

Appendix B

County/City ~~XXX~~ SISKIYOU

**SUGGESTED MODEL RECLAMATION PLAN**  
As a guide to Counties and Cities for Compliance with  
Section 2772, Surface Mining and Reclamation Act of 1975

**OWNER, OPERATOR, AND AGENT:**

**1. Applicant**

Name Spring Hill Enterprises  
Address P. O. Box 212  
Mt. Shasta, CA 96067  
Telephone (916) 926-4501

**2. Name (if any) of Mineral Property** "Spring Hill"

**3. Property Owners, or owners of surface rights (List all owners).**

Name Spring Hill Enterprises  
Address P. O. Box 212  
Mt. Shasta, CA 96067  
Telephone (916) 926-4501

**4. Owners of Mineral rights.**

Name Spring Hill Enterprises  
Address P. O. Box 212  
Mt. Shasta, CA 96067  
Telephone (916) 926-4501

**5. Lessee.**

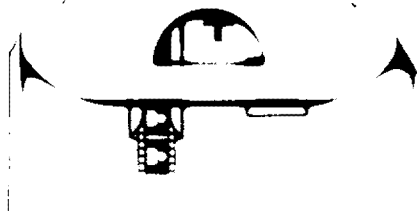
Name Spring Hill Enterprises  
Address P. O. Box 212  
Mt. Shasta, CA 96067  
Telephone (916) 926-4501

**6. Operator.**

Name Spring Hill Enterprises  
Address P. O. Box 212  
Mt. Shasta, CA 96067  
Telephone (916) 926-4501

**7. Agent of Process.** (Person designated by operator as his agent for the service of process).

Name Melvin A. Livingston  
Address 4891 Patricia  
Redding, CA 96001  
Telephone (916) 221-4292



**LOCATION:**

8. Brief description, including legal, of the extent of the mined lands (to be) involved by this operation, including total acreage.

Section(s) 5, Township 40N, Range R4W.D.B.  
Meridian.

9. Describe the access route to the operation site. Primary access, North/South, is from Interstate Highway 5 at Abrams Lake Road. Secondary access is provided by means of existing frontage, Spring Hill Drive, from North Mt. Shasta to Abrams Lake Road Interchange.

10. Attach Location and Vicinity Map.

Map attached.

**DESCRIPTION:**

11. Mineral commodity (to be) mined: Volcanic Rock

12. Geologic description, including brief general geologic setting, more detailed geologic description of the mineral deposit (to be) mined, and principal minerals or rock types present. The proposed quarry and plant site is located North of Spring Hill and generally slopes from Northeast to Southwest. Elevations vary from 4060 feet above sea level in the Northeast corner to 3850 feet above sea level in the Southwest, near Spring Hill Drive. See Additional Information for more description.

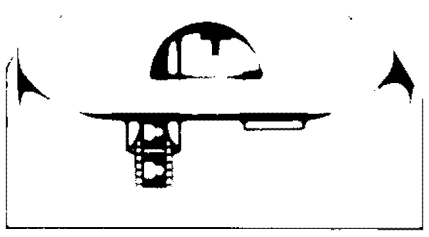
13. Brief description of environmental setting of the site and the surrounding areas. Describe existing area land use, soil, vegetation, ground water elevation and surface water characteristics, average annual rainfall and/or other factors pertaining to environmental impacts and their mitigation and reclamation. Environmentally the site is located in "Strawberry Valley" which separates Mt. Eddy and the Trinity Mountains from Mt. Shasta. The acreage setup for the quarry and plant site operation is in a re-growth development. Average annual rainfall is thirty-seven (37) inches. See Reclamation Plan, Additional Information.

**PROPOSED (EXISTING) SURFACE MINING OPERATION:**

14. Proposed starting date of operation 1980

Estimated Life of Operation 50 Years

Duration of First Phase  
Anticipated 10 years, Reference Phasing Plan.



