

FEASIBILITY STUDY

RIA Mines Inc.

RIA Mines Inc.

2003 NW Oceanview Drive Newport, Oregon 97365, USA
Phone: 1-971-222-3394 Cell phone: 1-541-272-1345 Email: tbm@riamines.com

March 2006



RIA Mines Inc.

Nepheline Syenite

To make the World Different

Home

There is so much talk these days about “out sourcing” of jobs and not being able to create enough employment for the people in the United States.

The opening up of this largest nepheline syenite mine in the world could create here in our country through the use of this newly-available material combined with new technology that creates uses for this material that would make it a entire new industry - based here in the United States and adding many jobs in Oregon since that is where Table Mt. is located.

Let us unbundle the above declarative statement.

Nepheline Syenite is not readily available in the United States. It has been mined in Canada at Blue Mt. in Ontario. The bulk of the market is used in their glass and ceramics industry.

In the US we have had two small deposits in Arkansas and New Mexico.

In Table Mt. the United States Geological Survey indicated there are proven reserves of up to 40 million tons and probable reserves of up to 700 million tons - thus making the Table Mt. deposit of nepheline syenite the largest in the world.

We have the mining claims to proceed in developing this property. It is on U.S. government land managed by the U. S. Forest Service. The U.S. Forest Service is already using one quarry to mine nepheline syenite needed for the gravel for the roads on Table Mt. and other places in the Siuistlaw National Forest.

Our first task is to get the proper operating permits and permissions from both the U.S. Forest Service as well as

the Oregon Department of Geology & Mineral Industries. We are working on those permissions now.

We have identified a site in Newport, Oregon for our processing plant which would have both water and rail access right on our site.

Our market for nepheline syenite is detailed in this business report. However, it can be divided between two general areas:

1. The immediate sales of the product for roofing granules and the development of the market of nepheline syenite as a natural substitute for soda ash, especially where we can be very price competitive. Other products would also be included as well, again mentioned in the “use of products” and marketing chapters in this report.
2. The other near future possibilities of the use of nepheline syenite as a polymer resin could create a whole new industry in the United States and the world. The projects will be funded from parties that are keenly interested in getting the products produced.

The company will undertake two substantial applied research projects.

- a. The first would be the use of our product as a “coffin” for storing and transporting nuclear waste. At least two great research institutions will join in this – the Colorado School of Mines as well as the University of Sheffield’s Immobilisation Science Laboratory, which is undertaking many projects in this field.
- b. The other area is applied research for the use in lightweight cars (and other vehicles that use steel) using the polymer resin in place of now commonly used steel. With the imperative of developing lightweight vehicle due to high oil prices, we feel we could get one or more of the automobile companies to join us in this endeavor. It is strictly in their interests and ours.

Let me repeat, as I have indicated before, the cash flow and financials for the company only reflect the products that can currently be sold – not any income from the products derived from the polymer resins mentioned in the above two paragraphs. These financials show a substantial return to the shareholders.

Once the financial returns from the polymer resins start to accrue to the company, the worth of the company will be enormous. It will have started a new industry in the United States and the world that will depend on our raw material for its growth.

[It is very rare that a new raw material appears in great abundance with the technology to have it used in new ways by thus creating a new industry in the world. We are fortunate to have it in this case.](#)

The bottom line of this entire project is the following:

- 1. The investment is in the United States, which is politically safe and secure**
- 2. The products derived from nepheline syenite are needed in the marketplace, particularly in the building industry, and are relatively easily marketed.**
- 3. There are low capital costs with proven technology that have been used for decades in the mining industry.**
- 4. The processing is relatively simple – certainly not “rocket science.”**
- 5. This is a low risk industry because of what is mentioned above.**
- 6. Yet with all the low risk, we have relatively high return for the investor.**



RIA Mines Inc.

Nepheline Syenite

To make the World Different



THE RESOURCES AND INDUSTRIES ASSOCIATES (RIA) GROUP.

Founded in 1975, the Resources and Industries Associates (RIA) Group, has been involved in a wide variety of projects.

The RIA Group was founded by The Right Honorable Alvin Hamilton, P.C., Dr. Thomas B. Manton, Ambassador Curtin Winsor, Professor Dr. Ernst Florian Winter, His Excellency Eng. Fathi El Gahmi, Mr. Kunt U. Kloster, Professor Dr. Zuhayr Mikdashi, Joe Y. C. Ho and others to offer a new way of doing business in the world.

We all believe that the clash between the industrialized nations and those countries relying mostly on natural resources must be avoided. Positively we believe that a productive partnership must be developed between the resource rich countries and those who are heavily industrialized.

The late Alvin Hamilton was a champion of this belief in so many practical ways. He guided our thinking from the very first days of our forming RIA. Mr. Hamilton had been Minister of National Resources and then Minister of Agriculture of Canada and had shown in so many ways his creative talent for making practical events flow from good ideas. He started the first wheat deal between Canada and China when few in the West would even talk to China. This program saved millions of Chinese lives during famine in China and sustained so many small farmers in Canada.

All the programs in RIA were modeled after that type of activity. Combining the essential ingredients of resources and industrial development is a theme that permeates most all of the projects in which RIA has been involved.

We welcome our long term Vice Chairman, Ambassador Curtin Winsor, Jr. to the helm of RIA Chairman. He now carries on the innovative tradition pioneered by our founding Chairman, the late Right Honorable Alvin Hamilton, P. C. and long time Member of Parliament of Canada.

RIA Mines Inc. is another project of RIA that brings a new material to the world that has many uses and our applied research arm will help develop.

RIA Chater

(Adopted by Resources and Industries Associates in 1975)

We, as people in an interdependent world, determined to cooperate, have come together, pooling our talents, reputations, resources and honor, and seek to help create a new international economic order based on equality and justice, by forming a cooperative multi country endeavor called **RESOURCES AND INDUSTRIES ASSOCIATES**.

The world consists of many nations in varying stages of development of human and material resources. To assist in the more effective development, distribution, and utilization of these resources, we are determined to create a new form of business institution. This new institution will represent a mutual sharing of influence, risk, opportunity, and reward for the benefit of all concerned.

We believe:

1. That each nation should control its natural resources.
2. That all resources, including the technological and scientific advances developed by man, must be shared, with appropriate compensation, for the betterment of all.
3. That the new international economic order which is evolving is bringing into being new forms and bases for the transfer and exchange of mineral resources, agricultural commodities, technologies, and industrial goods and services on a global basis.

4. That within this evolving economic order there is an opportunity for a new form of private enterprise, which brings together, harmonizes, and energizes the nations, peoples, and institutions of this world so that they can more fully realize the benefits of this new economic order.



Toward these ends, we of **RESOURCES AND INDUSTRIES ASSOCIATES** pledge ourselves to work for the interests of world harmony and the betterment of mankind by taking the initiative to create a private enterprise to cooperate with other private, public, or mixed enterprises in response to this new economic order.



RIA Mines Inc.

Nepheline Syenite

To make the World Different

Mines

The deposit detailed in this report is located at Table Mountain, Lincoln County, Oregon. On a highway map the claims may be found 15 miles (direct) SE from Newport/Toledo, or 12 miles NW (direct) from Waldport, on the scenic Oregon Coast.

Table Mountain is a beautiful peak, which rises over 2,800 feet above sea level and overlooks the Pacific Ocean just southeast of the lovely central Oregon coastal city of Newport. This special mountain contains one of the largest deposits of Nepheline Syenite the world has yet discovered.

Nepheline Syenite is a rare igneous rock, although resembling medium-grained granite in texture consists principally of Nepheline and alkali feldspars.

This is not a recent discovery. Mr. Barry Murray has held the mining claims on this property for over twenty years with a view to develop them. Now, however, the products that can be made out of this rare rock have expanded greatly because of recent technology innovations.

For instance, a new and priority technology has been developed to reduce the iron content in the finished product to nearly zero.



This makes it possible to use our processed nepheline syenite as a very advantageous natural substitute for widely used synthetic soda ash. The United States is the largest producer of soda ash and nearly forty percent of it is exported to Asia, Mexico and Europe.

The reported uses in the United States of soda ash by end use is glass manufacture 51%, chemicals 22%, detergents 13%, distributors 5%, miscellaneous 3% and pulp and paper, water treatment and flue gas desulphurization 2% each.

Nepheline syenite has also been developed into a polymer resin which can be used in many important applications, including a very lightweight substitute for steel, excellent insulation for houses and many other items, shields against bullets and other projectiles and also a self-sealing and very safe container for nuclear waste material to either be stored or transported.

There are so many potential uses for nepheline syenite that it seems imperative to establish an applied research laboratory to test out the material for this uses for both ourselves as well as our potential customers. The general uses are enumerated in the above paragraph and we propose to establish an "RIA Applied Research Laboratory" (RARL) to undertake very specific testing of our material in conjunction with potential users. For instance, the largest user of nuclear waste containers is the US Department of Energy which supervises and/or manages all the nuclear facilities in the United States. Twenty percent of the electricity we use here is generated by nuclear power. In Europe, that percentage is higher. In France it is 80%. Therefore, this problem of safely containing nuclear waste is a problem confronted by other nations around the world. The same is true with other applications of nepheline syenite.



