March 9, 2009

Notice of Decision

Water Pollution Control Permit
Number NEV0091029

Barrick Goldstrike Mines, Inc.

North Block Project

The Nevada Division of Environmental Protection (Division) has decided to issue Water Pollution Control Permit NEV0091029, to Barrick Goldstrike Mines, Inc. for the North Block Project. This permit authorizes the construction, operation, and closure of approved beneficiation facilities in Elko and Eureka Counties. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through NAC 445A.447, to assure that the groundwater quality will not be degraded by this operation, and that public safety and health will be protected.

The permit will become effective March 24, 2009. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute (NRS) 445A.605 and NAC 445A.407. All requests for appeals must be filed by 5:00 PM, March 19, 2009, on Form 3, with the State Environmental Commission, 901 S. Stewart Street, Room 4001, Carson City, Nevada 89701-5249. For more information, contact Paul Eckert at (775) 687-9401, or visit the Division website at: http://ndep.nv.gov/bmrr/bmrr01.htm.

Two comments were received during the public comment period. The first, dated January 19, 2009, was received from John Hadder, Staff Chemist for Great Basin Resource Watch with additional input from Tom Myers, PhD. The second, dated January 28, 2009, was received from Sue Gilbert of the Nevada Division of Water Resources. Division responses to the comments are attached to this notice of decision.

Division Response to Great Basin Resource Watch (GBRW) Comment Letter dated January 19, 2009 from John Hadder to Paul Eckert NDEP-BMRR (with additional input from Tom Myers included – headings are those in the Tom Myers portion).

Comments on the Fact Sheet

Comment 1: "The pit expansion will produce 315.5 million tons of additional waste rock, some of which will be added to in-pit backfill and an additional waste rock dump, the Clydesdale, will also be constructed. However, the numbers presented in the fact sheet do not add up. How can in-pit backfill be increased from 570 to 940 million tons, or 370 million tons (Fact Sheet, page 2), along with the new Clydesdale waste rock dump include 350 million tons (Fact Sheet, page 5)? Also, 90% of the newly mined waste rock will be placed in the Clydesdale waste rock dump (Fact Sheet, page 6), so what is the source of the new pit backfill?[1] (note that the supplemental DEIS also includes these widely varying number for waste rock estimates.)"

Response: The mine plan discussed in the Fact Sheet includes about 674 million tons of rock in the expansion area. The tonnage of rock mined over the period from 2009 to 2015 averages 120 million tons per year. During this period, ore will be routed to processing, and 1,045 million tons of waste rock will be placed as in-pit backfill, in the Bazza and Clydesdale WRFs, in the North Block Tailings Embankment, and as underground backfill.

Comment 2: "The pit lake model had been updated to consider the plan for placement of 570 million tons of backfill into the pit (Fact Sheet, page 21). NDEP should verify this part of the fact sheet, but considering that the expansion will increase the in-pit backfill to 940 million tons, is the pit lake modeling discussed in the Fact Sheet and used in support of this permit renewal out of date? If so, Barrick should have updated the model prior to applying for this renewal."

Response: The pit lake study included with the renewal application (Schafer 2007) did account for the proposed increase in backfill, the change in the pit area and volume, changes in pit wall geology, and differences in the proposed groundwater pumping schedule.

Comment 3: "Additionally, the pit expansion will produce just 12.4 million tons of ore for all this waste rock (Fact Sheet, page 3). This is a very small ore/waste rock ratio, but if correct, why is the mine authorized to process up to 14,000,000 tons/year?"

Response: The processing facilities handle material from the expansion, previously authorized open pit mining activities, the underground mines and stockpiles. Actual annual tonnage varies from year to year but the facilities have been designed and permitted to process up to 14,000,000 tpy of ore.

Pit Lake

Comment 4: "The pit lake model (Schaeffer and Associate, 2007) shows that the pit lake quality will not be good. Initially the pH will be low and in the long term, the arsenic concentrations will be high. This section addresses these issues and the inherent uncertainties in the analysis which could lead to the water quality being even worse than predicted."

Response: The Division disagrees with the characterization of the predicted pit lake water quality (i.e. that it will not be good). The pit lake study submitted with the renewal application

(Shafer 2007) found that the pit lake water is predicted to be alkaline (pH 7.5 to 7.8) and will be dominated by calcium, magnesium, and sulfate (results for year 50), and will drift toward proportionally higher sodium and bicarbonate through year 400. Initial pit lake water quality (from year 14 when the pit lake first forms to year 18) is predicted to be somewhat acidic without mitigation, though Barrick proposes to add lime or other alkaline amendments to raise the pH if necessary. The predicted pit lake chemistry was generally low in metals, which is typical of other Carlin type pit lakes studied in Nevada (Shevenell et al 1999).

