



King County

Department of Permitting and Environmental Review

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Periodic Review Report and Decision

Date of Decision: September 15, 2017

A. General Information

File Number: Grading Permit, GRDE15-0004

Project/Site Name: Raging River Quarry

Permittee: Raging River Quarry, LLC
3132 NE Harrison Street
Issaquah, WA 98027

Staff Contact: Primary Contact:
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Section, Township, Range: Section 22, Township 24, Range 07 E

Tax Parcels: 222407-9011 and 222407-9035

Location: 32715 SE Carmichael Road¹

Zoning:	M-P, Mineral with P-Suffix conditions	Parcel 222407-9011
	RA-10, Rural Area 10-acre minimum lot	Parcel 222407-9035
	ROW, King County Right of Way (unclassified; private road in public ROW)	SE Carmichael Road

B. Periodic Review Project Summary

The Raging River Quarry, located approximately 1.5 miles south west of Fall City on the Preston-Fall City Road at the western terminus of A.R. Carmichael Road, began operations in

¹ SE Carmichael Road is the official name of the access to the Raging River Quarry based upon 911 addressing. In various DPER documents, the road is also referred to as A.R. Carmichael Road, William Carmichael Road and Carmichael Road. For purposes of this report and decision the access to the quarry is called Carmichael Road.

1935. King County (the County) issued the grading permit that is the subject of this periodic review to Raging River Mining, Inc. (RRM) on June 27, 1973 to continue quarry operations on a portion of the property that is now tax parcel 222407-9011 (see Figure 1).

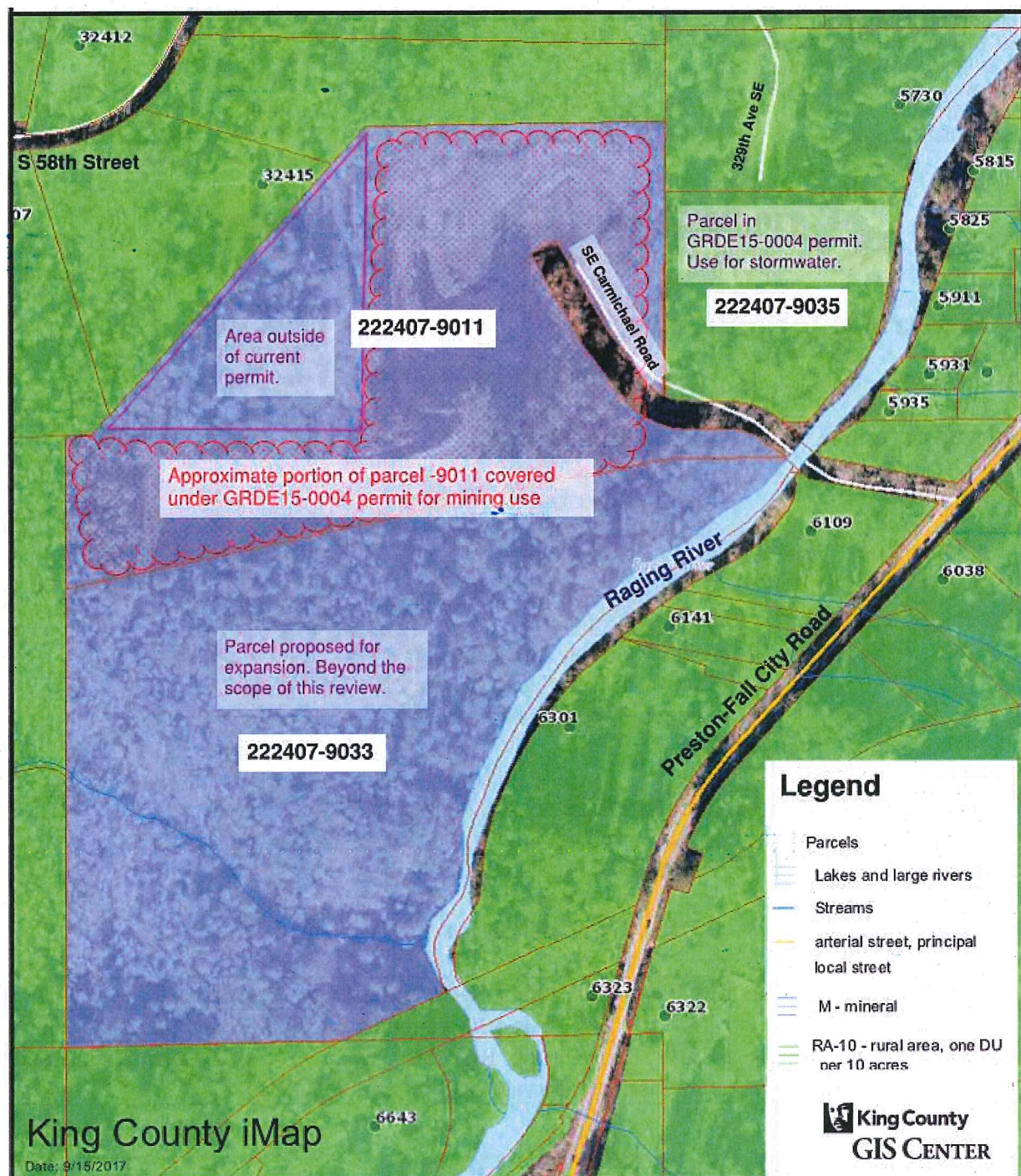


Figure 1: Periodic Review Vicinity Map.

Mining operations at this site have varied in intensity and frequency over time. During the life of this mine, there have been a number of changes in the parties that own, manage, and operate this site resulting in various periods of intermittent operations, inactivity, or reduced operation. Recently, in 2013, RRM informed the King County Department of Permitting and

Environmental Review (DPER) that they were resuming ownership and management of the quarry. When DPER first received notification of RRM's intent to restart operations at the quarry, DPER notified the permittee via a letter dated May 30, 2014 that periodic review would be required because under King County Code (County Code) all extraction and materials processing uses are subject to periodic review of their site design and operating standards every five years (KCC 21A.22.050).

RRM then notified DPER of their intent to apply for a new grading permit that would encompass their entire property, including parcels that were rezoned in 1987 – 1989 to potentially accommodate mining, but that have never been mined and have not yet been permitted for mining. Initially, DPER agreed to consolidate the periodic review with the review of the proposed expansion. This was consistent with prior permit expansions and periodic review conducted by DPER on other mining permits. In mid-2016, DPER decided to proceed with the periodic review on the existing permit in order to address the issues specifically associated with the current operations. The permittee was notified of that requirement at the end of July 2016, and the public notice of periodic review went out in August 2016.

C. Regulatory Authority for Periodic Review

All extractive and processing operations are subject to a review of developmental and operating standards at five year intervals. This section outlines regulations and policies related to the Periodic Review, which establish the scope of the review, the code standards to which the existing operation is evaluated, and review procedures.

Scope and Standard of Periodic Review

“The purpose of the periodic review process is to provide opportunities for public review and comment on the mineral resource facility’s fulfillment of state and county regulations and implementation of industry-standard best management practices” (R-688, King County 2016 Comprehensive Plan). If inspections uncover new circumstances, unapproved disturbance, and/or unanticipated project-generated impacts, the periodic review process allows the County to modify, add, or remove conditions to address these new circumstances. County regulations regarding nature, extent, and process for periodic review are contained in KCC 21A.22.050, which states:

- A. *In addition to the review conducted as part of the annual renewal of a mineral extraction operating permit or materials processing permit, the department shall conduct a periodic review of mineral extraction and materials processing operation site design and operating standards at five-year intervals.*
- B. *The periodic review is a Type 2 land use decision.*
- C. *The periodic review shall determine:*
 - 1. *Whether the site is operating consistent with all existing permit conditions;*
 - and*
 - 2. *That the most current site design and operating standards are applied to the site through additional or revised permit conditions as necessary to mitigate identifiable environmental impacts (Ord. 15032 § 28, 2004: Ord. 11157 § 21, 1993: Ord. 10870 § 443, 1993).*

The periodic review process is not a new action that would require additional State Environmental Policy Act (SEPA) analysis. King County 2016 Comprehensive Plan (Comp Plan) Policy R-688 states:

The periodic review process is not intended to re-examine the appropriateness of the mineral resource use, or to consider expansion of operations beyond the scope of existing permitted operations since that review would be accomplished through the county's permitting process. The periodic review is intended to be a part of King County's ongoing enforcement and inspections of mineral resource sites, and not to be a part of the county's permitting process.

The periodic review decision itself is categorically exempt from SEPA. Action required by the decision may however require SEPA analysis depending on whether thresholds are exceeded where SEPA is required.

Regulatory Standards for Mining and Mining-Related Operations: Grading Standards, Site Design Standards, and Operating Standards

The following County regulations are the current basis for site design and operation standards at mine sites:

KCC chapter 16.82, Clearing and Grading;
KCC 21A.22, Mineral Extraction Development Standards;
KCC Title 9, Surface Water Management;
King County Surface Water Design Manual (KCSWDM);
KCC 21A.24, Critical Areas; and
KCC 12.86, Noise.

In addition to the general authority under KCC 16.82 and 21A.22, this operation is also subject to site specific (P-suffix) conditions established through approval of the rezone by the King County Council that was effective in 1984. (see discussion under Zoning)

There are also other agencies that regulate specific environmental impacts and/or operation standards of mines and mining operations in the state of Washington. Some of the regulations of other agencies are adopted by reference as part of grading permit conditions and are required for operations. Specific compliance with certain of these regulations is beyond the scope of the periodic review, except as referenced in County Code or required by existing permit conditions. Specifically, other agency regulations governing mining operations are the Puget Sound Clean Air Agency (PSCAA), the Washington State Department of Natural Resources (DNR) Reclamation Permit, and the Washington State Department of Ecology (Ecology) National Pollutant Discharge Elimination System (NPDES) Sand and Gravel General Permit.

Public Notice for Periodic Review

Periodic review is identified as a Type 2 decision in KCC 20.20.020.E, and therefore it is subject to the public notice requirements set out in KCC 20.20.060. Periodic review decisions are also subject to public notice in accordance with the provisions of KCC 20.20.090. A Notice of Periodic Review was sent to all landowners within a quarter of mile radius on August 18, 2016, and the notice was concurrently published in the Seattle Times and the Snoqualmie Valley News.

Due to an error in the notice, it was resent and republished on August 29, 2016. The King County Department of Natural Resources and Parks (KC DNRP), Ecology, and the affected Tribes were also notified.

