FACT SHEET
(Pursuant to Nevada Administrative Code (NAC) 445A.401)

Permittee Name: **Newmont USA Limited dba Newmont Mining Corporation**

Facility Name: **Trenton Canyon Projec**t

Permit Number: **NEV0095112**
Review Type/Year/Revision: Renewal 2016, Fact Sheet

A. Description of Facility

Location: The **Trenton Canyon Project** (Trenton Canyon) is located in southeast Humboldt County and northwest Lander County, within portions of Township 32 North (T32N), Range 42 East (R42E), Sections 1, 10, 11, 12, 13, 14, and 15; T32N, R43E, Section 36; and T33N, R43E, Sections 7, 18, 19, and 20; Mount Diablo Baseline and Meridian. The project site is located in the historic Buffalo Valley Mining District, approximately 10 miles south of Valmy and 12 miles west of Battle Mountain on the eastern slope of the Battle Mountain Range within the Pumpernickel Basin.

Site Access: To access Trenton Canyon, proceed approximately 37 miles east from Winnemucca or 13 miles west from Battle Mountain on Interstate 80 to *"Exit 216—Valmy".* Proceed south on an unnamed dirt road, past the western boundary of the Marigold Mine (WPCP NEV0088040), for a distance of 12 miles to the Trenton Canyon Mine.

General Description: Trenton Canyon is owned and operated by the Newmont USA Limited dba Newmont Mining Corporation (the Permittee). The project is comprised of two mining areas (North Peak and Trenton Canyon), a cyanide heap leach facility (North Peak Heap Leach Facility), pregnant and barren tanks and process overflow solution ponds, and a carbon adsorption/desorption/recovery (ADR) circuit for gold recovery. There is no milling of ore performed at the project site. Production water for heap leaching operations and dust control is obtained from a dedicated well at the Permittee's Lone Tree Mine (WPCP NEV0090058), located 12 miles north (by air) of the Trenton Canyon Mine. All Petroleum-Contaminated Soil (PCS) is placed into containers and shipped to the Lone Tree Mine.

Trenton Canyon is authorized to process up to 8.2 million tons per year of ore using chemicals (e.g. cyanide heap leaching). The project has been designed and constructed to operate and close without discharge or release in excess of those standards established in regulation except for meteorological events that exceed the design storm limit.

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Since September 11, 2008, the facility has been in planned "Temporary Closure".

B. Synopsis

History: Historical records indicate that silver was first discovered in the Buffalo Valley District in June 1869. Within a year an underground mine (the Lott-Trenton Mine) was developed and a 5-stamp mill constructed at the site of the present day Valmy Pit. By 1873, the mine and mill had ceased operation, due to poor silver recoveries.

The district remained dormant until about 1916, when the Garser-Buffalo Valley Mine and adjoining cyanide mill were constructed at the present day Valmy Pit site. From the start, the mill was plagued by poor recoveries due primarily to the presence of fine-grained manganese minerals within the silver-ore matrix. In spite of the complex metallurgical issues, the mine and mill operated intermittently until it was finally abandoned in the early 1940's. During the war years, the U.S. Bureau of Mines developed a process to recover manganese from the Trenton ores; however this was met with little industry interest as the war was nearing its end and the demand for manganese (and other metals) was sharply reduced.

During the 1970's, the discovery of several low-grade gold deposits in the Battle Mountain Range fueled a renewed exploration interest in the Trenton Canyon area. In 1986, Gold Fields Mining Corporation discovered several economic gold deposits in Mule and Trenton Canyon areas of Lander County. Hanson PLC later purchased Gold Fields interest in the Mule and Trenton Canyon areas and in June 1993 transferred the ownership of the properties to Santa Fe Pacific Gold Corporation (parent of Santa Fe Minerals), under an asset exchange. Santa Fe Minerals (Santa Fe) continued exploration and feasibility studies for both the Mule and Trenton Canyon areas and in 1995, submitted an application to the Nevada Division of Environmental Protection (the Division) for a Water Pollution Control Permit (WPCP) for the Trenton Canyon Project.

WPCP NEV0095112 was first issued in June 1996, to Santa Fe. At the time of issuance, the permit incorporated only the North Peak and Valmy Mine areas and the North Peak Heap Leach Facility (referred to as the Section 15 Heap Leach Facility in earlier documents). All mining and processing activity was confined to private lands with a minimal amount of access across public (BLM) land required.

