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

Permittee Name: **Osgood Mining Company, LLC**

Project Name: **Granite Creek Mine Project**

Permit Number: **NEV2005103**
Review Type/Year/Revision: **Renewal 2025, Fact Sheet Revision 00**

A. Description of Facility

Location: The Granite Creek Mine Project (Formerly Pinson Exploration Project) is located on the eastern flank of the Osgood Mountains, approximately 37 miles northeast of the town of Winnemucca in Humboldt County, Nevada. The project is located within the Getchell Gold Trend in the historic Potosi Mining District.

The project is located on private land within Sections 28 E½ SW¼, 28 SW¼ SW¼, 29, and 33 of Township 38 North, Range 42 East, Mount Diablo Baseline and Meridian. To access the Pinson Mining Project site, proceed 18 miles east of Winnemucca on Interstate 80 to "Exit 194—Golconda, S.R. 789". Proceed approximately 12 miles northeast on S.R.-789 to the end of the pavement and then continue northeast five miles to the Pinson site.

Characteristics: The Granite Creek Mine Project is an underground mining project on property currently owned by Osgood Mining Company, LLC (OMC), the Gene & Jo Christison Family Trust, and Michael C. Murphy. The owner, operator, and Permittee of the facility is Osgood Mining Company, LLC.

The Granite Creek Mine Project is designed and constructed to operate and close without discharge, excluding that which may result from exceedance of the 25-year, 24-hour storm event. Formerly a small-scale (NAC 445A.377) exploration facility, a major modification, submitted by the Permittee in June 2012, was approved by the Division allowing up to 400,000 tons of ore per year (tpy) to be produced for off-site processing at a permitted facility for precious metal recovery. The major modification also included a name change from Pinson Exploration Project to Pinson Mining Project to reflect the transition to active mining. As of October 2017, present site activity consists of active dewatering to maintain the ground water levels near the CX Pit and the underground working, OMC is currently evaluating historic drill data and preparing for future exploration programs. In August 2021, the Division received a request to rename the facility from Pinson Mining Project to Granite Creek Mine Project.

B. Synopsis

The Potosi Mining District (also referred to as the Crystal, Osgood Range, Getchell, Kelly Creek, and Preble mining districts) was first discovered and organized around 1866.

Deposits of gold, silver, tungsten, and manganese were identified within the district, and by the early 1900s the district had become a minor producer of gold. During World War II, the district became a significant producer of tungsten and manganese. The elimination of government contracts and falling metal prices after the war resulted in the cessation of most mining activity within the district. Renewed interest in gold and silver exploration within the district during the 1960's and 1970's led to the discovery of several disseminated gold deposits, including the Pinson, Preble, and Getchell deposits.

Permitting History: Activities at this mine site are covered under three separate Water Pollution Control Permits (WPCP)s: WPCP NEV0089002 (closed and permit terminated), WPCP NEV2005102, and WPCP NEV2005103.

WPCP NEV0089002 (terminated by the Division in September 2019), initially referred to as WPCP NEV000004, permitted the design, construction, operation, and closure of the open pits, mill, tailings pond, heap leach pad and process ponds at the mine. . Refer to WPCP NEV0089002 Fact Sheet for additional information. The active facilities are permitted under WPCP NEV2005102 and NEV2005103 (see below).

WPCP NEV2005102 permits the design, construction, operation and closure of Rapid Infiltration Basins (RIBs) at the Granite Creek Mine. Refer to WPCP NEV2005102 Fact Sheet for additional information.

WPCP NEV2005103 was issued to Atna Resources Inc. (Atna) on 1 September 2005, under conditions of an agreement with Pinson Mining Company (PMC), and became effective fifteen days later on 16 September 2005.

An Engineering Design Change (EDC) was approved by the Division on 7 November 2005, for the relocation of the Proposed Power Line/Telephone Line, CX Pit Shop Facility, Backfill/Shotcrete Plant, Mineralized Ore Stockpile and an increase in the amount of waste rock permitted to be deposited in the CX Waste Rock Dump (CX Pit) to 250,000 tons. In addition, monitoring requirements for the pit lake and backfill material were revised to reflect the increase in the amount of waste rock placed in the CX Pit.

