

Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
1	May 2007 DAR	air quality	150	A designated responsible employee will be assigned to monitor the air quality at each working location, during each shift, on a daily basis and maintain records of the air quality monitoring information.	This is strictly related to underground activities as they are the most prone to air quality changes.
2	May 2007 DAR	air quality	330	Tamerlane commits to the use of low sulphur diesel fuel and regular equipment and engine maintenance	
3	May 2007 DAR	air quality	330	Tamerlane will conform with the Guidelines for Ambient Air Quality Standards in the NWT	
4	May 2007 DAR	air quality	330	Tamerlane will conform with GNWT and WCB standards for mine air quality	
5	October 23, 2007 - Developer's Air Quality Monitoring Undertaking	air quality		For air quality monitoring, Passive Integrated Samplers will be employed. They will provide monthly averages for parameters such as NO <sub>2</sub> , SO <sub>2</sub> and VOC's. For particulate matter sampling, an integrated sampler such as an Airmetrics "MiniVol" sampler will be employed to sample PM <sub>10</sub> .	The developers commitment meets the recommendations from RWDI with the exception of CO. Based on EBA and Tamerlane's opinion, atmospheric testing of CO is negligible for this project, however, Tamerlane will be monitoring CO levels underground daily. Tamerlane will also be employing periodic metal content and dustfall analysis during the life of the project for use in future baseline applications.
6	Tamerlane 1st Round IR responses, 05-29-07	community involvement	79	Persons responsible for conducting water quality monitoring program as well as any other environmental management responsibilities are expected to include locally based personnel to participate in reporting results of testing and other environmental data gathering to the local communities	As clarification, this statement is related to Tamerlane's commitment to hire from the local communities as we have committed to in our agreements with the First Nations and Metis to relay/train the monitor from each community in our monitoring techniques for educational purposes
7	August 15, 2007 - Tamerlane partial 2nd Round IR responses	contractors	IR40.1	All contractors or subcontractors will be required to sign and adhere to Tamerlane's policies and procedures when working on site. Any contractor or subcontractor found to not be in compliance... individuals will be escorted from the site and the validity regarding the main contract will be discussed between the contractor and Tamerlane.	
8	August 15, 2007 - Tamerlane partial 2nd Round IR responses	contractors		Tamerlane is incorporating its policy to maximize Northern and Aboriginal employment into its final contractual agreements with key specialized contractors.	This statement means that our contractors, such as, Thyssen, Layne, FKC-Lakeshore are required to hire as many skilled & non-skilled employees from the local communities and provide on-the-job training to those employees.
9	May 2007 DAR	dust control	154	Tamerlane will use water for dust suppression on site, on the haul road from the site to the highway, and at the ore transfer facility outside Hay River.	Dust suppression at the surface crusher is not expected due to the moist nature of the hoisted material, however, spray bars will be installed at the feed end of the crusher to mist the area if dust is encountered. During winter months, a mixture of glycol and water may be necessary to prevent freezing.
10	May 2007 DAR	dust control	323	To prevent dust from the concentrate from being released to the environment during transportation of the concentrate product by truck to the Hay River railhead, the concentrate will be maintained in a "moist" condition and the truck boxes and product will be covered.	Tamerlane would like to clarify that the surface facilities are enclosed and the material is moist/wet throughout the surface process. The wet ore material is transported from the DMS plant to a wet ball mill in which the material undergoes further grinding. This material passes through the flotation circuit in solution form. The ore concentrate is dried to within 5-8% moisture content and prepared for transport. The ore concentrate will have little time for drying as transport will occur expeditiously. The ore concentrate will be moist and can only turn to dust if there is air movement over the ore. Since the trucks will be tarped, no air movement will be allowed to pass over the ore concentrate thus not creating dust. Tamerlane will require these trucks be covered and inspected before leaving the site.
11	Hearing presentation, 10-16-07	dust control		Tamerlane will adhere to the GNWT Guideline for Dust Suppression.	
12	Developer's Response to Technical Reports, October 5, 2007	freezeway	B-1	Tamerlane will utilize isolation valves on each of the freeze pipes in the freeze perimeter, to minimize brine intrusion in the case of breakage/leakage.	
13	Technical Reports, October 5, 2007	freezeway	B-3	If precipitation builds up in the lined brine distribution trench, Tamerlane will clear the ice to ensure proper volume allotment (in the trench) to capture all potential brine leakage in case of a pipe rupture.	
14	Technical Reports, October 5, 2007	freezeway	B-5	In the event of an uncontrolled brine spillage, Tamerlane will follow a 10 to 1 dilution ratio (water to brine) as part of its cleanup plan and include this in its spills contingency planning.	This procedure has already been added to Tamerlane's Spills Contingency Plan.
15	Developer's Response to Technical Reports, October 5, 2007	freezeway		Tamerlane will place berms around the freeze plant to contain and prevent the spreading of brine in the event of a tank rupture. The brine tanks will be equipped with low level sensors and valving that will detect a lower than normal level and automatically shut off the outgoing valve.	
16	Email from Anne Wilson, EC, Notes from Tamerlane Ventures & Regulators meeting, 07-25-2006	freezeway	2	The developer will use blasting techniques that minimize fracturing, using narrow stable stopes, and monitoring of rock mechanics. The brine line will be monitored for pressure loss. A break would shut down the circuit. Pipes will be pressure tested and may be in concrete trenches.	To clarify, rock mechanics of the underground openings are monitored by visual inspections of loose ground along with periodic deflection measurements to determine areas of potential movement. As committed to earlier, the freeze manifold will be in a concrete lined trench and the individual freeze pipes will have isolation valves as indicated in # 12-15 above.
17	July 21, 2006 - Tamerlane response to NWTMN	freezeway	Attachment #3	Each freeze pipe will be pressure tested before being used. The network of surface lines connecting the vertical freeze pipes and the freeze plants will be placed in concrete or HDPE trenches.	
18	Letter from Layne Christensen Company to David Swisher, 07-24-07	freezeway		The HDPE-lined trench will support the entire volume of the system. Built within the manifold system is a series of electronically controlled valves that will close based on a change in brine level or pressure. Also the pumps will be shut off to reduce pressure and flow from the rupture. An on site repair package will be provided as well as reserve storage capacity. Traffic control around the manifold will be implemented.	
19	May 2007 DAR	freezeway	133	The installation of each individual freeze pipe will be pressure tested and surveyed for verticality. The pressure test will be conducted by filling each pipe with water and applying 200 psi of air pressure while assuring that the pipe holds this pressure for at least one hour. Each pipe will be checked for verticality using gyroscopic surveying methods.	
20	May 2007 DAR	freezeway	133-4, 333	Layne Christensen will supply the development with an instrumentation system integrated with ground, distribution manifold and the refrigeration plant. The system will measure, record and reduce the data for the following components: ground temperatures will be measured at 30 different temperature pipes equally located throughout the site... coolant return temperatures will be measured at each freeze pipe at the connection to the return manifold... groundwater levels will be continuously measured using transducers installed in each of the piezometers or monitoring wells installed during the initial engineering... coolant flow and pressure are constantly monitored and connect to an alarm system... refrigeration plant data are built within the compressor system. These data, as well as other data from the plant, will be incorporated into the central monitoring system that records all other data... Layne Christensen engineers will establish a monitoring program including appropriate alarms and response actions. An HSE (Health, Safety and Environment) plan by Layne Christensen will be provided along with on-site management and inspection during operations.	



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
21	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	freeze wall	12	Adaptive mitigations that will be used to ensure proper development of the freeze wall include: 1. adjusting the spacing of the pipes (the closer they are together, the greater the strength of the barrier); 2. adjusting the temperature of the brine (the colder, the stronger the barrier); 3. Constant monitoring of pipe, brine and ground temperatures to look for anomalies; and 4. If problems are found, grouting and/or additional pipes will be utilized.	There is no intent by Layne Christensen or Tamerlane to use liquid nitrogen for this project.
