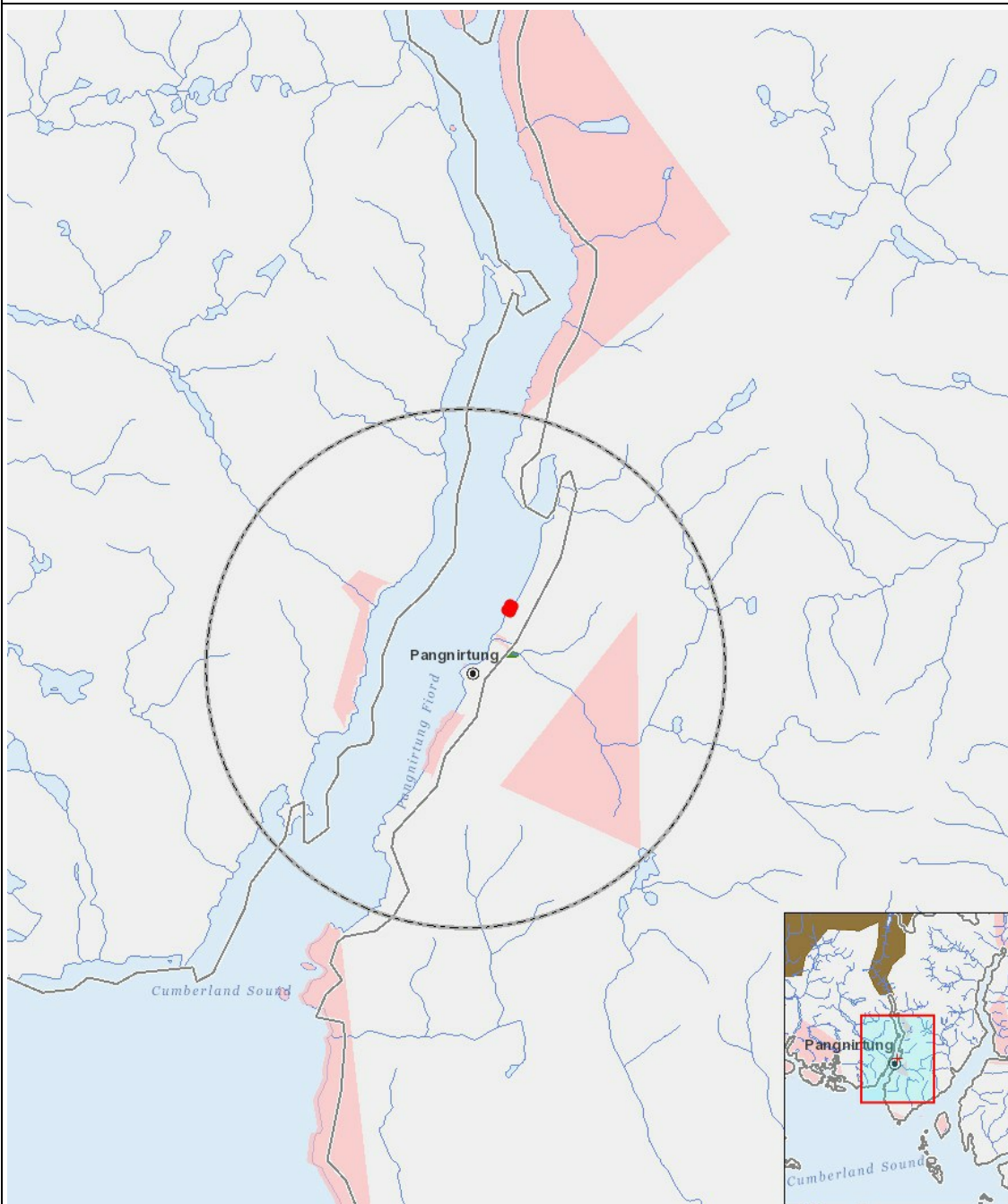
(dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. The Municipality's contact information is as follows: ATTN: Eric Lawlor Municipality of Pangnirtung P.O. Box 253 Pangnirtung, NUX0C 0R0PH: (867) 473-8953

Cumulative Effects

Impacts

$\Delta^{\epsilon_b} C D \sigma^{-\epsilon_r} C$ $A \rho \cap \Gamma D C \dot{\sigma}^C D^C$ $A^b D^{\epsilon_b} C D \rho L \rho^C$

[illegible]
$$(P = \langle b \rangle \Delta \langle p \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C, N = \langle b \rangle \langle \bar{b} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C \langle \bar{c} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C \langle \bar{c} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C, M = \langle b \rangle \langle \bar{b} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C \langle \bar{c} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C \langle \bar{c} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C, U = \langle \bar{b} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C \langle \bar{c} \rangle \langle \bar{a} \rangle \langle \bar{b} \rangle^C)$$



List of Project Geometries

1	polygon	Quarry_1
2	polygon	Quarry_1
3	point	Quarry_1
4	point	Quarry_1
5	point	Quarry_1
6	point	Quarry_1
7	point	Quarry_1
8	point	Q1_1
9	point	Q1_2
10	point	Q1_3
11	point	Q1_4
12	point	Q1_5