In April 2006, PMC exercised the right under terms of the agreement with Atna to "back into" the project, resulting in transfer of NEV2005102 and NEV2005103 to PMC. Active exploration operations, including mine dewatering, exploration drilling, and underground development, were suspended and the project was placed in temporary closure. Active exploration operations resumed in July 2007 with surface exploration drilling followed by resumed mine dewatering from well APW1 in August 2007. This allowed for resumption of underground exploration activity in January 2008. Site activity during this period included the addition of four dewatering wells (BPW2, BPW3, BPW4, BPW5), and construction of supplemental groundwater monitoring well GMW-CX5.

In August 2008, the Division approved an EDC for the construction of a new, synthetically lined Mineralized Material Stockpile Pad (MMSP). The design called for a 60-mil high density polyethylene (HDPE) liner within a fully bermed area of approximately 62,500

square feet. The liner was covered with a 6-inch minimum clean gravel drainage layer, which was in turn overlain by a 3-foot thick cushion layer of 3/8-inch minus material for protection from heavy equipment traffic. Non-woven geotextile layers – above the HDPE liner, and above the drainage layer – promote drainage of meteoric precipitation to a low point at the southeast corner. A perforated 4-inch diameter polyvinyl chloride pipe extends from the low point to the crest of the embankment, allowing accumulated fluid to be monitored and extracted if necessary. Disposal of such fluid must be preceded by Profile I analysis and written approval of the disposal method by the Division.

In September 2011, PMC sold ownership of the facility and portions of the land on which the facility is located to Atna. The Division was notified of the change in ownership and the Permit documents were updated to reflect this in September 2011.

Beginning in late 2011, the Permittee began staffing the facility and resuming underground development operations focused on rehabilitation as necessary of existing underground workings and continuation of secondary access development initiated in 2008. As part of this effort, the Permittee completed the post temporary closure inspections.

In May 2012, the Permittee submitted an EDC proposing the construction of a lined ore stockpile directly west of the existing MMSP. The west stockpile covers an area of 142,700 square feet, in an oval shape measuring approximately 700 feet by 250 feet. The May 2012 EDC proposed a compacted clay liner, but this was modified by an EDC submitted in November 2012 to 60-mil HDPE overlying a compacted subbase. The subbase consists of suitable material moisture conditioned and compacted to 95 percent of maximum dry density (standard proctor) in two loose lifts of 6 inches each. The permeability of the compacted soil layer will not exceed $1x10^{-6}$ cm/sec. The 60-mil HDPE liner will be overlain by 18 inches of aggregate base for protection from vehicle traffic. The western side of the stockpile will be protected from storm runoff from the adjacent hillside, resulting from the 100-year, 24-hour storm event, by a stormwater diversion ditch. The cross-section of the ditch measures approximately 12 feet wide by 2 feet deep, with rip-rap in those areas where flow velocities are predicted to exceed 10 meters per second. The HDPE modifying EDC was approved by the Division in November 2012.

In September 2012, the Permittee proposed that low grade oxide ore from the underground workings be stockpiled temporarily on the 4,700 foot bench of the Mag Pit, due to space constraints within the surface of the CX Pit. The area designated for the temporary stockpile was approximately located on the south west quarter of the Mag pit, delineated on drawing Pinson_Mapping_2012.DWG dated 15 October 2012. The proposal was approved by the Division after review of ore characterization data compared to the exposed rock in that portion of the pit. As a condition for using this stockpile area, the Permittee was required either remove all stockpiled material or recontour and cover the stockpile area with alluvial highwall source material by 31 October 2017.. The stockpiled material was completely removed in January 2017.

Site activity has been minimal since 2012 and is limited to the continued dewatering around the perimeter of the CX Pit and intermittent mining within the pit. Mined ore was

temporarily stockpiled on the MMSP for future offsite processing or crushed onsite for use as aggregate for Cemented Rock Fill (CRF) for use as backfill in underground workings and shotcrete production to support underground ground control. Other activities included preparations to bring a third dewatering well online, operation of an onsite laboratory, and a continuation of all support and administrative functions associated with the permitted facility. Exploration and delineation drilling within the underground workings has been intermittent, but there is no active surface exploration drilling at this time.