E. Detailed Permit History and Background

The Raging River Quarry, which is located as shown in Figure 1, has been operating since 1935. King County formally recognized the quarry as a non-conforming use in 1961. RRM purchased the quarry in 1972. At the time of RRM's purchase, the quarry property was comprised of two parcels in zone "FR (potential QM)," which stands for Forestry and Recreation potential Quarry Mining. The northerly 15.8 acre property includes the area that had been intermittently mined. Quarrying of this northerly parcel had been determined, through extended litigation, to be a legal non-conforming use (Exhibit 1). The southerly parcel (current parcel 22407-9033) is approximately 25 acres and has never been mined. The permit issued to RRM on June 27, 1973 covered continuation of quarry operations on the northerly property only, which is an L-shaped portion of current parcel 22407-9011. The King County Council approved the rezone of the 15.8 acre parcel to QM in January 1984 (Ordinance No. 6653) subject to 22 P-suffix conditions. The permit for the ongoing mining operation was amended to incorporate all of those conditions except the requirement for quarterly reporting (Exhibit 2 through Exhibit 5). The permit also included the stormwater ponds that were constructed in 1983 on tax parcel 224070-9035 to support the quarry operations as well as the access road to the quarry located in the Carmichael Road right-of-way (Exhibit 6).

In 1987, King County approved the rezone of the southern 25 acres (parcel 22407-9033) from FR to QM-P in 1987, subject to conditions that primarily dealt with permit administration, permit enforcement, traffic, blasting, and noise (Exhibit 7). An additional 4.5 acres located to the northwest of the existing quarry (triangular portion of current parcel 22407-9011) were rezoned to QM-P with the adoption of the 1989 Snoqualmie Valley Community Plan.

The grading permit that is the subject of this periodic review is GRDE15-0004 (Exhibit 8) and is limited to the 15.8 acres originally permitted by King County (L-shaped portion of current parcel 22407-9011 but includes the stormwater ponds located on tax parcel 22407-9035 and access road and appurtenances located in the Carmichael Road right-of-way. (Quarry).

Operations and Enforcement History at Site

RRM continued operating the Quarry intermittently until 1988. Inspections occurred intermittently and typically resulted in requests by the county inspector for some kind of follow-up action, such as maintenance of the drainage facilities.

Between 1988 and 2005, Cadman, Inc. operated the quarry. During this period, operations were also intermittent and during many seasons, there was no production at all. In 1988, following approval of the 1987 rezone, a revised visual/noise attenuation plan was approved and implemented to address environmental concerns raised by the adjacent property owners during the rezone hearings. Additional work, including repairs to the bridge, was undertaken to address the remaining rezone conditions. Winter storms in late 1990 led to the need to conduct repairs to the rip-rap at the base of the bridge and the permittee received the necessary approvals to complete this work in the early spring of 1991.

In the early 1990s, conflicts between the quarry operations and an adjacent property owner began to surface. The complaints included mining outside of the approved King County Grading Permit boundary and within the required setbacks established by the 1987 rezone and the formation of an erosional gully on the mine property, potentially affecting adjacent properties. This ultimately resulted in corrective actions being required by DNR. The measures implemented by Cadman included creation of a safety berm, installation of fencing, restoration and repair of mining beyond the approved limits, and repairs and stabilization of the erosional gully. This work also included construction of a diversion berm to direct drainage away from the gully at the top of the slope. This work was generally overseen by DNR through a corrective action by them with some participation by King County. There were multiple geotechnical reviews undertaken before, during, and after stabilization of the gully. The latest survey, in 2006, determined the gully was stable and no further erosional activities were identified. This issue was raised again in 2015, but investigation by DNR and DPER noted no further movement of materials in the gully and confirmed the gully remained stable. No additional mitigation was required. During the review of the application for expansion into the remaining acreage, a geotechnical report was required, and nothing new was forthcoming from that report (Exhibit 9).

The property and quarry operations were transferred back to RRM in October 2005. The site remained idle until 2008, when Managing Green, LLC entered into a purchase agreement with RRM. They took some initial steps to reopen the site. This included repairing Carmichael Road, having a structural evaluation of the bridge completed, and then performing recommended repairs to the bridge deck and abutment armoring. Managing Green also cleaned up the operating areas of the pit and received approval to clear the rest of the 15.8 acre property covered under the existing grading permit for mining (the L-shaped portion of current parcel 222407-9011). This was all completed by 2010. RRM then foreclosed on the property and resumed management of the site in 2013. Subsequent to the change in management, complaints were filed alleging the 2010 clearing had exceeded the permit boundaries, had impacted a wetland buffer, and resulted in placement of dirt and debris over the slope towards the Raging River. DPER has taken the necessary corrective actions to address these issues with RRM. RRM was required to remove the debris placed over the slope and stabilize the area. A site inspection in early 2015 showed the clearing was contained within the permitted boundaries. While determination of the extent of the wetlands and size of their buffers under current regulations has not been finalized, it does appear that the buffers extend into the area that has been approved for mining under the current permit and some clearing and grading has occurred in or near the wetland buffers.

In early 2014, RRM informed DPER of their intent to restart operations at the quarry. RRM was informed that prior to any construction activity on the site, they would be required to notify surrounding properties of that intent. DPER provided a list of parties of record they needed to notify. When operations resumed in early February 2015, DPER issued a Stop Work for failure to notify the parties of record as required. Work ceased until that notification was complete. The permittee and operator were changed in 2015 to Raging River Quarry, LLC (RRQ).

Since the time when operations restarted at the site, DPER has received numerous operational complaints from surrounding property owners and other concerned parties. A number of these complaints were either unsubstantiated or could not be attributed to the quarry operations. Those that were substantiated generally fell into the following categories: dust/emissions, exceedance of the permissible noise levels, violations related to hours of operation, tracking, failure to

comply with the P-suffix conditions, blasting issues, including failure to provide advance notification of blasting, exceeding the limits of approved mining, and other concerns. These will be discussed in more detail later in this report.

DPER also received a number of complaints/concerns that the quarry is not compatible with the existing residential development in the area and that mining should not be allowed this close to the Raging River. The land use question was settled in 1984 when the property was rezoned to allow quarry mining. Inasmuch, this issue is beyond the scope of this periodic review.

E. Regulatory Context

The most recent approved permits, plans, and conditions are used for the periodic review when determining whether the site is operating consistent with all existing permit conditions. When site design and other standards in current use differ from those that were employed in development/review of the approved permits, plans, and conditions, this periodic review will be used to determine whether action needs to be taken to bring the site into conformance with current operating conditions and performance standards to the maximum extent practicable (KCC 21A.22.040).

Approved Permits, Plans, and Conditions – County Reviews

The pre-effective conditions that had to be completed before the rezone of the 15.8 acre parcel was approved by King County included preparation and installation of an approved stormwater management plan, design and construction of noise berms or other noise attenuation features on both sides of A.R. Carmichael Road that were sufficient to bring the road and its truck traffic into compliance with the King County noise standards for private property and a warning system that was audible to residents in their homes. Once these three items were completed, the rezone for the 15.8 acre parcel was adopted. The permit for the quarry was revised in 1984/85 after adoption of the original rezone request. The revision incorporated the rezone conditions into the operating permit and established the basic operating concept as that shown on a site plan dated May 1974 and identified as Figure IV (a) of the December 1979 FEIS.

The permit conditions were modified in February 1990 to incorporate the 122-86-R rezone conditions. All of the conditions in this permit were standard conditions derived from KCC 16.82.100 through 105 (Grading) and KCC 21 (Zoning) except the following:

Site shall be operated at all times in conformance with the conditions of division files #134-74-R, 007-80-SH and 122-86-R.

Hours of operation were modified to limit loading of trucks to 7:30 a.m. to 4:00 p.m. Monday through Friday.

There was a disagreement between BALD and RRM over the effect of adoption of 122-86-R. RRM believed that the rezone was the only approval needed to commence mining into parcel 9033. In 1992, the permit conditions were revised to clarify that work was only allowed within parcel 9011 and that quarry operations needed to conform to the approved plans dated 2-2-83. It is important to note that since the 1986 rezone only applied to the southern tax parcel which

is not included in the current operation, the inclusion of the reference to the 1986 rezone in the operating conditions had no effect upon this permit.

With this background then, the following documents are considered the current approved plans and conditions for this permit:

1. Plans for mining area recognized as a legal nonconforming use, which are marked "received by King County Building Dept., Housing and Zoning Division May 10, 1973."
2. Phase I plans, dated May 1974 and described as Figure IV (a) of the Final EIS, December 1979.
3. File No. 134-74-R conditions as shown on 1984/85 approved permit conditions.
4. KCC 16.82 and KCC Title 21 Conditions, as amended in 1992
5. Final EIS (November 1979) and the subsequent Addendum (1988)
6. Approved February 3, 1983 drainage plan and site plan

Related Regulatory Approvals - Other Agency Reviews

The site is regulated under the Ecology-administered NPDES Sand and Gravel General Permit from the state, #WAG503112. The site was inspected twice in 2016 by Ecology staff. RRQ requested an update to the NPDES permit in July 2016 to accurately reflect that this site discharges to groundwater, and this permit modification was completed in April 2017. Under the site's permit coverage, only stormwater is permitted to be discharged to ground.

The project operates under approval from the PSCAA. The site was inspected in 2016 by PSCAA staff. No citations were issued, but the quarry was asked to complete the required equipment registration process. The quarry's rock crusher and generator (internal combustion engine) are now registered with PSCAA under File No. 27660.

The site has an active Reclamation Permit with DNR, permit number 11047. The site was inspected in 2016 by the DNR mine inspector. No immediate problems were identified.

A complete discussion of the elements reviewed for conformance with the applicable regulations is included in the following sections.

Insurance/Bonds

KCC 16.82.090 requires the permittee to maintain a liability policy in the amount of \$100,000 per individual, \$300,000 per occurrence, and \$50,000 property damage, and shall name King County as an additional insured. RRQ has submitted proof of liability insurance through April 2018 that names King County as additional insured.

The P-suffix conditions for this permit include a bond requirement as follows:

In order to insure compliance with the conditions of this permit, the applicant shall post the following bonds and maintain the following insurance: a. Surety bond in the amount of \$10,000, B. \$1,000 cash operating bond, C. Site reclamation bond in the amount of \$10,000, These bonds shall be maintained at full value at all times and King County shall be named as an assign. The requirement for posting these bonds with King County may

be waived if similar bonds are posted with the State of Washington in an amount at least equal to the monetary requirements stated above and for the purposes intended by King County.

Bonds, or financial guarantees as they are called in County Code, are a form of financial security posted to ensure timely and proper completion of improvements, to ensure compliance with the County Code, and/or to warranty materials and workmanship of improvements. RRM provided replacement financial guarantees in 2005. These included a \$10,000 cash operating guarantee with the County and a \$21,500 reclamation guarantee with DNR. DPER inadvertently released its interest in the \$10,000 operating bond in 2007.

Typically, surety guarantees are used to ensure that specific improvements are completed and cash operating guarantees are used to ensure that existing facilities or improvements are maintained. KCC 27A.30.020 requires that financial guarantees meet the following:

Financial guarantees shall be in a form approved by the director, in consultation with the department of natural resources and parks, department of transportation, the prosecuting attorney's office, and other affected agencies. The amounts of the financial guarantees shall be based on the schedules appropriate to the required work which are updated on a periodic and frequent basis to ensure that the amount fully captures likely costs. Financial guarantees shall also require a contingency in an amount to be determined by the director.

To satisfy these requirements, updated financial guarantee amounts should be set after review and approval of the revised operating plans that are being required in conjunction with this periodic review, after consultation with the KC DNRP and KCDOT and in coordination with the DNR regarding updates to the reclamation plan. The amounts of the guarantee should be based on the estimated cost of performing the work.