15. Operation will be (is): Continuous  X , Seasonal \_\_\_\_\_,  
 Intermittent \_\_\_\_\_  
 Developed,  
 not yet in operation  X , Temporarily deactivated \_\_\_\_\_,  
 Stockpile in Mine \_\_\_\_\_

16. Operation will be (is):  
 Under 5,000 tons cu. yds/yr. \_\_\_\_\_  
 5,000 - 50,000 tons cu. yds/yr. \_\_\_\_\_  
 50,000 - 250,000 tons cu. yds/yr.  X   
 250,000 - 1,000,000 tons cu. yds/yr. \_\_\_\_\_  
 Over 1,000,000 tons cu. yds/yr. \_\_\_\_\_

17. Total anticipated production

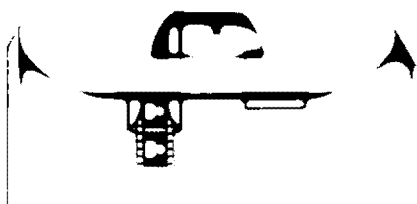
Mineral commodities to be removed -	tons (cu. yds.)	<u> 10,000,000 </u>
Waste retained on the site -	tons (cu. yds.)	<u> -0- </u>
Waste disposed off site -	tons (cu. yds.)	<u> -0- </u>
Maximum anticipated depth <u> 200 </u> ft.		

18. Mining Method: (Check all applicable)

Open Pit <u> X </u>	Gravel/Sand Pit <u> X </u>
Single Bench _____	Drill and Blast _____
Quarry:	
Hill Top _____	Clay Pit _____
Multibench <u> X </u>	Truck to processing _____
Side Hill <u> X </u>	plant (To RR) <u> X </u>
Dragline _____	Borrow Pit _____
Low Level _____	Tailings Pond _____
Shovel _____	Slurry Pump _____
Underground _____	Waste dump _____
Gravel bar skimming _____	Rail _____
Other _____	Other _____

19a. If processing of the ores or minerals mined is planned to be conducted at or adjacent to the site, briefly describe the nature of the processing and explain disposal method of the tailings or waste from processing.  
 Processing methods will be common to the industry and will consist of screening, crushing, and concrete batching equipment with the necessary conveyor belts for feeding and stockpiling materials. Waste water and residual particles will be contained on site in settling ponds.

19b. Estimate quantity (gallons per day) and quality of water required by the proposed operation, specifying proposed sources of this water, of method of its conveyance to this property and the quantity and quality and method of disposal of used and/or surplus water.  
 Approximately 10,000 G.P.D. will be used in the processing operations from wells on site. Waste water will be contained on site in settling ponds for percolation into the ground.



20. If the nature of the deposit and the mining method used will permit, describe and show the steps or phases of the mining operation that allow concurrent reclamation, and include a proposed time schedule for such concurrent activities.

See attached drawing for phasing of the operation. Concurrent reclamation is precluded by nature of the operation. Revegetation of the North/South cut slopes will be completed during the course of the mining operations.

21. Attach a map of the mined lands and/or suitable aerial photograph showing:

- (a) Boundaries and topographic details of the site;
- (b) Location of all streams, roads, railroads, water wells, and utility facilities within 500 feet of the site;
- (c) Location of all currently proposed access roads to be constructed in conducting the surface mining operation(s);
- (d) Location of areas (to be) mined, and of waste dumps and tailings ponds.
- (e) By use of overlay symbol or color, depiction of separate mining phases if applicable. (See Item 20).
- (f) The source of map base, orientation (North arrow), and scale (e.g., 1" = 500', etc.) of the map.

**RECLAMATION PLAN:**

22. Indicate on an overlay of map of Item 21, or by color or symbol on map those areas to be covered by reclamation plan.

Acreage 100

23. Describe the ultimate physical condition of the site and specify proposed use(s), or potential uses, of the mined lands as reclaimed.

Approximately 15% of the site will be level, suitable for building or other designated uses within General Plan Criteria. The balance of the site will ultimately be set aside for wildlife habitat or recreational facility.

24. Describe relationship of the interim uses other than mining and the ultimate physical condition to:

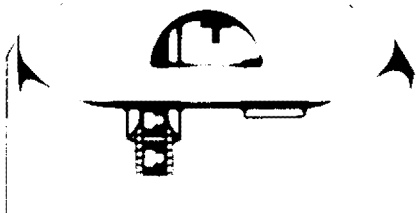
- (a) Zoning regulations. Currently light industrial (M1).
- (b) General plan and plan elements. Zoned light industrial with proposed Industrial Park under consideration.

25. Provide evidence that all owners of a possessory interest in the land have been notified of the proposed use(s) or potential uses identified in Item 22. (Attach copy of notarized statement of acknowledgment, etc.)

Owner/Applicant

26. Describe soil conditions and proposed soil salvage plan.

Soils are generally gravelly with low to moderate fertility. Soil salvage plan includes total utilization of materials to designed quarry floor elevations.