In June 2016, the Division received notice from OMC that it was assuming responsibility for the Project through an asset purchase of Atna Resources, Inc. The Permit was reissued as Revision 01 to OMC, the Permittee, on 22 July 2016. In August 2021, the Permittee formally requested renaming the "Pinson Mining Project" to Granite Creek Mine Project.

Mining: A major modification in 2013 included a transition from exploration activity to full-scale mining at a permitted rate of 400,000 tpy of ore for shipment off-site to a separately permitted facility for gold extraction and refining. Underground mining will be by the underhand cut and cemented rock fill method. Ore will be transported to the surface for crushing or for stockpiling as run of mine material. Ore, which is shown by quarterly analysis to be potentially acid generating (PAG), will be either stored on the MMSP (synthetically lined) or on the 60-mil HDPE-lined additional ore stockpile area. Non-PAG material will be stored on the same MMSP and/or additional HDPE-lined ore stockpile area unless it is considered low-grade.

Ore which requires crushing will be introduced by loader to a vibrating feeder grizzly. The grizzly will have bars with spacings of 8-12 inches to prevent oversize material (which would probably be non-ore/waste) from entering the crushing system. Material from the grizzly will be fed to a jaw crusher that discharges 4-inch minus material to a conveyor, transferring the reduced material to a 2-inch screen. Two-inch plus reject from the screen is further reduced by a roller cone, and then discharged to a series of conveyors. Some material may be diverted back to the screen/roller cone a second time if necessary to achieve the required size reduction. The final 2-inch minus product will discharged into a stockpile from the radial stacker for shipment off site. The entire crusher circuit will be located on the 60 mil HDPE lined additional ore stockpile area.

Waste rock will be placed at the bottom of the CX pit, in the permitted surface waste rock stockpile (waste rock dump), or used as aggregate for CRF (aggregate for CRF may also be purchased from offsite sources or mined onsite from the CX West open pit remnant from the 1980-1999 Pinson surface mine).

Waste rock mined onsite from the CX West open pit that requires crushing for CRF aggregate will be introduced by loader to a vibrating feeder grizzly. Material from the grizzly is fed to a jaw crusher that discharges 4-inch minus material to a conveyor, transferring the reduced material to a screen. Three-inch plus reject from the screen is further reduced by a roller cone, and then discharged to a series of conveyors. Some material may be diverted back to the screen/roller cone a second time if necessary to achieve the required size reduction. Undersize (3/8-inch minus) from the screen is

conveyed to the reject pile. Discharge from the roller cone and screen between 3/8-inch and 3-inch in size is conveyed to the stockpile for use as CRF aggregate. The entire waste rock/CRF-aggregate crushing circuit is located in the CX West open pit.

In February 2014, the Permittee submitted an EDC proposing to increase the allowable tonnage of waste rock for backfill in the CX Pit. Geochemical analysis of the increased backfill tonnage (in increments of 500,000 tons, 750,000 tons, and 1,000,000 tons) showed that the proposed increase will not create a potential to degrade waters of the State. The EDC was approved by the Division in April 2014 and the Permit limit for in-pit backfill was increased to 1,000,000 tons. Exceedance of this limit or opening of new areas for waste rock disposal will require prior modification of the Permit. As of November 2017, approximately 747,000 tons remain for in-pit backfill.

In October 2024, the Division an EDC to increase the allowable tonnage of waste rock for backfill in the CX Pit. Geochemical analysis of the increased backfill tonnage (in increments of 500,000 tons, 750,000 tons, 1,000,000 tons, and 2,000,000 tons) showed that the proposed increase will not create potential to degrade waters of the State. The EDC was approved by the Division in October 2024 and the Permit limit for in-pit backfill was increased to 2,000,000 tons. Exceedance of this limit or opening of new areas for waste rock disposal will require prior modification of the Permit.