Based on geochemical modeling, arsenic concentrations were predicted to rise from around 0.1 mg/L in year 20 to 0.4 mg/L by year 60 and then gradually decrease to 0.1 mg/L. Laboratory batch tests conducted in 2003 to simulate pit water quality had arsenic concentrations ranging from less than 0.01 to 0.046 mg/L, suggesting that the geochemical model may overestimate arsenic solubility. Predicted arsenic concentrations, though higher than some drinking water standards, are lower than the standards for protection of aquatic life. Arsenic, which is naturally elevated throughout the Humboldt basin (Yager and Folger 2003), is elevated in many natural alkaline closed basin lakes in the eastern Great Basin region. Most importantly for the applicability to this permit, the pit lake will act as a terminal sink for inflows from the surrounding pit walls, preventing the conveyance of dissolved metals and other constituents into the adjacent groundwater aquifers.

Comment 5: "The PAG rock placed in the deeper backfill probably contributes to the lower pH predicted for the first 14 years of the pit lake formation. It will contain up to 23% potentially acid generating rock, but the mixture will be net neutralizing (Fact Sheet, page 6). However, this backfill may generate more acid than a perfect mixture of PAG and non-PAG rock. Schaeffer Associates (2007, Figure 12) show a frequency diagram of tons of backfill for the lower backfill zone with 50 kg/t increments of NNP, starting at -150 and increasing to 500; there are large increments lower and higher than these ranges. The figure and report state that PAG rock will be just 23% of the total backfill. This means that 23% of the rock will have NNP<-20 kg/t. It does not mean that the remainder of the rock will be net neutralizing. Based on the figure, about 33% of the backfill has PAG less than 0 and interpolating the 0 to 50 kg/t increment suggests that about 42% has NNP less than 20 kg/t. Only 58% would have NNP greater than 20 kg/t, the cut-off for assuming that the rock is non-PAG. It therefore appears that about 20% of the rock has uncertain acid-generating properties. While this still suggests the majority is neutralizing, the ratio not as protective as suggested by emphasizing PAG is only 23%. The mixing can also be misleading. The neutralizing rock will act as such only if the water has flowed through acid-generating rock first. The model report does not address this. It depends on the mixing, so how can NDEP be certain the mixing will actually neutralize the acid?"

Response: Based on extensive static and kinetic testing at Goldstrike, materials have been shown to be potentially acid generating (PAG) only if the NNP is less than 0 and sulfur is greater than 0.3%. Consequently, the estimated proportion of PAG in backfill (23%) is accurate. Samples that have an NNP of 0 to 50+ are mostly oxidized Vinini rocks that have very low to undetectable sulfur albeit with low ANP as well. Therefore, none of the rocks with NNP from 0 to 50 should be considered PAG.

The acidic pH that occurs for the first few years after mining is due to acidity contributed by pit wall runoff, which comprises the primary water source for the first 4 to 8 years after the pit lake development (Shafer 2007). Groundwater flowing through the backfill will follow a tortuous pathway and will have a longer residence time than highwall runoff. Therefore, more *complete equilibration between interstitial solution and carbonate minerals can occur in the backfill than in the highwall. Consequently, the Division is satisfied that the pit lake model is a reasonable prediction of future water quality.*

Comment 6: "Also, the pit wall may continue providing products of oxidation due to groundwater inflow through it longer than expected due to the PAG rock above the pit lake water level. The model relies on rinsing of contaminants to determine the concentrations to be expected in the groundwater inflow to the pit lake as it forms. It uses leaching experiments to determine the dilution by pore volume for the wall rock. This method is reasonable, except it appears to assume that once rinsing begins, no further contaminants are added to be leached. This is not correct for PAG rock that continues to undergo wetting/drying cycles, as will occur just above the pit lake level."