22	18, 2007 Technical Sessions, 9-14-07	freeze wall	13	A contingency plan and environmental impact worst case assessment of a massive loss of brine from the manifold will be developed	Note: Worst case assessment has been evaluated and contingencies developed as outlined in #12-21 above.
23	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	freeze wall	20	The developer will monitor the creation of the freeze wall through an advanced downhole monitoring system linked to a central computer and alarm system. Temperature parameters are set ahead of time, and no lateral work on mining stopes and other infrastructure will occur until the freeze ring is fully established. In terms of drilling tolerances, gyroscopic surveys are used to confirm that all holes are vertical within a tolerance of a 2 metre cylinder for each freeze pipe (i.e., no more than a one metre radius of deflection over a 550 foot drill hole). Where more than this deflection occurs, additional infill drilling will be conducted to assure the freeze pipes are close enough to create an impermeable barrier.	
24	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	freeze wall	21	Thermal erosion potential will be remodeled based on pump test data gathered after the establishment of the curtain. Once a value can be agreed on for basal hydraulic conductivity, then thermal erosion rates can be looked at and any required changes built into the freeze wall adaptive management system.	A recalculation will occur in order to update the adaptive management system.
25	18, 2007 Technical Sessions, 9-14-07	freeze wall	55	At closure, all Freeze Pipe Brine will be removed from the system and possibly sold to another group. If they don't sell it, the developer will return it to the supplier for reuse or storage.	
26	18, 2007 Technical Sessions, 9-14-07	freeze wall	56	The developer will line the area where most of construction will occur with concrete, and elsewhere build a ditch in which to bury the distribution pipes to protect them, especially during construction.	
27	Minutes from regulators meeting with Tamerlane - July 5, 2007	freeze wall	4	Tamerlane will develop an environmental monitoring plan that documents the rate and changes associated with the melting of the freeze curtain. Sensors used to track the freeze-in will be used to monitor the thaw rate. This is expected to take about 3 months.	As indicated in #20 & 23, Layne Christensen and Tamerlane's monitoring plan will provide real-time data that will enable a predictable model for the thawing process, once the freeze system is shutdown. After removal of the freeze system, manual monitoring of flow regimes in the wells will confirm the modelling predictions for future operations.
28	August 15, 2007 - Tamerlane partial 2nd Round IR responses	hazmat	IR50.1	Underground fuel will be transported in a buried Schedule 40 pipe from the tank farm on the surface directly to the mine shaft. The piping will be attached to the shaft wall and run to an underground holding facility with polypropylene storage tanks sized to supply 1-2 days of fuel. Tanks will be contained in a lined catchment sized to 110% capacity. Tamerlane's Hazardous Spills Contingency Plan applies underground as it does above.	
29	Developer's Response to Technical Reports, October	hazmat	E-1; O-2	There will not be any cyanide compounds used in the flotation process or at all in this development	
30	EC, Notes from Tamerlane Ventures & Regulators meeting, 07-25-2006	hazmat	3	Tamerlane will contain all stored fuels and lubricants in separate catchments, pipe fuel underground for short term use rather than batch resupply, and have weekly re-supply to minimize on site quantities.	As clarification, the surface facility will store the fuels and lubricants in a designed catchment that is provided in more detail on page 163 of the DAR.
31	July 19, 2006 - Tamerlane to Natural Resources Canada - re explosives questionnaire	hazmat	R12	The temporary construction magazine will house 25,000 kg of explosives and be located a minimum of 330 meters from the nearest building of the Pine Point Pilot Project. The magazine will be bermed and follow the regulated criteria for D4 at 235 m distance.	The 25,000 Kg of explosives was an initial estimate early during project design and before the implementation of the environmental assessment. This accounts for approximately 2 weeks of storage and may be more or less depending on delivery and weather restrictions.
32	July 21, 2006 - Tamerlane response to NWTMN	hazmat	R11	The temporary construction explosives storage facility will be designed, located and operated in accordance with the NWT Mine Health and Safety Act and Regulations. Tamerlane will obtain an Explosives Magazine Permit for its proposed temporary construction explosives storage facility.	
33	letter from EBA Consultants to Tamerlane, 7-27-07	hazmat		Tamerlane has committed to use emulsion explosives only for the mining of the R-190 underground deposit.	Tamerlane is committed to using emulsion for its blasting needs, however, operational variance may require different explosive products depending on ground conditions encountered, however, this would be for isolated, short term events.
34	letter from EBA Consultants to Tamerlane, 7-27-07	hazmat		Specific Best Management Practices adopted by Tamerlane's to minimize lossess of ammonia and nitrate at the PPPP include: All production blast holes will be primed according to the explosive manufacturers specifications and any specific Tamerlane Operating procedures; staff members have a significant role to play in reducing/controlling Ammonia Nitrate losses, through proper supervision of loading, emphasis on correct loading procedures and proper training updates of blasting personnel; the time that explosives sit in the ground in wet areas prior to detonation will be minimized.	These initiatives will be passed on through training of Tamerlane's employees and Contractors.
35	May 2006 - Tamerlane Project Description Report	hazmat	2.10.3; 5.2	Surface fuel will be stored in single containers with less than 4,000 litre capacities. All fuel and lubrication tanks (welded in place) will be placed in an engineered and lined enclosure capable of holding 110% of the capacity of the largest tank. Appropriate spill response equipment will be stored at the tank farm facility. Any fuel leaks and/or equipment spills will be reported to the On-Site Coordinator. The On-Site Coordinator will record and report the spills and direct cleanup activities in accordance with the procedures described in Tamerlane's Hazardous Materials Spill Contingency Plan. A spill kit will be located at the surface fuel storage facility. The Environmental Advisor (EBA Engineering) will be involved in any spill response.	For clarification, the 4,000 litre storage capacity was designed initially around the requirements for a Type B LUP. Since Tamerlane will have a Type A LUP, the requirements are for containers > 4,000 litres. Tamerlane's design criteria dictates a container of 10,000 litres to provide a weekly supply.
36	May 2007 - Developer's Assessment Report Appendices	hazmat	Appendix F; page 9	The On-Site Coordinator will conduct training for all surface personnel working on the PPPP. Surface personnel will be trained in the techniques and materials required to manage hazardous spill responses. Training will include the following instruction: the initial spill response procedure to use in the event of a spill; location and use of emergency equipment to respond to spills; safe operation of equipment and tools to minimize the potential for spills; operational procedures to limit the potential and impact of spills; monthly safety discussions to address work hazards.	
37	May 2007 DAR	hazmat	170	The transportation of all hazardous materials transported to and from the site will be conducted in accordance with existing territorial and federal regulations, including the Transportation of Dangerous Goods guidelines and will most likely be carried out by a qualified third-party contractor.	Contractors involved in trucking will be qualified in transportation of dangerous goods and the trucks appropriately placarded in compliance with TDG legislation.



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
38	May 2007 DAR	hazmat	453	Response preparedness will be maintained for incidents involving medical, fire, underground flooding, fuel, refrigerant or concentrate spills or other environmental related incidents (e.g., wildlife collisions).	As regulated by the NWT Mine health and safety act and regulations, Tamerlane will be developing an emergency response plan prior to mine operations by Tamerlane.
39	May 2007 DAR	hazmat	453	Fuel and other hydrocarbons will be stored in accordance with the existing CCME environmental code of practice for storage of these products (CCME 2003).	
40	May 2007 DAR	hazmat	453	"Any spills will be immediately reported to the 24-hour Spill Report Line... and spill containment and cleanup activities will be implemented in accordance with Tamerlane's Hazardous Materials Spill Contingency Plan".	