F. Review and Discussion of Environmental Elements

SEPA

Statement of Facts

SEPA Chapter 43.21C RCW requires evaluation of environmental impacts associated with a project or an agency action prior to approval. The SEPA Rules, Chapter 197-11 WAC, are the implementing regulations that identify standard procedures to be used in evaluating a project's environmental impact.

King County issued a Determination of Significance (DS) for the Raging River Quarry on October 26, 1976. A final EIS was published in November of 1979. There was a subsequent Addendum processed and published in 1988. Permits related to this mining site previously incorporated mitigation measures included in these environmental impact statements. No new action is being proposed for the project by the permittee as a part of this decision.

Conclusions

The overall scope of work on the site is generally as proposed in the descriptions included in prior environmental reviews, and through this review, we did not identify any element, existing

or proposed, that would necessitate SEPA review. The proposed expansion, a separate action, is subject to environmental review.

Zoning/Land Use

Statement of Facts

The 1979 rezone conditions were applied to the 15.8 acre parcel that is covered by the current grading permit for mining (L-shaped portion of current parcel 222407-9035). The 1987 rezone conditions were initially applied to the southern 25 acres (parcel 22407-9033). As noted earlier in this report, the 1987 rezone conditions do not apply to the current grading permit. One of the stated purposes of periodic review is to ensure that the most current site design and operating standards are applied to a site to mitigate identifiable environmental impacts. Accordingly, any of the conditions established through the later rezones that were related to mitigating impacts associated with the ongoing operation of the quarry and not specifically addressing impacts from the proposed expansion of the quarry, would be appropriate for inclusion in the current permit. Many of the conditions need to be revised slightly to reflect current site conditions or regulations.

The site design and operating standards in the quarry's current permit are based upon the original zoning code which was repealed in the mid 1990's and replaced with the current zoning regulations in KCC 21A.22. The major changes in these regulations are associated with blasting, emissions, mine reclamation and operating hours. The zoning code also establishes setbacks for mining properties from adjacent neighboring properties unless otherwise established through a permitting process. In the case of the Raging River Quarry, buffers and setbacks were established through review of the individual rezone requests. The resulting required setbacks and buffers for mining-related uses and activities at this site are 75 feet from most of the surrounding RA-10 zoned properties, 150 feet from the northwest parcel boundary (adjacent to parcel 2224079011), a minimum of 75 feet of which has to be on the quarry property and 200 feet from the Raging River, but in no case closer to the Raging River than the 300 foot contour line (see Figure II in Exhibit 5).

Operations related to mining land uses on these parcels must comply with the approved plans and with the requirements found in the relevant P-suffix conditions, KCC 21A.22 and KCC 16.82, and any other applicable King County codes and regulations. Any proposed uses or activities not covered by the current grading permit for mining must first obtain the necessary permits and approvals. The approved operating plans for the quarry, dated May 1974, show the scale house located on the south side of Carmichael Road right of way (see Figure IVa in Exhibit 5). The March 1986 plans that were prepared for the rezone of the southerly 25 acres show the scale and scale house located within the Carmichael Road right of way on the south side of the roadway. The 1986 plans have not been approved for the current operation (Exhibit 10).

There is a steep slope classification associated with two areas of the site, the working faces within the pit area (see Reclamation below) and some steep slope areas that are located between the current top of the pit sloping down towards the Raging River. Mining of steep slopes is allowed under this permit, however, this permit is conditioned to prohibit any clearing or mining within 200 feet of the river or below elevation 300. There have been instances in which this required buffer and steep slope was indirectly impacted by quarry activities. The first occurred in 2016 when excavated material was inadvertently pushed over a ridge onto the slope above the

scale house. The most recent incident occurred in August 2017 when rock and other material was dislodged in the same area during a blast and was deposited onto the steep slope. Prior to additional blasting, the quarry is required to submit a geotechnical evaluation to assess the cause of the recent rockfall, evaluate the stability of the debris discharged onto the slope, suggest measures that need to be taken to clean up and/or stabilize the debris, and provide recommendations to ensure additional erosion, landslide, or slope stability impacts do not occur again in the future. The required geotechnical evaluation was submitted on August 15, 2017 (Exhibit 11).

Conclusions

Standard site design and operating standards need to be updated to be consistent with current regulations.

Permit conditions will be updated to incorporate any of the 1987 rezone conditions that were intended to mitigate impacts from ongoing operations that are not already covered by existing permit conditions. Rezone conditions 5-7, 14-16 and 19, for example, are partially addressed in the current permit but need to be revised. Rezone conditions 17, 26-28 and 30 are not covered by the current permit conditions and need to be added and revised to address noise, traffic and blasting related impacts. Rezone conditions 2-4, 6, 9-13, 18, 20-23, and 25 are already incorporated into the existing permit conditions from the original rezone or through existing code authority. The remaining conditions 1, 1a, 8, 20 and 24 are only applicable to the rezoned properties, are not intended to address specific environmental impacts or are no longer applicable because of changes in state law and will not be included in the revised permit conditions (Exhibit 7).

To address the 2017 rock/debris fall and potential soil stabilization issues in the steep slope areas above the Raging River, a condition will be added requiring implementation of specific recommendations from a geotechnical consultant that 1) evaluate stabilization of material from the 2017 rock/debris fall, 2) evaluate the cause of the July 2017 rock/debris fall; 3) suggest stabilization or corrective actions that may need to be taken, and 4) provide recommendations on preventative measures related to both blasting and grading/excavation to prevent similar future occurrences which will be incorporated into the updated site plan.

The scales, scale house and related facilities need to be accurately shown on the revised site plan that will be prepared pursuant to this periodic review. If these facilities are located within the right of way a Special Use Permit or other KCDOT approval to use the ROW for non-transportation purposes will be required or the structures will be moved to an acceptable location outside the ROW.

Reclamation

Statement of Facts

The project site operates under a valid Washington State Surface Mining reclamation permit, and the site must also comply with the standards contained in the County Code regarding drainage and site reclamation upon closure of the operations. King County and DNR, through a long standing interagency agreement, work together closely to provide for compatibility between the state reclamation permit and the County grading permit. The purpose of this coordination is to

ensure that nothing approved under the grading permit conflicts with or would create issues that would negatively affect implementation of the final reclamation plan.

As noted earlier, the working faces within the pit area are classified as steep slopes under King County's critical area regulations. Those areas can be altered under the grading permit. Ultimately, the working faces of the mine are subject to the requirements of the DNR Mining Reclamation Permit as regulated under Title 78 of the Revised Code of Washington.

Past mining, particularly in the northwestern corner of the site, encroached into areas that were not authorized for mining and were in conflict with the quarry's reclamation plan. In 2002, a segmental reclamation plan was approved under the oversight of DNR to address these issues and respond to a corresponding slope stability/erosion concern. To conduct this abatement work, the quarry obtained a grading permit from the County, which was separate from the permit currently under review and did not authorize additional mining activities in the affected area.

The current operation and reclamation plans on file for the quarry are based upon a conceptual mining plan that requires mining of the proposed expansion area. These operational and reclamation strategies were developed in the mid-1970's and have been based on an assumption that a permit would be granted for the southerly expansion. The mining and reclamation concepts depicted on these plans exceed what can be achieved within the current permit boundaries. The site plans from 1983 and 1986 submitted as part of previous permit reviews, which are not considered approved operating plans, also show work in areas that never received permits for mining, depict planned features that are not present, and would not allow for reclamation that meets current standards.

Several of the current permit conditions influence reclamation, and some of these conditions contain references to outdated standards.

Conclusions

RRQ needs to submit updated operating plans to DPER for review and approval, including a site plan that illustrates final mining limits and reclamation that would be feasible under the current permit. To be feasible under the current permit, the site plan would need to show no mining activities or need for reclamation on the southerly parcel or on the triangular portion of parcel 222407-9011, as there are no current permits for mining on those properties. Concurrent with review and approval of the updated operating plans, RRQ needs to begin the process to revise the reclamation plan that they have on file with DNR.

The permit conditions relative to post-mining reclamation will be updated in conjunction with review of the revised mining and reclamation plans.

Drainage/Water Quality

Statement of Facts

The drainage facilities and water quality issues on this site are monitored by Ecology through NPDES Sand and Gravel General Permit #WAG503112, the KC DNRP through implementation of the General Municipal permit issued to the County, and DPER through inspections for compliance with the approved plans and permit conditions.

The drainage facilities were constructed in 1983 in accordance with plans approved by the County. These facilities include five ponds and a series of ditches, pipes and catchments that control stormwater runoff generated from quarry operations and the portion of the access road located between the scale house and the quarry. With the exception of one brief period in the early 2000's when there was a breach in one of the stormwater ponds, all of the stormwater collected in these ponds is infiltrated and there have been no discharges to surface waters.

The quarry submitted a technical information report (TIR) in 2016 (Exhibit 12) as part of the application materials for the proposed expansion. The submitted TIR was also intended to examine whether the existing stormwater facilities are sufficient to meet current water quality standards. The analysis in the submitted TIR was inadequate to demonstrate that there is sufficient capacity within the ponds to meet the needs of the current operation. The parameters selected for the modelling did not reflect characteristics of the currently permitted operation. There have been no documented water quality issues attributable to runoff from quarry operations or the portion of the access road that discharges to these ponds. King County stormwater regulations were updated in 2016 and utilize a different methodology for modelling flow control facility sizing than was used in the submitted TIR.

Inspections by Ecology in 2015 and 2016, related to compliance with the NPDES Permit # WAG503112, identified a few potential impacts related to water quality, including some road runoff from a short segment of the bridge approach that was draining on to the riprap near the bridge (February 2016) and minor sediment track out on the bridge (November 2016). One recommendation, to control the discharge from the road at the bridge, included construction of a trench through the berm to allow the runoff to drain onto the forest floor before it reaches the bridge. Repaving of the access road was discussed as a means to address sediment track out. Both the drainage and repaving were completed in February 2016. The Ecology inspector also recommended street sweeping when needed to address water quality concerns in regard to the 100 foot length of bridge approach that cannot be discharged to the forest floor as discussed above.

Finally, review of the file and field inspection revealed a lack of drainage control features on the entrance road from the scale house to the intersection with the Preston-Fall City Road. This includes the absence of any conveyance on either side of the bridge decking to intercept and keep drainage from directly entering the river, which is important to prevent water quality impacts if track out of sediment onto the bridge is not fully managed. Tracking of dirt and debris onto Carmichael Road and, to a lesser degree, onto Preston-Fall City Road has been the source of numerous complaints since the quarry resumed operations. Ongoing County inspections have revealed that minor track out of sediment is still occasionally an issue for this site.

RRQ submitted a Road Surface Management Plan in May 2017 (Exhibit 13) in response to these complaints and a directive from the County that if this tracking continued, hauling operations would be shut down. With the lack of effective drainage controls along Carmichael Road, this tracking could contribute to water quality problems in the Raging River. The May 2017 Road Surface Management Plan does not sufficiently address measures to avoid tracking of dirt and debris onto the bridge and approaches to the Raging River or, when tracking does occur, identify what specific measures would be employed during clean-up and maintenance of that portion of the access road to avoid water quality impacts to the river.