A chapter on the RIA Applied Research Laboratory (RARL) is a part of this business plan. We believe that once this Lab is in existence, we will be able to conduct our own tests of nepheline syenite made into a specific application and then invite an appropriate partner into undertaking either a joint venture operation with RIA Mines for the production of that specific product or some other arrangement that would be mutually satisfactory to all parties concerned.

This way we would know our own capabilities in the use of our own material for the end product to which we would jointly manufacture it. If joint ventures are undertaken, it would be our intention to control that joint venture with 51% of the voting shares. Of course, since we would be the supplier of the basic material, our control would be fairly clear in any joint venture.

In order to quick start our efforts in establishing the RARL in the forefront of applied research on nepheline syenite is will be necessary to affiliate the RARL with a number of institutions both in the United States and overseas. This includes, but is not limited to Oregon State University, Colorado School of Mines, MIT, the University of Sheffield, French and Germany research institutions as well as Institutes of the Russian Academy of Sciences. All of the above institutions have a great deal of experience in nepheline syenite, new materials and/or development of composites.

There are many other well-known uses for nepheline syenite, which are enumerated in another chapter of this report.



There is a ready market for this product in North America and elsewhere in the world as witnessed by the production of nepheline syenite mine and processing plant at Blue Mt. in northern Ontario, Canada. However, their raw material has nearly run out. Therefore, they bought a mine in northern Norway from which it is more expensive to obtain since it is under ground on an island within the Arctic circle of Norway and is far away from the substantial American market. There are small pockets of nepheline syenite in Arkansas and New Mexico – however, nothing to compare with the huge 700 million tons of probable reserves in Table Mountain.

This report will cover all aspects of this operation – from permissions needed, cooperation and support that can be obtained from local, state and federal agencies to the processing operation required to the marketing and management and ownership of the company running the entire business. Please read carefully the last page of chapter ten which details the ability of RIA Mines to obtain the stone from Table Mt. and Lincoln County in the State of Oregon.

This report shall also show that, with the currently available markets, there shall be very substantial cash flow and gross profit plus profit after taxes for the shareholders.

The sales of the polymer resin mentioned above, has been included in the projections of just a few products about which we have very specific knowledge now. Once the full extent of that product possibility is ready for the market place the company will literally be worth billions of dollars. The RIA Applied Research Laboratory (RARL) is being established fully explore all the applications of nepheline syenite. There is not another such substance on the market. Therefore, the benefit to the shareholders will be enormous.



Physical Description and the Reserves

Table Mountain is a plateau of 2,800 feet in altitude in the Suislaw National Forest. It has stands of Douglas fir as well as two natural springs. On a clear day one can see the Pacific Ocean - 12 miles direct. Currently there are at least five quarries on the property, which have been utilized by the U.S. Forest Service, Georgia Pacific Co. and others.

As the U.S. Forest Service has been quarrying and crushing some of the material on the site for road gravel, it is not expected the "environmental" issues will be used as an excuse to slow development of the operation.

According to Bulletin 81 (1973) Environmental Geology of Lincoln County, Oregon, by the Oregon Department of Geology & Mineral Industries, and Henry Harris (1962) Economics of Coast Range Igneous Rocks in Oregon, U.S. Bureau of Mines unpublished report, the deposit is 300 feet thick, and covers one square mile - please see claim map in the USGS report.



The Oregon Department of Geology & Mineral Industries Bulletin assumes, from the vertical relief of the deposit (i.e: the elevation difference from outcrops on the top of the mountain, to the bottom of the exposure, adjusted for the angle of the slope), an indicated total of 700 million tons of recoverable nepheline syenite.

The USGS Professional Paper 840, which features the Table Mountain nepheline syenite, suggests the deposit may be 400 feet thick. Using this number the indicated quantity is 700 million tons of probably reserve.

The immediately proven and able-to-mine reserves are between 35 and 40 million tons. Currently five quarries are open and could be mined with just a simple operating permit from the U.S. Forest Service. One of those quarries is currently being operated by the Forest Service for obtaining gravel to cover the logging roads needed in the Table Mountain area. Thus the immediate environmental restrictions are not major.



RIA Mines Inc.

Nepheline Syenite

To make the World Different

Nepheline Syenite

Nepheline Syenite

The Table Mountain nepheline syenite ore has a Mohs scale hardness of 6, a specific gravity of 2.57, and an average weight of 160 pounds per cubic foot.

U. S. Geological Survey Professional Paper 840, and the State of Oregon Department of Geology and Mineral Industries Bulletin 8, show that the unprocessed material from Table Mountain consists of:

SiO₂ (silica) 59.62%

AL₂O₃ (alumina) 18.60%

Fe₂O₂ (Ferric Oxide) 02.86%

The composition of commercially processed Grade A nepheline is:

SiO₂ (silica) 60.04%

AL₂O₃ (alumina) 23.06%

Fe₂O₂ (ferric oxide) 00.08%

Supposedly a limiting factor in utilizing the Table Mountain material, as is, in the production of clear glass and ceramic items has been the high iron content. The discoloration caused by the iron is not a factor in beer and wine bottles. Recent mill tests show the removal of iron not to be a problem at all. And higher iron content has been shown to be desirable in roofing granules in that the impurity filters UV rays.

The main competitor in North America, the Blue Mountain, Ontario deposit owned by Indusmin Ltd, operates on raw material that contains 2% ferric oxide. After processing, this waste is sold as 56% Fe.

Besides the iron content, other factors limiting utilization of the Table Mountain material such as rock wool, and alumina, and extenders only seem to be location, and the initial cost of developing production. The material, due to the size of blocks and hardness of the rock, makes a good jetty stone.

And, as the light to medium gray (with a blue tint) granite-like rock takes a good polish, displaying a soft cloud-like effect, nepheline syenite material is a desirable dimension stone for building facing, memorials, and floor tiles. The Audubon Society Field Guide to North American Rocks and Minerals states that the nepheline syenite quarried at Magnet Cove, Arkansas, is an excellent building stone.

Recently we have had a number of researchers requesting samples of our nepheline syenite ore for their projects including a researcher from the University of Toronto, researching nepheline syenite in the steel making process.

Also a number of researchers who requested were sent ore for their research in making "self-sealing" glass caskets for safer transportation and storing of nuclear waste products.

We are being told by many of these researchers that Nepheline Syenite shall be the next "miracle industrial mineral" of this century.



U.S. Geological Survey Certificate of Analysis

Syenite STM-1

A sample of peralkaline nepheline syenite was collected from a sill that underlies Table Mountain which is approximately 60 km WNW of Eugene, Oregon. The rock sample was light to medium gray and had a glassy luster. The material was holocrystalline and very fine to fine grained, having a very pronounced trachytic texture (Flanagan, 1976).

Element concentrations were determined by cooperating laboratories using a variety of analytical methods. Certificate values are based primarily on international data compilations (Abbey, 1983; Gladney and Roelandts, 1988; Govindaraju, 1994). Initial USGS studies (Flanagan, 1976) provide background information on this material.

Recommended Values

Oxide	Wt %	±	Oxide	Wt %	±
SiO ₂	59.6	0.49	CaO	1.09	0.06
Al ₂ O ₃	18.4	0.23	MgO	0.10	0.02
Fe ₂ O ₃	2.87	0.02	Na ₂ O	8.94	0.20
FeO	2.09	0.03	K ₂ O	4.28	0.07
Fe ₂ O ₃ T	5.22	0.1	P ₂ O ₅	0.16	0.01
			TiO ₂	0.14	0.01

Glossary

Symbol	Definition
Fe ₂ O ₃ T	Total iron expressed as Fe ₂ O ₃
S _{tot}	Total concentration of sulfur
Wt %	Percent of total element concentration
µg/g	Total element concentration expressed as micrograms of element per gram of solid sample
±	One standard deviation

Notes

Unless otherwise indicated, total element concentrations are reported for material on an as-received basis, i.e., no drying.

Element	$\mu\text{g/g}$	\pm
Ba	560	60
Be	9.6	0.6
Ce	260	18
Cl	460	40
Cs	1.5	0.1
Dy	8.1	0.5
Er	4.2	0.4
Eu	3.6	0.3
F	910	50
Ga	35	5

Element	$\mu\text{g/g}$	\pm
Gd	9.5	0.8
Hf	28	2
La	150	6
Mn	1700	120
Nb	270	12
Nd	79	7
Pb	18	1.8
Rb	118	6
Sb	1.7	0.2
Sc	0.61	0.07

Element	$\mu\text{g/g}$	\pm
Sm	13	1
Sr	700	30
Ta	19	1.2
Tb	1.6	0.2
Th	31	3
U	9.1	0.1
Y	46	5
Yb	4.4	0.4
Zn	235	22
Zr	1210	120

Element	$\mu\text{g/g}$
Ag	0.08
As	4.6
B	6.4
Bi	0.13
Cd	0.27

Element	$\mu\text{g/g}$
Co	0.9
Cr	4.3
Cu	4.6
Li	32
Mo	5.2

Element	$\mu\text{g/g}$
Ni	3
S _{tot}	43
Sn	6.8
Tm	0.7
V	8.7



RIA Mines Inc.