Construction of access roads, utilities and Phase I of the North Peak Heap Leach Pad (HLP) was completed in 1996. Mining in the North Peak Pit commenced in June 1996, with the initial waste rock production utilized for construction of the HLP. The HLP and gold recovery plant were placed in service in November 1996. Newmont acquired all of the Santa Fe properties as part of their 1997 merger with Santa Fe and became the Permittee of Record for all of the Santa Fe

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projects, including Trenton Canyon.

A Minor Modification (approved by the Division in November 1998) further expanded Trenton Canyon Project onto public lands. The Minor Modification included the North Peak Pit, Valmy Pit and associated waste rock facilities in the Valmy deposit area and developed 8 small open pits and 6 waste rock disposal facilities in the Trenton deposit area. The North Peak HLP was constructed in as Phase 1 and Phase 2 between 1996 and 2000. The most recent leach pad expansion, Phase 2A, was completed in 2003. The Cell 6 expansion of the North Peak Heap Leach Pad was authorized by the Division for construction in 2003, but is not yet constructed.

Depending on favorable economics and availability of equipment, future plans include the mining of the undeveloped East Pit, with utilization of TC-2 and possibly TC-4 Waste Rock Facilities. The East Pit is an oxide deposit containing an estimated 1.2 million tons of ore with 1.8 million tons of waste. Ore removed would either be transported to the North Peak Heap Leach Pad or the Lone Tree Mine Phase 5/6 Heap Leach Pad (WPCP NEV0090058) for cyanide leaching. If initiated, mining of the East Pit would be short term, lasting no more than nine months.

The Permittee is continuing to investigate areas for potential development and expansion. Exploratory drilling adjacent to Trenton Canyon south boundary began in 2006 and feasibility studies were initiated for the development of the Relay Ridge area located within the West Pit. Construction of the approved Cell 6 HLP Expansion will be contingent on a decision to resume active mining at the Trenton Canyon Project. A Schedule of Compliance item requires the Permittee to inform the Division on any future plans.

In August 2015, the Permittee sold several land parcels to neighboring Marigold Mining Company. Included in the sale were the Trenton, NW 29, Valmy, and Mud pits and the V-1, V-2, V-3, V-5 (approved but not constructed), and V-6 waste rock disposal facilities (WRDFs), all associated with the Trenton Canyon Project--Valmy Mine Area. The transferred land parcels are located on private and public land in Humboldt County, Nevada within portions of:

- T32N, R42E, Sections 01 and 02;
- T32N, R43E, Sections 04, 05, and 06;
- T33N, R42E, Sections 11, 23, and 35; and
- T33N, R43E, Sections 21, 28, 29, 32, and 33.

The Permittee retained the North Peak Heap Leach Pad, the ADR plant, the North Peak, South, and West pits and the NP-1, TC-1 TC-2, TC-3, TC-4, and TC-5 WRDFs. Refer to the sub-sections ***Mining*** and ***Waste Rock Characterization***

and Management for additional details.

Geology: Trenton Canyon is within the Basin and Range physiographic province. The geology within this province reflects a complex history of sedimentation, volcanism, and tectonic and intrusive activity. Sedimentary and volcanic rocks ranging in age from Late Cambrian to Permian occur in two major blocks. The Roberts Mountains Block (Late Cambrian Harmony Formation, Ordovician Valmy Formation, Devonian Scott Canyon Formation) is made up of a complex sequence of marine sedimentary and associated volcanic rocks thrust eastward by a major mid-Paleozoic compressional event (the Late Devonian to Mississippian Antler Orogeny). These rocks are unconformably overlain by shallow water carbonate and clastic rocks of the Antler Sequence (Pennsylvanian Battle Formation, Pennsylvanian-Permian Antler Peak Limestone, Permian Edna Mountain Formation).

Deep marine sedimentary and igneous rocks of the Golconda Block (Havallah Sequence) were thrust over the Antler Sequence and the underlying Roberts Mountains Block by a major late Paleozoic compressional event (the late Permian to Triassic Sonoma Orogeny. Paleozoic rocks within the Battle Mountain complex were intruded by monzonite and granodiorites, and overlain by ash-flow tuffs and basalts of Mesozoic and Tertiary age.