Response: The pit lake model assumes that once rock in the highwall is submerged, no new oxidation products will accumulate, and rinse-out of accumulated oxidation products will begin. Rock units exposed on the highwall above pit water level are considered to continually release solutions with the same pH and metal concentrations as were detected in the "first flush" in column experiments. Therefore, conceptually, no rinse-out occurs above the water table. This is reasonable for the reason mentioned in the comment, that oxidation will continue to produce acidity and soluble metals. Long-term field experience suggests that metal releases above the water table will subside over tens to hundreds of years, so the current pit lake model is conservative is maintaining constant metal releases from the highwall zone.

The pit lake model calculated monthly water levels that exhibited about 0.4 m (1.3 feet) seasonal variations in water level. The model used average monthly rainfall and evaporation as model input. If actual rainfall and evaporation data were used, water level fluctuations would be somewhat greater. Assuming that lake water levels could vary by 1 m over a period of years, the potential contribution of acidity from this source (e.g. the highwall rocks within the fluctuating water table zone) was calculated. The weathered rock zone that is intermittently saturated will have an area of about 6140 m^2 when the pit lake is full. Assuming a rapid rate of oxygen diffusion into the highwall (1000 $g/m^2/yr$), and further assuming that all oxygen is consumed in pyrite oxidation reactions, then about 100,000 moles of pyritic sulfur could react annually within this zone. If none of the acidity was neutralized within the highwall, this represents 5.8 mg/L of acidity added to the pit lake water which has a background alkalinity of about 400 mg/L. The resulting water quality predictions are not expected to be affected by this process.

Comment 7: "The model assumes that oxidation ceases as the pit wall (or backfill) is inundated with water. This assumption ignores the potential for dissolved oxygen causing oxidation. It also ignores the portion of the pit walls that may experience seasonal or longer-term wetting and drying due to changes in the pit lake level due to changing groundwater inflow rates. In order for the lake to be terminal at the so-called steady state condition, the groundwater level must be above the lake level for there to inflow to the lake; the inflow rate equals the flux lost to evaporation. There may be a seepage face above the lake level. Whether or not that occurs, the lake level will fluctuate due to changing inflow rates caused by seasonal or drought/flood-caused differences in the recharge rate. Every time a saturated pit wall desaturates, oxidation can occur anew resulting in a new source of contaminants."

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Response: *Water entering the pit from the pit wall contains at most 10 ppm oxygen compared to 210,000 ppm for air. Additionally, oxygen diffusion occurs much more slowly in water than in air. Therefore, the oxidation caused by oxygen dissolved in water will be insignificant compared to the acidity that accumulates during the period that the highwall is exposed to the atmosphere.*

Comment 8: "As noted, the modeling predicts the short-term pH will be low and the long-term arsenic concentrations will be high. The water quality would degrade surrounding groundwater if water flows from the pit lake into surrounding aquifers. While such a deep pit lake with such a large drawdown cone would presumably be terminal, the assumption should be tested in the groundwater model. The drawdown cone around the Betze pit is asymmetric, extending far to the northwest. If the flow rate to the pit is substantially higher on one side of the pit than the other, it is possible that the head caused by that inflow may exceed the head on another portion of the pit. NDEP should require Barrick to provide detailed hydrology model outputs showing where the groundwater flows into the pit while it is filling and identify any sections from which outflow occurs. This should be done a various time intervals because the groundwater which replenishes the pit lake may be greater on some sides than on others."

"The lake will be terminal in the long-term if the evaporation of pit lake water causes a permanent groundwater cone with a gradient toward the pit from all sides. However, if the pit lake occurs in an area where the groundwater has a naturally large gradient, the groundwater level on the down-gradient side of the lake may slope away from the pit. This could occur if the recharge reaching the pit is substantially higher on one side. The Betze pit lies at the headwaters of the Boulder Flat basin, which drains to the southwest. Any natural flow in the pit area would be in that direction, if not controlled by faults. But there is no natural recharge source in that direction, other than recharge of the ephemeral streams which may be intercepted by the pit. NDEP should also require Barrick to show detailed groundwater contours near the pit for steady conditions to prove the lake will be terminal."

Response: *The pit lake is expected to be a conventional terminal pit lake based on the particular details of the local hydrogeologic system. This assessment has been confirmed by groundwater modeling studies completed to date. Modeling done in support of the 2001 SEIS clearly showed the pit to be a complete sink in model-simulated drawdown contours at end of mining, at 50 and 100 years post mining, and at full recovery. The current model confirms the 2001 study that shows the pit to remain terminal.*

The main inflow to the pit will be groundwater from the carbonate aquifer that flows through the weathered highwall or the in-pit waste rock backfill, with a small amount of groundwater flow from the Carlin Formation. Groundwater that flows through the backfill will originate mainly from the carbonate aquifer. The downgradient (southwest) side of the pit lies within the carbonate aquifer which, owing to its high permeability, has a very low gradient. For example, recorded water table elevations at Dee Gold, approximately four miles away from the Betze pit, have been virtually identical to historical Betze water table elevations.