Ecology inspections noted that the Site Map on file with Ecology needed to be updated to reflect current configuration of the stormwater management on the site, identify outfall and monitoring points, and indicate which type of discharge is occurring at each point (process water, dewatering water, or stormwater). When the permit was updated to reflect discharge to groundwater rather than surface water, the quarry put in place a system to conduct and log daily monitoring to verify that oil and grease are not present in the managed runoff that will discharge to groundwater. Outside of these requirements, the quarry does not currently conduct any other type of groundwater monitoring.

Some of the rezone conditions or current permit conditions related to drainage or water quality contain outdated references to Code or have not yet been updated to match the 2016 KCSWDM.

Conclusions

In conjunction with the submittal of revised mining plans, a supplement to the TIR submitted in 2016 is required to demonstrate the existing flow control facilities for the quarry meet current KC SWDM requirements. The supplemental materials will need to include revised calculations that accurately model the contributing areas for the proposed mining plan through final reclamation. In addition, the TIR and plans will need to include measures to address stormwater management and pollution prevention for the entrance road from the scale house to the Preston-Fall City Road and for the bridge crossing the river.

A revised Road Surface Management Plan needs to be prepared to look at more aggressive measures to avoid tracking dirt and debris onto the bridge crossing and the portion of Carmichael Road that does not currently direct discharges to the approved stormwater ponds. The plan needs to include specific pollution control and clean-up measures to avoid water quality impacts to the Raging River from maintenance and clean-up of that portion of the access road.

The 1987 rezone condition that required the quarry operator to clean the Preston Fall City Road in the vicinity of the quarry site as frequently as is necessary to maintain the right-of-way clear of rock, debris or dirt attributable to trucks entering or leaving the site will be revised to prohibit the tracking of rock, debris or dirt from quarry operations onto the Preston Fall City Road, and additional conditions will be added requiring RRQ to reimburse King County DOT for any costs incurred by them to clean up or repair damages to County ROW resulting from the quarry operations and to develop a Haul Road or similar agreement.

Permit conditions will be updated to ensure the County's requirements for management of sediment track out are compatible with and at least as stringent as those required under the conditions of RRQ's NPDES permit with Ecology. Conditions will be added to require that stormwater monitoring reports be kept on site and be available for inspection/review.

Wetlands, Aquatic Areas, and Other Critical Areas

Statement of Facts

This area currently under permit contains critical areas, and the access road to the site crosses the Raging River. The permitted property includes the following identified critical areas and associated buffers: landslide hazard areas, steep slopes, erosion hazards, seismic hazards, wetlands, and the Raging River, which is a Class I stream with a channel migration hazard area extending onto the easternmost tip of the site. Additionally, while they don't currently appear in

the County's iMap data layers, other unclassified streams and wetlands have been identified on or in the vicinity of the project site, including some located in portions of the property that are not covered by the current grading permit for mining. Critical area concerns related to geological hazards are discussed in the Zoning/Land Use and Blasting sections of this report. This section of the report will focus on issues related to wetlands and aquatic areas.

This permit is conditioned to prohibit any clearing or mining within 200 feet of the river or below 300 foot elevation contour. This requirement is intended to protect ecological functions of the river and associated riparian area as well as to prevent impacts to the slopes between the river and the quarry. As a result of this rezone condition, no mining is permitted to occur within shoreline jurisdiction. One of the 1987 rezone conditions related to requirements for appropriate review of the condition of the bridge across the Raging River, including measures taken to protect the bridge and their effect on the Raging River. There have been concerns expressed by the public regarding the condition of the bridge, its structural integrity, and the potential environmental impact to the Raging River in the event of a catastrophic failure. According to the KC DOT Bridge and Construction Unit, federal regulations for publicly-owned facilities would typically require an inspection schedule of at least once every two years for a County-owned bridge like this. Depending on deterioration or other factors noted in the inspection report, some bridges on publicly-owned roads would be required to have inspections more frequently, such as annually or once every six months. As discussed in the operations history section of this report, the bridge on Carmichael Road was last inspected in 2009, and recommended repairs were made following that inspection.

There are two wetlands located on the triangular portion of parcel 222407-9011. While this triangular area is not covered by the current permit, a portion of one of these wetlands (Wetland B), as well as the buffer for another (Wetland A), extend into the permitted portion of the property. While determination of the extent of the wetlands and size of their buffers under current regulations has not been finalized, it does appear that the buffers extend into the area that has been approved for mining under the current permit and some clearing and grading has occurred in or near the wetland buffers. Site plans illustrating proposed future operations for the portions of the property under the mining permit all include some expansion onto the triangular portion of parcel 222407-9011, which is outside the limits of the current permit. The updated site plan will need to illustrate how the future mining program will stay within the permitted portion of the parcel and will avoid or mitigate for impacts to the wetland buffers.

Partially within these wetland buffers, a ditch extends southeast towards the steep slope from Wetland A. This is located northwest of the permitted area. The ditch drained through a culvert underneath a dirt road and overland, and then discharged onto the steep slope. The flow channel on the slope disperses and infiltrates partway down the slope towards the river. However, the pipe has recently been removed or blocked. In 1994, King County determined this ditch was not a stream. Preliminary assessments of the area indicate that there is likely no impact to the hydrology of the upstream wetlands as a result of these changes to the ditch. However, additional topographic details to be provided as part of the site plan/operating plan update would help clarify or confirm these assessments.

While not mapped, comments and letters have alleged the existence of unclassified streams along the northeast boundary of the pit. Field investigation didn't confirm these features. There

have also been inquiries regarding the existence of a stream on the outward slope towards the Raging River. While such a stream was confirmed on the property subject to the new expansion permit application, the stream's buffer would not be wide enough to affect work under the current permit. For additional details related to the wetland and aquatic areas, see Exhibit 14, which includes two April 11, 2017 memos from Laura Casey, the 2016 Wetland Determination documents submitted by the Quarry, the 1994 Bowles Letter, and the 2017 Cooke Site Assessment.

Conclusions

The updated site plan illustrating plans for future operations and reclamation will need to show how the quarry plans to comply with existing conditions that require they remain outside the 200 foot buffer from the Raging River and above the 300 foot contour line. This site plan should include the most up-to-date information that the quarry has regarding the wetlands in parcel 222407-9011 and parcel 222407-9033. If the updated site plans indicate identifiable environmental impacts have occurred or will occur under the proposed operational plan as a result of encroachments into the wetlands or their buffers, the plan will need to illustrate how the quarry intends to mitigate for such impacts. Details related to the ditch and culvert that was blocked in the vicinity of the Wetland A and the boundary of permitted area should be included in the updated site plan; this would include information such as a profile running between the wetland and ditch, spot elevations, cross sections, and more detailed contours as necessary to illustrate the hydrology in this area.

The quarry will need to follow a regular inspection schedule to have a qualified structural engineer evaluate the condition of the bridge and measures taken to protect it, as well as their effect on the river. Inspection reports will need to be submitted to DPER for review. This schedule may be adjusted in the future if supported by recommendations in the inspection report.

Existing buffers from critical areas (such as the 200 foot setback from the Raging River) should be surveyed and clearly marked onsite to prevent unplanned encroachment into these areas. Any final work limits that may be established following review of updated site plans should also be surveyed and clearly marked onsite to facilitate compliance with permit conditions during day-to-day operations at the quarry. While future impacts to the Raging River or the wetlands in the vicinity of the project would have the potential to affect the wider surrounding area, the existing and proposed permit conditions are intended to protect against such impacts.

Transportation

Statement of Facts

Truck traffic was a significant element of review under the original permit with specific emphasis on impacts related to noise and dust emanating from Carmichael Road and water quality from sediment track out by trucks. This resulted in conditions requiring noise attenuation berms, fences, and landscaping along the access road and paving of the access road between the scale house and Preston-Fall City Road. The noise attenuation and landscaping features were installed prior to final approval of the initial rezone. The original paving was completed in 1980 and has been repaved at least twice, most recently in February 2016. Tracking of sediment and debris onto Carmichael Road and Preston-Fall City Road, which has been the source of

numerous complaints since quarry operations resumed, is covered in the Drainage/Water Quality section.

Traffic on Preston-Fall City Road has changed significantly since approval of this permit. The permittee provided a Traffic Impact Analysis (TIA) dated August 2015 as part of their application for the expansion permit, which was also reviewed by KCDOT to evaluate any ongoing impacts from the current operation. Initial reviews have determined that additional daily trips that result from this operation do not significantly impact the current level of service; however, the analysis identified a potential safety conflict related to sight distance for trucks entering or leaving the quarry. A site visit in July 2016 confirmed that the entering site distance (ESD) to the north for trucks leaving the quarry and entering Preston-Fall City Road is less than the minimum of 610 feet that is required.

KCDOT recommended that the permittee work with a qualified traffic consultant to develop a proposal to demonstrate how the ESD standard can be met. KCDOT found that a proposal submitted by the quarry's consultant in September 2016, to install supplemental signs, in addition to the updated permanent signage installed by KCDOT in February 2016, would be insufficient to address the underlying safety issue, and the quarry has received no approval to install such signs. KCDOT Road and Traffic Engineering recommends that either a speed study be conducted with possible clearing within the right-of-way to obtain the required ESD or that a thorough investigation be conducted of clearing and possible grading within King County right-of-way and on the applicant's property. The permittee may present alternative mitigation solutions prepared by a qualified traffic consultant for review by KCDOT (Exhibit 15).

Other permit conditions related to transportation prohibit truck parking on Carmichael Road outside of normal operating hours, require locking gates at the bridge on Carmichael Road and at the intersection of Carmichael Road and Preston-Fall City Road when the site is not in use, require signage warning of truck operations, suggest circumstances that may trigger a requirement for use of flaggers at the access point to Preston-Fall City Road, and require notification to DPER whenever continuous trucking operations will be used.

There is a locking gate at the bridge on Carmichael Road but there is not one at the intersection of Carmichael Road and Preston-Fall City Road. There have been recent complaints of trucks showing up at the quarry prior to normal operating hours. During an inspection on August 23, 2017, a dump truck was observed entering the quarry at approximately 6:55 a.m. On August 11, 2017, DPER received a complaint that trucks were backed up onto Preston-Fall City Road at approximately 7:15 a.m., interfering with south-bound traffic and creating an unsafe condition. While trucks queueing on Carmichael Road between the Raging River and the Preston-Fall City Road after 7:00 a.m. is not prohibited under the current permit conditions, the impact it potentially creates to the travelling public is not acceptable and is considered a hazard.

Permit conditions related to transportation prohibit external signage except for warning, safety signs, and other required signs, require a gate at the access road, allow KCDOT to set requirements for signage and other traffic control measures, and require use of appropriate measures to keep streets and roads clean.

Conclusions

Permit conditions will be updated to incorporate all relevant rezone conditions and to reflect current standards and best practices related to transportation. Some of the current permit conditions include outdated Code references, which will be updated.