Mining: Since WPCP NEV0095112 was first issued in 1996, six open pits have been developed at the project site:

Mine Area	Open Pit/Surface Mines
Valmy	*Valmy, Mud, and NW 29 Pits*
North Peak	*North Peak Pit*
Trenton Canyon	*South and West Pits*

Surface mines permitted but not yet developed include the East Pit and a future (unnamed) pit, both to be located in the Trenton Canyon Mine Area.

The Valmy, Mud, and NW 29 pit floors are approximately 5,680 feet above mean sea level (amsl) and have since been backfilled. Groundwater depth in the Valmy Mine area is in excess of 550 feet below ground surface (bgs) and 5,200 feet amsl.

The elevation of the North Peak Pit floor is approximately 5,540 feet amsl with groundwater depth in the vicinity of the North Peak area in excess of 450 feet bgs and 5,300 feet amsl.

The bottom elevations of the Trenton Canyon pit floors range between 6,400 and 7,460 feet amsl for the South and West pits, respectively. Groundwater in the vicinity of the Trenton Mine area is in excess of 425 feet bgs and 6,500 feet amsl.

Future pit development is not anticipated to necessitate dewatering. Consequently, pit lakes are not expected to form when mining ceases.

Waste Rock Characterization and Management: Waste rock and overburden material is routinely tested. Characterization of the waste rock and overburden to date indicates that the material has an insignificant potential to degrade waters of the State. The waste rock and overburden material is managed in accordance with the updated materials handling plan (MHP).

The MHP describes the materials management practices for handling waste rock that will be encountered during operations. These practices are designed to minimize the potential for acid rock drainage (ARD) from the waste rock disposal facilities. The MHP addresses the following components associated with waste rock handling:

- Material characterization;
- Material classification and segregation during operations;
- Design and construction of waste rock disposal facilities; and
- Monitoring and reporting procedures.

The MHP addresses materials handling of potentially acid generating (PAG) material and drainage from the waste rock disposal sites. New waste rock disposal facilities will be designed and constructed pursuant to the MHP guidelines. Once PAG material is identified, the material will be placed in encapsulation cells within a waste rock disposal facility. The practices for preventing acid generation in waste rock disposal facilities include:

- Identification and segregation of PAG waste rock and non-acid producing (non-PAG) waste rock during mining;
- Placement of PAG waste rock in a waste rock disposal facility designed for PAG;
- Encapsulation of the PAG waste rock with non-PAG material;
- Diversion and control of surface water flows to preclude infiltration of stormwater runoff/run-on;
- Placement of a low permeability cap over the PAG cell; and
- Reclamation of waste rock disposal facilities, including establishing vegetation, to minimize water infiltration.

These practices are intended to minimize the amount of water that contacts PAG waste rock as an effective method to prevent ARD. Refer to the document

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entitled "Newmont Mining Corporation, Trenton Canyon Project Materials Handling Plan—April 2011" for additional details.

Eleven WRDFs are permitted for construction at the project site:

Open Pit/Surface Mines	**Waste Rock Disposal Facilities (WRDFs)**
Valmy, Mud, and NW 29 Pits	*V-1, V-2, V-3, V-5, and V-6*
North Peak Pit	*NP-1*
South and West Pits	*TC-1, TC-2, TC-3, TC-4, and TC-5*

With the exception of TC-1, TC-3, TC-5, and V-5, all of the WRDFs have been constructed. WRDF V-1, V-2, V-3, V-6, and the upper portion of TC-4 have been reclaimed.

WRDFs are typically constructed by end-dumping from mine haul trucks. Where present in salvageable volumes, growth media is removed and stockpiled according to the Permittee's operating and reclamation plans. The disposal sites are typically constructed in lift heights of 50 to 100 feet. However, some fill slopes may be as high as 500 feet due to the steep topography at the site. During operation, the slope of each lift is at the angle of repose (approximately 1.5 horizontal (H):1.0 vertical (V). The final slope after reclamation will be to approximately 2.5H:1.0V. The waste rock disposal facility is designed to have stable slopes, given the material types, terrain, and reclamation plans.

Four existing and proposed WRDFs (TC-2, TC-3, TC-4, and TC-5) are each permitted for construction with a waste rock underdrain system, which is designed to collect stormwater at an inlet located at the top surface of the WRDF and convey it beneath the WRDF to a discharge outlet.

