4-B-09-UR\_cor\_Hale

# KRAMER RAYSON LLP

- ATTORNEYS AT LAW-----

July 6, 2009

VIA HAND DELIVERY

POST OFFICE BOX 629 KNOXVILLE TENNESSEE 37901-0629

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METROPOLITAN

105 DONNER DRIVE, SUITE B OAK RIDGE TENNESSEE 37830 TELEPHONE 865 220-5134 TELECOPIER 865 220-5132

R R. KRAMER (1888-1966) CARTER B. WALL (1915-1968) ANDREW JOHNSON (1918-1985) JACKSON C. KRAMER (1921-1993) R ARNOLD KRAMER (1918-1993)

Mr Dan Kelly Director of Development Services 400 Main Street, Suite 403 City/County Building Knoxville, Tennessee 37902

#### In re: Amended Use on Review Application of Vulcan Lands, Inc. MPC No. 4-B-09-UR

Dear Dan:

Based on discussions between representatives of the Buttermilk, Graybeal, Everett, Pittman, and Yarnell Communities ("Community") and representatives of Vulcan Lands, Inc ("Vulcan"), they have agreed to the following additional conditions in connection with Amended Use on Review Application (4-B-09-UR) related to the 105 acres of property Vulcan owns that lies southwest of Graybeal Road and which adjoins the currently permitted area for its quarry operation, that area referred to herein as the New Area ("New Area") which additional conditions have been noted in text form on the attached exhibits marked as <u>Exhibit 1</u> <u>Supplemental and Exhibit 2 Supplemental</u>:

1. Vulcan will construct berms as noted on <u>Exhibit 1 Supplemental</u> in the New Area along Buttermilk Road and Graybeal Road The berms will be constructed in accordance with Knox County Zoning Regulations as recommended by the staff of the MPC. The toe of the berm will be no less than 100 feet from the rights of way of Buttermilk Road and Graybeal Road Because of the Hickory Creek flood plain, the berm will terminate as shown on Exhibit 1 Supplemental At this point, the end of the berm will be no less than 500 feet from the common property corner between Vulcan and its adjacent property owner, which is more than the 200foot distance requested by the Community. Mr. Dan Kelly July 6, 2009 Page 2

2 Vulcan shall construct the berms in stages, as depicted on Exhibit 1 Supplemental The berms designated as "Initial Berms" shall be constructed to a height of not less than 20 feet and an approximate width of 150 feet within nine months (pending normal construction delays, such as inclement weather) of the granting of the Use on Review Application. Within three months after building the first phase of the Initial Berms they shall be planted with indigenous biodiverse trees and plants (no monocultures) on the outer slope, as indicated herein. Over time, Vulcan will raise the height of the Initial Berms as needed to handle the overburden created from the quarrying operations. The "Secondary Berms" as designated on <u>Exhibit 1 Supplemental</u> lie along Graybeal Road across from property owned or controlled by Vulcan. The Secondary Berms shall be constructed in a first phase to a height of not less than 20 feet and an approximate width of 150 feet before Vulcan mines rock within the New Area. When the first stage of construction of the Secondary Berms is completed, Vulcan will landscape the outer slope of the berms within six months with indigenous biodiverse trees and plants (no monocultures)

As with the Initial Berms, the Secondary Berms may be raised in elevation over time as the need to dispose of overburden arises. However, the outside toe of the berm shall remain at least 100 feet from the rights-of-way. During construction of the Initial and Secondary berms, Vulcan will allow natural vegetation to grow within the 100-foot offset from Buttermilk and Graybeal roads.