The existing permit condition requiring a locking gate at the intersection of Carmichael Road and Preston-Fall City Road will be deferred and a condition will be added requiring preparation and implementation of a traffic management plan to control movement of trucks onto the quarry prior to, and during, regular operating hours. If, after implementation of these recommendations, there is a recurrence of the August 11, 2017 traffic safety issue on Preston-Fall City resulting from trucks queueing at the entrance of the quarry, or other similar activities, additional measures may be required which may include construction of turning lanes, or other similar features, on Preston-Fall City Road.

A new condition will require a revised proposal to improve the currently inadequate ESD to mitigate for conflicts created when trucks enter Preston-Fall City Road; the design will need to be prepared by a qualified traffic consultant and will require final review and approval by KCDOT.

Permit conditions will be modified to prohibit any parking or queuing of vehicles on and the portion of Carmichael Road between the Raging River and Preston-Fall City Road before 7:00 a.m. and the Preston-Fall City Road at all times. The condition regarding fencing/gates will be modified. As discussed in the Drainage/Water Quality section of this report, there will be permit conditions related to management of track out and the potential impact of track out on public roadways, and the plan that is currently under review to address other water quality impacts along the access road will require revisions.

Noise

Statement of Facts

When the quarry property was first rezoned during the last half of the 1970's, there was no development on the west side of the Raging River on the properties that bordered the northern, western and southern boundaries of the quarry. As a result, all of the noise analyses done for the rezone and EIS was performed to address the existing properties located on the east side of the Raging River along Preston Fall City Road. One of the pre-effective rezone conditions required that berms or other sound attenuating structures be designed and constructed along both sides of Carmichael Road sufficient to bring the road and its traffic into compliance with the noise standards for private property. Pavement of the access road from Preston-Fall City Road into the quarry was also intended to reduce traffic noise. This work was completed in 1983. The King County Department of Health was given the responsibility to monitor the site for compliance with County noise standards. They were to establish an on-site monitoring device and make periodic site inspections and noise evaluations, all at the quarry's expense. There are no records in the department's files of the results of that monitoring or if it was done.

By the time the southerly 25 acres was rezoned in 1987, the properties to the north and west of the quarry had been platted into residential lots. In approving this second rezone, similar conditions regarding noise berms and repaving of Carmichael Road to mitigate noise for residents along Preston-Fall City Road were imposed. Regarding the properties to the north and west, it was concluded that noise impacts would be attenuated with increased setbacks from the

newly created residential lots because of the elevation difference between the quarry operations and adjoining properties. The Department of Health retained the responsibility to monitor noise for compliance with the County noise standards, at the quarry's expense. If operation was found to be out of compliance, the quarry would be notified and timely corrections made. The requirement for an on-site monitor was optional.

When full operations resumed in 2016, DPER received numerous complaints about noise that prompted issuance of several stop work orders between June and September 2016 for noise that exceeded King County standards. This resulted in development of noise monitoring protocols that would allow a certain level of mining and processing to continue while noise monitoring was occurring. As the testing progressed, site and operational modifications were made to reduce noise levels or otherwise attempt to comply with King County noise standards. These included, but were not limited to, construction of sound barriers around the crusher, installing shields on the rock drill and obtaining a noise easement from the adjoining property to the north. As mitigation measures were implemented and discrete aspects of the operation were found to be in compliance, the stop work order was provisionally revised to allow those activities to continue. By early 2017, most operations had been tested and found to be in compliance with the County noise standards below the 150 foot elevation (measured from the quarry floor). The exception was crushing and rock drilling occurring simultaneously. Above 150 feet, the only activity that had been tested and determined to be in compliance with noise standards was tested was stripping of overburden. Additional testing that occurred on July 5th and 6th, 2017 showed that rock drilling at the 180 to 200 foot elevation, without crushing, also met County noise standards. Additional testing is required for other quarry operations to continue at locations over 150 feet above the quarry production floor.

Prior to adoption of Ordinance 18000 which was effective on July 2, 2015, the Seattle-King County Department of Health, Environmental Health Division, was responsible for compliance with the King County noise standards. The environmental noise compliance program was significantly cut back during the 1990's and eventually eliminated. Under current noise regulations, DPER is responsible for construction noise and operational noise related to activities they permit. The Sheriff's Department is responsible for public nuisance and public disturbance neighborhood noise.

DPER staff are trained to use basic noise monitoring equipment to spot check operations for compliance with noise regulations. When more thorough monitoring or analyses is required, DPER has contracted with outside consultants to perform that work.

Conclusions

Prior to initiating full operations at the site, RRQ needs to demonstrate compliance with the permissible sound levels as established in Title 12. Until a comprehensive noise study demonstrates that quarry operations can be performed in compliance with King County noise standards at all locations within the quarry and under the full range of environmental conditions, the current operating permit needs to be conditioned as follows:

- 1) Concurrent rock drilling and crushing are not allowed.
- 2) Only rock drilling and stripping are allowed above elevation 150.
- 3) A supplemental study and noise management plan for the upper portions of the quarry must be completed prior to resuming normal operations in that area. The

testing and noise modelling for that area should include all elements of the operations that may take place at upper levels of the quarry and should be based on the operational levels the permittee intends to use during normal production.

In order to ensure continued compliance for the allowed activities, a comprehensive noise management plan, including monitoring and reporting requirements, shall be submitted within 60 days of issuance of this report for DPER's review and approval. The plan shall include provisions for curtailing or discontinuing all or a portion of quarry operations when found to be out of compliance with noise standards. .

Permit conditions need to be revised to reflect that DPER is responsible for independent noise monitoring and that the quarry will be responsible for any costs incurred by DPER in performing this work, including reimbursement for outside consultants. To ensure effective monitoring of ongoing operations, the permit will be conditioned to require prior notification and approval for any mining related activities to occur at locations over 150 feet above the quarry production floor.

Air Quality

Statement of Facts

The original SEPA review for the 1980 rezone and permit revision concluded that air quality may be affected "through dust emanating from blasting, rock transportation and crushing." Suggested mitigation measures included sprinkling areas that may produce dust with water, soil stabilization, modifications to blasting techniques, use of dust palliatives, and paving of the access road to reduce dust from truck traffic. The original rezone included one condition that required that dust be controlled on the site. The 1987 rezone was approved with the same condition.

PSCAA has the primary responsibility to monitor dust emissions, and in consultation with DPER, PSCAA provides information to the permittee regarding appropriate mitigation measures. PSCAA regulates fugitive dust through their Regulation 1, which includes the following:

- Section 9.15 requires BMPs for dust control; visible dust is allowed as long as they are taking reasonable precaution to avoid it. PSCAA doesn't distinguish between dust that remains onsite or dust that leaves the site. However, if the operation is not taking preventative measures (BMPs, etc.); then no visible dust is allowed, even if it appears to stay on the operator's property.
- Section 9.11 regulates nuisance conditions from air contaminants (including odor), which relates available enforcement to whether an actual impact is occurring to another person or property (tickets can be issued at that point by PSCAA).
- Section 9.18 is a rock crushing rule, which sets % opacity standards for visible emissions, sets particulate matter standards for crushers that have stacks, and requires an active control method.
- Rock crushers require annual registration (not a permit).

PSCAA inspected the operation in May 2016 and has been working with the quarry to ensure equipment on this site is registered as required under PSCAA policies. Opacity tests were conducted on October 31, 2016 on all of the crushing equipment including the vibratory feeder,

primary and product screen decks and associated conveyors. This test showed the equipment met the visible emissions standards in EPA Method 9 and Subpart OOO. The quarry's rock crushing equipment is now registered with PSCAA under File No. 27660.

The dust suppression techniques used by RRQ for the crusher include spray bars on the screen, crushers, and conveyors. The operator used a storage tank to provide water, but there were instances where daily operations continued without the necessary dust suppression practices after the quarry had run out of water. Additional storage has been provided which has proven to be a more reliable water source.

Complaints have been received related to odors, emissions from diesel vehicles and blasting, and other potential air contaminants. Plumes of dust or smoke resulting from blasting have been observed, and there is no approved plan in place to determine when additional measures must be taken to control such emissions or to evaluate when weather or other circumstances may result in such blasting emissions being carried to adjacent properties.

RRQ submitted a Dust Mitigation Plan to DPER on August 4, 2017 that describes their emissions control plan for all of their operations (Exhibit 16). The sections on blasting, loading, hauling, sorting stockpiling and excavation discuss generally what could be done, when necessary, but do not describe what will be done and when. There are also no contingencies in the plan for when alternative measures might be necessary or conditions when operations should be curtailed or discontinued because of excessive emissions. The section on blasting does not evaluate alternative blasting techniques to reduce blast induced emissions.

There are a number of existing permit conditions related to air quality, emissions, or dust control that need to be updated to meet current standards. Transportation related conditions such as limitations on queuing of trucks, indirectly affect air quality and also need to be revised.

Conclusions

The permit conditions associated with air quality will be updated to be consistent with language in current code and to ensure that all conditions associated with the PSCAA approval are incorporated into the grading permit Emissions from trucks parking, queuing or idling along the access road and emissions from blasting need to be addressed in the quarry's emissions control plan.

The permittee's emissions/dust suppression plan for the site, will need to be revised to incorporate specific BMP's that will be utilized for each part of their operation with a special emphasis on controlling emissions from movement of materials off the slope, feeding of the processing equipment, fumes, diesel emissions, dust/smoke from blasting and other air contaminants. The plan should demonstrate that the quarry is taking all practicable steps necessary to control dust or other emissions in every element of the operation.

Visual/Aesthetics/Safety

Statement of Facts

The SEPA impact analysis regarding this element primarily resulted in the establishment of buffers between the M-zoned property and the adjacent residential properties. As discussed, in

the Zoning/Land Use section of this report, some of the buffers and setbacks that were established under the rezone applications to provide visual or audial screening apply primarily the parcels that would be subject to the expansion permit application, and do not have much of an effect on the areas under the current permit..

Current permit conditions require the site be provided with a fencing, signage, and a locked gate. In addition, KCC 21A.22.060.C gives DPER authority to require fencing whenever it determines they are necessary to eliminate a safety hazard. During a site inspection on August 8, 2016, it was determined a fence was needed on the quarry's north property line in the vicinity of 329th Avenue SE to discourage unauthorized access into the quarry. This was to be in addition to signage and video cameras that had been placed prior to the scheduled inspection. The fence was to be installed by September 30, 2016 in accordance with standards in KCC 21A.22.060.(C2,4, and 5). An inspection on August 11, 2016 revealed the additional fence/gate has not been installed. However, there have been no additional reports of unauthorized access into the quarry since the signs and cameras were installed.

Other screening techniques employed on site that address visual impacts are discussed in the Noise and Transportation sections of this report. Potential future visual and aesthetic impacts from the quarry are also addressed as part of reclamation plans for the site.

Conclusions

Permit conditions will be updated to conform to existing regulations and ensure compatibility with applicable P-suffix conditions.

The permit will not be conditioned at this time to require installation of the fence on the north property line in the vicinity of 329th Ave SE.