Nepheline Syenite

To make the World Different

New Materials

Table Mountain Nepheline Syenite as a polymer resin

There have been very exciting products made from nepheline syenite and we need to follow this up with further applied research and through appropriate research organizations and universities.

1. Making self-sealing containers for storage and transportation of nuclear waste.

Westinghouse is one of the large contractors at the Hanford facilities in Washington State. They are currently running tests on nepheline syenite to be used as storage “coffins” for nuclear waste materials both for permanent storage as well as transportation.

The polymer resin becomes a self-sealing material seemingly ideal for such purposes.

The scientists with the Department of Energy that operate the nuclear waste and storage facility feel that nepheline syenite is an ideal substance for using in these “coffins” but have said that there is not enough available in the United States for such use. Once Table Mt. is in full operation there will be a more than adequate supply.

We feel very optimistic that the “coffins” will be used not only in the United States but also around the world for such storage and transportation of nuclear waste materials.

Once these tests are successfully concluded, there will be a major breakthrough for the company in the sale of nepheline syenite as a polymer resin to manufacture these "coffins." Development of this revolutionary, unique product will make our company very valuable.

2. The insulation qualities of this material are truly also remarkable.

We are thinking of making a simple item like a cooler. This material has been tested with an R rating of 90.

Both in the developed world as well as the developing world coolers are needed that have excellent insulation as well as being light. The use of foam has its limitations.

The insulating property can also be used in the building industry worldwide.

We have an order for building 5,000 homes of 36 square meters for the tsunami survivors just in a small part of Aceh (Indonesia).

In another development we have indication we will get an order to build 300 hurricane-proof houses in Florida. It can withstand 200 mile an hour winds as a building block.

There are other applications also.

It is truly a NEW Material!

3. Making bullet proof material such as vests, armor for military vehicles, possibly even tanks, for buildings and bunkers.

This is a very unique material for the military. Mixed with steel wool it can stop either a bullet or a shell. The fact that it can be used as material to stop even nuclear-tipped bullets and absorb the radioactive material from the bullet is truly remarkable.

4. Making a substance as hard as steel and at seventy percent less weight

This product has already been made into a polymer resin and the creators of such resin envisaging it being used in boats (as a substitute for fiberglass) and for use in coal rail cars so that they would be lighter in weight so as to carry more coal.

Nepheline syenite is used in Canada as a substitute for soda ash. Therefore it is a primary ingredient in the making of glass. It has both nepheline and silica in it. Consequently it is natural to have these

ingredients to make a polymer resin for a substance that could be as strong as steel but much lighter weight.

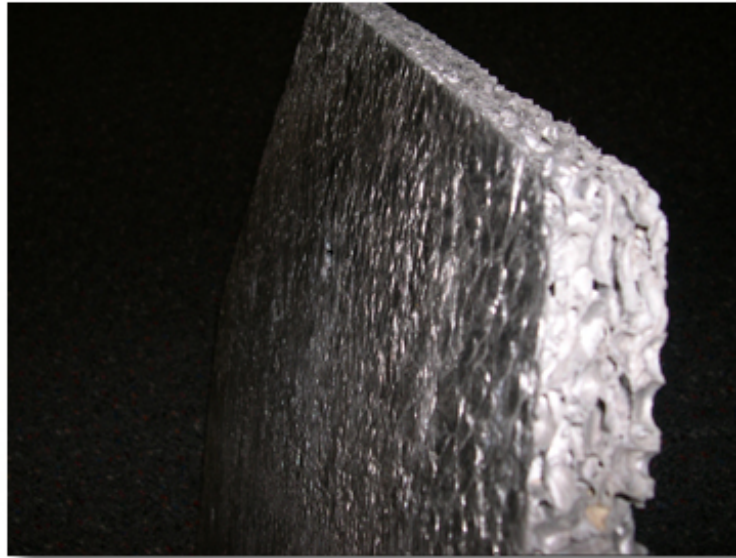
A number of people in the Northwest have used nepheline syenite to make this resin and further experiments are taking place.

The company will devote considerable resources to develop these processes after the initial core business commences.

The automobile industry would have great use for this material if the weight of a car could be reduced by 65%. All kinds of fuel efficiencies would be realized.

The Management and faculty of RARL will be obtained from universities, research laboratories, governments and business from around the world.

The work of the RARL shall be funded from research grants from government, universities, foundations, and companies interested in the potential products that the RARL can develop.





RIA Mines Inc.

Nepheline Syenite

To make the World Different

R&D

RIA Applied Research Laboratory (RARL)

The RIA Applied Research Laboratory (RARL) will function as the research and development arm of RIA Mines Inc. to initiate and coordinate all the efforts to bringing the use of our stone – nepheline syenite to the world markets in specific products.

PURPOSE OF THE RARL AND AREAS IT WILL HANDLE

The main purpose of the RIA Applied Research Laboratory (RARL) will be to find the practical applications for nepheline syenite and therefore take it from the theoretical realm to the practical market—and in some cases, develop uses vital to our country and the world.

There are four areas of applied research the RARL shall pursue:

1. Nuclear waste containers, shields and protectors
2. Insulation for all kinds of products including housing, coolers, roofs, etc.
3. Protection against bullets and other projectiles

4. A new material to substitute for steel with substantially lighter weight

In the previous section, some parts of these areas have been mentioned. Although industries are using some applications, thorough experiments have not always been undertaken to verify that NS is superior. These areas are of vital concern to the US and the world, so we should get thorough data and verify the most effective uses of NS-- the applications in which it is proven to be superior.

AFILLIATED ORGANIZATIONS WITH THE RARL

We shall endeavor to obtain the best research facilities and the best researchers from around the world to work together on this challenge of making new products from NS.

Nearest home will be the best technical university in the State of Oregon – **Oregon State University** in Corvallis which is only 50 miles from Newport. We will draw on both facilities as well as faculty from this distinguished Oregon university.

We have already talked to the best mining school in the United States to work with us here in Newport – the **Colorado School of Mines** in Golden, Colorado. It has a stellar reputation both in the US and around the world as one of the finest mining schools available.

We might approach either the **California Institute of Technology (Cal Tech)** and/or the **Massachusetts Institute of Technology (MIT)** to join us in helping to develop some of the specialized products that we will need for the success of this endeavor. This might especially be true in the development of this new material that could be a lighter weight but just as strong as steel made of NS.

In the United Kingdom the **Immobilisation Science Laboratory of the University of Sheffield** has done an outstanding job of working on materials and has expended efforts on developing material especially for nuclear waste containers. We have discussed this proposal with the Director of the ISL and he would be willing to cooperate closely with RARL.

Through our Board Director, Dr. Nikolay Mungalov, we are to be working with the **Russian Academy of Sciences** and their various Institutes in developing a very close working relationship with them on both products as well as an exchange of personal. The Russians have worked with NS for the last 30 years largely on projects for the military, some of which are now allowed to be de-classified.

There are several research organizations in both France and Germany that will be affiliated and working with RARL. These arrangements have yet to be worked out.



RIA Mines Inc.

Nepheline Syenite*To make the World Different*

Markets

Traditional Markets

Nepheline Syenite is an anhydrous sodium potassium alumino silicate. Although feldspar-like in its chemistry, mineralogically it is an igneous rock combination of nepheline, microcline, albite and minor minerals like mica, hornblende and magnetite. It is found in Canada, India, Norway, United States and USSR. In the United States the Table Mountain deposit is the largest and has never been mined for anything other than gravel for the local roads. The quarries on Table Mountain are currently not being used.

Nepheline-syenites are rare rocks; there is only one occurrence in Great Britain and one in France and Portugal. They are known also in Bohemia and in several places in Norway, Sweden and Finland. In America these rocks have been found in Texas, Arkansas and Massachusetts, also in Ontario, British Columbia and Brazil. South Africa, Madagascar, India, Tasmania, Timor and Turkestan are other localities for the rocks of this series. They exhibit also a remarkable individuality as each occurrence has its own special features; moreover a variety of types characterize each occurrence, as these rocks are very variable. For these reasons, together with the numerous rare minerals they contain, they have attracted a great deal of attention from petrographers.

The reason for opening this chapter on marketing Table Mountain Nepheline Syenite with a discussion of its mineral content and the rare occurrence of this rock in the world is that this lode on Table Mountain is easily assessable (inexpensive to quarry and move to a production facility), near a port facility (inexpensive water transport to the end user) and will be the only nepheline syenite being mined on the west coast of North America.

The four major markets for the Table Mountain Nepheline Syenite are:

- Glassmaking
- Ceramics
- Industrial fillers in coatings, plastics and rubber
- Table Mountain Nepheline Syenite as a polymer resin

As we discuss each one of these existing markets keep in mind that other emerging markets are being developed and will allow the company to generate revenue in these existing markets as the new potential uses of TMNS are developed.