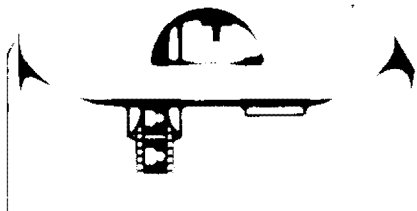


27. Describe the methods, their sequence and timing, to be used in bringing the reclamation of the land to its end state. Indicate on map (Item 21-22) or on diagrams as necessary. Include discussion of the pertinent items listed below.
- (a) Backfilling and grading.
  - (b) Stabilization of slopes.
  - (c) Stabilization of permanent waste dumps, tailings, etc.
  - (d) Rehabilitation of pre-mining drainage.
  - (e) Removal, disposal, or utilization of residual equipment, structures, refuse, etc.
  - (f) Control of contaminants, especially with regard to surface runoff and ground water.
  - (g) Treatment of streambeds and streambanks to control erosion and sedimentation.
  - (h) Removal or minimization of residual hazards.
  - (i) Resoiling, revegetation with evidence that selected plants can survive given the site's topography, soil and climate.
- 

28. If applicant has selected a short term phasing of his reclamation, describe in detail the specific reclamation to be accomplished during first phase. Short term phasing consists primarily of site preparation for plant and equipment. Revegetation of North/South cut slopes for stabilization and drainage.
- 

29. Describe how reclamation of this site in this manner may affect future mining at this site and in the surrounding area.

Anticipated utility of aggregate sources precludes future mining at this site.



R E C L A M A T I O N   P L A N

County of Siskiyou  
Application for Compliance with  
Section 2772 of the Surface Mining  
and Reclamation Act of 1975  
-----

February 5, 1980

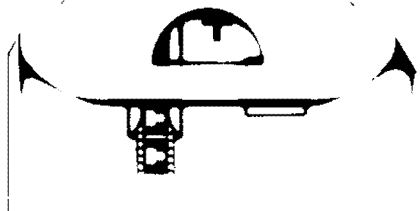
ADDITIONAL INFORMATION

LOCATION:

8. The proposed quarry and plant site is situated on approximately 100 acres North of Spring Hill; 1½ miles North of the City of Mt. Shasta In Section 5, Township 40N, Range 4 W.D.B., County of Siskiyou, State of California.
9. Primary access, North/South, is from Interstate Highway 5 at Abrams Lake Road. Secondary access is provided by means of existing frontage, Spring Hill Drive, from North Mt. Shasta to Abrams Lake Road Interchange.

DESCRIPTION:

11. Mineral commodities to be mined consist primarily of volcanic rock suitable for commercial aggregate production.
12. The proposed quarry and plant site is located North of Spring Hill and generally slopes from Northeast to Southwest. Elevations vary from 4060 feet above sea level in the Northeast corner to 3850 feet above sea level in the Southwest, near Spring Hill Drive.

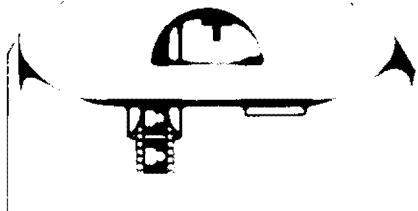


The geologic setting is dominated by Mt. Shasta and several plug domes on the lower slopes. Black Butte, an andesitic dome, is to the North and Spring Hill, an andesitic lava cone, is South of the project site.

Soils in this area are generally gravelly with low to moderate fertility; consisting primarily of glacial outwash fans and plains identified in the Deetz Series (85def and 85GCD).

13. Environmentally the site is located in "Strawberry Valley" which separates Mt. Eddy and the Trinity Mountains from Mt. Shasta. Currently the acreage setup for the quarry and plant site operation is in a regrowth stage of development dominated by manzanita and buck brush; with evidence of ponderosa pine, white fir, and cedar. The project site is not within any designated floodways nor is there any evidence of standing surface water bodies or streams on the project site. The area generally receives an average annual rainfall of thirty-seven (37) inches with surface water runoff flowing Northeast to Southwest following the natural ground contours.

Based on elevations of ground water in existing wells surrounding the proposed site, ground water occurs in the glacial outwash 90 to 300 feet below the surface area. Wildlife common to the area are songbirds, reptiles, and mammals (see attached listing of wildlife



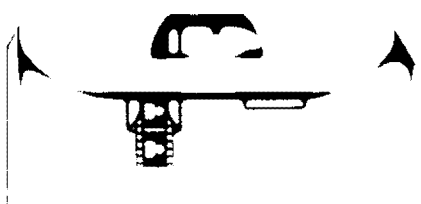
species).