Flow from the waste rock underdrain systems is not expected to occur on a regular basis, primarily during/after precipitation events and snow melt, therefore, the Permittee must monitor these systems throughout the quarter and sample when appropriate. If any flow occurs during a quarter, one Profile I analysis must be submitted, consequently, multiple flow events during a quarter will not require more than one characterization.

The placement of waste rock is managed to prevent PAG waste rock from exposure to meteoric water by placing the PAG waste rock within the interior of an engineered waste rock disposal facility. The design consists of non-PAG material as the base and on the sides (a minimum 10-foot vertical thickness) and a low permeability cap on top of the PAG cell. In addition, a lift of non-PAG material, also a minimum 10-foot vertical thickness, will be constructed as the

final lift of the PAG cell in the waste rock disposal facility. Isolation and encapsulation of PAG waste rock will limit water and oxygen infiltration, which will inhibit acid generation and the leaching and mobilization of metals.

The low permeability cap constructed on top of the PAG cells, is intended to minimize the amount of water that could potentially infiltrate into the PAG waste rock. The low permeability cap is constructed a minimum of one-foot in thickness of silt or clay material and compacted to a permeability of $1x10^{-5}$ centimeters per second (cm/sec) or less. The cap extends a minimum of 10 feet beyond the vertical projection of the PAG material.

The low permeability cap is designed and constructed so that re-shaping for final reclamation will not breach the cap. Waste rock disposal facility designs incorporating encapsulation methods must be flexible, yet consider encountering PAG waste rock near the end of the mine life. Adequate areas within the waste rock disposal facilities will be afforded for potential PAG waste rock quantities that might be encountered at depth. In addition, the surface area and length of time that a PAG cell is open and active will be minimized to reduce exposure to meteoric water events. At a minimum, PAG cells are capped within 6 months of initial PAG placement.

Subsidence of the TC-4 WRDF was first observed during the 14 November 2005 mine compliance inspection. Subsidence cracks due to recent reclamation and recontouring activities were noted on the road at the top of the dump and the haul road at the toe of the dump. Effected areas were recontoured in 2007 and 2008 and it now appears that the settling has since stabilized.

Heap Leach Facility: Run-of-mine ore from the Valmy, North Peak, and Trenton Canyon Mine is transported by haul trucks to the HLP. The North Peak Heap Leach Facility is located adjacent to the North Peak pit, has a total lined surface area of approximately 55 acres, and a maximum permitted height of 250 feet from the surface of the HLP liner.

The facility consists of a lined HLP, one solution pond and a processing and recovery plant. The heap leach pad and solution pond are equipped with leak detection systems and process components associated with the recovery plant are provided with secondary containment. In addition, there are various pumps, tanks, fittings, and secondary containment structures connecting the HLP, solution pond and process recovery plant.

Heap Leaching Operations: Ore from the various pits is conditioned prior to placement on the pad by adding measured amounts of lime to the haul trucks. Leach solution percolates through the ore, dissolving gold into solution. The pregnant solution is collected via piping within a lined solution collection ditch located along the down-gradient edge of the pad. Gold is recovered from the

pregnant solution at the ADR plant and loaded carbon is transported off-site to the Permittee's Lone Tree Mine for recovery through a pressure stripping and electrowinning process. Stripped carbon is returned to the site and loaded directly back into the columns for reuse.

North Peak HLP Design: The HLP is designed as a composite-lined system with leak detection. The liner is an 80-mil high-density polyethylene (HDPE) with textured HDPE used along the graded toe area of the pad to ensure adequate overall stability of the HLP. Smooth HDPE is used in all other areas of the leach pad. The HDPE liner overlies a 12-inch layer of fine-grained soil (liner bedding), compacted in place to provide a permeability of less than 1×10^{-5} cm/sec and placed in two 6-inch lifts. Leak detection pipes are placed under the HDPE liner beneath areas of concentrated flow.

A minimum of 24 inches of liner cover fill overlies the HDPE liner to protect it from the heap stacking operation. This material is free draining to allow solution to pass to the collection pipe system. The liner cover fill is comprised of crushed mine overburden or ore from the North Peak Pit, waste rock from other Trenton Canyon Project pits or natural borrow materials that are crushed and transported to the site. Maximum particle size is 3/4-inch with permeability on the order of 0.05 cm/sec, based on Hazen's formula.