During the early recovery period, precipitation runoff will infiltrate into the pit bottom, contributing to the refilling of storage in the carbonate aquifer. The dewatered carbonate aquifer will thus act as a transient regional sink until the groundwater level recovers to an elevation above the pit bottom, at which point the pit lake will become a permanent evaporative sink with no outflow to the groundwater system. Water that previously refilled the *dewatered storage would be forced back into the pit during this process and become part of the pit lake. Inflow is predicted to exceed evaporation until year 400 at which time the pit lake will reach equilibrium.*

North Block Tailings Impoundment

<u>Comment 9</u>: "The North Block tailings impoundment receives up to 9000 gpm of tailings from the current mine operations. The impoundment includes a drain system which collects tails seepage and routes it back to the tailings (Fact Sheet, pages 15 and 16; Tetratech, 2008); a piezometer system monitors the head on the drain. Neither the fact sheet nor impoundment management plan discusses the results of these activities, which based upon the seepage rates appear to be significant. The 3rd quarter 2008 North Block Tailings Impoundment Seepage Collection flow readings range from 215,000 to 318,000 gallons/day. This is a tremendous amount of seepage being circulated from the drain to the top of the impoundment. Please explain the reason that so much tailings fluid reaches this drain. The fact there is so much flow reaching the bottom of the impoundment makes the integrity of the leak detection system, and monitoring around the impoundment, of paramount importance."

<u>Response</u>: The drainage system noted is comprised of a large drainage blanket above the liner system and is not a leak detection system. It is performing as designed. The piezometers are located above the drain system in consolidated, low permeability tails. These piezometers will show higher readings as the drainage system has the ability to remove water faster than the tailings can drain.

<u>Comment 10</u>: "The piezometer readings, shown in the North Block Tailings Disposal Facility Quarterly Piezometer Review, July 1 – September 30, 2008, show that most are increasing with time. For example, piezometer TMP-20 has increased from about 37 to 50 feet; this is common amongst the piezometers in the facility. This suggests the potential for leakage has increased, whether detected or not."

<u>Response</u>: As the tailings mass consolidates from the bottom up, due to the effective drainage system, its permeability decreases. As this consolidation occurs above and below the piezometers, the hydrostatic head (pore pressure) increases as well. As the permeability decreases, the risk of leakage and flow to the groundwater system decreases as well.

<u>Comment 11</u>: "However, many of the piezometers are no longer working. NDEP should assess whether the data currently reported fulfills the intention of installing the piezometers in the first place."

<u>Response</u>: Many of the failed piezometers have been replaced. Their original intention was to measure early performance of the drainage system prior to tails consolidation. Additional piezo-cone testing has been performed upon the tails mass and areas with excess pore pressure have been drained using wick drains which have accelerated consolidation and reduction of permeability in these areas.

<u>Comment 12</u>: "Tailings leakage is reported at NBSPOP-5; based on the draft permit, this would be under the underdrain collection vault. This is a critical leakage detection point. Please provide a detailed description including a figure showing how this leak detection works and how NDEP is certain that no leakage can get past the detection system."

Response: *This area is beneath the secondary liner adjacent to the seepage return vault. Solution collected in this port has been chemically characterized and has been determined to be meteoric in origin, not process solution. Engineering drawings are on file at the Division offices.*

Comment 13: "There is evidence of leakage reaching Bell Creek which drains by the impoundment. The 2007 annual report includes upstream and downstream monitoring points. Several constituents, including chloride, fluoride, and sulfate, increased at a relatively consistent 10 to 20%. NDEP should explain these changes."