Glassmaking

The major use for nepheline syenite in Western Europe and North America is for glassmaking, where it is an inexpensive source of necessary alumina, soda, and potash for the glass batch. Alumina increases the chemical resistance and physical strength of the glass, and the alkali content reduces the requirement for more expensive soda ash. Nepheline syenite improves the workability of the glass batch by lowering the viscosity of the batch. Its low fusion point lowers the melting temperature, promoting faster melting, higher productivity and cost savings. Nepheline syenite typically comprises 4 to 8% by weight of a soda-lime container glass batch. . About 70% of Canadian production and 80% of Norwegian production is used for glass, particularly for container glass, tableware glass, and fiberglass. More than 50% of Canadian production is exported to the United States; more than 90% of Norwegian production is exported to Western Europe.

Nepheline syenite falls into a category of rock called feldspar and chemically, the feldspars are silicates of aluminum, containing sodium, potassium, iron, calcium, or barium or combinations of these elements.

The United States is the world's third largest producer of feldspar, after Italy and Turkey, with about 800,000 metric tons/year, which is 8.5% of worldwide production. The sole North American source of nepheline syenite is Canada, with more than half of the estimated world annual commercial production of 1.2 million metric tons.

The only other source of nepheline syenite in North America is Unimin Corporation that owns the mineral rights to Blue Mountain in Ontario, Canada. We will be in the unique position of being able to provide a second source of supply. We will certainly compete favorably on transportation costs to West Coast glass manufacturers. Unimin will no longer be a sole source supplier with the ability to dictate terms and conditions to customers as sole suppliers often do.

Expected sales to be 35% of total annual production.

Ceramics

Finely ground nepheline syenite is also used in the manufacture of white ware ceramic products, particularly sanitary ware, dinnerware, floor and wall tile, and various porcelain products for electrical, dental and chemical uses. A low fusibility temperature and high fluxing capacity allows nepheline syenite to act as a vitrifying agent

by contributing an early glassy phase that binds other constituents to the mix.

This permits lower flux content in the ceramic body, lower firing temperatures and faster firing schedules. Its long firing range results in higher physical strength of the finished body. Sanitary ware bodies can be commercially formulated to fire at a cone 4, resulting in a much lower fuel and refractory costs and faster firing time.

Pressed vitreous floor tiles where nepheline syenite comprises 50 to 55% with accessory flint and clay, enjoy lower firing temperatures and faster firing cycles. Vitreous china can be formulated solely from clays and nepheline syenite without an auxiliary flux, maturing at cones of 3 to 6 and exhibiting high translucency.

Ultra fine ceramic grades are used successfully in electrical porcelain, especially in alumina bodies, to provide faster and lower firing temperatures, increased firing range increased strength, increased shrinkage and decreased absorption over comparable bodies using potash feldspar. Nepheline syenite is also useful in formulating practically all-ceramic glazes particularly because of its fluxing ability in both fast-fire and conventional firing cycles.

Expected sales to be 25% of total annual production.

Industrial fillers in coatings, plastics and rubber

There are four roofing tile manufacturers in and around Portland, Oregon. Malarkey Roofing Products is the largest of the four and they are testing TMNS in their plant to determine how to use it in their manufacturing process. We should have an answer within the next 30 days. Malarkey is currently buying their filler from a source on the east coast. We feel this is an excellent application for our TMNS to start off with for two reasons: one is that we will do a minimum amount of processing by only grinding the stone to 140-150 mesh requiring no specialized equipment other than the crushing machines and second the customer will just pay for transport of the TMNS from Newport, Oregon to Portland on an ocean going barge. Once our product tests positive for their roofing tile filler we will negotiate a conditional sales contract for their business.

In speaking to Greg Malarkey, Malarkey's Senior Vice President recently he expressed the sentiment that will prevail with all four roofing products companies in that area and that is that he would "prefer to support an Oregon based company," than continue to buy his filler from his current East Coast source.

Expected sales from just these four roofing products companies to be 200 thousand tons annually.

Nepheline syenite is used as an extender of pigments and fillers: an application that was pioneered in Canada and now represents about 15% of total sales. Finely ground nepheline syenite is especially used as an inert filler in paints, both latex and alkalid systems, for use in high traffic areas, as metal primers, wood stains, sealers, and undercoats. Nepheline syenite contributes a high dry brightness, inertness, high bulking value, low vehicle demand, and easy wetting and dispersion in paint formulations.

In plastics, nepheline syenite is used as inert low cost mineral filler in polyvinyl chloride (PVC), epoxy and polyester resin systems. Because it exhibits a low resin demand, high filler loadings are possible, permitting reduced requirements for more expensive components.

Nepheline syenite is also used as inert filler in the manufacture of foam carpet backing. It has a specific gravity lower than either calcium carbonate or talc.

Expected sales from industrial fillers to be 40% of total annual production.

The key to our long-term competitiveness will be the quality of our product, the reliability of our supply to our clients and the cost of our delivered products. In each area it is essential we work to develop an unblemished reputation for quality, reliability of supply and delivery and best cost to our customers.

TABLE OF CONTENTS

1.	Introduction	3
2.	The deposit of nepheline syenite on Table Mt. in Oregon	5
3.	How RIA Mines can extract the stone from the quarries, crush it and transport it down to the Port of Newport for shipping it to the customer	9
4.	The customers in the Pacific Northwest for the Nepheline syenite	11
5.	The customers in Japan and Europe for nepheline syenite	16
6.	Nuclear Waste containers made from nepheline syenite	17
7.	Management of RIA Mines Inc.	20
8.	The Financials associated with the above processes	21
9.	Some information on the persons involved in this Feasibility Study	25
10.	Summary and Conclusions	27

1. Introduction

The purpose of this short Feasibility Study is to show the actual feasibility of this project by exploring the major aspect of it.

They fall into three categories:

1. Market
2. Organizational and technical
3. Financial

The questions we must answer include but are not limited to:

1. Is the nepheline syenite there in sufficient quantity and is it accessible to mine?
2. Can the mining take place in the specific quarries mentioned?
3. Can the rock crushing take place in the quarries or on the mountain?
4. Can the crushed stone be transported down the mountain to the Port of Newport?
5. Does the Port of Newport have the facilities to handle the transportation of the material from Newport by barge or by ship?
6. Can RIA Mines get sufficient customers in the Pacific Northwest, the west coast of the US and Canada and Mexico and Japan and Europe?
7. What is the cost of providing the material to the customers in ways in which they can use it?
8. What is the approximate price of the material to the customer?
9. Can the RIA Mines make money from this operation?
10. Does RIA Mines have the management to undertake this operation?

The persons involved in putting together this Feasibility Study are as follows:

Dr. Cyrus W. Field, Professor and Chairman Emeritus, Dept. of Geosciences, Oregon States University, Corvallis, Oregon.

Mr. Dennis Reno, Founder and former President and CEO of Kasper-Hall Corp.

Mr. Don Mann, General Manager, Port of Newport, Newport, Oregon

Mr. Fred Postlewait, President and CEO, Oregon State Bank, Newport, Oregon.

Mr. Gregory B. Malarkey, Senior Vice President for Sales and Marketing, Malarkey Roofing Products, Portland, Oregon.

Mr. Orlando Cavedoni, President of

Mr. Hiroshi S. Ohashi, former Vice President, GE of Japan

Mr. Joe Ho, President and CEO, MPS International Marketing Ltd., Richmond, British Columbia, Canada

Dr. Thomas B. Manton, President and CEO, RIA Mines Inc., Newport, Oregon.

The above persons were instrumental in participating in this Feasibility Study. Except for the case of Mr. Ho and Dr. Manton these persons are experts in their various fields and have agreed to supply information to make this Feasibility Study possible.

Mr. Ho and Dr. Manton are responsibility for putting this material together and writing the final draft which has been reviewed in whole or in part by the above persons.

2. The deposit of nepheline syenite on Table Mt. in Oregon

The deposit of nepheline syenite on and within Table Mountain is located southeast of Newport, Oregon. From the Port of Newport the most likely route is US Rt. 101 south from Newport to Waldport for 15.5 miles and then on Oregon State Route 34 east. Just past milepost 13 there is a US Forest Service road that climbs up to the main quarries on Table Mt. measures approximately 10 miles. Thus from the quarries to the Port of Newport it is approximately 38.5 miles.

The United States Geological Service (USGS) has done extensive work on Table Mt. and they have concluded the following:

The USGS Professional Paper 840, which features the Table Mountain nepheline syenite, suggests the deposit may be 400 feet thick. Using this number the indicated quantity is 700 million tons of probably reserve.

The immediately proven and able-to-mine reserves are between 35 and 40 million tons. Currently five quarries are open and could be mined with just a simple operating permit from the U.S. Forest Service. One of those quarries was being operated by the Forest Service for obtaining gravel to cover the logging roads needed in the Table Mountain area. Thus the immediate environmental restrictions are not major.

According to Bulletin 81 (1973) Environmental Geology of Lincoln County, Oregon, by the Oregon Department of Geology & Mineral Industries, and Henry Harris (1962) Economics of Coast Range Igneous Rocks in Oregon, U.S. Bureau of Mines unpublished report, the deposit is 300 feet thick, and covers one square mile - please see claim map in the USGS report.

The Oregon Department of Geology & Mineral Industries Bulletin assumes, from the vertical relief of the deposit (i.e: the elevation difference from outcrops on the top of the mountain, to the bottom of the exposure, adjusted for the angle of the slope), an indicated total of 700 million tons of recoverable nepheline syenite.