Blasting

Statement of Facts

This hard rock quarry regularly uses blasting to produce raw product, which is then processed into various sized aggregates. Blasting was the source of significant discussion during review of the two rezone applications. The original rezone included a pre-effective condition that the applicant and the division work to establish a warning signal system that was audible to the residents in their homes. In addition, the following rezone condition was added to their operating permit:

All blasting to be performed at the site shall be 'confined' blasts and shall be done in accordance with State and Federal regulations. The preparation and actual blasting operation shall be conducted under the supervision of a licensed blasting contractor. All blasting shall be confined to no more than twice a week and only between the hours of 3:00 p.m. and 4:30 p.m., Monday through Friday. Notice shall be given to local area residents at least 5 minutes prior to detonation. Notice shall either be by way of a bell, siren or whistle audible within the surrounding area for at least a distance of one mile from the site.

During the second rezone, concerns were again raised about possible vibration damage from blasting. In recommending approval of that rezone, the examiner concluded that the lateral movement of the quarry operations away from the existing developed properties, together with

the vertical/horizontal setbacks proposed, and the blasting engineer ability to control ground vibration by limiting the amount of explosives used should not result in significant impacts to nearby residents. The 1987 rezone was approved with the addition of three more conditions that made the quarry responsible for any blast related damages to nearby properties, including domestic water supplies, required prior approval from King County before explosives could be stored on site and added the following:

“The blast warning signal shall be modulated, directed or otherwise controlled to reduce its impact on adjacent residents to the maximum extent feasible consistent with assuring audibility of the signal for one mile radius area from the location of the blast”.

As noted earlier, the 1987 rezone conditions do not apply to the current operating permit.

Since the quarry resumed operations, DPER has received complaints after each blast from surrounding property owners regarding lack of proper advance notice, excessive ground movement, excessive air movement, noise, dust and other blasting emissions. Each blast is monitored by a licensed blaster for ground motion, airblast levels, and flyrock in accordance with accepted standards for blasting from the Office of Surface Mining Enforcement and Reclamation’s (OSMRE) Blasting Guidance Manual. The standards established by OSMRE, especially for vibration and airblast are intended to avoid impact to residential structures. In their simplest form, ground vibration must not exceed 1.0 inch per second (ips) and airblast must not exceed 133 decibels (dB) at any dwelling. The blasting reports have shown ground vibration levels that range from .045 ips to .4 ips, all within the acceptable limits.

Air movement produced by blasts results in audible and inaudible waves that, at certain levels, may be experienced as “noise” at properties surrounding a blast. The King County standard for airblast, based upon the standards adopted by OSMRE, is 133 dB at the nearest residential property or point of public assembly. The blasting reports have shown airblast readings in the range of 108 dB to 121 dB, all within the acceptable limit.

There has been no flyrock generated from any of these blasts.

The rezone conditions include specific requirements for providing notification of upcoming blasts. They are currently using a locomotive horn as a warning device, and they have been experimenting with the location of the horn. They have not yet identified a location where testing demonstrates the horn is consistently audible at the one mile distance required. DPER has verified that the siren/horn is capable of being heard a mile distance from the quarry but various complaints DPER has received indicate that at lesser distances from the quarry it is not being heard. The other issue is that the siren/horn is not required to be audible within a structure. S. Reactions and comments received from neighboring properties indicate ongoing dissatisfaction with the efficacy of the current notification system.

Slope stability related to blasting is addressed by requirements that the licensed blasting contractor follow OSMRE guidance and standards. A geotechnical report submitted in September 2016 concluded that blasting operations at this site are in general accordance with established industry practices and criteria, and the required adherence with the maximum allowable vibration criteria set in WAC 296-52 is an appropriate risk reduction measure for this site. The consultant recommended that steep slopes in the vicinity of active timber harvest,

blasting, and excavation be routinely inspected for signs of instability or disturbance caused by these practices.

During a blast that occurred on July 27, 2017, rock and other material was dislodged and was deposited onto the steep slope above the Raging River. Prior to additional blasting, the quarry is required to submit a geotechnical evaluation to assess the cause of the rock/debris fall, evaluate the stability of the debris discharged onto the slope, suggest measures that need to be taken to clean up and/or stabilize the debris, and provide recommendations to ensure additional erosion, landslide, or slope stability impacts do not occur again in the future. The required geotechnical evaluation was submitted on August 15, 2017. The report recommended that no blasting occur along the eastern portion of the quarry until the following items had been completed:

- 1) Regrade/remove over-steepened slopes, remove the loose/unstable debris above/below the 300 foot elevation and revegetate/stabilize impacted areas.
- 2) The two overhanging logs that protrude over the blast debris are removed; and
- 3) A blasting plan is prepared that incorporates the recommendations of the geotechnical engineer that will not destabilize the slope to the east or result in further rock/debris falls onto the slope above the Raging River.

The two overhanging logs that protrude over the blast debris was removed.

Dust and emissions related to the blasting process are discussed in the Air Quality section of this report.

Existing permit conditions related to blasting contain outdated references to King County Code and do not match currently accepted procedures for blasting and explosives. Code requires that all blasting be conducted under an approved blasting plan (KCC 21A.22.070.B).

Conclusions

As provided in KCC 21A.22.070.(B), RRQ needs to submit a comprehensive blasting plan for the site. The plan should include, but not be limited to, a program for monitoring blasting, timely filing of monitoring reports, effective, predictable and timely notification to the community of upcoming blasts, and -a community outreach and complaint response program. It should also include descriptions of the proposed blast designs including measures to reduce dust/smoke during blasts, reduce airblast, and include recommendations to ensure additional erosion, landslide, or slope stability impacts do not occur. The plan should reflect the need for the permittee and their blasting contractor to comply with the Office of Surface Mining Enforcement and Reclamation (OSMRE) 1987 Blasting Guidance Manual, which was reprinted in 2004 as the U. S. Bureau of Mines (USBM) Explosives and Blasting Procedures Manual.

Prior to commencing any work in the area affected by the July 27, 2017 rock/debris fall, a detailed plan will be required that is prepared or approved by the geotechnical engineer that details how this work will be accomplished with specific recommendations for short and long term stabilization and revegetation, including specific recommendations for avoiding/minimizing vegetation removal below elevation 300.

As part of the community outreach element of the blasting plan, RRQ will need to propose a system that effectively provides the necessary information to affected property owners about upcoming blasting, results in predictability regarding blasting, satisfies the minimum standards outlined in the rezone conditions, can be tested prior to final implementation, and includes a mechanism for soliciting input from the surrounding property owners (seeking information about the residents' preferred means of notice and whether the permittee's proposed means of notice will be sufficient) prior to final approval and implementation of the notification plan. This notification plan may include elements such as annual outreach to surrounding property owners or residents, discussion of alternative types of notification to supplement the warning device described in the rezone condition, methods to regularly disseminate the schedule for blasting, modulation of the location, volume, and type of warning device currently used for notification, and a process for updating, adjusting, and monitoring success of the notification system.

In the interim, the conditions will be updated to incorporate blast monitoring requirements (air and ground movement), a reporting program with a defined timeline for submittal of the blasting reports, and certain applicable OSMRE best practices and procedures. Compliance with some of these new conditions may not affect operations much, as the licensed blasting contractor used at this site adheres to current OSMRE procedures. Also, the permit conditions need to be updated to consistently incorporate the rezone conditions related to blasting.

I. Decision, Approval, and Issuance

This periodic report and supporting file documentation provides a sufficient level of information to establish whether the permitted site is operating consistent with all existing permit conditions and whether there are identifiable environmental impacts.

Pursuant to KCC 21A.22.050, King County is requiring that the following additional or revised permit conditions and/or revisions to existing plans are to be applied to the existing grading permit GRDE15-0004 to mitigate identifiable environmental impacts and/or bring the site into compliance with its permit conditions. The new conditions and changes shall be added to the permit through the permit revision process.

Conditions Requiring Follow-up Action(s) by the Permittee

Administrative

1. Within 30 days of the date when updated bonding requirements are set by DNR, for the updated reclamation plan, submit documentation to DPER that these bonding requirements have been met. .
2. Within 30 days of the date when updated financial guarantee amounts have been set by the County, submit the updated guarantees to DPER.

Zoning/Land Use

3. Within 90 days of the date of this decision, submit a permit revision to DPER for review and approval, including updated operating mining plans and other operational plans as detailed below. These plans shall show no mining or reclamation work occurring outside the portions of parcels 222407-9011 or 222407-9035 that are currently covered by this grading permit for mining. The plans shall satisfy the general

requirements for site plan submittals for clearing and grading permits and shall incorporate:

- a) Accurate depictions of the current working faces of the mine.
- b) Proposed configurations of the activity areas for ongoing operations.
- c) Details listed as items c.i through c.iii below, related to potential geological impacts at the site, which shall be consistent with recommendations contained in geotechnical evaluations currently approved or under review by DPER or shall be accompanied by an updated evaluation or memo containing supplemental recommendations from a geotechnical consultant that support the proposed strategies.
 - (i) Grading details sufficient to demonstrate how the permittee proposes to excavate and blast at the top of the slopes near the proposed mining limits without causing additional erosion and landslide impacts.
 - (ii) Details regarding stabilization measures that have been or will be undertaken to address the 2015 sediment discharge that occurred when excavated materials were inadvertently pushed over the ridge onto the slope below the scale house.
 - (iii) Details related to any necessary abatement measures needed to address the August 2017 sediment discharge onto the slope that occurred during blasting.
- d) Site improvement plan elements as necessary to complete a drainage review. These shall include:
 - (i) Stormwater facility layout and details, which shall be consistent with the revised TIR and supporting calculations.
 - (ii) Details related to the ditch and culvert that was blocked in the vicinity of Wetland A and the boundary of the permitted area as necessary to analyze the relationship between the ditch and Wetland A hydrology. These supplemental details could include a combination of the following: a profile running between the wetland and ditch, spot elevations, cross sections, and more detailed contours sufficient to document the hydrology of this specific area.
 - (iii) Layout/details of erosion and sediment control or SWPPS measures that will be maintained for ongoing operations.
- e) The location of all quarry-owned structures, including the office and scale building, and their relationship to the King County Right of Way (ROW) boundaries. For all structures that are partially within ROW boundaries, either:
 - i) A Special Use Permit or other KCDOT approval to use the ROW for non-transportation purposes shall be obtained following final approval of the updated site plan, or
 - ii) The structures shall be relocated to an acceptable location outside the ROW.
- f) Proposed final mining limits that would be feasible under the current permit.
- g) Proposed work limits for reclamation areas that match the updated reclamation plan filed with DNR for review.
- h) Updated information related to potential impacts to critical areas. However, these details may be added to the site plan at a later point in the review process

due to timing requirements related to updating the wetland delineation and categorization.

i) Any other relevant requirements noted in these conditions.

4. Within 15 days following approval of the updated site plan, survey, stake, and flag the proposed final mining limits consistent with the approved site plan. These demarcation lines shall be maintained in a permanent and visible manner with accurate flagging throughout the lifetime of the mining and reclamation processes.