In January 2025, the Division approved an EDC to use the existing waste rock from the reclaimed waste rock disposal facilities as aggregate for cemented backfill into the underground mine project. Materials will be crushed at the south waste rock dump and transported to the underground mine project. It is estimated the volume available from the south waste rock dump will be approximately 12,178,461 cubic yards. This was approved on condition that a MWMP/Profile I analysis on the material is provided to the Division prior to use as cemented backfill.

Mine facilities also include a metallurgical lab and fire assay room for on-site analysis purposes. The lab building is located adjacent to the existing office building and also includes additional offices, restrooms, and storage areas. Any liquid waste from the laboratory analyses will be collected in an HDPE carboy, which in turn drains to a hazardous waste fluid storage tote which can be taken off-site when full for disposal at an appropriately licensed facility.

Geology: Granite Creek Mine Project is located within a Carlin-type gold system composed of micron-gold hosted in altered, fine-grained sedimentary rocks. Mineralization at the Mine and nearby Getchell and Twin Creeks Mine sites is controlled and locally hosted by the Getchell Fault zone, which defines the eastern margin of the Osgood Mountains. Calcareous siltstone and shale of the Cambrian–age Comus and Preble formations host micron-sized gold mineralization at Mine. Gold occurs in de-calcified and locally silicified zones along high-angle fault zones and as stratigraphic controlled replacement bodies within receptive host rocks adjacent to feeder faults.

CX Pit (Current Status): After cessation of dewatering operations in 2006, a 26-foot-

deep lake formed in the pit. However, resumption of dewatering in 2007 has resulted in complete elimination of the pit lake, with current water table elevation approximately 75 feet below the pit floor. When dewatering is eventually terminated sometime in the future, the lake elevation is predicted to rise and eventually stabilize at a depth of approximately 100 feet. During its existence, the pit lake acted as a hydrologic sink and all constituent concentrations were below Profile I reference values except for arsenic which was as high as 0.083 milligrams per liter (mg/L) during the first year before dropping below 0.05 mg/L thereafter, consistent with current predictions of pit lake water quality presented in the most recent pit lake study (Water Management Consultants, April 2009).

The CX Pit is predominantly limestone and carbonate rock. A fault running between the CX and Mag Pits limits outflow from the CX Pit, creating a hydrologic sink. The same fault acts as a barrier between the two pits, minimizing exchange of groundwater between the two basins. Monitoring required by the Permit (if the pit lake is present) includes pit lake water quality analysis for various depths, downgradient wells, upgradient wells, and Granite Creek.

Mag Pit (Current Status): A pit lake has been allowed to form in the Mag Pit. The elevation of the pit lake surface in April 2014 was approximately 4,663 feet above mean sea level (amsl). The elevation of the pit lake surface in December 2015 was approximately 4,655 feet amsl, and in October 2017 it was approximately 4,546 feet amsl. Approximately 1.5 million cubic yards of inert alluvial material were placed in the northern end of the pit in 1998/1999 to buttress unstable walls, isolate geochemically reactive rock, and provide a source of additional alkalinity for the lake. The pit was rapid-filled, between February and August 2000, at the rate of 500 to 900 gpm, to a depth of approximately 150 feet covering the areas of potential acid generation. Subsurface slumping has resulted in approximately 20 feet of material filling the pit bottom; therefore, the lake is now approximately 130 feet deep. The combination of alluvial cover material, rapid filling, addition of approximately 100 tons of slaked lime, and mechanical mixing, helped chemically stabilize the pit lake. Based on modeling conducted to date, no long-term amendment or treatment of the Mag Pit Lake is anticipated to be required. The Mag Pit was predicted to be a flow-through system with an estimated flow rate of 14-23 gpm. However, present monitoring data show the pit lake to be behaving as a marginal sink.

The Permittee intends to initiate Mag Pit lake dewatering to ensure the safety of underground operations in the adjacent CX hydrologic block. Discharge will initially be into the RIB distribution pipeline (RDP) and ultimately to the Surge Pond with transport from the surge pond through the RDP for discharge to the RIBs. Active mining in the Mag Pit is not presently planned but may be considered in the future. Permit SOC Item I.B.1 requires submittal of a mine plan to the Division for review and approval prior to initiating active mining in the Mag Pit.