In addition, there is a privately held quarry right next to the land that RIA Mines have contract with the lease holder Mr. Barry Murray which has been holding the leases on 640 acres of Table Mt. for the last 20 years. This addition track of land is 320 areas and has a working quarry on it and does not need any State or Federal permission. We have agreed, in principle, to lease this land for the mineral rights from this private party.

There are other quarries available to RIA Mines within Lincoln County that contain usable nepheline syenite.

The USGC has, in 1995, examined the nepheline syenite taken from Table Mt. and has shown the following results.

U.S. Geological Survey Certificate of Analysis

Syenite STM-1

A sample of peralkaline nepheline syenite was collected from a sill that underlies Table Mountain which is approximately 60 km WNW of Eugene, Oregon. The rock sample was light to medium gray and had a glassy luster. The material was holocrystalline and very fine to fine grained, having a very pronounced trachytic texture (Flanagan, 1976).

Element concentrations were determined by cooperating laboratories using a variety of analytical methods. Certificate values are based primarily on international data compilations (Abbey, 1983; Gladney and Roelandts, 1988; Govindaraju, 1994). Initial USGS studies (Flanagan, 1976) provide background information on this material.

Recommended Values

<u>Oxide</u>	<u>Wt %</u>	<u>±</u>	<u>Oxide</u>	<u>Wt %</u>	<u>±</u>
SiO ₂	59.6	0.49	CaO	1.09	0.06
Al ₂ O ₃	18.4	0.23	MgO	0.10	0.02
Fe ₂ O ₃	2.87	0.02	Na ₂ O	8.94	0.20
FeO	2.09	0.03	K ₂ O	4.28	0.07
Fe ₂ O ₃ T	5.22	0.1	P ₂ O ₅	0.16	0.01
			TiO ₂	0.14	0.01

Glossary

<u>Symbol</u>	<u>Definition</u>
Fe ₂ O ₃ T	Total iron expressed as Fe ₂ O ₃
S _{tot}	Total concentration of sulfur
Wt %	Percent of total element concentration
µg/g	Total element concentration expressed as micrograms of element per gram of solid sample
±	One standard deviation

Notes

Unless otherwise indicated, total element concentrations are reported for material on an as-received basis, i.e., no drying.

<u>Element</u> $\mu\text{g/g}$ \pm	<u>Element</u> $\mu\text{g/g}$ \pm	<u>Element</u> $\mu\text{g/g}$ \pm
Ba 560 60	Gd 9.5 0.8	Sm 13 1
Be 9.6 0.6	Hf 28 2	Sr 700 30
Ce 260 18	La 150 6	Ta 19 1.2
Cl 460 40	Mn 1700 120	Tb 1.6 0.2
Cs 1.5 0.1	Nb 270 12	Th 31 3
Dy 8.1 0.5	Nd 79 7	U 9.1 0.1
Er 4.2 0.4	Pb 18 1.8	Y 46 5
Eu 3.6 0.3	Rb 118 6	Yb 4.4 0.4
F 910 50	Sb 1.7 0.2	Zn 235 22
Ga 35 5	Sc 0.61 0.07	Zr 1210 120

<u>Element</u> $\mu\text{g/g}$	<u>Element</u> $\mu\text{g/g}$	<u>Element</u> $\mu\text{g/g}$
Ag 0.08	Co 0.9	Ni 3
As 4.6	Cr 4.3	S _{tot} 43
B 6.4	Cu 4.6	Sn 6.8
Bi 0.13	Li 32	Tm 0.7
Cd 0.27	Mo 5.2	V 8.7

Certificate Information

Denver, Colorado
revised March 1995
David B. Smith
Central Region Mineral Resources Team (formerly Branch of Geochemistry)

With 35 to 40 millions tons of proven reserves by the USGS there is adequate quantity of nepheline syenite in Table Mt. alone to justify the opening and the operation of this mine. If RIA Mines could obtain even the very conservative figure of \$80 per ton, that proven reserve would amount to between \$2.8 BILLION. The mine would be productive for at least for 50 years.

It is the intention of RIA Mines to make products from the nepheline syenite that was add considerable value to the selling price of nepheline syenite.

As is mentioned above the probably reserves according to the USGS is 700 million tons which would make it the largest nepheline syenite deposit in the world.

Table Mt. would be the only large producing mine of nepheline syenite in the United States.

RIA Mines has just one competitor which is owned by a family in Belgium and is a monopoly in the commercial selling of nepheline syenite today.

Please see within the marketing section some of the uses for nepheline syenite.

3. How RIA Mines can extract the stone from the quarries crush it and transport it to the Port of Newport for shipping to the customer

The simple answer is that it has already been done by the US Forest Service and various timber companies that have used nepheline syenite as a cover for the road all over Table Mt. Miles and mine of both US Forest Service road as well as timber company road are built with a nepheline syenite cover that has been mined from various quarries on Table Mt.

In addition, this stone has been crushed on the mountain for use on the roads and therefore it has already been done for some years now.

What RIA Mines will need a substantial crusher in one of the quarries to crush the stone to the size required by the customer. If further crushing is needed, it could be done on land leased to us by the Port of Newport, very close to the place from which the material is shipped to the customers.

The roads mentioned above have taken very large timber trucks on a very regular basis. Therefore, it is possible to transport by truck the crushed nepheline syenite from the quarries on Table Mt. to the Port of Newport from which they are transported by barge to the customers in the Pacific Newport of the United States.

As mentioned earlier, the first 5 miles of the road from the quarries to State St. 34 is gravel cover with nepheline syenite. The second 5 miles is a tarmac road which ends at State Rt. 34 at approximately Milepost 13. From the US Forest Service road until Waldport is about 13 miles. At that juncture one travels north on the coast highway US 101 for 15.5 miles to the Port of Newport. From Milepost 13 to Waldport to Newport it is an excellent road.

RIA Mines will be leasing land right in the Port of Newport area to store and then transport by barge to the clients in Portland, Oregon where it will be offload on a Columbia River port to truck to the client in Portland. If there is one client in Tacoma, Washington barges could be sent up to the Port of Tacoma where it would be offload on to trucks for delivery to the client there.

This procedure is very normal on the west coast of the US and routine in the Pacific Northwest.

The Port of Newport has been most cooperative in providing the possibility of RIA Mines using a great deal of the Port land and the Port facilities. RIA Mines is now being invited into more formal negotiations which will lead towards a Lease/Contract between RIA Mines and the Port of Newport for use of the land and the Port facilities.

5. The customers in the Pacific Northwest for the Nepheline syenite

There are many use and markets for nepheline syenite. Some of these uses and markets are spelled out in great detail in the Business Plan. However, for the purposes of this Feasibility Study RIA Mines is suggesting that straight purchases of ground nepheline syenite could be marketed immediately.

Hence, RIA Mines initial customers are in the states of Oregon and Washington. The prime client has been very carefully cultivated over a number of years. This client is in Portland and makes roofing tiles from various kinds of stone. During 2005 RIA Mines provided this client a large sample of the rock crushed to their specifications. They tested the crushed rock and found that they could use the crushed nepheline syenite to replace the three or four various crushed rocks they import from out of the state of Oregon.

The extra bonus for this customer is that since they produce roofing tiles the insulation factor in the material is very important. We are told that

RIA Mines is now meeting Mr. Greg Malarkey, Senior Vice President for Marketing and Sales of **Malarkey Roofing Products** in Portland to offer a Conditional Contract of Sales. Mr. Greg Malarkey is the nephew of the owner of the company and seems to have free reign to make commitments on behalf of the company.

Mr. Malarkey is being offered a 10% discount off the market price for Malarkey Roofing Products as the lead customer of RIA Mines. He has indicated to RIA Mines that Malarkey Roofing Products will need at least 50,000 tons of nepheline syenite per year to meet their own requirements.

Mr. Malarkey has also suggested that he could be the “broker” for RIA Mines to obtain additional contacts with two other factories in the Portland area as well as one factory in Tacoma, Washington. Mr. Malarkey estimated that each such factory would need 50,000 tons per year of the product. He offered to help RIA Mines make the deal with these companies in the same form as it would be with Malarkey – a Conditional Contract of Sale. For this service RIA Mines is promising the “broker” a commission when the deal is completed.

Mr. Malarkey told RIA Mines that he and others want to deal with an Oregon company for a variety of reasons including that the product is near by within the State and the product would replace both the filler and the backing of the tiles – which could be a substantial saving to them.

The proposed Conditional Sales Agreement is as follows:

CONDITIONAL SALES AGREEMENT

THIS AGREEMENT MADE AS OF THE 21st DAY OF FEBRUARY, 2006.