Regarding the berms in the 11-H-96-UR application, as well as the Initial Berms and Secondary Berms, referenced in this application, the following vegetation plan will be followed Hardwood trees will be planted along the outside toe of the berm. These hardwoods shall be spaced on about 40-foot centers. The outer slopes shall be planted with hardwoods at a density of no fewer than 16 trees per 1000 square feet Native vegetation will be allowed to grow on the berm's outer slope At completion, Leyland Cypress trees will be planted along the berms' crest on about 10-feet centers

3 Vulcan, as it has in the past will be governed and will operate its quarry operation in accordance with the Tennessee Blasting Standards Act, T C A 68-105-102 (the "Act") Continuous monitoring has been conducted and will continue to be conducted by a third party independent firm at the structure uncontrolled by Vulcan that is nearest to the blasting activity. Vulcan shall increase its monitoring of seismic activity and air blast response at four additional off-site locations that initially will be sited generally to the west, east, south and north of its quarry operation at the locations noted on <u>Exhibit 2 Supplemental</u> Because the impact of blasting activity on off-site areas can be influenced by subsurface geological conditions, the sites of these four additional monitoring locations may be moved by Vulcan, within the Community, from time to time in order to collect data about the blasting activity for Vulcan to better manage its blasting activities. However, the number of seismograph locations will not be reduced without concurrence from the Community. All collected monitoring data will be made available to the Community on a calendar, quarterly basis, upon request by those in the Community

4. Vulcan's blasting activity will be governed by and will meet the standards set forth in the Act Based on the results of blasting between 2005 through April 2009, the Mr. Dan Kelly July 6, 2009 Page 3

seismographic readings have been well within the standards set forth in the Act, and Vulcan will endeavor to operate its blasting activities going forward at less than 1 0 inch per second, which is half of the standard allowed by the Act.

5 Vulcan will offer to conduct standard engineering surveys of structures along Buttermilk Road that are within 1,000 feet of the northern most property line of the New Area that is adjacent to Buttermilk Road and Graybeal Road The parcels with structures that Vulcan will offer the owners to survey are:

tax map 129, parcel 07604;

tax map 129, parcel 076;

tax map 129, parcel 07602;

tax map 129, parcel 07603;

tax map 129, parcel 075;

tax map 129, parcel 07601;

tax map 129, parcel 07401;

tax map 129, parcel 074;

tax map 129, parcel 073;

tax map 129, parcel 072;

tax map 129, parcel 07201;

tax map 129, parcel 071;

tax map 129, parcel 086;

tax map 129, parcel 085;

tax map 129, parcel 084;

tax map 129, parcel 083;

tax map 129, parcel 082;

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tax map 129, parcel 08102;

Mr. Dan Kelly July 6, 2009 Page 4

> tax map 129, parcel 081; tax map 129, parcel 08103; and tax map 141, parcel 042

Vulcan will conduct a community meeting before the surveys are done for those within this area who are willing to authorize such surveys. Presentations will be made on pre-blast survey procedures, and on the procedures and type of blasting and mining Vulcan does at the Dixie Lee Quarry. Vulcan will only survey those identified property owners indicating a willingness to engage in the program.

6 Vulcan will conduct its operations in accordance with Knox County Department of Air Quality Management Regulations which are incorporated into Knox County Zoning Ordinances by way of § 4 10, which are protective to its employees and adjoining neighbors

7 Vulcan will conduct its operations in accordance with the noise requirements of Knox County as required by the Knox County Zoning Ordinance which contains specific requirements at § 4 10 1 Vulcan will also investigate and implement use of alternative safety devices in place of the backup sounding buzzers on their earth moving and excavation equipment An alternative will be selected that will reduce the noise compared to the buzzers

8 On a case by case basis, Vulcan will install landscaping that with maturity will serve as shields or blinds on adjacent properties in the Community for up to four (4) residences in consultation with the landowners The residential properties on which such landscaping blinds will be installed will be selected by the Community's representatives Kirkpatrick, Williams and Bryant and will only be installed with the agreement of the landowners

Very truly yours,

Thomas M. Hale\_

Thomas M Hale KRAMER RAYSON LLP

cc via e-mail: Dr Keith Kirkpatrick Mr Jack Lambert Mr Ken Haislip

4-B-09-UR-cor- Hale2

# KRAMER RAYSON LLP

-ATTORNEYS AT LAW-----

July 7, 2009

VIA HAND DELIVERY

POST OFFICE BOX 629 KNOXVILLE TENNESSEE 37901-0629 SPECIAL COUNSEL SHANNON D. COLEMAN

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Mr Dan Kelly July 7, 2009 Page 2

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Mr Dan Kelly July 7, 2009 Page 4