Monitoring of the pit lake water quality is required by the Permit on an annual basis, or monthly if active dewatering commences. Monitoring performed by the Permittee consists of pit water quality at various depths and downgradient and upgradient monitoring well water quality. Pit lake water quality analyses reported in the 2016 Annual Report show

surface pH between 7.3 standard units (SU) and 8.3 SU and all constituent concentrations below the Profile III reference values.

Model results for long term pit lake water quality predict a mildly alkaline lake with pH of approximately 8 SU and alkalinity in the range of 70-90 mg/L. Other predicted maximum pit lake constituents of concern in year 30 are arsenic (0.128 mg/L - 0.0089 mg/L), cadmium (0.052 mg/L - <0.001 mg/L), iron (6.9 mg/L - 0.047 mg/L), manganese (0.9 mg/L - 0.32 mg/L), nickel (0.93 mg/L - 0.029 mg/L), sulfate (552 mg/L - 540 mg/L), and thallium (.0048 mg/L - <0.001 mg/L).

C. Receiving Water Characteristics

Surface Water: The Granite Creek Mine Project is located in the Kelly Creek drainage area, approximately 11 miles north of the Humboldt River. Granite Creek is located adjacent to the site, and usually flows ephemerally during the spring and early summer, in response to snow melt and following large precipitation events. The period of observable flow in Granite Creek ranges from a few weeks during dry years to several months during wet years. Surface water flow is only exhibited in the upper reaches of the creek. Prior to mining, the Granite Creek normally dissipated at the alluvium-bedrock contact, immediately downgradient of the range front. The creek is currently diverted through a series of pipes and culverts around the southern rim of the CX Pit to the original stream channel below the open pit. Water quality in Granite Creek is of good quality with all constituent concentrations below the Profile I reference values.

Groundwater: Continuous groundwater flow occurs in the alluvial deposits throughout the entire Kelly Creek Area Basin. Depth to groundwater ranges from 200 to 250 feet below ground surface. Most of the regional groundwater flow along the eastern edge of the basin occurs within the alluvium. In the area of the CX Pit the alluvial deposits are thin and lie entirely above the water table. Alluvial groundwater quality is generally good due to the active recharge at the range front. Groundwater pH typically ranges between 8.0 and 8.4 SU and the concentration of total dissolved solids (TDS) ranges from 100 to 230 mg/L. Exceedances of the Profile I reference values for iron, lead, and manganese routinely occur in the vicinity of the precious metal deposits.

Within the Kelly Creek Basin, groundwater in the bedrock is highly compartmentalized along the range front, which trends north-northwest to south-southeast. Associated cross-faults act to compartmentalize the groundwater flow and prevent any widespread regional flow. High angle geologic structures appear to have formed partial barriers between some of the blocks or compartments, resulting in localized areas of continuous flow. Bedrock groundwater levels generally range between 4,527 and 4,721 feet amsl. Bedrock groundwater quality is more variable than the alluvial groundwater, attributable to the discontinuous nature of the groundwater flow. Bedrock groundwater pH typically ranges between 6.8 and 8.4 SU and the concentration of TDS ranges from 180 to 1,500 mg/L. Local exceedances of the Profile I reference values for arsenic, cadmium, iron, manganese, nickel, sulfate, and zinc routinely occur in the bedrock.

D. Procedures for Public Comment

The Notice of the Division's intent to issue a Permit authorizing the facility to construct, operate, and close, subject to the conditions within the Permit, is being published on the Division website: https://ndep.nv.gov/posts/category/land. The Notice is being mailed to interested persons on the Bureau of Mining Regulation and Reclamation mailing list. Anyone wishing to comment on the proposed Permit can do so in writing within a period of 30 days following the date the public notice is posted to the Division website. 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, or 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 renewed 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 sampling of monitoring wells and surface waters as required by the Permit and operating plans. Specific monitoring requirements can be found in the Water Pollution Control Permit.

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 (the 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: TJ Mohammed
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