BETWEEN: **RIA MINES Inc.**, a company duly incorporated under the laws of the State of Nevada, having a business office in Newport, Oregon, USA (hereinafter referred to as "VENDOR")

OF THE FIRST PART

AND: **Malarkey Roofing Products** a company duly incorporated under the laws of the State of Oregon, having a business office in Portland, Oregon, USA (hereinafter referred to as "PURCHASER")

OF THE SECOND PART

1. Vendor hereby sells to Purchaser and Purchaser hereby accepts from Vendor on the terms and conditions hereinafter set forth: **50,000 Metric Tons of Nepheline Syenite**, ordered herein (all of which shall hereinafter be referred to as the "Goods").
2. The said Goods shall be delivered to Purchaser by Vendor within 180 days from the execution of this Agreement, upon condition, nevertheless, that title hereto shall remain in Vendor and shall not pass to Purchaser until the purchase price has been paid in full (together with interest thereon).
3. Goods have to meet all Purchaser's specifications for the use as roofing material. Purchaser will provide specifications to Vendor 90 days before delivery of Goods. Final written acceptance of the specifications from Purchaser is required for the delivery of Goods.
4. The price will be 10% off the market price at the date when the specifications condition is removed.
5. Purchaser shall pay a 20% deposit on the date when the specifications condition is removed.
6. The Payment Schedule is: 20% at removal of the specifications condition, 40% at delivery, and 40% thirty days after delivery.
7. If Purchaser fails to accept delivery, it shall forfeit its deposit as liquidated damages for Vendor's expenses and efforts and Vendor shall be permitted to dispose of the Goods without any liability to Purchaser whatsoever. This does not limit Vendor's rights to additional damages against Purchaser.

8. From the time of delivery until all payments and other obligations of Purchaser have been fully performed, Purchaser shall bear the full burden of any loss or damage to the Goods due to fire, theft or any other cause whatsoever. This is regardless of the fact that the title to the Goods remains in Vendor. Purchaser covenants and agrees to keep the Goods in good condition and repair until payment in full including interest has been made.
9. Purchaser covenants and agrees to keep the Goods insured at all times against risks of fire (including extended coverage), theft, and other risks as Vendor may require, in such form, for such periods and with such companies as may be satisfactory to Vendor. Such insurance to be made payable to Vendor as its interest may appear. If loss, injury or destruction occurs to the Goods before payment in full has been made, Vendor shall have the right to collect any insurance money payable as its interests may appear and such insurance money shall be deemed to be payments towards the purchase price for the Goods. Purchaser however, shall remain fully liable for any deficiencies which may result after such application of insurance monies has been made.
10. Purchaser shall not mortgage, sell pledge or otherwise dispose of the Goods and shall keep the Goods free and clear of all liens, charges and encumbrances whatsoever until payment in full has been made. Vendor may pay any lien, charge or other encumbrance on the Goods and add the amount thereof to the amount secured by this Agreement and if Vendor so chooses, the whole amount secured by this Agreement shall fall due.
11. Purchaser shall be in default under this Agreement upon the happening of any of the following events or conditions:
 - (a) default in the payment (including interest) or performance of any of the obligations or any covenant or liability contained or referred to in this Agreement;
 - (b) if any warranty, representation or statement made or furnished to Vendor by or on behalf of Purchaser proves to have been false in any material respect when made or furnished;
 - (c) loss, theft, damage, destruction, sale of the Goods or the placing of any mortgage, lien, charge or other encumbrance whatsoever upon or against the Goods; and
 - (d) death, dissolution, termination of existence, insolvency, business failure, appointment of a receiver of all or any part of the Goods, assignment for the benefit of creditors by, or the commencement of any proceedings under any bankruptcy or insolvency laws by or against Purchaser.
12. Upon the happening of any event or condition of default and at any time thereafter, Vendor may declare the obligations secured by this Agreement immediately due and payable, whereupon all the obligations shall become due and payable forthwith and Vendor shall have in addition to any other rights and remedies provided by law, the rights and remedies of a secured party under the laws of the State of Oregon and those provided by this Agreement. Vendor shall have the right to take immediate repossession of the Goods by any method permitted by law.
13. No waiver by Vendor of any default shall operate as a waiver of any other default or of the same default on a future occasion.

14. Purchaser acknowledges that this Agreement constitutes the entire contract between the Parties and that there are no representations, warranties or conditions express or implied statutory or otherwise, other than those contained herein.
15. The Goods shall remain personal property irrespective of the manner of their attachment to the realty, and title thereto shall be and remain vested in Vendor until the purchase price thereof has been fully paid and Purchaser has fully complied with all his obligations under this contract. Until full payment, Vendor shall be vested with title to any additions and substitutes in and to the Goods as well as title to the Goods themselves.
16. The interest of Purchaser in this contract or in the Goods shall not be assigned, sold or transferred nor shall the Goods be leased, loaned or rented or removed from the address stated in Purchaser's bill of sale.
17. This Agreement shall be binding upon and endure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.
18. This purchase order is an offer to purchase the Goods. Receipt by Buyer of Seller's acceptance by the return of one copy of this Purchase Order duly executed by the Seller within thirty (30) days of the date of this purchase order will create a contract upon the terms and conditions herein set forth.

Thomas B. Manton
RIA MINES Inc.

Greg Malarkey
Malarkey Roofing Products

The customers in Europe and Japan for nepheline syenite

The commercial sale of nepheline syenite in Europe and the United States is a monopoly now being head by a single family in Brussels operating out of a holding company in the Italian part of Switzerland. They have their principal mines in Blue Mt. in northern Ontario, Canada as well as on an island in the Arctic Circle of northern Norway. The Norwegian mine is underground therefore the costs as substantially higher.

In December 2005 and January 2006 RIA Mines was contacted by Mr. Hiroshi Shin Ohashi. Dr. Manton visit Mr. Ohashi and his long term friend of colleague Mr. Orlando Cavedoni from Italy who has been in the business of selling nepheline syenite for many years. He knows the inside of this business. Mr. Ohashi was a Vice President of General Electric of Japan for consideration time and has been in the consulting with both Japanese and American company for some years now.

Dr. Manton has a most productive series of meeting with them over a 24 hour period on time in January 2006 in Rancho Mirage, California.

As a result, it was decided to award the marketing of our product to Mr. Orlando Cavedoni as the exclusive agent of the company in Western Europe and the Mediterranean area. This will be a great addition to our marketing effort since Europe is very familiar with the product and has considerable need for in the manufacturing process of ceramics and tile industry.

We have awarded Mr. Ohashi the marketing for our product in Japan and are working very closely with him in the area of developing nuclear waste containers.

RIA Mines very much looks forward to working with both gentlemen in the coming months and years.

6. Nuclear waste containers made from nepheline syenite

Introduction:

Starting in 2010 the Yucca Mt. facility is due to open. We are told that during the last 40 years only 3,000 nuclear waste containers have been moved around the country. In contrast, once Yucca Mt. opens, we are told that between 50,000 and 100,000 nuclear waste containers will be shipped from up to 126 currently used nuclear waste sites to Yucca Mt. Within Table Mt., RIA Mines Inc. has the material from which we could manufacture very safe and effective nuclear waste containers – namely, nepheline syenite.

The US Dept. of Energy states:

*“For over two decades, the Yucca Mountain Project has conducted an extensive scientific effort to determine whether Yucca Mountain, Nevada is a suitable site for a deep underground facility called a repository. The purpose of a repository is to safely isolate highly radioactive **nuclear waste** for at least 10,000 years.*

*On July 9, 2002, the U.S. Senate cast the final legislative vote **approving the development of a repository at Yucca Mountain.***

*The Yucca Mountain Project is currently focused on preparing an application to obtain a **license** from the **U.S. Nuclear Regulatory Commission** to construct a repository.”*

What RIA Mines has been told by:

The Chief Scientist of the US Dept of Energy has said the ideal material to make nuclear waste containers is nepheline syenite but we in the United States do not have enough of this material to make them. With Table Mt. coming online RIA Mines can offer the output of our quarries to manufacture nuclear waste containers.

The Immobilisation Science Laboratory of the University of Sheffield (ISL) has 40 researchers working on making safe nuclear waste containers. They would like to use nepheline syenite but they feel none is available in great quantities. RIA Mines has been in close touch with Dr. Bill Lee who is Director of the ISL and is an expert himself in this area of nuclear waste containers.

RIA Applied Research Laboratory (RARL) is being established in Newport, Oregon to handle the above mentioned matter as well as several other projects of urgent concern. Dr. Bill Lee, Director of the ISL at the University of Sheffield, has agreed to join the research institutions that will be affiliated with RARL. The

RARL will apply for research funds from the US Dept. of Energy and other institutions for the funding of this critical applied research that will be done in Newport as well as other places. We have also been informed that the Russian Academy of Sciences is ready to be an affiliated institution of RARL. The Russians have 30 years experience in working with nepheline syenite mostly in military applications including protective shields for nuclear submarines and their nuclear power plants. They will also be brought into this important applied research. One or more American institutions shall also join in to undertake this important applied research.

RIA Nuclear Waste Containers Inc. (RNWC) shall be established in Newport. It shall be owned by RIA Mines Inc. (51%) and other partners who have a great deal experience in the making of nuclear waste containers. RIA Mines shall control this new company.

RNWC shall establish its manufacturing plant at the Port area in Newport, Oregon.

Once the prototypes are made and have passed the rigid tests established by the U. S. Nuclear Regulatory Commission, RNWC will approach the US Dept of Energy as well as the many current waste sites to market our safe and efficient product.