PROPOSED MINING OPERATIONS:

14. It is anticipated the mining operation will commence during the 1980 calendar year and will utilize methods commonly acceptable to the industry; i.e., mining operations shall be open pit, multi-bench utilizing dozers, scrapers and loaders.

Initially, materials harvested at the quarry site will provide level acreage for future plant facilities. Materials harvested for plant site will be loaded and truck hauled to the existing plant facilities for processing.

15. The quarry site contains an estimated ten million (10,000,000) tons of aggregate providing an estimated life in excess of fifty (50) years.
16. Based on the knowledge of previous years construction and growth in the area, the annual production quantities are estimated to be 150,000 tons annually.
19. Processing methods to be used are common to the industry and will consist of screening, crushing and concrete batching equipment with the necessary conveyor belts for feeding and stockpiling materials. Waste from these production processes will be minimized because product demand and methods of processing provide near total utility of the mined material. Waste will be





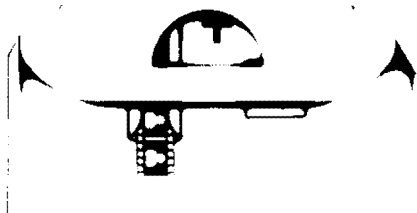
limited to wash water and residual particles which will be contained within designated settling ponds.

RECLAMATION PLAN:

22. The acreage covered by the Reclamation Plan will provide for the entire site although the acreage available for reclaimed utility will be limited to approximately fifty per cent (50%) of the total site.
23. Ultimately the physical condition of the plant and quarry site will be leveled to mutually agreed elevations in accordance with specific depth requirements providing suitable building sites and/or other designated uses within General Plan Criteria for the growth and planning control at the time of completion.
24. Zoning regulations currently provide for light Industrial (M1) uses for the proposed plant and quarry site.

Provisions for the construction of an industrial park are under consideration for the properties South of the project site and the Northerly boundary is adjacent to Siskiyou County "Black Butte" Landfill.

26. Soils are generally gravelly and low to moderate in fertility. Due to the nature of the proposed project soil salvage plan is not relative primarily since total utility of mined area is anticipated.

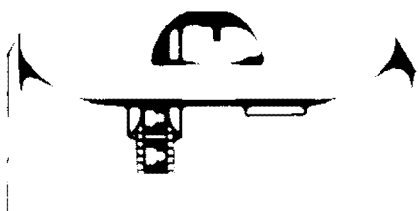


27. Estimated annual processing related to area demand provides for an anticipated life expectancy in excess of fifty (50) years. Harvesting and processing of mined materials will utilize equipment and methods common to the industry.

Surface drainage reclamation will be constructed contiguously with the mining operations in order to provide adequate controls for erosion and siltation. Slope stabilization will be provided by designed ratio to provide minimal erosion and revegetation programs with native plant life will be included during the course of mining.

Concurrent reclamation is precluded although necessary measures will be taken to provide slope stabilization and revegetation during the course of the mining operations.

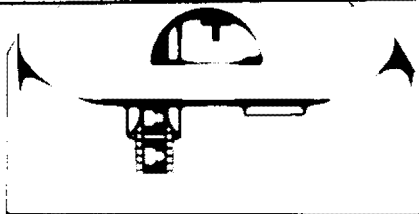
28. Project phasing is not considered to be short term and, therefore, phasing reclamation is not feasible with regard to the total project.
29. Future mining at the site is precluded considering the resource will be considered depleted upon the completion of the project. Additionally, future mining in the surrounding areas will become limited considering the existing and proposed uses for the immediate area.



REPTILES

Western Fence Lizard  
Sagebrush Lizard  
Northern Alligator Lizard  
Rubber Boa  
Ringneck Snake  
Western yellow-bellied Racer  
Gopher Snake  
Common Garter Snake  
Western Terrestrial Garter Snake  
Western Rattlesnake

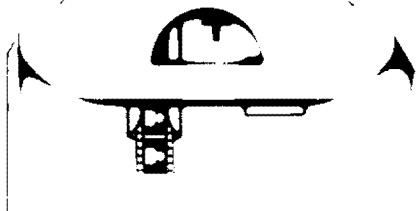
Sceloporus occidentalis  
Sceloporus Gracilis  
Gerrhonotus Coeruleus  
Charina Bottae  
Diadophis Punctatus  
Coluber Constrictor Murmon  
Pituophis Mezanoleucus  
Thamnophis Sirtalis  
Thamnophis Elegans  
Crotalus Viridis