Reclamation

5. An updated reclamation plan shall be submitted to the Washington State Department of Natural Resources (DNR) for review and approval in accordance with chapter 78.44 RCW concurrently with submittal of a permit revision application to DPER.

Drainage/Water Quality

6. Within 90 days of the date of this decision, submit a supplement to or revisions to the technical information report (TIR) and supporting calculations currently under review by DPER, to document adequacy of the existing stormwater management facilities for ongoing operations at the currently permitted site. The revisions or supplement shall:
 - a. Be consistent with the required updates to the site plan, operating plan, and reclamation plan.
 - b. Include calculations and other supporting information documenting whether or not the site will be in compliance with the 2016 Surface Water Design Manual and the Construction Stormwater Pollution Prevention Manual. Revisions shall address areas contributing runoff to the site that reflect the actual open/active mining areas, impervious surfaces, vegetation, other groundcover, and soil types anticipated on the currently permitted portion of the property during all phases of mining operations through final reclamation. This may require explanations of the assumptions used in the engineer's selection of land use classifications or other parameters for the model. The report shall discuss required elements relevant to the existing mine site, such as the Operations and Maintenance Manual for the drainage facilities.
 - c. Provide information and analysis related to stormwater management and pollution prevention proposed for portions of the site that do not flow to the current stormwater facilities, including the bridge crossing the river and the access road from the scale house to Preston-Fall City Road, which shall be consistent with the required revision to the Road Surface Management Plan.
7. Within 90 days of the date of this decision the permittee shall submit a revision to the May 2017 Road Surface Management Plan currently under review by DPER, which shall a) propose additional measures to avoid tracking dirt and debris onto the bridge crossing and the portion of Carmichael Road that currently direct discharges to the Raging River and b) specify pollution control and clean-up measures to avoid water quality impacts to the Raging River from maintenance and clean-up of the access road.

Noise

8. A comprehensive noise management plan, including monitoring and reporting requirements, shall be submitted within 90 days of issuance of this report for DPER's review and approval. This comprehensive noise management plan, shall include provisions for curtailing or discontinuing all or a portion of quarry operations when

operations are found to be out of compliance with KCC 21A.22.070.A.1 or KCC chapter 12.86.

9. The quarry will be responsible for any costs incurred by DPER in performing independent noise monitoring, including reimbursement for outside consultants. This condition will sunset after the approval of a comprehensive noise management and monitoring plan and at least one year of monitoring in accordance with that plan has shown the quarry operations are in compliance with the noise standards.

Air Quality

10. Within 90 days of the date of this decision, submit a revised emissions/dust suppression plan for the site identifying, at a minimum, methods to address 1) fugitive dust from stockpiles, materials handling, and processing, 2) diesel fumes and 3) dust/smoke emissions from blasting. This plan shall be consistent with PSCAA requirements and KCC 21.22.070.C and include specific BMPs that will be utilized and identification of conditions that would necessitate curtailing or discontinuing operations.

Transportation

11. Within 60 days of the date of this decision, submit a revised proposal to improve the currently inadequate entering sight distance (ESD) to mitigate for conflicts created when trucks enter Preston-Fall City Road. The design for these improvements shall be prepared by a qualified traffic consultant and will require final review and approval by KCDOT. The final proposal approved by KCDOT to address the ESD shall be incorporated into the final approved operating plan.
12. Within 60 days of the date of this decision, submit a request to the KCDOT requesting a haul road or other similar agreement to cover unexpected expenditures by KCDOT to clean up King County roads in the vicinity of the quarry that are impacted by quarry operations.
13. Within 90 days of the date of this report, submit an updated bridge inspection report by a structural engineer on the condition of the Carmichael Road Bridge, including measures taken to protect the bridge and their effect on the flow of the Raging River. If the recommendations of the bridge inspector indicate that corrective actions are required, conditions may be imposed upon the permit, or, if necessary, annual renewal of the clearing and grading permit may be denied, to assure that the necessary corrections are made. The initial inspection should also include recommendations for scheduling future bridge inspections.
14. Within 60 days of the date of this decision, submit for review and approval by King County, a traffic management plan to control movement of trucks into the quarry prior to, and during, regular operating hours.

Blasting

15. Submit a comprehensive blasting plan to DPER for review and approval in accordance with KCC 21A.22.070.B within 60 days of the date of this decision. The blasting plan shall include a proposal to improve the site's current system of blasting notification, evaluate feasibility of reducing airblast levels, and be consistent with all other requirements of these conditions.

Critical Areas

16. In conjunction with preparation and review of a final wetland delineation and categorization, subject to approval by DPER, the wetland boundaries and associated buffers for wetlands located on parcel 22407-9011 and parcel 22407-9033, shall be clearly flagged after December 1, 2017, but prior to January 1, 2018, with this demarcation maintained until agreement has been reached regarding 1) the final mining limits under this permit and 2) any required mitigation for wetland impacts.

Ongoing Permit Conditions, effective immediately

The following conditions will replace the existing permit conditions in their entirety. These conditions include the relevant conditions from the 1984 rezone, conditions from the 1987 rezone that address environmental issues related to ongoing operations and current operating standards from KCC Chapters 16.82, 12.86, and 21A.22. These conditions will be in effect until the permit revision that will be filed pursuant to this periodic review decision has been approved. Subsequent to the permit revision approval, some of these conditions will be replaced with similar but more relevant conditions. Others will be retained in their entirety or revised.

Administrative

1. A valid clearing and grading permit shall be maintained on this site until the reclamation of the site required under chapter 78.44 RCW is completed (**KCC 21A.22.081.A**).
2. This operation shall be subject to the conditions of King County Ordinances 3108 and 1488, as amended and KCC 21A.22. Any subsequent modification to equipment due to technology may be subject to additional standards at that time.
3. The applicant shall maintain a liability policy in the amount of one hundred thousand per individual, three hundred thousand per occurrence, and fifty thousand property damage (\$100,000 / \$300,000 / \$50,000), and shall name King County as an additional insured. King County must receive proof of this policy prior to commencement of any work authorized under this permit (**KCC 16.82.090**).
4. The applicant shall maintain the existing \$21,500 reclamation bond on file with the state at full value until such time as the level of the reclamation bond requirement is updated by the state DNR.
5. If work is to be suspended for 30 or more consecutive calendar days, permittee shall notify DPER prior to the cessation of work indicating their intention to do so and also prior to restarting operations.
6. In the event that extraction activities cease for a period in excess of 120 days, all trucks and equipment shall be removed from subject property until such time as excavations are recommenced. No maintenance of equipment shall be allowed during periods that the quarry is dormant.
7. The issuance of the grading permit does not relieve the operators from obtaining other required State and local permits.
8. Failure to comply with any of the conditions contained within this permit shall be cause for suspension and/or revocation of the permit and fines and penalties pursuant to King County Code Title 21A (Zoning) and Title 23 (Code Compliance) and Chapters 9.04 and 9.12 (Storm Water) and 16.82 (Grading).

9. The applicant shall maintain an onsite log of activity. The log shall briefly describe each day's activities, start time, stop time, number of trucks entering and leaving, and what activities occurred, such as drilling, blasting, crushing, pond maintenance, or any other activities. The log shall be kept in the scale house available for review by DPER's site inspector. Summaries of the log, indicating the amount of rock removed from the site, the number of truck trips generated each quarter, and the number, size, and dates of all blasts, shall be prepared quarterly and similarly stored in the scale house and made available to DPER's site inspector upon request.
10. A copy of the approved plans, conditions, and permit must be on the job site whenever work is in progress.

Zoning/Land Use

11. Mining-related uses and activities shall setback a minimum of 75 feet from the RA-10 zoned properties along the western property line, 150 feet from the northwest parcel boundary (adjacent to parcel 2224079011), and 200 feet from the Raging River, but in no case closer to the Raging River than the 300 foot contour line.
12. A minimum 150 foot setback shall be maintained between quarry operations and property authorized to be developed for residential use along the northwest corner of the triangular portion of parcel 2224079011, of which not less than 75 feet shall be on the M zoned property. The entire 150 foot setback shall be a native growth protection area. No alterations are allowed to the native growth protection area without express written approval from DPER.
13. No removal of vegetation shall be permitted within 200 feet of the Raging River or lower than the 300 foot contour, whichever is greater (except to accommodate the necessary drainage ditches). These demarcation lines shall be clearly staked and maintained during the mining process.
14. Boundaries of the clearing limits shown on the approved updated site plan shall be surveyed, staked, and clearly flagged in the field. No land disturbing activities that would require a permit shall be allowed beyond the flagged clearing limits. The flagging shall be maintained by the permittee in a permanent manner throughout the lifetime of the mining and reclamation processes.
15. The surveyed, staked and flagged limits of mining, the required setbacks from the Raging River, and previously approved clearing limits shall be maintained for the duration of quarry operations.

Reclamation

16. Rehabilitation of the subject property shall be done in conformance with the provisions of KCC 21A.22.081.
17. The granting of this permit does not imply approval of any permit(s) which may be required for site rehabilitation.
18. The department may modify reclamation requirements of KCC 21A.22.081 or within these permit conditions when not applicable or if it conflicts with an approved subsequent use for the site (**KCC 21A.22.081.D**).

Drainage/Water Quality

19. The operator shall control surface water and site discharges to comply with KCC chapter 9.04 and the surface water design manual and KCC chapter 9.12 and the stormwater pollution prevention manual. For the life of the mineral resource operation and until site reclamation is complete, the operator shall maintain a valid Washington

State Department of Ecology National Pollutant Discharge Elimination System (NPDES) individual permit or maintain coverage under the sand and gravel general permit. The operator shall keep onsite and available for department review copies of the erosion and sediment control plan, the applicable NPDES individual or general permit and the Stormwater Pollution Prevention Plan. The operator shall make the plans and permit available for inspection upon request. The operator shall provide to the department copies of the monitoring results on permit monitoring data submittal dates. The department shall make the monitoring results available for public inspection. If the department determines that National Pollution Discharge Elimination System monitoring frequency or type is not adequate to meet the demands of the site and the requirements of this subsection, the department may require more frequent and detailed monitoring and may require a program designed to bring the site into compliance (**KCC 21A.22.070.F**).

20. The operator shall not excavate below the contours determined through hydrologic studies necessary to protect groundwater and the upper surface of the saturated groundwater that could be used for potable water supply (**KCC 21A.22.070.G**).
21. If contamination of surface or ground water by herbicides is possible, to the maximum extent practicable, mechanical means shall be used to control noxious weeds on the site (**KCC 21A.22.070.H**).
22. All drainage ditches, interceptors, and holding ponds shall be kept clean and free of obstructions. These and other erosion sedimentation facilities shall be maintained in good working condition throughout the life of the mine.
23. The operator shall provide maintenance, monitoring, and adaptive monitoring of erosion and sediment control measures and facilities, including any necessary replacement or upgrades to these facilities, through completion and final reclamation of mining operations as required through previous reviews and approvals. The permittee shall inspect the ESC facilities at the end of each working day to assure that they are in good working condition. If these facilities require repair or maintenance, it shall be performed prior to the end of the working day. All disturbed areas shall be promptly and thoroughly stabilized against erosion during periods of wet weather when work is suspended.
24. **E-18** Erosion sedimentation control facilities on inactive sites shall be inspected and maintained a minimum of once a month or within 48 hours following a storm event.
25. **E-21** Where seeding for temporary erosion control is required, standards set forth in appendix "D" of the King County Surface Water Design Manual shall be used.
26. **E-22** Where straw mulch for temporary erosion control is required, it shall be applied at a minimum thickness of 2-inches.