Marketing will also be undertaken in Europe and other places where the disposal of nuclear wastes are a problem and we can be part of the solution.

Initial Management of RIA Nuclear Waste Containers Inc. (RNWC)

RIA Mines is pleased to name a very distinguished engineer Roger Garramore to be the Chief Operating Officer and Executive Vice President of RNWC. Mr. Garramore has built nuclear power plants which were completed on budget and on time. He has an amazing breath of experience in nuclear energy as well as engineering and construction.

Marketing Targets

Since RIA Mines are informed that between 50,000 and 100,000 movements will be undertaken starting in 2010 that means RIA Mines should be able to obtain 5% to 10% of that market during the first five years of operation. RIA Mines' specific marketing target will be 5,000 containers or 1,000 per year for the first 5 years of supplying RIA's clients.

RIA Mines plans to become the premier nuclear waste container in the world. Once that happens, RIA Mines will have a market in any country that uses nuclear power.

These sales could begin as soon as we have approved nuclear waste containers ready for the marketplace.

Financials:

RIA Mines are informed that each container of about 8' by 6' by 6' would cost over US\$1 million. These must be fully safe and secure containers that would be sent from 126 currently-used nuclear waste sites across the United States to Yucca Mt. in Nevada.

With a target of 1,000 containers per year, that would be approximately US\$1 billion in gross revenues. There would be a very sufficient profit margin. It is unlikely that this profit margin would be not less than 50%.

Please Note: The revenue for the nuclear waste containers, which shall be very considerable, has not been calculated in the overall financials of this Feasibility Study. Within the coming months a special and separate Business Plan and Feasibility Study will be produced on this new subsidiary company.

Worth to RIA Mines Inc.

If we could assure a profit margin of 50% of gross revenues, then there would be a total profit before taxes of \$500 million per year. With RIA Mines being 51% owner of RNWC, the profit before taxes would be \$250 million. This would make RIA Mines a very valuable company just from this product alone.

7. The Management of RIA Mines Inc.

The Honorable Curtin Winsor, Jr. – Chairman of the Board is former American Ambassador to Costa Rica, former owner of a number of coal mines in West Virginia and chemical companies and now Chairman of the RIA Group.

H.E. Professor Dr. Ernst Florian Winter - Director Emeritus of the Austrian Diplomatic Academy in Vienna and numerous other high posts in Europe detailed in the management resumes. Dr. Winter is the Special Advisor to the Board as well.

Dr. Thomas B. Manton is President and CEO who has a long and distinguished record of leadership in international business and wide relationships throughout Asia and the Middle East. He is President and CEO of RIATRADE Development Inc. He has been CEO of a number of enterprises around the world for the last 30 years. He is a former professor of International Business at the University of Washington in Seattle and early in his career was with the United Nations and was the biographer of *U THANT: A POLITICAL BIOGRAPHY: The third Secretary General of the United Nations*.

Mr. Joe Y. C. Ho, CGA, MBA is the Executive Vice President of the company and will handle not only the finances of the company but also marketing in Asia. Mr. Ho has thirty years experience in the field of finance and international business. He is President and CEO of the MPS International Group.

Mr. John Fred Salitore - Senior Vice President for Sales and Marketing who has a long and distinguished career in marketing and operations around the world, including in India, China, Iran, the United States and most recently Iraq.

The Honorable Dr. Nikolay V. Mungalov is the Senior Vice President for Technology and the official Representative (Ambassador) of the Buryat Republic in Europe based in the Czech Republic. He was an official of the United Nations Industrial Development Organization in Vienna. He is Chairman of RIATRADE Development Inc. He is currently also Deputy Secretary General of the International Traffic Police and Road Transport Organization. He holds a doctorate of Economy in Foreign Trade.

Mr. Syed Salamah Ali Mahdi – is Senior Vice President for the Middle East and South Asia who has had a long career in marketing and operations of companies in both the Middle East and South Asia.

A world class mining expert has been identified and is in the process of being named. He would be named the general manager of mining.

8. The Financials associated with the above processes

RIA Mines Inc.
Table Mountain Operation
 Projected Statement of Cashflow
 Year 1- Year 5

	Year 1	Year 2	Year 3	Year 4	Year 5
	US\$	US\$	US\$	US\$	US\$
Cash In:					
Sales (Nepheline Syenite)	\$25,500,000	\$51,625,000	\$79,417,188	\$96,305,137	\$111,359,581
Loans	\$10,000,000	-\$2,500,000	-\$2,500,000	-\$2,500,000	-\$2,500,000
Total Cash In:	\$35,500,000	\$49,125,000	\$76,917,188	\$93,805,137	\$108,859,581
Cash Disbursements:					
Capital Investment (mining):					
Building - Plant	\$1,600,000	\$240,000	\$240,000	\$240,000	\$240,000
Mining Equipment	\$1,500,000	\$300,000	\$300,000	\$300,000	\$300,000
Office Equipment	\$150,000	\$30,000	\$30,000	\$30,000	\$30,000
Deposits	\$120,000				
Direct Production Cost (Nepheline Syenite)					
Mining	\$2,240,000	\$4,796,000	\$7,889,200	\$10,222,080	\$12,649,824
Truck to plant	\$1,960,000	\$4,196,500	\$6,903,050	\$8,944,320	\$11,068,596
Processing	\$2,800,000	\$5,995,000	\$5,995,000	\$6,594,500	\$7,253,950
Overhead and workers	\$2,520,000	\$5,395,500	\$5,935,050	\$6,528,555	\$7,181,411
Additional Cost for Other Products		\$120,000	\$240,000	\$360,000	\$480,000
Lease - Equipment					
Mining	\$700,000	\$770,000	\$847,000	\$931,700	\$1,024,870
Automobile	\$50,000	\$55,000	\$60,500	\$66,550	\$73,205
Office Equipment	\$30,000	\$33,000	\$36,300	\$39,930	\$43,923
Salaries & Wages:					
Administrative	\$750,000	\$900,000	\$1,080,000	\$1,296,000	\$1,555,200
Marketing	\$250,000	\$287,500	\$330,625	\$380,219	\$437,252
Fringe & Benefits	\$80,000	\$95,000	\$112,850	\$134,098	\$159,396
Royalties (1% of Gross Revenue)	\$255,000	\$516,250	\$794,172	\$963,051	\$1,113,596
Communications	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Repair & Maintenance	\$300,000	\$330,000	\$363,000	\$399,300	\$439,230
Marketing Commissions	\$2,550,000	\$5,162,500	\$7,941,719	\$9,630,514	\$11,135,958
Marketing Expenses	\$1,275,000	\$2,581,250	\$3,970,859	\$4,815,257	\$5,567,979
Royalties	\$255,000	\$516,250	\$794,172	\$963,051	\$1,113,596
Interest Expense	\$1,200,000	\$900,000	\$600,000	\$300,000	
Professional Fees	\$100,000	\$50,000	\$55,000	\$60,500	\$66,550
Permit & Licences	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Insurance	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Travel Expenses	\$175,000	\$192,500	\$211,750	\$232,925	\$256,218
Headquarters Expenses	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Housing for Staff	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Other Offices	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Automobile Expenses	\$100,000	\$110,000	\$121,000	\$133,100	\$146,410
Miscellaneous	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Total Cash Disbursement:	\$21,970,000	\$34,678,250	\$46,062,847	\$54,893,409	\$63,792,698
Cash In (Cash Out)	\$13,530,000	\$14,446,750	\$30,854,341	\$38,911,727	\$45,066,883
Cash In Hand - Beginning		\$13,530,000	\$27,976,750	\$58,831,091	\$97,742,818
Cash In Hand - Ending	\$13,530,000	\$27,976,750	\$58,831,091	\$97,742,818	\$142,809,701

* Tax & interest revenue are not included in projection

RIA Mines Inc.
Table Mountain Operation
Projected Statement of Profit & Loss
Year 1- Year 5