M A M M A L S

Trawbridge Shrew  
Common Opossum  
California Myotis  
Horry Bat  
Big Brown Bat  
Long-eared Myotis  
Little Brown Myotis  
Silvery-Haired Bat  
Blacktailed Jackrabbit  
Snowshoe Hare  
Brush Rabbit  
Belding Ground Squirrel  
California Group Squirrel  
Yellow Pine Chipmunk  
Townsend Chipmunk  
Western Grey Squirrel  
Douglas Squirrel  
Northern Flying Squirrel  
Botta Pocket Gopher  
Western Harvest Mouse  
Forest Deer Mouse  
Deer Mouse  
Dusky-Footed Wood Rat  
Long-Tailed Meadow Mouse  
California Meadow Mouse  
Western Jumping Mouse  
Gray Fox  
Raccoon  
Long-Tailed Weasel  
Mink  
Coyote  
Spotted Skunk  
Striped Skunk  
Mule Deer

Sorex Trowbridgii  
Didelphis Marsupialis  
Myotis Californicus  
Lasiurus Cinereus  
Eptesicus Fuscus  
Myotis Evotis  
Myotis Lucifugus  
Lasionycteris Noctivagans  
Lepus Californicus  
Lepus Americanus  
Sylvilagus Bachmani  
Citellus Beldingi  
Citellus Beecheyi  
Eutamias Amoenus  
Eutamias Townsendii  
Sciurus Griseus  
Tamiasciurus Douglasii  
Glaucomys Sabrinus  
Thomomys Bettae  
Reithrodontomys Megalotis  
Peromyscus Oreas  
Euomyscus Maniculatus  
Neotoma Fuscipes  
Microtus Longicaudus  
Microtus Californicus  
Zapus Princeps  
Procyon Cinereoargenteus  
Procyon Lotor  
Mustela Frenata  
Mustela Vison  
Canis Laterns  
Spilogale Putorius  
Mephitis Mephitis  
Odocoileus Hemionus



VEGETATION SPECIES LIST

	<u>SCIENTIFIC NAME</u>	<u>VERNACULAR</u>
Grasses:	<u>Poa Gracillima</u>	Grass
	<u>Carex Rostrata</u>	Sedge
	<u>Brodiaea Capitata</u>	Common Brodiaea
Ferns:	<u>Pteridium Aquilinum</u>	Braken Fern
Flowering	<u>Penstemon Heterophyllus</u>	Penstemon
Plants:	<u>Ephedra SSP.</u>	Mormon Tea
	<u>Gilia Aggregata</u>	Scarlet Gilia
	<u>Ceanothus Prostratus</u>	Squaw Carpet
	<u>Plantago SSP.</u>	Plantian
	<u>Asarum Hartwegi</u>	Wild Ginger
	<u>Rumex Acetosella</u>	Sheep Soral
	<u>Calyptridium Umbrellatum</u>	Pussy Paws
	<u>Lupinus Albifons &amp; L. Breweri</u>	Lupin
	<u>Geranium Californicum</u>	Wild Geranium
	<u>Hypericum Formosum</u>	St. John's Wort
	<u>Epilobium Angustifolium</u>	Fireweed
	<u>Wyethia Mollis</u>	Mule Ears
	<u>Cirsium Californicum</u>	Sierra Thistle
	<u>Lilium Washingtonianum</u>	Washington Lily
	<u>Brassica Campestris</u>	Mustard
Shrubs:	<u>Prunus Emarginata</u>	Bitter Cherry
	<u>Cytisus Scoparius</u>	Scotch Broom
	<u>Sorbus Sitchensis</u>	Moutain Ash
	<u>Arctostaphylos SSP.</u>	Manzanita
	<u>Ceanothus Integerrimus</u>	Dear Brush
	<u>C. Cordulatus</u>	Snow Brush
	<u>C. Cuneatus</u>	Buck Brush
	<u>Chrysothamnus Nauseosus</u>	Rabbit Brush
Trees:	<u>Quercus Kelloggii</u>	Black Oak
	<u>Libcedrus Decurrens</u>	Incense Cedar
	<u>Abies Concolor</u>	White Fir
	<u>Pinus Ponderosa</u>	Yellow Pine