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Very truly yours,

tom the

Thomas M Hale KRAMER RAYSON LLP

Mr. Dan Kelly July 7, 2009 Page 5

cc via e-mail: Dr Keith Kirkpatrick Mr Jack Lambert Mr Ken Haislip From:Dan KellyTo:Betty Jo MahanDate:4/2/2009 8:45:20 AMSubject:Fwd: Notice of Public hearing on April 9

>>> Craig <craig\_hutto@yahoo.com> 04/01 4:07 PM >>> Dan,

I just wanted to express my adamant objection to Vulcan Materials developing the land mentioned in file # 4-B-09-UR. This will certainly devalue our property and could pose a property damage hazard based on the proximity of blasting.

Surely there is rock elsewhere.

Craig Hutto 12528 Buttermilk Rd Knoxville, TN 37932-2223 865.591.7632

There are three things that are real: God, human folly, and laughter.

The first two are beyond comprehension. So we must do what we can with the third. - John Kennedy

E. H. RAYSON JOHN B. RAYSON JOHN T. JOHNSON, JR. WARREN L. GOOCH WAYNE R. KRAMER EDWARD G. PHILLIPS THOMAS M. HALE JACKSON G. KRAMER BEECHER A. BARTLETT, JR. ROBERT W. KNOLTON JOHN C. BURGIN, JR. ADRIENNE L. ANDERSON CHARLES M. FINN ROBERT A. CRAWFORD JOHN E. WINTERS ROBERT L. BOWMAN CHARLES E. YOUNG, JR. FRANCIS L. LLOYD, JR. AMANDA M. BUSBY STEVEN E. KRAMER KATE E. TUCKER BETSY J. BECK WILLIAM J. CARVER J. MATTHEW BROTHERTON

# KRAMER RAYSON LLP

-ATTORNEYS AT LAW-

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tomhale@kramer-rayson.com

June 10, 2009

Via e-mail

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OF COUNSEL DONELSON M. LEAKE HUGH W. MORGAN G. WILSON HORDE

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Dr. Keith Kirkpatrick 12605 Buttermilk Road Knoxville, TN 37932

> RE: Knoxville/Knox County Metropolitan Planning Commission (the "MPC") File No.: 4-B-09-UR Use on Review (105 acres) (the "New Area")

Dear Dr. Kirkpatrick:

On behalf of Vulcan, thank you for meeting with company representatives Ken Haislip, Jack Lambert, my law partner, Don Leake, and me on June 1, 2009. Please also extend our thanks to Ms. Williams and Mr. Bryant for attending.

Since our meeting, we have been working with representatives of Vulcan to do two things. We have sought to articulate definitive, meaningful commitments that will both address the requests made by the Community, and at the same time be clear enough that any miscommunication is avoided. Some of the requests involve technical things about which most of us non-technical people are not conversant. The second thing we have been doing is gaining an understanding of the conditions recommended by MPC staff and how those mesh and/or overlap the Community's concerns that you have expressed on behalf of your group.

At the outset let me make a couple of overriding points. First, the aerial photograph with your letter is turned about 90 degrees clockwise from true north and that has caused a little confusion in some of the Community's requests, but we feel certain that we understand what you intended and will try to clarify hereinafter where it is material to the issue.

As a general matter, I believe you will find the following to be consistent with the discussions that occurred at our meeting. Of course, there are some requests in the Community's submission to us that were not specifically discussed at the meeting. The issues that we only discussed in a general way appear to relate to (1) the monitoring of certain things such as air and acoustics and (2) requests for technical standards related to vibration and air-shock/air blast

Dr. Keith Kirkpatrick June 10, 2009 Page 2

target values that are more stringent than current state regulations under which Vulcan and all quarry operators are required to operate. As you are aware from the blasting data that Mr. Haislip provided last week, Vulcan's track record against those state standards, as well as the Community's target values set out in your letter is very good.

The following is an item-by-item response authorized by Vulcan that is offered to the Community in connection with the Amended Use on Review application related to the 105 acres of property Vulcan owns that lies southwest of Graybeal Road and which adjoins the currently permitted area for its quarry operation, that area referred to herein as the "New Area":

### 1. Routing of Berm and Landscaping

• <u>Request (1)</u>: The northern berm along Buttermilk be routed to keep the outer edge of the berm at least 200 feet from the roadway and at least 200 feet from Graybeal where current residences are constructed across the streets.