Response: *Bell Creek has been diverted approximately 800 feet to the north of its original channel. Water flowing in this channel is in contact with previously undisturbed ground. The sample location upstream of the facility is upgradient of the tails disposal facility and reflects natural stream flows. There have been several range fires in the watershed which may account for changes in constituent concentrations over time. There is no evidence of any drainage at the toe of the facility. There are no elevated concentrations of monitored constituents present downstream of the facility that would lead to the conclusion that the facility is leaking.*

Waste Rock

Comment 14: "This permit renewal includes construction of a new waste rock dump, the Clydesdale. A management plan (Schaeffer and Geosystems, 2007) discusses the proposed dump. It will contain about 3.8% with NNP less than 0, therefore with a PAG rock isolation, Barrick expects little acid formation. The conceptual design of the "PAG management and cover" (Schaeffer and Geosystems, 2007, Figure 2 and pages 3, 4), claims there will be a minimum 50-foot setback from the base of the facility and that there will be PAG cell cover over the PAG rock. Will the PAG rock be temporarily stored if additional mining is needed to attain the 50-foot setback prior to PAG rock placement? How will the PAG rock be protected from moisture while being stored? The PAG cell cover must extend for a large distance beyond the extent of the PAG rock due to the lateral movement of moisture; due to heterogeneities, unsaturated flow does not move strictly vertical, contrary to the assumptions of the simplest equations. The design does not indicate how large the cover will be. The designers should provide this information and sufficient modeling of flow to indicate that the cover will minimize the potential for seepage reaching the PAG rock. NDEP should discuss how they are certain the design proposed will actually be installed. Please discuss the level of inspection that NDEP provides for the construction of the PAG rock isolation cell."

Response: *PAG material (that will inset at least 50 feet from the dump face and 50 feet above the dump base) will be adequately protected from long-term infiltration. The entire facility will be re-contoured, covered with a topsoil/Carlin Formation layer, and re-vegetated. Reclamation of the dump will be conducted concurrently with operation.*

The Permittee has conducted an extensive study on the hydrologic properties of ROM materials (leached ore and waste rock) for its Nevada operations. It was found that initial water content of ROM materials is usually about 4% by weight. However, field capacity, or the moisture content required to initiate downward water movement within the ROM materials is about 10% by weight. During the loading phase of the dump, PAG waste rock will only be exposed for several weeks of time and will be covered long before field capacity can be reached. Any unexpected draindown through the exposed PAG waste rock would then have to percolate *through at least 50 feet of non-PAG waste rock before reaching the boundary of the dump, effectively mitigating any acid generated by contact with the PAG.*

Lateral flow under the unsaturated conditions is well recognized and understood by the Permittee technical staff and its consultants. Lateral flow is caused by lateral gradients in suction (or water content) which are not expected to be significant. A theoretical analysis indicates that under field capacity conditions (10% moisture by weight) lateral spreading of water from the ROM materials would be only 0.6 m over a 45m deep pile.

Comment 15: "There is another conceptualization error which suggests the quality of the modeling used for the design is not adequate. The initial rock water content when mined is most likely below a moisture content which would cause drainage, as noted (Schaeffer and Geosystems, 2007, page 6). However, they assume that just 25% of the annual precipitation will infiltrate during the construction of the dump. Because the waste rock is not protected, the cover has not been compacted and it is likely that most precipitation will infiltrate due to the coarseness of dumped waste rock; as noted in the first paragraph of section 2.3.2, the porosity of waste rock is usually 30% or more (*Id.*). Prior to using such an assumption, Schaeffer and Geosystems should provide data or references showing that just 25% of the precipitation will infiltrate. NDEP should require this justification."

Response: 25% infiltration for an uncovered dump is a conservative estimate. It is believed that actual infiltration would be far less. Net infiltration into active waste rock piles will vary depending on site-specific conditions. In particular, the grain size is an important variable affecting infiltration, with finer materials having much lower infiltration than surfaces covered with large clasts. The waste rock facilities at the Goldstrike facilities tend to have fine, pulverized materials on the active dump surface due to heavy truck traffic.

Furthermore, the site is located in a semi-arid area with annual precipitation of about 10 inches and pan evaporation of about 60 inches. For a heavily traffic compacted dump, most precipitation falling on the dump will be stored in the shallow zone and will subsequently be evaporated. Based on the well recognized Maxey-Eakin method for estimating recharge, first applied to southern and eastern Nevada, recharge is thought to be negligible where precipitation is less than 8 in/yr and to be about 3% of precipitation where precipitation is between 8 and 12 in/yr.

These assumptions are supported by data from a monitoring station installed on an uncovered portion of the Bazza waste rock dump in 2001. The station was equipped with water content sensors (time domain reflectometry – TDR) and suction sensors (heat dissipation sensors – HDS). The monitoring results indicated that about 3% to 5% of precipitation infiltrates into active portions of the waste rock facility.