Noise

27. The operation shall comply with KCC 21A.22.070.A.1, which requires compliance with the noise standards in KCC chapter 12.86.
28. Maximum hours of operation are as follows:
 - a. 7:00 a.m. to 7:00 p.m. Monday through Friday; provided, however, loading of the trucks shall be restricted to the hours of 7:30 am to 4 pm.
 - b. 8:00 am to 4:30 pm Saturday; provided, however, that activity on Saturdays shall be restricted to maintenance of equipment.

These hours of operation may be increased only in the event of an emergency situation as identified by the manager of DPER. Maintenance of equipment may occur on the site

only during the stipulated hours of operation. Minor maintenance, such as lube or oil changes, of equipment is permissible during non-operating hours provided that in no event shall such equipment be started and tested outside the approved operating hours (P-suffix #4).

29. Crushing and drilling shall not be conducted concurrently at any location on the site until a comprehensive noise study, approved by DPER, demonstrates that concurrent operations can be conducted in compliance with permissible sound levels in KCC 12.86.
30. The only work that may be conducted at an elevation of greater than 150 feet above of quarry production floor is rock drilling and excavation for stripping overburden until a comprehensive noise study, approved by DPER, demonstrates that other quarry operations can operate above elevation 150 in compliance with permissible sound levels in KCC 12.86.
31. Prior to initiating full operations at the site, the permittee shall demonstrate compliance with the permissible sound levels as established in Title 12.
32. Berms, solid fencing, and landscaping on both sides of the Carmichael Road, from the intersection of the Preston-Fall City Road to the quarry office and scale, shall be maintained to the satisfaction of DPER as necessary to reasonably mitigate noise and visual impacts of the quarry, as they affect persons traveling on the Preston-Fall City Road and adjacent and nearby residents.
33. The applicant shall construct and/or maintain rock berms or acoustical walls around the rock crusher, screener, and other similar types of stationary and semi-stationary noise producers. Said berms or walls shall be included in the noise comprehensive noise plan and constructed to the satisfaction DPER.
34. DPER shall have the authority to require monitoring devices to be located on or adjacent to the site to assure compliance with King County noise regulations. The permittee shall reimburse the County for all costs incurred to conduct independent noise monitoring.
35. The permittee shall provide notification to DPER for and must receive prior approval from DPER for any mining-related activities above an elevation 150 feet.
36. In the event that noise occurs in excess of the allowed levels, the operators shall cease operations that are causing the excessive noise until measures are implemented to correct the violation. Failure to implement corrective measures in a timely fashion may result in the imposition of a Stop Work Order and, if necessary, other enforcement measures.

Air quality

36. The permittee shall comply with Puget Sound Clean Air Agency (PSCAA) requirements for registration or permits, and copies of the permit or registration shall be kept onsite and available for department and public inspection. The permittee shall comply with all other PSCAA requirements, including, but not limited to, emission standards, control methods, best management practices, monitoring, and/or inspections. Monitoring data related to required PSCAA registration or permits shall be provided to DPER on the submittal dates (KCC 21.22.070.C.1 and KCC 21.22.070.C.2).
37. Dust and smoke from processing operations at the site shall be controlled, such that there is no significant increase the existing levels of suspended particulates at the perimeter of the site, in compliance with KCC 21.22.070.C.3.

Transportation

38. The applicant shall be responsible for maintenance, to the satisfaction of KCDOT, of existing warning signage along Preston-Fall City Road, which was previously approved by KCDOT and installed to comply with the rezone conditions. If there are changes to the traffic flow or nature of truck operations along Preston-Fall City Road, the applicant may be required to update the specific character and nature of the signage when determined necessary by KCDOT in accordance with KCC 21A.22.070.E.
39. DPER or KCDOT may require the applicant to provide flaggers when truck traffic at the quarry would interfere with the normal traffic flow along the Preston-Fall City Road or when otherwise determined necessary in accordance with KCC 21A.22.070.E.
40. The applicant shall notify DPER at least 48 hours prior to commencing continuous trucking operations, which shall mean an average, over a four hour period, in excess of one truck leaving or entering the site every 5 minutes.
41. No signs, other than signs required by KCC 21A.20 and these conditions, are allowed.
42. Existing access road paving, from the Preston-Fall City Road to at least the quarry office and scale, in conjunction with other measures as needed, shall be maintained to the satisfaction of KCDOT and DPER, to prevent rocks, dirt, mud, and any raw or processed material from spilling from or being tracked by trucks onto public roadways in accordance with KCC 21A.22.070.D and to minimize additional noise.
43. No rock, debris or dirt attributable to trucks leaving the site will be tracked or spilled onto the Preston-Fall City Road.
44. RRQ will reimburse King County DOT for any costs incurred by them to clean up or repair damages to County R-O-W resulting from the quarry operations.
45. Parking or queuing of vehicles shall be prohibited on the portion of Carmichael Road between the Raging River and Preston-Fall City Road before 7:00 a.m. and on Preston-Fall City Road at all times.

Visual /Aesthetics/ Safety

46. Security fencing meeting the requirements of KCC 21A.22.060.C shall be maintained along the parcel boundary at the northwest corner of the property. A lockable gate shall be maintained at any road access to the site. Additional warning signs, trespass signs, fences, and/or alternatives to fences shall be provided if determined necessary by DPER in accordance with KCC 21A.22.060.C.

Blasting

47. Blasting shall be conducted under an approved blasting plan in accordance with KCC 21A.22.070.B.
48. In accordance with KCC 21A.22.070.B.3, blasting shall be conducted according to a time schedule, provided to residents within one-half mile of the site, that features regular or predictable times, except in the case of an emergency. If requested by a resident, the operator shall provide notice of changes in the time schedule at least twenty four hours before the changes take effect.
49. All blasting to be performed at the site shall be "confined" blasts and shall be done in accordance with State and Federal regulations. The preparation and actual blasting operation shall be conducted under the supervision of a licensed blasting contractor. All blasting shall be confined to no more than twice a week and only between the hours of 3:00 p.m. and 4:30 p.m., Monday through Friday. Notice shall be given to local area residents at least five minutes prior to detonation. Notice shall either be by way of a bell, siren, or whistle and audible within the surrounding area for at least a distance of

one mile from the site. The blast warning signal shall be modulated, directed, or otherwise controlled to reduce its impact on adjacent residents to the maximum extent feasible consistent with assuring audibility of the signal for one mile radius area from the location of the blast. Explosive materials shall only be stored on the subject property with the prior approval of DPER.

50. Blast monitoring shall be conducted consistent with the methods specified in the Office of Surface Mining Enforcement and Reclamation 1987 Blasting Guidance Manual in accordance with KCC 21A.22.070.B, and reports summarizing monitoring results shall be submitted to DPER promptly after the blast. No additional blasting is allowed until the report is submitted to DPER.
51. The quarry operator shall be responsible for any damage to nearby properties, including domestic water supply wells, attributable to blasting on the subject property. Claims for any such damage shall be the responsibility of the affected property owner and the quarry operator to handle directly between themselves, but a failure of the quarry operator to respond in good faith to any such claim may be cause for denial of future grading permits, or prohibition or restriction upon future blasting.

ORDERED THIS 15th day of September, 2017



Jim Chan
Assistant Director for Permitting
Dept. of Permitting and Environmental Review

Transmitted on September 15, 2017 to the Parties and Persons of Record listed in Exhibit 17.

EXHIBITS

- Exhibit 1 – Approved Plan dated May 10, 1973
- Exhibit 2 – Ordinance No. 6653
- Exhibit 3 – 1984 Rezone conditions from File No. 134-74-R, as revised in February 1985
- Exhibit 4 – Early permit conditions from 1982 annual renewal, referencing rezone conditions
- Exhibit 5 – 1979 Final EIS
- Exhibit 6 – 1983 Approved Stormwater Improvements Site Plan
- Exhibit 7 – Rezone conditions in 1987 Hearing Examiner's Report and 1988 EIS Addendum
- Exhibit 8 – Permit Conditions related to KCC 16.82 and KCC Title 21, as amended in 1992
- Exhibit 9 – 2016 Revised Letter Report, Geotechnical and Geological Hazard Evaluation
- Exhibit 10 – 1986 Plans for Rezone of Southern Parcel
- Exhibit 11 – Slope Evaluation Revised Summary Letter (August 14, 2017 Geotech Memo)

- Exhibit 12 – Draft Technical Information Report (TIR) for GRDE15-0166, Sept. 2016
- Exhibit 13 – Draft Road Surface Management Plan, May 2017
- Exhibit 14 – Wetland Memos from Laura Casey, 1994 Bowles Letter, 2016 Wetland Determination Memos submitted by Quarry, Cooke Site Assessment
- Exhibit 15 – August 2015 Traffic Impact Analysis (TIA), KC DOT Comments on TIA, September 2016 GTC Memo, KC DOT Response to GTC Memo
- Exhibit 16 – Draft Dust Mitigation Plan
- Exhibit 17 – Complete List of Parties and Persons of Record

The complete file and all other documents used in the review and preparation of this report are available for public viewing. You may arrange to review the record by contacting the Permit Center at (206) 296-6600. Please reference the permit name and number when making your request.

RIGHT TO APPEAL

This action may be appealed in writing to the King County Hearing Examiner, with a fee of \$250 (check payable to King County Office of Finance).

Filing an appeal requires actual delivery of an appeal statement and an appeal fee to the King County Department of Permitting and Environmental Review prior to the close of business 4:00 p.m. on **October 9, 2017**. The cashier is located near the reception desk. Prior mailing is not sufficient if actual receipt by the Department does not occur within the applicable time period. The Examiner does not have authority to extend the time period unless the Department is not open on the specified closing date, in which event delivery prior to 4:00 p.m. on the next business day is sufficient to meet the filing requirement.

The appeal statement shall: 1) Include a copy of, or clearly identify, the decision being appealed; 2) Identify the location of the property subject to the appeal, if any; 3) Identify the legal interest of the appellant; 4) Identify the alleged errors in the decision; 5) State specific reasons why the decision should be reversed or modified; 6) State the harm suffered or anticipated by the appellant; and 7) Identify the relief sought.

Failure to submit a timely and complete appeal statement and the appeal fee deprives the Examiner of jurisdiction to consider the appeal. Appeals must be submitted to the Department of Permitting and Environmental Review addressed as follows:

LAND USE APPEAL
Department of Permitting and Environmental Review
35030 SE Douglas St., Suite 210
Snoqualmie, WA 98065-9266

A request for a pre-hearing conference may be made by any party. For more information regarding appeal proceedings and pre-hearing conferences, please contact the Office of the Examiner at 206-477-0860 for a Citizens' Guide to the Examiner hearings and/or read K.C.C. 20.22.