<u>Response</u>: Berms along Buttermilk Road in the New Area and along Graybeal from its intersection with Buttermilk that lies across from property owned by third party landowners will be constructed in accordance with Knox County zoning regulations and MPC staff recommendations. The outer toe of the berm will be 100 feet from the property line.

• <u>Request (2)</u>: The southwestern berm along Graybeal be routed to keep the outer edge of the berm at least 100 feet from the roadway.

<u>Response</u>: The berm in this area, which is across Graybeal from property owned/controlled by Vulcan, will be constructed in accordance with Knox County's Zoning Regulations and MPC recommendations, with the outer toe of the berm along Graybeal Road, subject to certain exceptions in the zoning regulations, being a minimum of 100 feet from the right of way.

• <u>Request (3)</u>: The southernmost part of the berm along Graybeal be routed to keep the berm at least 200 feet from the roadway where adjacent properties not owned by Vulcan Lands, Inc. are located.

<u>Response</u>: The outer toe of the berm, along this area, will be about 200 feet from the Graybeal Road right of way, approximately as depicted on the Community's figure 2.

• <u>Request (4)</u>: All constructed berms will be landscaped within 6 months of construction (with construction taking place no longer than 6 months) with indigenous biodiverse trees and plants (no monocultures). Trees will be allowed and ensured to grow as an additional blind beyond the constructed berm height.

<u>Response</u>: The construction of berms is a continual process. Thus, Vulcan (VLI) cannot agree to construct all berms within six months. Because of the nature of stripping requirements, and the huge expense involved, the berms must be built on an on-going basis, to allow the construction of the berms from the over-burden, as the quarry pit expands on the current permitted area and the New Area toward Graybeal Road. VLI, however, will agree to build the berms along Buttermilk Road and that portion of the north end of Graybeal Rd., across from third party landowners addressed in request (2) above, before VLI mines on property included in the New Area. VLI agrees to landscape the berms within six months after completion (weather permitting) in accordance with the MPC staff recommendations.

### 2. Continuous Monitoring

• <u>Request (5)</u>: It is requested that continuous seismic and sound monitoring be provided by Vulcan Lands, Inc., via a 3<sup>rd</sup> party firm at the parameter and in strategic locations throughout the community so that the impact of blasting can be monitored and shared with the community. This will ensure that when using any explosives, blasting shall not exceed the standards of distance, amount of charge, maximum earth vibration, and maximum air shock as set forth in the United States department of the interior bureau of mines report of investigators number 8507 which is entitled "Structure Response and Damage Produced by Ground Vibration from Surface Mines Blasting," and any amendment and/or modifications thereof, which standards are incorporated herein by reference.

<u>Response</u>: Although not required by the Tennessee Blasting Standards Act, VLI currently has a third party firm monitor and will continue to so monitor for seismic activity and air blast for every shot. Blasting operations have been and will be conducted in accordance with the Tennessee Blasting Standards Act, T.C.A. 68-105-102, for limits on seismic activity and air blast response. However, VLI's blasting has been conducted such that it has been in accordance with the standard referenced by the Community in almost every shot. VLI currently conducts this monitoring at one location which is at a close by residence to the north of the New Area. VLI agrees to increase the monitoring of seismic activity and air blast response to be done at three additional off-site locations which will be sited at locations generally to the west, east and south of VLI's quarry operations.

• <u>Request (6)</u>: (a) Blasting limits. No licensee shall use an explosive weight in pounds per delay in excess of the formula of the distance to the nearest structure in feet, divided by the factor of 70, multiplied by itself, [W = (D/70) squared], except when seismograph monitoring as set forth in subsection (b).

<u>Response</u>: The maximum weight of explosives in pounds per delay will be in accordance with the Tennessee Blasting Standards Act. As noted above, VLI blasts are and will continue to be monitored for seismic activity.

• <u>Request (7)</u>: (b) Seismograph required. Each licensee shall be required to perform a seismograph test at the nearest structure to the blast prior to and during any blasting that would exceed the limits as set forth in subsection (c).