41	May 2007 DAR	hazmat	453	"Explosives ingredients (e.g., Ammonium Nitrate, diesel) will be transported to the site from local distributors in accordance with federal <i>Transportation of Dangerous Goods, Workplace Hazardous Materials Information System, and Explosives Act</i> requirements".	
42	May 2007 DAR	hazmat	147-8	"Both [underground explosives] storage drifts will be gated and locked with access keys given only to designated responsible employees. The two drifts will be separated by at least 4.5 metres (15 feet) of unconsolidated rock. One drift will be used for the safe storage of ANFO and Emulsion and the second drift will be utilized for all Detonators. Only properly trained and certified employees or contractors will be permitted to handle explosives".	Clarification: "The two drifts will be separated by at least 4.5 metres (15 feet) of consolidated rock."
43	May 2007 DAR	hazmat	164-5	Explosives and detonators will be stored separately at the temporary surface explosives magazines. A primary lock will secure the magazines while a secondary lock will be used for a chain link fence to be installed at the magazine access.	
44	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	hazmat	26	The way in which the explosives are set up is also geared toward minimizing losses: stopes will not be loaded and left sitting for a long time; they will only be loaded when getting ready to be shot. The use of down hole loading as opposed to up hole loading was also cited as a way to reduce losses.	
45	Tamerlane 1st Round IR responses, 05-29-07	hazmat	27	All product leaching will be captured and recycled through the process facility. In the unplanned event that a spill happens to the environment in the process plant, it will be treated as any spills outlined in Tamerlane's Hazardous Materials Spill contingency plan.	
46	Tamerlane responses to Technical Meeting Topics, 6-October 16 Hearing Transcripts	hazmat		Any hazardous materials will be shipped to the hazardous waste facility in Hay River.	
47	October 16 Hearing Transcripts	health		Tamerlane will conduct annual health and safety checkup for its employees.	
48	Tamerlane 1st Round IR responses, 05-29-07	health	40	Tamerlane has committed to using health and safety training as well as zero tolerance drug policy to promote a healthy employee population.	
49	Tamerlane 1st Round IR responses, 05-29-07	heritage resources	60	If unexpected archeological materials are encountered during any phase of this development, all activity in the area must cease and the PWNHC and any affected First Nations must be contacted.	As required by PWNHC, all activity in the area must cease and they must be contacted. In addition to this, Tamerlane committed to contacting any affected First Nation and will do so but for clarification, this was not a requirement.
50	Tamerlane 1st Round IR responses, 05-29-07	heritage resources	60	During early stages of construction orientation sessions will be held w/personnel to address the issues including: site safety, heritage/archaeological protection, environmental protection. The Heritage resource component includes info on legal, reporting and mitigation requirements related to the protection of Archaeological/Heritage Resources in the event any are found	
51	May 2007 DAR	infrastructure	293	Tamerlane will locate as much of the building and associated infrastructure footprint on previously disturbed terrain as possible.	
52	May 2006 - Tamerlane Project Description Report	materials management	2.5; 2.8.1; 2.8.2; 2.9.1	Monitoring of waste rock storage seepage will be included in the design and operation of the waste rock storage location. The stockpile area will be covered and concrete lined or bermed. Capturing minute seepage from the temporary waste rock stockpile is one of the primary objectives of the PPPP water management plan.	The monitoring of the waste rock stockpile will not be as extensive as monitoring other portions of the process. This is largely due to the waste rock posing no threat to the environment because it is made up of primarily limestones and dolomites. The monitoring of this facility will encompass visual inspections and periodic water quality tests to develop background baseline data for future operations. This has not changed due to the addition of flotation.
53	May 2007 DAR	management	154	"The run-of-mine ore will be temporarily stockpiled in an enclosed heated structure with a concrete pad".	
54	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	materials management	45	By filtering off 40% more coarse material [in the expanded process] and using it as backfill, the project will not need any other backfill sources, as previously planned.	
55	Minutes from regulators meeting with Tamerlane - July 5, 2007	materials management	4	There will be separate lead and zinc areas in the covered, heated storage building, each made with concrete floors and contained. If any seepage is collected, it will be sent to the processing circuit or the water treatment system.	
56	August 30, 2007 - Responses to IR's 35 and 38	power	IR35.2	Tamerlane will employ hydroelectric line power for the bulk of its power needs. A diesel generation plant will be used for some ancillary activities and primary safety and environmental back-up in the event of power failures or scheduled maintenance on the Taltson Dam.	
57	May 2007 DAR	reclamation	143	"Reclamation [of the vertical conveyor] will consist of removing all surface and underground conveyor components and belting. The surface structure will be dismantled and removed from site".	
58	May 2007 DAR	reclamation	290	Organic and mineral top soils will be salvaged and stored for future reapplication during reclamation of the site	Organic "Top Soils" in the area are very limited, but, to the extent possible, they will be segregated and salvaged for reapplication during future reclamation of the site.
59	May 2007 DAR	reclamation	290	Re-contouring, scarification, and reseeding of disturbed areas with appropriate and approved native seed mixes will occur.	
60	May 2007 DAR	reclamation	293	The mined out area will be backfilled with a waste rock/concrete mixture.	
61	May 2007 DAR	reclamation	417	Following project completion, the freeze plants will be turned off and the brine completely removed from the system. The freeze pipes will be reclaimed and the holes filled with grout. All infrastructure related to the freeze ring will be loaded on truck and shipped off site. Any temporary foundations and leakage barriers will be removed and hauled off site. The abandoned area where the freeze infrastructure once lay will be levelled and reclaimed in a manner consistent with INAC and Land Use Permit conditions.	For clarification, the inner freeze pipes from surface down 185 meters will be reclaimed and reused, whereas, the outer freeze pipes firmly embedded into the ground will be cut at surface sublevel and filled with grout unless required for monitoring purposes. Anything more than this will create further surface and ground disturbance. Please also refer to #66.
62	May 2007 DAR	reclamation	418	Water discharge lines will be reclaimed and shipped off site. The fuel and lube tanks and associated piping will be drained, washed, cleaned and then dismantled. All infrastructure will be removed from site. The catchment containment berms will be breached or re-contoured to encourage natural drainage.	



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
63	May 2007 DAR	reclamation	418	Waste oils will be shipped off site or consumed in the used oil heaters. Unused explosives will be shipped off site or burned or destroyed on site and unused chemicals as well as any other hazardous waste material will be either treated on site or shipped off-site for disposal. All non-combustible, non-hazardous waste will be disposed of in the permanent non-hazardous solid waste disposal facility located in Hay River. Peripheral equipment like lighting and signposting will be removed.	With regard to explosives, standard practice is to consume unused or spilled explosives in the next blast initiated. In the event a bad batch of explosives are delivered, then those explosives will be picked up by the vendor and replaced. The vendor would be responsible for disposing of the bad batch of explosives.
64	May 2007 DAR	reclamation	140-1	"Reclamation [of the shaft] will consist of removing all piping and support sets from the shaft. The head-frame will be removed and the concrete pad can be lifted if necessary. Once the shaft is cleared, a concrete plug will be installed at ground level that will extend several feet into the shaft".	After shut-down the installation of the concrete plug requires the immediate surrounding cement pad infrastructure to ensure a secure and stable fit.
65	May 2007 DAR	reclamation	151, 417	Temporary [surface] structures will be removed at the completion of the bulk sampling program unless future full-scale mining is deemed viable. All temporary buildings will be stripped down and prepared for off-site transport. Any remaining foundations will be removed or buried.	
66	September 17, 2007 - Report of Q&A between Tamerlane and DOT	reclamation	C-1	Internal down-hole freeze pipes will be salvaged and removed. The external freeze pipes will be capped below surface and left in place, and the area returned to its natural contours. These wells will not be plugged, as they can provide a means for future water surveys and test work.	
