Summary of Activities at Nunatta Environmental Services Inc. (NESI)

NWB licence 1BR-NUN-1217 Type "B"

Landfarm in Iqaluit for 2015 season

Water

No water was brough into Nunatta Landfarm during the year of 2015
15 cubic meters of snow delivered by city of Iqaluit contaminated with hydraulic fluid. This was put into cell one and

Soils

NESI landfarm received 526.25 cubic meters of hydrocarbon contaminated soil for treatment in year of 2015.
this soil was put into cell #1 and treated with fertilizers prior to being screened down to 3 inch
soil samples were taken, results at the end of the report.
Soils in cell #1 were removed after screening and placed in front of cell #3
these soils will be rescreened down to 3/4 inch in summer of 2016 and if required will be treated with additional fert
Soils in cell #4 were also screened this time down to 3/4 inch and placed in back of cell #3. samples were taken
and results indicated these soils could be removed and used as commercial fill or as landfill cover material
Permissionwas granted by Government of Nunavut Environmental head Krist Lowe, early freezing kept city staff fr
Plans for summer of 2016 is to remove this soil to make room for screening operatins with in cell #3

Test wells continue to be frozen or dry throughout the summer months. This is the second year in a row where no
for testing purposes. Cool weather and lack of sunshine is responsible for this trend. Nunatta will continue to check
Removal of gravel from pit located next to land farm has also contributed to this by leaving Nunatta Environmental
ground level in the pit. We feeel this accounts for the lower water levels in the well on the north side of the landfarm

Remediation practices

Nunatta Environmental Services has been improving our soil remediation practices and each year we find ways of
the soil spends in our landfarm. With these practices of careful monitoring, proper additions to the soil, innoculation
from remediated soil to new soils, we have been able to reduce the remediation time to less than 1/2 of what it was
Information gathered from soil samples and testing in association with University of Saskatchewan has been a grea
out results before putting them into practice in our cells in Iqaluit. We cannot thank Dr. Steven Scicilano enough for
he has taken many call and asnwered many emails from us and been able to suggest solution to many problems w
along the way. With the use of new equipment and practices we are hoping to take out knowledge to other commu
with soil cleanup where large historic spills have occoured. Our plan is to be able to clean hydrocarbions out of soils
Talks are in progress with ulliq Power corp and Petrolem products division to do a test plot in Baker Lake a site of r

Monitoring

Water: Since there was no thawing of the water wells this summer no water samples were taken therefore no repo

Soil: Spring and Fall soil samples were taken and samples sent to Paracell Labs in Ottawa for analysis
The results indicate hydrocarbon remediation is taking place at a very generous rate compared to samples from a f
Lab reports show Microbiological count far exceeds the normal found in South Baffin soils as indicated by the differ
fall lab reports. Spring tests show microbal count anywhere from 2,000-6,000 while fall count after inoculation, scre
show numbers in excess of 198,000 and even TNTC (too numerous to count). These are the microbes responisibl
the breakdown of hydrocarbons into harmless components.
Managing and feeding these microbes is most important in operating a landfarm.

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ilizers

om using this soil on the landfill

water has been collected
test wells on regular basis.
services well above the
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shortening the time
ı of bacteria and enzymes
just 6 years ago.
at asset in finding
his help in this area
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nany large spills

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few years ago
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