<u>Response</u>: All VLI blasts are monitored for seismic activity, and will be shared with the community upon request.

• <u>Request (8)</u>: (c) Seismic limits. At the structure nearest to the blast, the peak particle velocity in any direction at frequencies between 2.5 and 10 Hertz shall not exceed 0.5 inches per second, and at each frequency, f, greater than 10 Hertz, the peak particle velocity shall not exceed 0.05f inches per second up to a maximum of 2 inches per second. In addition, at the nearest structure no air-shock (sound) reading shall exceed one hundred and thirty-four (134) decibels using a 0.1-Hz, high-pass system or exceed one hundred and thirty-three (133) decibels using a 2-Hz high-pass system or exceed one hundred and twenty-nine (129) decibels using a 5-Hz or 6 Hz high-pass system. (2) If blasting within the allowed limits as dictated under subsection (a), but is found in excess of the seismic limits of this subsection, Vulcan shall reduce the amount of explosives per delay, or adjust the operation to comply with the limits as dictated by this subsection.

<u>Response</u>: VLI operations will be in compliance with the Tennessee Blasting Standard Act. A review of blast results, from 2005 through April 2009, for the Dixie Lee quarry, show the peak particle velocity and corresponding frequency results are almost always less than the Community's target values. Many factors beyond Vulcan's control affect air blast responses, but VLI will comply with 140 dB allowed by Tennessee Blasting Standards Act.

• <u>Request (9)</u>: It is requested that VLI provide engineering surveys of the property structures within the community so that a baseline can be established of the current structures. This will serve as a point of reference for vibration induced damage from blasting.

<u>Response</u>: VLI proposes to conduct engineering surveys of structures along Buttermilk Road that are within 1,000 feet of the northern most property line of the new area that is adjacent to Buttermilk Road and Graybeal Road. VLI proposes to offer a community meeting before the surveys are done for those whose structures will be surveyed, and others in the community, at which presentations will be made on blasting methods, preblast survey procedures, and about the type of blasting and mining VLI does at the Dixie Lee Quarry. Dr. Keith Kirkpatrick June 10, 2009 Page 5

• <u>Request 10</u>: It is requested that VLI provide continuous acoustic monitoring through a 3<sup>rd</sup> party independent agency at strategic locations to ensure that their operations stay within an acceptable limit (65 dBA and 78 dBC at the quarry boundary) where data can be shared with the Community.

Response: VLI responds to this request by agreeing to that which is agreed to in Request (12) below.

• <u>Request (11)</u>: It is requested that VLI provide continuous air quality monitoring within strategic locations at the boundary and within the community to monitor dust and other harmful emissions from the quarry activities.

<u>Response</u>: VLI will conduct its operations in accordance with VLI's permit issued in accordance with the Tennessee Division of Air Pollution Control regulations, which are protective to its employees and adjoining neighbors.

• <u>Request (12)</u>: It is requested that Vulcan Lands, Inc. investigate alternative safety devices in place of the backup sounding buzzers on their earth moving and excavation equipment. The Community understands the importance of these safety devices, but the sound emitting from the backup warning devices will create a undesirable sound emission into the surrounding areas. There are alternative devices that do not emit sound that should be acceptable.

Response: VLI will agree to this request.

#### 3. Landscaping on Community Property

• <u>Request (13)</u>: It may be advantageous due to the topography of the surrounding land to build landscaping blinds on adjacent properties in the community. If the owner consents, would Vulcan be agreeable to the building of landscaping blinds on the properties of adjacent land owners. Please note this will have to be discussed on a property by property case with the respective owners.

<u>Response</u>: On a case by case basis, VLI is willing to concede to this request, but based upon a visual inspection of close-by residences, VLI believes that limiting its obligation to such four (4) residences is reasonable. The parties will have to agree on the definition of what the "landscaping blind" will consist of.

Yours truly,

Than mtale

Thomas M. Hale

TMH/pm

Dr. Keith Kirkpatrick June 10, 2009 Page 6

cc: Dan Kelly, MPC Staff Jack Lambert Ken Haislip