67	Report of Q&A between Tamerlane and DOT	reclamation	C-3	Tamerlane will reclaim all externally exposed piping on or near the surface during closure and reclamation	
68	August 15, 2007 - Tamerlane partial 2nd Round IR responses	reclamation	IR45.2	Reclamation of the sediment settling pond will entail final agitation and removal of all sediments to be mixed into the backfill for return underground. During reclamation, the liner will be removed and the area contoured as necessary to resemble its former state.	
69	August 15, 2007 - Tamerlane partial 2nd Round IR responses	reclamation	IR51.1	All brine will be removed and returned either to the manufacturer or GNWT for roadway usage and internal pipes removed while the external pipes are left in place.	
70	August 15, 2007 - Tamerlane partial 2nd Round IR responses	reclamation	IR51.2	Fuel and lube tanks, if not sold or reused, will be washed and the wash water captured and the tanks hauled off site to an appropriate disposal facility either in Hay River or Edmonton.	
71	August 15, 2007 - Tamerlane partial 2nd Round IR responses	reclamation	IR51.5	Post-closure monitoring will be limited to evaluating the success of the re-vegetation effort. Post-closure monitoring for re-vegetation success is envisioned to be conducted 1 & 5 year post closure.	
72	August 30, 2007 - Responses to IR's 35 and 38	reclamation	x	"Following removal of the PPPP surface facilities, the remaining fill embankments, borrow pits, access roads and development footprint will be re-contoured and scarified as required to ensure surface stability and to facilitate the re-establishment of native vegetations.	
73	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	reclamation	53	If R190 is successful the shaft would be reused, the existing freezeway kept in place, and other freezeways set up as necessary to reach other ore bodies.	
74	meeting with Tamerlane - July 5, 2007	reclamation	4	All ore and other stockpiles will be removed post mining.	
75	Minutes from regulators meeting with Tamerlane - July 5, 2007	reclamation	pages 4-5	Tamerlane will update their Closure and Reclamation Plan if: the PPPP leads to expansion that hasn't been contemplated in the existing Plan; there is a change (or proposed change) in reclamation procedures; there are unforeseen or significant hazards as well as operational changes identified.	Should changes occur, Tamerlane will be updating community groups and regulators.
76	Tamerlane 1st Round IR responses, 05-29-07	reclamation	74	Tamerlane will accept all responsibility for the proper cleanup of the used portion of the former gravel pit which will house the sediment settling pond.	Tamerlane would like to impress that no damages are expected to occur
77	Tamerlane response to ENR recommendations, 7-27-07	reclamation		Tamerlanes primary reclamation scenario is to return affected areas to states compatible with the original environmental conditions that existed prior to the development of the PPPP.	
78	Tamerlane Ventures Public Hearing presentation, 10-16-07	reclamation		Tamerlane will follow the reclamation guidelines set forth in section 15 of the Mackenzie Valley Land use Regulations and the 2007 INAC Mine Site Reclamation Guidelines as applicable.	
79	July 21, 2006 - Tamerlane response to NWTMN	safety	R20	Upon completion of Tamerlane's Emergency Response Plan, the following will be included but not limited to: an emergency response coordinator, a site hazard assessment, an ERP committee, site personnel accountability method, posted and designated escape routes and assembly points, reporting procedures, alarm system notification, procedures for key employees who are required to remain to operate critical equipment, identity of medically trained employees, posting of emergency numbers and contacts throughout facility, emergency drills, annual employee reviews.	
80	June 1, 2006 - Land Use Permit Application to MVLWB	safety	8: Roads	"A gate will be installed near the highway access to provide security for plant equipment and materials. It will also serve as a safety precaution and prevent the public from coming into contact with plant equipment and explosives".	Due to the fact that Tamerlane will not be the only user of the dirt access road off highway #5, Tamerlane's gate will be installed at the guard shack at the site.
81	May 2006 - Tamerlane Project Description Report	safety	5.1	"All machinery will be equipped with standard noise suppression equipment. The company will construct earth berms as needed. Employee Personal Protective Equipment guidelines will also be outlined in all contractor and company operation procedures".	
82	May 2006 - Tamerlane Project Description Report	safety	2.11.4	The PPPP will employ a full-time training coordinator to implement and deliver specific training sessions. Safety related training will be given high priority and be a requirement for all employees and subcontractors. Required training will include: site orientation, mine site general safety rules, personal protective equipment use, hazardous materials spill contingency training, basic first aid training, and other (job specific) training.	
83	May 2006 - Tamerlane Project Description Report	safety	2.11.5	Tamerlane will comply with all Emergency Medical Response criteria associated with the Mine Health and Safety Act. An Emergency Response Plan will be distributed to all employees and posted for easy access in the event of an emergency. Selected employees will be trained in First Aid, and mine rescue crews will be on-site. A dedicated first aid facility will be located on-site. There will be a dedicated ground vehicle for evacuation to Hay River and may include medi-evacuation options.	
84	May 2007 DAR	safety	150	"All [underground] escape routes will be inspected on a regular interval and maintained in a safe, travelable condition. Both the primary and secondary escape-ways will be marked with conspicuous and easily read direction signs that clearly indicate the ways of escape. Prior to entering the mine, all personnel will be trained and oriented to the proper method of escape from the mine".	



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
85	May 2007 DAR	safety	164	"Tamerlane will operate a small manned guard shack to ensure that only authorized people are entering and leaving the facility".	
86	Tamerlane 1st Round IR responses, 05-29-07	safety	34	The guard shack will be positioned such that no walking or driving access will be possible w/o checking into the guard shack first. Appropriate signage is to be posted along all visible points surrounding the project site. In even that unauthorized human access is attempted the individual personal infor will be gathered and turned around at the guard shack. In event of access by animals they will be escorted/encouraged to move to the perimeter of the site, local wildlife officials will be called in for counsel.	For clarification: "In event of access by animals they will be escorted/encouraged to move to the perimeter of the site, local wildlife officials will be called in for counsel." should be deleted. Wildlife will be left alone.
87	Tamerlane 1st Round IR responses, 05-29-07	safety		Tamerlane will put up signage indicating a no shooting zone between the highway and project site. Tamerlane will consult on a consistent basis with the local Aboriginal groups to ensure that traditional land users are award of the project and its boundaries.	
88	August 15, 2007 - Tamerlane partial 2nd Round IR responses	sewage treatment	IR48.2	The BIODISK treatment system will be used for treating sewage, and the treated sewage [and greywater] will be co-mingled with process and minewater and directed to the injection well	
89	Hearing presentation, 10-16-07	sewage treatment		The sewage treatment plant will meet the Camp Sanitation Regulations, RR.NWT. 1990 c P12 and Public Health Act, RS.NWT. 1998, c P12	
90	August 15, 2007 - Tamerlane partial 2nd Round IR responses	socio-economic	IR41.1	"Tamerlane will conduct pre-employment screening, including criminal background checks on all finalists. In considering whether to hire a finalist who has been convicted of a criminal offense, Tamerlane will consider several factors including but not limited to: the relevance of the criminal conviction to job duties, the date of the most recent offense and employment history since the commission of the crime, the nature of the offense, the accuracy of the information the finalist provided on the employment application, [and whether the offense was committed as a minor]".	As indicated in our 2nd Round IR response, "Tamerlane plans at this time to conduct pre-employment screening, including background checks on all finalists." There are many variations to pre-employment screening and Tamerlane is still determining which will be appropriate for its employees.