Comment 16: "Schaeffer and Geosystems (2007) report that the Clydesdale waste rock dump will contain 350 million tons by the end of 2015, but their Table 1 shows it will be 158,894,060 tons. Which is correct? These are vastly different tonnage estimates. Which volume of rock has been used for the design and seepage modeling of the dump?"

Response: Current mine plan calls for 159 million tons but the design is for 350 million to provide operational flexibility. The Division review was based on 350 million tons. Regardless of *final size, seepage will be controlled by the Carlin, topsoil or composite cover, revegetated to maximize evapotranspiration and minimize infiltration to the waste rock.*

Monitoring Results

Comment 17: "The 2007 annual report shows that concentrations at the North Block Spring have increased significantly with time. Between 4/8/03 and 4/8/05, TDS increased form less than 500 to more than 2000 mg/l. Sulfate was not measured at the earlier date, but in April 2005 it was almost 1400 mg/l. The increase coincides with a small but potentially significant (because it is a logarithmic scale) decrease in pH from more than 6.5 to less than 6.4 and almost 6.3 in 2006."

Response: The North Block Spring is under the foundation of the south leg of the North Block Tailings Dump. The spring water is collected after the water has flowed through placed fill material. Several constituent concentrations have elevated over time as this flow has been collected. A decision was made in 2006 to gather this solution and route it into process instead of allowing it to infiltrate back into the groundwater system as was the initial permitted plan. The documents and plans applicable to this change are on file at the Division offices. The long-term management of the spring water will be addressed in the final closure plan.

Monitoring for the Future

Comment 17: "Because of the extreme dewatering drawdown, there is little regional groundwater in the area to monitor. For this reason, leak detection and seepage through waste rock is more important to consider. Additionally, the NDEP should make plans to monitor the recovering groundwater levels to determine whether they are picking up contaminants which may have attenuated in the unsaturated zone above the regional water table."

Response: It has been noted in previous responses (#4 and #8) that the pit lake will act as a terminal sink for local groundwater due to evaporation from the surface which will permanently create a gradient for local groundwater leading to the pit. The waters of the pit itself are, therefore, the most logical and most accessible monitoring point for recovering aquifers adjacent thereto. In addition, the Permittee has run, and continues to run, inundation testing of samples representative of the post closure underground areas, including native wall rock, sand paste, tails paste, and concrete rock fill to verify, before water recovery, that the waters will not remobilize unacceptable concentrations of monitored constituents. These tests are ongoing and approval of various closure options for the underground areas, including paste backfill, will depend on the results.

Division Response to Nevada Division of Water Resources (NDWR) Comment (e-mail) dated January 28, 2009 from Sue Gilbert to Paul Eckert NDEP-BMRR.

Comment 1: "All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions under Chapters 533 and 534 of the Nevada Revised Statutes (NRS), and not otherwise. Any water developments constructed and utilized for a beneficial use whether surface or underground must be done so in compliance with the referenced chapters of the NRS. The applicant must clarify what is meant by the "capture of springs" and the re-routing of streams", and any intended beneficial use of water or potential impacts on existing rights."

Response: *Bell Creek has been diverted approximately 800 feet to the north of its original channel. This diversion was planned and carried out in accordance with plans submitted to and approved by the Division.*

Further capture of springs and rerouting of springs are proposed options for closure of the area around the Betze pit and the Clydesdale waste rock storage facility sometime in the future. If these options are implemented, the Permittee will provide final proposed plans to both the Division and the NDWR to insure that the final execution is in accordance with the applicable chapters of the NRS.

Comment 2: "Any impoundments for tailings or other types of structures must be done so in compliance with NRS 535."

Response: *The North Block Tailings Storage Facility was constructed and is maintained and inspected in accordance with NDWR requirements and chapters of the NRS applicable to impounding structures.*

References

Schafer, W. M. 2007. Betze Pit Lake Water Quality Prediction. Report submitted to NDEP.

Shevenell, L., K. A. Conners, and C. D. Henrya 1999. Controls on Pit Lake Water Quality at Sixteen Open Pit Mines in Nevada. Applied Geochemistry 14 (1999) 669-687.

Yager, Douglas B. and Helen W. Folger 2003. Map showing arsenic concentrations from stream sediments and soils throughout the Humboldt River basin and surrounding areas, Northern Nevada USGS Miscellaneous Field Studies Map. MF-2407-G (http://geology.cr.usgs.gov)