Leach solution is collected on top of the liner by a system of 4-inch diameter perforated collection pipes placed within the liner cover fill. The collection pipes drain to 6-inch diameter perforated collection pipes, which drain to 10-inch diameter perforated collection pipes. The 10-inch diameter pipes drain to a 15-inch diameter perforated pipe, which drains each cell to the west side of the pad. At each cell outlet, the 15-inch diameter cell collection pipes are tight-lined and welded to 16-inch diameter non-perforated pipes. These pipes drain by gravity to the pregnant tank which is located on containment in the process facility or the process overflow pond. Five 16-inch diameter non-perforated pipes (one from each of 5 pad cells) drain to the process facility to allow management of flows from each cell.

All perforated solution collection pipe is "N-12" corrugated polyethylene (CPE) pipe, as manufactured by Advanced Drainage Systems, or an equivalent. The leach pad is graded to provide a minimum 2-percent slope for fluid flow. The 4-inch diameter collection pipes are placed to provide a minimum slope of 2 percent. The collection system is designed to minimize the fluid head on the liner, resulting in a spacing of the 4-inch diameter perforated solution pipes of 50 feet. The 4-inch pipes are sized by considering the maximum area under leach that each pipe is required to drain. Given an application rate of 0.005 gallons per minute per square foot (gpm/sq ft) and a pipe spacing of 50 feet, the pipe must transmit a maximum flow of 88 gallons per minute (gpm). Using a roughness coefficient of 0.012 for the interior pipe walls ("N-12" CPE) and a 2-percent slope, a 4-inch

pipe can transmit flows up to 116 gpm using Manning's pipe flow equation.

The HLP collection pipes increase in diameter as they progressed to the west to accommodate increased flows resulting from larger tributary solution application areas. The 6-inch diameter pipes are required to transmit solution flows of up to 405 gpm. Using a Manning's roughness of 0.012 for the smooth interior walls of the 6-inch diameter pipe and a minimum slope of 10 percent, the 6-inch diameter pipes can convey flows of up to 862 gpm. The 10-inch diameter pipes are required to transmit solution flows of up to 2,230 gpm. Using a Manning's roughness of 0.012 and a minimum slope of 9.8 percent, the 10-inch diameter pipes can convey flows of up to 3,300 gpm.

A single 15-inch diameter CPE pipe is used to drain cell flows across the two percent toe area of each cell. The 15-inch diameter pipes are each required to transmit the maximum anticipated solution flow of 3,000 gpm. Using a Manning's roughness of 0.012 and a minimum slope of two percent, the 15-inch diameter CPE pipes will each convey a flow of up to 4,440 gpm.

The 16-inch diameter, standard dimension ratio (SDR)-17 HDPE, non-perforated pipes are required to transmit the maximum anticipated solution flow of 3,000 gpm. Using a Manning's roughness of 0.010 and a minimum slope of 1.75 percent, the 16-inch diameter HDPE pipes can each convey a flow of up to 4,150 gpm. Flow monitoring devices are installed in each of the five, 16-inch collection pipes to provide the Permittee the capability of separately monitoring the flows from each and cell of the leach pad.

Upon exiting the HLP, the five non-perforated, 16-inch diameter pipes are placed within a HDPE-lined channel for secondary containment of process fluids. At the entrance to the concrete process facility pad, each 16-inch diameter pipe is fitted with a tee and valves to allow the Permittee to direct pipe flow to either the pregnant tank in the process facility or the process overflow pond.

HLP Leak Detection, Collection and Recovery System: The HLP is designed with a leak detection/collection system placed under the liner in areas of high solution flows, such as in collection ditches and under the main solution collection pipes. Leak detection for the leach pad and collection ditches are separated into five individual monitoring systems corresponding to each HLP cell.

The HLP leak detection/collection system is comprised of 2-inch diameter perforated PVC pipes embedded in sand and fine gravel. The pipes are placed above the liner bedding and below the HDPE liner under areas of concentrated flow, under the main cell 6-inch, 10-inch, and 15-inch diameter solution collection pipes.