91	August 15, 2007 - Tamerlane partial 2nd Round IR responses	socio-economic	IR41.2	Tamerlane will have zero tolerance for the possession and/or use of drugs or alcohol at any Tamerlane work location. The Company will conduct drug screening for "reasonable cause" and "post-accidents".	In addition, Tamerlane is currently evaluating whether it will conduct pre-employment drug-testing and/or random drug-testing at its sites on an on-going basis
92	Tamerlane partial 2nd Round IR responses	socio-economic	IR41.3	Tamerlane will consider prior work experience as equivalent to education on a case-by-case basis.	
93	August 15, 2007 - Tamerlane partial 2nd Round IR responses	socio-economic	IR44.1	Tamerlane is working with the Mine Training Society to begin an underground mine training program that will provide training for the communities of Fort Resolution and Hay River. The classes will be in sizes of 12 students per community depending on the demand. Additional instructors or classes may need to be added if demand is high. Tamerlane has committed to hiring 6 people each from the KFN and the DKFN, as well as 6 people from each of the HRMC and the FRMC. Tamerlane's HR Superintendent will liase with the community points of contact and the Mine Training Society to advertise, screen and select candidates.	The training initiatives are already underway being led by Hillary Jones of the Mines Training Society. She is working with the Deninu Kue and Katlodeeche to conduct training sessions in those communities centered around mining.
94	August 15, 2007 - Tamerlane partial 2nd Round IR responses	socio-economic	IR44.2	Tamlerlane will provide content expertise to the Mine Training Society in the development of curriculum for college certificate level training in mining at Aurora College in Yellowknife, NT.	David Swisher has already provided content and will continue to do so at the Mine's Training Society's request.
95	August 30, 2007 - Responses to IR's 35 and 38	socio-economic	IR38.1	"Tamerlane is considering subsidizing temporary housing for prospective employees from Fort Smith".	
96	August 30, 2007 - Responses to IR's 35 and 38	socio-economic	iv; ix	"The Tamerlane [training] program will initially be designed to fill apprenticeship and technological occupations. In addition, all PPPP contractors will also be required to adhere to Tamerlane's goal of maximizing Northern and Aboriginal employment".	As clarification, Tamerlane's apprenticeship program is a structured training program to allow non-skilled employees the opportunity to garner skills which would allow them advancement opportunities within the company
97	Responses to IR's 35 and 38	socio-economic	DAR Summary	No camp facilities will be used during the life of the PPPP.	
98	May 2007 DAR	socio-economic	381	"Tamerlane is committed to employing as many persons as it can from the limited, locally available labour pool. The criteria for employee selection will recognize the value of years of experience in the work world."	
99	May 2007 DAR	socio-economic	340; 357	Tamerlane's commitment to training will include site-based on the job training and the support of a number of apprenticeships. Tamerlane will consult and collaborate with local Aboriginal interests and communities to encourage effective development and delivery of the training programs.	
100	May 2007 DAR	socio-economic	359-360	"In considering contract bids, Tamerlane will prioritize Aboriginal and northern (South Slave) businesses, and will take a number of measures to maximize project-related business opportunities. These measures will include: preparing annual business opportunities forecast to identify foreseeable procurement requirements for mining equipment, operations and maintenance support services; providing technical support and assistance in accessing sources of commercial capital; working closely with local First Nations interests and communities; identifying project components at all stages of development and operations that should be targets for a northern business development strategy; facilitating subcontracting opportunities for northern businesses; and identifying possible opportunities for joint ventures with Aboriginal and northern businesses".	This initiative has and will continue to occur.
101	September 6, 2006 - Hay River Scoping Sessions	socio-economic	8	Infrastructure contractors will be required to hire trainees and the developer will have training guidelines.	
102	River Scoping Sessions Final Report	socio-economic	8	Within a certain reasonable percentage, local northern contracts will be preferred	
103	Tamerlane 1st Round IR responses, 05-29-07	socio-economic	48	Tamerlane will seek out bid packages from all local communities and aboriginal groups for the non-specialized services required for the project. Tamerlane will work first with the aboriginal groups to determine and demonstrate capacity, competitiveness, regulatory requirement compliance and Tamerlane's operational requirement. If thsi cannot be done the developer will encourage joint venturing w/local business to meet these requirements.	This is currently being done and will be ongoing
104	Tamerlane 1st Round IR responses, 05-29-07	socio-economic	58	Medical/dental benefits will be available to employees and their immediate families. Training ops include (pre-employment, on the job, health and safety, environmental protection and archaeological resource protection	
105	Tamerlane Ft. Resolution Scoping Session, Meeting Report, 08-17-06	socio-economic		The developer has stated that people without education can still get hired. Work ethic and quality of the worker is more important in some instances. Tamerlane will require their specialized contractors to go to the communities so that they can hire people if they don't have experience.	This statement is meant for the contractors to go "through" the communities to hire as many people as possible both skilled and non-skilled.
106	Tamerlane 1st Round IR responses, 05-29-07	traditional economy	41	Tamerlane is actively working with communities chiefs and councils to ensure that traditional land users who currently frequent the proposed project area will be accomodated during the life of PPPP.	



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
107	Tamerlane response to ENR recommendations, 7-27-07	traditional economy		The developer will consult with local elders and active harvesters familiar with the area on the location of berry patches in the development area.	This occurred during the Traditional Knowledge survey and of course, subsequent meetings at the site throughout the environmental assessment.
108	August 30, 2007 - Responses to IR's 35 and 38	transportation	IR35.2	At the ore transfer facility, concentrate will be handled in a fully enclosed shelter, the facility size will be large enough to ensure rail loaders and haul truck traffic in and out, the facility will be constructed with a concrete floor, the facility will contain, treat and recycle all wash water on site, the facility will be supported by CN's environmental policy and standards. Concrete barriers will separate the zinc from the lead. All material will be contained inside the building. Before the truck departs the building, an automated wash will clean its undercarriage. The wash water will be collected in a sump and routed through a small water treatment plant. The resulting clean water will be reused. Any solids buildup over time will be added to the concentrate bins for loading into railcars. Railcar loading activities will also take place inside the building to eliminate outside exposure. Any spillage of concentrate will be picked up and the remaining residue on the concrete floors will be washed into the wash sump and treated.	
109	Email from David Swisher to MVEIRB,9-10-07	transportation		Tamerlane's proposed rail loadout facility will have a concrete foundation and walls will be constructed ~1.0 m above the Designated Flood Level.	
110	May 2007 DAR	transportation	164	"All haul trucks will undergo an external inspection and clean up, if necessary, before departing from the PPPP site. If the security guard deems a truck to be overloaded, the truck will be returned to the concentrate loadout area to have its load adjusted".	
111	May 2007 DAR	transportation	170	"Construction, materials, repair and maintenance of all roads pertaining to the Pilot Project, will be undertaken by Tamerlane to ensure year round, safe access for the PPPP and local land users".	This encompasses the road access from Highway #5 to the project site.
112	May 2007 DAR	transportation	196	"If necessary, Tamerlane would be willing to modify haulage schedules to staggered, or graveyard shift hauling".	
113	May 2007 DAR	transportation	197	Tamerlane will provide daily transportation via bus/van to and from site to workers from Hay River and Fort Resolution, funded by Tamerlane, from designated parking areas.	
114	May 2007 DAR	transportation	380	"PPPP-related traffic will be complying with all DOT traffic regulations. Tamerlane will reinforce this expectation with all employees and contractors involved in travelling along the highway or any other roads in the Pine Point area.	
115	May 2007 DAR	transportation	454	"Concentrate product will be transported from the PPPP site to the Hay River railhead in designated trucks equipped with covers".	Please refer to response #10 above for further clarification.
116	October 16 Hearing Transcripts	transportation	85	The ore transfer facility in Hay River will be a covered, fully covered and enclosed facility where the railcar will be pushed inside the facility prior to loading. The railcar will be covered and sealed before it leaves the building.	