	Year 1	Year 2	Year 3	Year 4	Year 5
	US\$	US\$	US\$	US\$	US\$
Revenue					
Sales (Nepheline Syenite)	\$25,500,000	\$51,625,000	\$79,417,188	\$96,305,137	\$111,359,581
Total Revenue:	\$25,500,000	\$51,625,000	\$79,417,188	\$96,305,137	\$111,359,581
Expenses					
Direct Production Cost:					
Mining	\$2,240,000	\$4,796,000	\$7,889,200	\$10,222,080	\$12,649,824
Truck to plant	\$1,960,000	\$4,196,500	\$6,903,050	\$8,944,320	\$11,068,596
Processing	\$2,800,000	\$5,995,000	\$5,995,000	\$6,594,500	\$7,253,950
Overhead and workers	\$2,520,000	\$5,395,500	\$5,935,050	\$6,528,555	\$7,181,411
Additional Cost for Other Products		\$120,000	\$240,000	\$360,000	\$480,000
Lease - Equipment					
Mining	\$700,000	\$770,000	\$847,000	\$931,700	\$1,024,870
Automobile	\$50,000	\$55,000	\$60,500	\$66,550	\$73,205
Office Equipment	\$30,000	\$33,000	\$36,300	\$39,930	\$43,923
Salaries & Wages:					
Administrative	\$750,000	\$900,000	\$1,080,000	\$1,296,000	\$1,555,200
Marketing	\$250,000	\$287,500	\$330,625	\$380,219	\$437,252
Fringe & Benefits	\$80,000	\$95,000	\$112,850	\$134,098	\$159,396
Royalties (1% of Gross Revenue)	\$255,000	\$516,250	\$794,172	\$963,051	\$1,113,596
Communications	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Repair & Maintenance	\$300,000	\$330,000	\$363,000	\$399,300	\$439,230
Marketing Commissions	\$2,550,000	\$5,162,500	\$7,941,719	\$9,630,514	\$11,135,958
Marketing Expenses	\$1,275,000	\$2,581,250	\$3,970,859	\$4,815,257	\$5,567,979
Royalties	\$255,000	\$516,250	\$794,172	\$963,051	\$1,113,596
Interest Expense	\$1,200,000	\$900,000	\$600,000	\$300,000	
Professional Fees	\$100,000	\$50,000	\$55,000	\$60,500	\$66,550
Permit & Licences	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Insurance	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Travel Expenses	\$175,000	\$192,500	\$211,750	\$232,925	\$256,218
Headquarters Expenses	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Housing for Staff	\$120,000	\$132,000	\$145,200	\$159,720	\$175,692
Other Offices	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Automobile Expenses	\$100,000	\$110,000	\$121,000	\$133,100	\$146,410
Miscellaneous	\$200,000	\$220,000	\$242,000	\$266,200	\$292,820
Depreciation - Plant	\$160,000	\$184,000	\$208,000	\$232,000	\$256,000
Depreciation - Equipment	\$330,000	\$396,000	\$462,000	\$528,000	\$594,000
Total Expenses:	\$19,090,000	\$34,688,250	\$46,162,847	\$55,083,409	\$64,072,698
Total Profit (Loss)	\$6,410,000	\$16,936,750	\$33,254,341	\$41,221,727	\$47,286,883

* Tax & interest revenue are not included in projection

Assumptions - Sales

	Nepheline Syenite Material				
	Year 1	Year 2	Year 3	Year 4	Year 5
Nepheline Syenite Sold (in tons)	250,000	500,000	750,000	875,000	975,000
Average price per ton (US\$)	\$90.00	\$92.25	\$94.56	\$96.92	\$99.34
Sales (US\$):	\$22,500,000	\$46,125,000	\$70,917,188	\$84,805,137	\$96,859,581
Roof & stone material sold (in tons)	30,000	45,000	65,000	85,000	105,000
Average price per ton (US\$)	\$100	\$100	\$100	\$100	\$100
Sales (US\$):	\$3,000,000	\$4,500,000	\$6,500,000	\$8,500,000	\$10,500,000
Total Tonnage:	280,000	545,000	815,000	960,000	1,080,000
Other Products Sales (US\$) * :		\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000
Total Sales:	\$25,500,000	\$51,625,000	\$79,417,188	\$96,305,137	\$111,359,581

* Other Products Sales does not include new material sales.

Assumptions - Expenses & Other

(All \$ are US\$)

	<u>Year 1</u>			
Cash In:				
Loans	\$10,000,000	<u>Loan Repayment</u>		
		25% Second Year		
		25% Third Year		
		25% Fourth Year		
		25% Fifth Year		
	<u>Year 1</u>			
Cash Disbursements:				
Capital Investment (Mine):				
Building - Plant	\$1,600,000	Annual additions	15%	
Mining Equipment	\$1,500,000	Annual additions	20%	
Office Equipment	\$150,000	Annual additions	20%	
Royalties	1%	of Gross Revenue		
Deposits	\$120,000			
Direct Production Cost (Nepheline Syenite):				
Mining	\$8	per ton	Annual increase	10%
Truck to plant	\$7	per ton	Annual increase	10%
Processing	\$10	per ton	Annual increase	10%
Overhead and workers	\$9	per ton	Annual increase	10%
Additional Cost for Other Products	12%	of Other Products Sales		
Lease - Equipment				
Mining	\$700,000	Annual increase	10%	
Automobiles	\$50,000	Annual increase	10%	
Office Equipment	\$30,000	Annual increase	10%	
Salaries & Wages:				
Administrative	\$750,000	Annual increase	20%	
Marketing	\$250,000	Annual increase	15%	
Fringe & Benefits	8%	of Salaries & Wages		
Communications	\$120,000	Annual increase	10%	
Repair & Maintenance	\$300,000	Annual increase	10%	
Marketing Commissions	10%	of gross sales		
Marketing Expenses	5%	of gross sales		
Royalties	1%	of gross sales		
Interest Expense	12%	on outstanding loans		
Permits & Licences	\$50,000			
Professional Fees	\$100,000	<u>2nd Year</u>	Annual increase	10%
		\$50,000		
Insurance	\$120,000	Annual increase	10%	
Travel Expenses	\$175,000	Annual increase	10%	
Headquarters Expenses	\$200,000	Annual increase	10%	
Housing for Staff	\$120,000	Annual increase	10%	
Other Offices	\$200,000	Annual increase	10%	
Automobile Expenses	\$100,000	Annual increase	10%	
Miscellaneous	\$200,000	Annual increase	10%	
Depreciation -Equipment	20%	per year		
Depreciation - Plant (Building)	10%	per year		

9. Some information on the persons involved in this Feasibility Study

A number of persons have participated in this Feasibility Study. The professions and resumes of several of these participants are self-explanatory and therefore are not mentioned in this short summary.

Dr. Cyrus W. Field, Professor and Chairman Emeritus, Dept. of Geosciences, Oregon States University, Corvallis, Oregon. Dr. Field has been involved in a number of mining companies both in the United States and around the world. He is considered one of the world's experts in mining and geology.

Mr. Dennis Reno, Founder and former President and CEO of Kasper-Hall Corp. Mr. Reno is a graduate in engineering from the University of Arizona and has been in engineer most of this life. In 1983 he founded Kasper-Hall Corp. which he owned and operated as President and C.E.O. This Engineering and Construction business was primarily focusing on mining and industrial facilities such as waste water treatment plants. During this period he started and operated several spin off companies, which complemented each other with offices in three States. He started this company and it grew to several hundred employees during his tenure. In 1995 he sold the company. Since then he had been doing engineering consulting and airport management.

Mr. Don Mann, General Manager, Port of Newport, Newport, Oregon. RIA Mines has been working very closely with Mr. Mann and his colleagues in the Port Commission.

Mr. Fred Postlewait, President and CEO, Oregon State Bank, Newport, Oregon. Mr. Postlewait is a very well respected citizen of Newport and the only locally-owned bank in the city of Newport.

Mr. Gregory B. Malarkey, Senior Vice President for Sales and Marketing, Malarkey Roofing Products, Portland, Oregon. Malarkey is a decision maker in the Malarkey Roofing Products Company which is owned by his uncle.

Mr. Orlando Cavedoni, President of Minerali Ceramici. Mr. Cavedoni has been given the exclusive representation of the products of RIA Mines in western Europe and the Mediterranean area.

Mr. Hiroshi S. Ohashi, former Vice President, GE of Japan. Mr. Ohashi has been given by RIA Mines the exclusive representation of RIA Mines in Japan for the marketing of their products.

Mr. Joe Ho, President and CEO, MPS International Marketing Ltd., Richmond, British Columbia, Canada and he is Executive Vice President of RIA Mines, Inc.

Dr. Thomas B. Manton, President and CEO, RIA Mines Inc., Newport, Oregon.

10. Summary and Conclusions

RIA Mines is already starting to market their product within the States of Oregon and Washington. Soon some Conditional Sales Agreements will be signed – maybe as early as the first week of March 2006.

From one Conditional Sales Agreements with Malarkey in Portland, there is a strong possibility that RIA Mines will obtain up to three other such Agreements – one in Portland and one in Tacoma, Washington. Those four agreements could make a total sales commitment of 200,000 tons of nepheline syenite sold each year during the first five years of RIA Mines. With no other business, all loans and other borrowings could be very easily paid off during that time with a great deal of cash to build the company as well as pay the shareholders handsomely.

The above does not include any other market to which RIA Mines has the possibility of selling into. The market chapter in the Business Plan has detailed many other uses for nepheline syenite. Ceramics and glass are just two of the many well-known products for which nepheline syenite is preferably to use.

There is a large market in Europe for which RIA Mines' nepheline syenite can be used.

RIA Mines is pursuing the markets which are immediately available and then expanding its marketing reach around the world.

Simultaneously, RIA Mines will be working on other applications for the use of nepheline syenite in many fields.

Immediately RIA Mines will be setting up a company to manufacture nuclear waste containers. We will be getting the technology from the Russian Academy of Sciences. We will then be developing it with the specifications that will meet the already set standards of the U.S. Nuclear Regulatory Commission to seek the certification from them to be used in the world's largest market place the United States. Once those containers are being sold, RIA Mines estimates that the sales figures for this new company – RIA Nuclear Waste Container Company - will be over US\$1 BILLION.

RIA Mines has shown this to be a very fine business opportunity.