Each 2-inch-diameter perforated pipe is tight-lined and welded to a 2-inch

diameter, non-perforated PVC pipe at the HLP cell outlet. From the cell outlet, each pipe drains by gravity to a 4-inch diameter, non-perforated PVC manifold pipe, located north of, and adjacent to, the process overflow pond. Prior to exiting into the 4-inch diameter manifold pipe, each 2-inch diameter pipe passes through an 8-inch diameter sump/observation riser, which allows flow from each of the cells can be monitored separately. The 4-inch collection pipes drain by gravity to the process overflow pond. The collection pipes enter the pond near the top of the pond so that flow can be easily observed. This is the only location where the pad leak detection system passes through a liner.

Early detection of fluids beneath the North Peak HLP liner system is accomplished through the installation and operation of vadose zone monitors in place of groundwater monitors. Two vadose wells with suction lysimeters (NPLP-V1 and NPLP-V2) were installed in 2003, with a third vadose well and suction lysimeter (NPLP-V3) to be constructed upon the completion of the HLP Cell 6 expansion.

The wells are drilled at the down gradient toe of the existing facilities. The wells are angle holes (60-70 degrees) drilled upgradient beneath the HLP. The wells are monitored quarterly for Profile I and volume of solution collected in gallons (gals). Since their installation in 2003, NPLP-V1 and NPLP-V2 have been dry.

Cell 4 Leakage Concerns: A leak in the liner of the Cell 4 HLP was first observed in the leak detection system during the third quarter of 2003. A corrective action plan was submitted to the Division and these actions have been implemented. To date, the Permittee has not been able to determine the exact location of the leak but it has been isolated to Cell 4 of the leach pad. No solution has been added to Cell 4 since early 2004 and the top of this cell has been covered with oxide material and seeded. The volume of leakage observed has dissipated significantly.

The North Peak HLP and ADR plant have operated intermittently since 2005. An updated operating plan for Trenton Canyon was submitted by the Permittee to the Division (February 2006) to reflect operations and manpower staffing during the temporary closure and the return to active operations. The Permittee may not add any new ore to North Peak HLP and solution application is limited to HLP Cells 1, 2, 3 and 5/6 only. Solution application rates to Cell 3 must be kept to a minimum in order to prevent any crossover of leaching solution onto Cell 4. Refer to the letter from the Division to the Permittee dated 16 May 2006 for additional details.

Fluid Management: In addition to the HLP, the North Peak Facility has a pregnant solution tank, a barren solution tank, and a process overflow pond for the management of process solution. Both the pregnant and barren tanks are located on containment within the process plant.

The process overflow pond has been designed to retain the combination of the normal operating volume of solution, 110 percent of the pregnant tank capacity, accumulations from the pad and pond that may result from the 25-year, 24-hour storm event, and draindown solution accumulations from the pad that would result from a 12-hour power outage. The total solution pond volume, including a 2-foot freeboard volume, is approximately 8.3 million gallons.

The process overflow pond is constructed with an 80-mil HDPE primary liner and a 60-mil HDPE secondary synthetic liner. A layer of HDPE geonet between the synthetic liners is designed to convey leakage from the primary liner to a sump in the corner of the pond. A 4-inch diameter pipe extends from the base of the sump to an HDPE leak detection manhole adjacent to the pond, where any accumulated fluid is monitored weekly.

The leak detection manhole is 3-feet in diameter and extends 2-feet below the invert elevation of the invert pipe, providing a sump capacity of about 106 gallons. The HDPE-lined manhole has welded seams to provide watertight containment to the ground surface.

Gold Recovery: Pregnant solution is pumped from the pregnant solution tank to the ADR circuit for gold recovery. The ADR circuit consists of 5 carbon columns and chemical storage, located on containment inside the process building and interconnected to the process overflow pond. Gold is adsorbed onto carbon within the ADR columns and the resulting barren solution reports to the barren solution tank where fresh water, sodium cyanide, and caustic soda can be added prior to its recirculation back to the HLP.

From the carbon-in-column (CIC) circuit, barren solution is pumped to a barren solution tank (located on containment within the process plant) which is equipped with an overflow pipe to allow barren solution to overflow to the overflow process pond in the event solution tank capacity is reached. From barren solution tank, barren solution is pumped through corrugated polyethylene tubing (CPT) delivery lines back to the pad for re-application to ore.

Chemical Storage: Two reagent tanks are located in a chemical storage area adjacent to the process building. Each tank is located on a concrete slab that drains to the process overflow pond for secondary containment. The secondary containment has sufficient capacity to contain 110 percent of the volume of the largest tank in the storage area.