117	October 16 Hearing Transcripts	transportation	164	Before the concentrate leaves the minesite storage facility, it will go over an undercarriage truck was that will clean the underside of the undercarriage of the truck..the truck will be covered and inspected to make sure everything is covered and enclosed properly.	Please refer to response #108 for clarification.
118	October 16 Hearing Transcripts	transportation	278	If highway maintenance [in the area travelled by Tamerlane PPPP-related activities] is in excess of the funds made available, Tamerlane understands that the GNWT Department of Transportation will be coming to them to help make sure and maintain that section of the road. For example, if the 1 kilometre of the chip seal road becomes a major maintenance issue, then the developer would sit back down with the DOT and draw up what they could do to mitigate that, including potentially extending the paved section of the road back to the site.	Bottom line, Tamerlane will work with DOT regarding this section of chip seal to ensure proper and safe operating parameters.
119	Tamerlane 1st Round IR responses, 05-29-07	transportation	15	Tamerlane will haul during the day shift to use the daylight hours and coincide with the rail loading operations conducted by CN. The haul trucks to follow all operating regulations in the NWT and operate within the posted speed limits. Tamerlane will require its contractors or subcontractors to comply with government and company policies	
120	Tamerlane 1st Round IR responses, 05-29-07	transportation	15	If a truck accident occurs Tamerlane will first assist local authorities by securing the safety of the truck driver and other vehicle traffic. Then Tamerlane will scoop up the concentrate and load it into another truck. The truck will haul the concentrate to either the rail loadout site or back the facility for reprocessing	
121	Tamerlane 1st Round IR responses, 05-29-07	transportation	27	Tamerlane will follow its cleanup procedures as outlined in the Tamerlane Hazardous Materials Spill contingency plan if there is a spill at the transfer facility.	
122	October 16 Hearing Transcripts	transportation	277	Tamerlane will post proper signage to make sure people are aware of main intersections used by Tamerlane traffic.	
123	Tamerlane response to ENR recommendations, 7-27-07	waste management		Used oils will be burned in an approved OMNI used oil heater, which is an incinerator approved by the Canadian Standards Association of the Underwriters' Laboratories of Canada for incineration of used oil and waste fuel. The developer will adhere to ENR's <i>Used Oil and Waste Fuel Management Regulations</i> , including but not limited to, providing a burning plan for the mine site.	Regardless of the brand of oil heater, all guidelines will be met.
124	August 30, 2007 - Responses to IR's 35 and 38	waste management	iv	All solid non-combustible and non-hazardous waste will be collected and consolidated weekly and disposed of in the Hay River landfill.	This activity will be undertaken as frequently and regularly as necessary, not necessarily weekly.
125	July 21, 2006 - Tamerlane response to NWTMN	waste management	R6	All solid wastes will be managed in accordance with NWT regulations.	
126	Tamerlane response to ENR recommendations, 7-27-07	waste management		The Town of Hay River accepts waste originating outside of the municipal boundary including hazardous wastes such as propane tanks, batteries, paints, solvents, glycol, petroleum products, pesticides and corrosive substances and is agreeable to enter into an agreement with Tamerlane to accept waste generated from the proposed PPPP.	
127	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management	Appendix A	The injection well will be cased fully down through to the top of the Presquile aquifer strata. The bottom of the injection well will be an open hole drilled through the entire thickness of the Presquile Dolomite, to take advantage of all available injection capacity. The open hole section will be lined with a perforated well liner. Injection water will be admitted through a drop pipe that extends below the static water level in the well.	Clarification: "The injection well will be cased to the top of the Presquile aquifer strata" .....do not want the reader to misunderstand that any casing would be in the aquifer zone itself.
128	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management	O-2	Flotation system operators will be trained in a thorough personnel training program to prevent excess quantities of all reagents entering the process. Clearly written instructions will be provided to all trained flotation system operators. A written contingency plan for the handling of reagent spills will be prepared before the commissioning of the DMS and flotation plant starts	As clarification, the operator training will include their purpose, addition point to the flotation circuit and the proper handling, measuring and mixing. Signs will identify the reagents, MSDS classifications will be distributed to all operators as well as copies will be located in the operator control rooms and in the reagent mixing/storage area.



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
129	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management	S-1; S-2	The sediment settling pond will be constructed during the construction phase of the development and utilize materials excavated during the shaft sinking operations. A high density polyethylene liner (HDPE) will be utilized in the pond. A thin layer of gravel or waste rock will be utilized under the HDPE liner to act as protection against puncture. The settling pond will be approximately 121,680 cubic metres in volume capacity. An HDPE discharge line from the process facility will be buried along the access road and discharge into the pond. A sump with an agitator will provide agitation of any suspended sediments that will be pumped back to the process facility through a second HDPE buried line, and used in the underground backfilling process.	
130	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management	S-3	If there are any contaminants of concern diverted to the settling pond, the water will be treated with lime or another appropriate material, prior to pumping into the disposal well.	
131	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management		There will be a minimum of two injection wells, with the second (backup) injection well acting as a monitor well for groundwater quality monitoring. In addition, two dedicated monitor wells will be completed into the Presquile aquifer.	
132	Report of Q&A between Tamerlane and DOT	water management		Injection well maintenance methods will vary based on the type of fouling occurring, but will occur when the specific capacity of a well drops 25%.	Best practice suggests maintenance of a well when it approaches a 25% decrease and Tamerlane will be adhering to best practice standards for well maintenance.
133	August 15, 2007 - Tamerlane partial 2nd Round IR responses	water management	IR45.1; 47.5	A secondary injection well will be drilled next to the primary well to serve as a back-up to the primary disposal well for maintenance activities and to function in the unlikely event problems occur with the primary well. The backup well will be identical to the primary injection well, but located approximately 100-200 metres away from and down-gradient of the primary injection well. Discharge water will be rerouted through valves and pipes to this secondary well if routine maintenance or unexpected fouling of the primary well occur.	
134	August 15, 2007 - Tamerlane partial 2nd Round IR responses	water management	IR47.1	Injection wells will be instrumented at the well head to monitor (at a minimum) flow rate, water level in the well and to provide points for water quality sampling or continuous monitoring. Well head systems, controls and monitoring instrumentation will be built into an enclosed, secure and weather-proof control house. Data from the control house will be data logged and downloaded periodically, or interfaced with a web-based monitoring system for remote real-time monitoring (preferred).	Most instrumentation is used for complex and long term operations. As this well is none of those, the following clarification will apply: "Well head systems, controls and monitoring will be built into an enclosed, secure and weather-proof control house. Data from the control house will be logged and interfaced into a site specific monitoring program. There will be safety sensors and alarms to indicate unacceptable variances with the well operation.
135	Responses to IR's 35 and 38	water management	page iii	The floor of the process plant will be concrete lined and sloped to a central drainage sump.	
136	Developer's Response to Technical Reports, October 5, 2007	water management	E-1	If there is not enough inflows to the mine to run the process plant, the developer will acquire the necessary makeup water from surface wells in the area	Wells established during the construction phase of the project would be utilized.
137	Developer's Response to Technical Reports, October 5, 2007	water management	I-5	Tamerlane will plumb in the secondary injection well with the primary injection well from the project outset, with a valve isolating the two. This will enable quick transfer of discharge water from the primary to the secondary well if necessary.	
138	Developer's Response to Technical Reports, October 5, 2007	water management	M-3; E-2	Tamerlane will be putting in place a pumping system with a maximum capacity of 2,273 m3/hr. In the event that higher inflows of water than the pumping system is designed for are encountered early on during development and operations, Tamerlane would be able to utilize additional pump capacity that will be on site by Thyssen mining.	
139	Developer's Response to Technical Reports, October 5, 2007	water management	M-3; S-4	The temporary settling pond will be used not only as a temporary storage for process water in the event of high suspended solids but also as an initial usage during start-up of operations to test all facilities and processes before discharging into the primary injection well. In addition, the settling pond will potentially be used when maintenance is occurring on the injection well system.	
140	Email from David Swisher to MVEIRB, 7-6-07	water management		Tamerlane commits to using the Packaged Nanofiltration Water Treatment Plant No. 914 water treatment plan for sump cleanup in both the processing facility and the concentrate facility	Although the brand may differ, the specifications will remain the same for water treatment.
141	Letter to MVEIRB re: injection wells	water management		Tamerlane will use injection wells for the purpose of its water disposal, not the previously proposed infiltration basin.	
142	July 21, 2006 - Tamerlane response to NWTMN	water management	R23	All mine inflows will be shipped through plastic piping methods	HDPE piping will be used were applicable throughout the operation, however, due to structural reasons, steel piping will be used in the shaft and the process facility.
143	Letter from ENR to MVLWB, 06-27-06	water management	3	Tamerlane commits to water quality sampling for six months after the program completion [2006 Project Description Report]. The GNWT has stated that Tamerlane should commit to water quality sampline until such time that demonstration of compliance with the licence criteria has been proven.	The six months is a current minimum and will be re-evaluated based on the results of the water quality test work to ensure compliance with the licence criteria.
144	May 2007 DAR	water management	263	There will be no direct discharge of any DMS circuit or mine-related water discharges to any surface water such as area streams or lakes.	
145	May 2007 DAR	water management	278	Implementation of erosion control measures if and as warranted - not anticipated to be required due to the generally level and porous nature of the terrain at the development site.	Measures may include, but not limited to, ditching and sloping as necessary.
146	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	water management	24	Once the development starts, representative water samples will be taken from depth and the findings built into water management systems.	
147	Meeting Notes from July 17-18, 2007 Technical Sessions, 9-14-07	water management	43	Tamerlane will use part of the southern part of the formerly proposed infiltration basin as a bermed, lined water discharge and settling pond as a contingency plan only.	As recently stated after the technical sessions, the settling pond will be utilized on a temporary basis to accommodate proper discharge water into the injection wells.
148	Meeting Notes from July 17-18, 2007 Technical	water management	61	The developer will be using an area of high aquifer activity (a "hinge line") to locate the injection well(s)	
149	October 16 Hearing Transcripts	water management	27	Pump tests will be undertaken on the two injection wells to provide more information about the aquifer and its capacity to take the outflows from the operation - permeability and K-values will be recalculated and the water management system altered accordingly.	A determination of K-values may occur sooner during upcoming drilling activities.
150	October 16 Hearing Transcripts	water management	34	During construction, Tamerlane will install silt barriers to try and make sure that none of the sediments get into the marsh area.	
151	October 16 Hearing Transcripts	water management	161	During well maintenance, the injection water will be diverted to the backup well. And the primary well will be cleaned mechanically with a brush arrangement and/or cleaned hydraulically with surging water. If there's a buildup of calcium carbonate deposits or other minerals some chemical additives will be added to the well temporarily to break those up.	



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
152	October 16 Hearing Transcripts	water management	161	"...if we see a glitch in the operation, a power outage or something that may cause a surge of sediments through the system we can quickly divert it to that settling pond, let it settle out before transferring it back to the injection well."	During an emergency power outage, most of the slurry (solids and water) from the flotation circuit will remain in the flotation cells so the flash flow of slurry will come from the pipelines and will flow to the pumpboxes which will overflow onto the basement floor. The basement floor sumps will hold this spill volume. This is only necessary until backup power is established to operate the discharge pumps which will discharge (mainly process water) to the settling pond. Excess water in the settling pond that is free of suspended solids will be pumped to the injection well.
153	October 16 Hearing Transcripts	water management	207	The developer will be contracting out a third party, SGS Consultants, to do additional test work that will provide additional information with regard to suspended solids coming out of the mine water. The end of flotation circuit will have a conventional thickener to which flocculants will be added to keep the suspended solids to a number under 50.	In the unlikely event that additional flocculants to the discharge thickener could not produce the desired water quality of the thickener overflow, then the overflow water could be pumped to the lined settling pond for additional settling time.
154	October 16 Hearing Transcripts	water management	209	"One of the components to be added is a mechanical filtering component which will filter out a certain fraction of the particulates which might be in the water, also a degassing element so any evolved gas can be taken off, prior to injection of the water into the well. The developer will measure the levels of suspended solids or particulate matter prior to release into the injection wells and document that it is as low as possible.	
155	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water management		If the settling pond breaches, Tamerlane will take immediate steps to first stop any further introduction into the sediment pond and then transfer all clean water to the injection well, and if necessary, agitate and transfer solids to the backfilling system. Tamerlane will then clean up all material and repair the area back to design specifications.	
156	Tamerlane 1st Round IR responses, 05-29-07	water management	64	If unexpected exceedences occurred, contaminated process water would be aerated and agitated with lime slurry in the settling pond. Hydroxides would be settled/thickened and then mixed with DMS "float" reject plus cement for final deposition as backfill in the mined out underground areas. Proactive measures would include pH monitoring of the discharge water.	
157	Technical Meeting Topics, 6-19-07	water management		Tamerlane will heat tape and bury the [water distribution] lines to prevent exposure	
158	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water monitoring		All of the following parameters will be measured and monitored at the injection well(s): flow rate, pressure at injection well head, pumping water level, injection water chemistry, air venting, and sediment filtering. Monitoring will continue on after shutting down of the injection well system, to document the recovery of groundwater to a natural static water level. In addition, groundwater sampling for chemical analysis in accordance with the mine closure plan will occur at these sites.	
159	August 15, 2007 - Tamerlane partial 2nd Round IR responses	water monitoring	IR47.4, IR49.4	When not in use, the backup injection well will be accessible for installing a submersible groundwater sampling pump. This configuration could be temporary (installed only at the prescribed sampling intervals) or semi-permanently as a dedicated sampling pump (to be removed only when the backup well was needed for injection purposes). Water quality at the injection well itself will be monitored for key indicator parameters as required. Water samples will be taken according to a prescribed schedule and submitted to a chemical laboratory. An automatic sampler will be placed in each injection well to take a sample before water enters the injection well pump	
160	October 16 Hearing Transcripts	water monitoring	82	There will be a minimum of three separate monitoring points dedicated to the injection well. In addition, the primary injection well will be monitored for buildup of head [mounding] in the casing. The 2nd or backup injection well which normally isn't in use will be used to monitor for both changes in the water level in that well and also for samples of ground water to measure what the quality of water is as it flows to that second injection well. There will be 2 smaller diameter monitoring wells, 1 at about 300 metres from the primary well and one quite distant, about 800 metres away from the primary injection well. These 2 monitoring wells will measure both the buildup of water level and be able to be sampled for water quality.	
161	September 17, 2007 - Report of Q&A between Tamerlane and DOT	water monitoring		Tamerlane will employ an Environmental Health and Safety coordinator responsible for monitoring on the condition of the sediment settling pond structure. All monitoring will be in accordance with the requirements outlined in the land and water permits.	
162	Tamerlane responses to Technical Meeting Topics, 6-19-07	water monitoring		The conceptual monitoring proposed by Tamerlane would include regular monitoring of the comingled effluent prior to its leaving the process circuit and being discharged.	
163	Tamerlane response to ENR recommendations, 7-27-07	wildlife		GNWT's ENR <i>Food and Waste Management Guidelines</i> will be implemented to ensure carnivores do not become habituated and eventually require relocation and destruction.	