C. <u>Site Hydrology and Background Water Quality</u>

Surface Water: The only surface waterways located within the project boundary are ephemeral drainages which convey rainfall and snowmelt runoff from

contributing watershed areas. Intermittent flows occur in some of the drainages immediately downstream from discharging springs. Cottonwood Creek and the north fork of Trout Creek, which run through the project site, exhibit ephemeral flows only. Monitoring of Cottonwood Creek is performed quarterly at two locations to determine the flow and water quality. Collected samples are subjected to an analysis for Profile I, specific conductance, and dissolved oxygen. Surface water quality is generally good, however exceedences of the Profile I reference values for iron have been observed on occasion.

Groundwater: As stated previously, groundwater is below the lowest elevations of the pits and no dewatering of groundwater formations has been necessary to facilitate open pit mining. Further mining of existing open pits as well as proposed future development of open pits are not anticipated to necessitate dewatering. Therefore, pit lakes are not expected to form when mining ceases.

Groundwater in the Trenton Mine area is monitored by two groundwater monitoring wells MW-3 and MW-4. Groundwater depth is in excess of 425 feet below ground surface (bgs) and 6,500 feet above mean sea level (amsl). Arsenic, iron and manganese concentrations in groundwater monitoring wells MW-3 and MW-4 have exhibited an upward trend since September 2004 with arsenic continuing to exceed Profile I reference values.

Groundwater depth in the vicinity of the North Peak Pit and Heap Leach Facility is in excess of 450 feet bgs and 5,300 feet amsl. North Peak groundwater elevation has been inferred via the compilation of exploration water data and regional sources by Shepherd Miller in 1996. Because of the depth to groundwater, an assessment of the initial groundwater quality in the North Peak area was not performed by Santa Fe, nor required by the Division, when first permitted in 1996.

Groundwater depth in the Valmy Mine area is in excess of 550 feet bgs (5,200 feet amsl). As in the case of the North Peak area, water quality has not been determined at the Valmy area because of the depth to groundwater.

D. Procedures for Public Comment

This Notice of the Division's intent to issue a permit authorizing the facility to construct, operate, and close subject to the conditions contained within the permit, is being sent to the **Battle Mountain Bugle** in Battle Mountain for publication.

This notice is also being mailed to interested parties on our mailing list. Anyone wishing to comment on the proposed permit may do so in writing within a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final

determination.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected intrastate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.403 through NAC 445A.406.

E. Proposed Determination

The Division has made the tentative determination to issue the proposed permit.

F. Proposed Limitations, Schedule of Compliance, Monitoring, Special Conditions

See Section I of the permit.

G. Rationale for Permit Requirements

The facility is located in an area where annual evaporation is greater than annual precipitation. Therefore, it must operate under a standard of performance which authorizes no discharge(s) except for excess accumulations which are a result of a storm event beyond that required by design for containment.

The primary emphasis for identification of escaping process solution will be placed on routine inspection of the leak detection systems and other monitoring devices as required by the permit and operating plans.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 U.S. Code 701-718, it is unlawful to kill migratory birds without license or permit, and no permits are issued to take migratory birds using toxic ponds. The Federal list of migratory birds (50 Code of Federal Regulations 10, 15 April 1985) includes nearly every bird species found in the State of Nevada. The U.S. Fish and Wildlife Service is authorized to enforce the prevention of migratory bird mortalities at ponds and tailings impoundments. Compliance with State permits may not be adequate to ensure protection of migratory birds for compliance with provisions of Federal statutes to protect wildlife.

Open waters attract migratory waterfowl and other avian species. High mortality rates of birds have resulted from contact with toxic ponds at operations utilizing toxic substances. The Service is aware of two approaches that are available to prevent migratory bird mortality: 1) physical isolation of toxic water bodies through barriers (e.g., by covering with netting), and 2) chemical detoxification. These approaches may be facilitated by minimizing the extent of the toxic water. Methods which attempt to make uncovered ponds unattractive to wildlife are not always effective. Contact the U.S. Fish and Wildlife Service at 1340 Financial Boulevard, Suite 234, Reno, Nevada 89502-7147, (775) 861-6300, for additional information.

Prepared by: Natasha Zittel
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