164	Tamerlane response to ENR recommendations, 7-27-07	wildlife		As required by the <i>NWT Mine Health and Safety Regulations</i> (s.15.05), all field personnel will undertake bear-safety training. In the event that a bear is disturbed and/or encountered during project operations, information on the sighting will be forwarded to the local Renewable Resource Officer at the earliest opportunity. If a bear is encountered, response should be in accordance with ENR's <i>Bear Response Guidelines</i> (by extension, all employees must be familiar with these guidelines; it will be included in employee training). Any defense of life and property (DLP) kills must be reported ASAP. Tamerlane will develop a project-specific bear response plan.	
165	August 30, 2007 - Responses to IR's 35 and 38	wildlife	IR35:2	Power pole locations are being designed alongside the existing access road to minimize exposure to nearby fen areas. Marking material will be added to enhance visibility of the power lines between the poles.	
166	August 30, 2007 - Responses to IR's 35 and 38	wildlife	vii	Tamerlane will implement a no hunting policy for all project employees and contractors while working on or off-site for Tamerlane. In addition, the company will require all project-related transportation activities to give the right-of-way to any wildlife that such activities may encounter.	
167	Letter from ENR to MVLWB, 06-27-06	wildlife	3	If a grizzly bear is disturbed and/or encountered during project operations, information on the sighting will be forwarded to the local Wildlife officer at the earliest opportunity.	Tamerlane would like to clarify that there are no grizzly bears in this area, however, if one is encountered, information will be forwarded to the local Wildlife officer.



Developer's Response to IR#55 - Submitted November 2, 2007

commit #	Document	theme	page section IR	Commitment	Developer's Clarification
168	Letter from ENR to MVLWB, 06-27-06	wildlife	3	If a mineral lick is present in the project area, the proponent will maintain a 300 m buffer zone between any development activities and the lick.	The baseline environmental studies commissioned by Tamerlane found no mineral licks within the 10 km x 40 km (36,000 hectares) Regional Study Area or the 1 km x 1 km (97 hectares) Local Study Area within which the project is located. Thus this commitment is not applicable or needed
169	Letter from ENR to MVLWB, 06-27-06	wildlife	3	if an active wolf or fox den is observed in the project area a buffer of 800m for wold and 150 m for fox will be maintained between the den and any development activity between May 1st and July 15th. Further, these sites will not be approached on foot by project personal.	The baseline environmental studies commissioned by Tamerlane found no wolf den sites within either the Regional Study Area or the Local Study Area. Although Tamerlane will manage its wastes in such a manner as to not attract foxes to the project site, foxes are known to establish dens in proximity to communities, camps and industrial activities throughout the North.
170	Letter from ENR to MVLWB, 06-27-06	wildlife	5	No wildlife will be purposefully encouraged to habituate to human presence (eg wildlife will not be fed)	
171	Letter from ENR to MVLWB, 06-27-06	wildlife		If woodland caribou are encountered during the development the proponent should shut down operations if they approach within 500 m. When caribou are further than 500 m away operations may resume.	Before the environmental assessment, Tamerlane had been in discussion regarding this initiative. Due to the dynamics of the project and for health and safety reasons, Tamerlane requests that this particular commitment be removed from the list of commitments. Tamerlane is committed to training its employees with regard to all SARA listed species to ensure the animals are not approached or harrassed and left to do what they want. Of course these animals will have the right-of-way with regard to haulage activities. It is completely impractical and unnecessary to shut down operations for a passing caribou or other species of wildlife.
172	May 2007 DAR	wildlife	334	"Tamerlane is prepared to conducted limited wildlife monitoring in the immediate vicinity of the PPPP development area. In particular, Tamerlane is prepared to to record all significant wildlife observations made by PPPP personnel while in the project area...also be willing to cooperate with and report any wood bison sightings seen in the Bison Control Area to the nearest ENR office as and when such sightings occur."	
173	May 2007 DAR	wildlife	309;312	...all waste foods and human garbage will be stored in wildlife proof containers prior to offsite disposal in an approved manner. No landfilling of such wastes will be conducted on site.	
174	Minutes from regulators meeting with Tamerlane - July 5, 2007	wildlife	pages 2-3	Infrastructure design will implement to following to minimize attraction of predators: wedges of greater than 45 degrees to deter ravens from nesting; all areas (large and small) with horizontal surface that can be enclosed will be enclosed; horizontal supports will be of the minimum possible width; heat exhaust from incineration or activity being recycled to heat other buildings will be transported using glycol in insulated pipes; anti-nest spikes or angled surfaces will be used near heat sources at greater than 45 degrees; surface complexity of all infrastructure will be reduced to avoid small nooks and crannies; all buildings and stairs will be skirted down the the ground; waste management will be consolidated in one secure, well-monitored location; domestic waste will not be exposed to the environment; all infrastructure will be continuously monitored for points of compromise; monitoring of wildlife use of decommissioned sites will continue once project is complete; and a knowledgeable wildlife specialist will be contracted to evaluate building plans and operations in order to identify points of likely exploitation.	To the extent reasonable this commitment will be followed
175	October 16 Hearing Transcripts	wildlife	236	The primary mitigation measure for any species at risk will be avoidance. If species at risk are encountered the proponent will avoid contact with or disturbance to the species, its habitat, or its residence. Monitoring will also be done to determine the effectiveness of mitigation or to determine if further mitigation may be required. As a minimum the proponent will record and provide to the relevant authorities all observations of any species at risk, including information on location sighted, number and reaction of the wildlife to project activities, and in some cases further monitoring may be required for particular species. Lastly, mitigation and monitoring will be consistent with recovery strategies and action or management plans for the particular species.	
176	October 16 Hearing Transcripts	wildlife	237	The proponent will undertake monitoring for whooping crane near the project site. Wetlands near the project site including the area identified as shrubby fen in the local study area will be visually checked every two (2) weeks from May to September to see if any cranes are present. If a whooping crane is observed, the wetland area will be visually checked on a weekly basis for cranes and measures undertaken to avoid disturbance to the bird. As well, Environment Canada will be contacted to determine whether any further mitigation measures might be required. Additionally, any other observations of whooping cranes will also be reported to Environment Canada.	
177	October 16 Hearing Transcripts	wildlife	238	The proponent will conduct a survey for Yellow Rails near the project area. The survey will include the area identified as "shrubby fen" in the local study area and any other wetland areas near the project site. The survey will be done in June 2008 or in June the year before project activities begin. If rails are observed or heard, measures will be undertaken to avoid disturbance to the birds, the area will be re-surveyed in subsequent years, and Environment Canada contacted to determine if any further mitigation might be required. As well, any other observations of Yellow Rails will also be reported to Environment Canada.	
178	October 16 Hearing Transcripts	wildlife	255	The developer will provide employee education on the SARA listed species, so that people do understand what they are looking at and know what to identify when they do see it, as well as make it a policy that they report that immediately to Tamerlane's Environmental Health and Safety Manager.	
179	Tamerlane response to ENR recommendations, 7-27-07	wildlife		Pre-construction surveys for raptor species will determine active nest sites in the project area. If a nest site of a peregrine falcon or short-eared owl is identified in the project area, a buffer of 1.5 km should be maintained between development activities and the nest site from April 15th to September 15th.	Baseline raptor surveys conducted for the project confirmed that there is no suitable nesting habitat for Peregrine falcons anywhere within the RSA or LSA (they prefer cliffs). Likewise, the studies determined that there is no suitable Short-eared owl nesting habitat within several kilometres of the project location. Thus this condition is not necessary and was not part of Tamerlane's responses to ENR.
180	Tamerlane Ventures letter to MVEIRB, 10-24-07	wildlife	1	Tamerlane will have sealed solid and liquid waste containers, most of which will be located indoors.	
181	Tamerlane Ventures letter to MVEIRB, 10-24-07	wildlife	1	Tamerlane will incorporate new hire orientation to include awareness of best practices pertaining to waste management and wildlife avoidance.	