State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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February 7, 2002

CERTIFIED RETURN RECEIPT
7099 3400 0016 8896 4080

Mr. Gerald L. Hascall
Operations Superintendent
Deseret Generation and Transmission
12500 East 25500 South
Vernal, Utah 84078

Re: Initial Review of Notice of Intention (NOI) to Commence Large Mining Operations, Deseret Generation and Transmission (DG&T), Diamond Mountain Resources Limestone Mine, M/047/066, Uintah County, Utah

Dear Mr. Hascall:

The Division has completed a review of your draft Notice of Intention to Commence Large Mining Operations for the Diamond Mountain Resources Limestone Mine, located in Uintah County, Utah, which was received January 8, 2002. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Please provide a response to this review by March 8, 2002.

The majority of the Notice of Intention (NOI) you submitted was blank; however, since a copy of the Forest Service environmental assessment (EA) for this project was included, we have attempted to review the EA as your mine plan. An EA is not designed to be a mine plan or plan of operations. This is because the EA presents options to be considered and also because it does not have the level of detail needed for the NOI. Deseret Generation and Transmission has made no commitments to follow any of the alternatives offered. Please use the NOI format to show your complete mining and reclamation plan rather than relying on the EA to present your plan. Within the NOI, you may refer to the EA or to other supplemental materials and appendices as necessary.

In addition, the Division has instituted a new policy where we ask that you submit two copies of the complete NOI. Once we are finished with our review, we will stamp every page "approved" together with the approval date and return one copy to you so you have a complete copy identical to the Division's copy. If you later find it necessary to change operations, this plan can be amended, but amendments will need to be submitted in a format that they can be inserted in the approved plan.

The Division will suspend further review of the mine NOI until your response to this letter is received. If you have any questions in this regard please contact me, Tom Munson, Paul Baker or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment: Review
Reclamation Bond Estimate Form
cc: Chauncie Todd, Ashley National Forest
David Crabtree, Deseret Power Electric Cooperative
M47-66rev.doc

REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Deseret Generation and Transmission
Diamond Mountain Mine

M/047/066

R647-4-104 - Operator's, Surface and Mineral Ownership

Information in this portion of the NOI appears to be complete. (PBB)

R647-4-105 - Maps, Drawings & Photographs

105.1 Topographic base map, boundaries, pre-act disturbance

The 7.5 minute quadrangle included with the notice is insufficient. The scale is too small to discern features within the area of the mine. Please submit a map with a scale of 1"=500' or larger. (DJ)

105.2 Surface facilities map

The surface facilities map should be of the same scale as the topo map. This map should show the location of topsoil stockpiles, product stockpiles, overburden/waste dumps, silt ponds, proposed drainage control structures (culverts and ditches), buildings, stationary mining/processing equipment, roads, power lines, gas pipelines, etc. (DJ)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide north south & east-west cross-sections showing the present ground surface, the surface after the proposed mining, and the surface after reclamation. The cross-sections should be of a scale sufficient that measurement of the affected surfaces will be possible. (DJ)

R647-4-106 - Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually.

The plan presented in the Forest Service EA states that the surface disturbance at the site will never exceed 5 acres. Before any additional acreage is disturbed an area of equal size will be reclaimed and released by the USFS. A site visit to the site has shown that the operator is not presently following this plan. A plan of operations showing the mine plan for this area needs to be submitted. Please indicate how the concurrent reclamation of the area will be facilitated. (DJ)

106.4 Nature of materials mined, waste and estimated tonnages

The Forest Service EA indicates that 60,000 tons of product will be mined the first year and 30,000 tons each year thereafter. The notice indicates that 30,000 to 75,000 *cubic*

yards of limestone will be mined each year. Please indicate which figure is correct. (DJ & PBB)

106.5 Existing soil types, location, amount

The dominant soil type is fine-loamy mixed Typic Argiborolls. The EA contains general information about the chemistry of these soils, and the NOI includes laboratory reports for several soil samples. The sampling locations are shown on Drawing 1. Available information indicates no physical or chemical limitations.

The EA included with the NOI gives no information about the quantity of soil available other than a statement that the soils range in depth from zero to several feet. The operator and the Division need more detailed information about how much soil could be salvaged. In areas where the soil is extremely thin, it is enough to say that all soil will be salvaged, but in those areas where the soil is deeper, the operator needs to identify how much topsoil is present.

The Division recommends also identifying the soil horizons, if they exist, below the topsoil. (PBB)

106.6 Plan for protecting & redepositing soils

According to Appendix E of the EA, all available topsoil should be stockpiled and saved for reclamation purposes, but the NOI does not have enough information to tell how much topsoil is available. Although this appendix says a minimum of four to six inches of soil should be used, it is unknown whether this much soil is available or if much more soil could be salvaged then redeposited for reclamation.

The amount of soil is variable, and some areas have deep soil, so it might be possible to salvage some subsoil materials in those areas where more soil is available and to use this in areas where there is little or no topsoil.

Once topsoil has been quantified, the operator should develop a plan for redistributing the soil that meets the minimum requirements for establishing vegetation on this site. If subsoil is available in addition to the topsoil, the operator should consider using some of the subsoil to enhance reclamation success.

The NOI needs to show where and how the topsoil will be stockpiled. The NOI includes a commitment to seed the topsoil annually until it is needed for reclamation. Rather than committing to seed the stockpile annually, the Division recommends that the operator seed the stockpile initially then monitor it and perform remedial work as needed. (PBB)

106.7 Existing vegetation - species and amount

The NOI includes a general description of vegetation communities and an exhaustive list of species occurring in the area together with a negative declaration about threatened, endangered, candidate, and sensitive species. It needs to include quantitative cover data sufficient to establish revegetation success standards. (PBB)

106.8 Depth to groundwater, extent of overburden, geology

The NOI fails to provide any information regarding a well that will be drilled to supply water to the operation. Please provide information concerning the formation into which this well will be drilled, and show the well location on a map. (TM)

106.9 Location & size of ore, waste, tailings, ponds

Please indicate the disposition of overburden/waste material. (DJ)

Please provide the location and size of all water storage/treatment ponds. (TM)

R647-4-107 - Operation Practices

107.1 Public safety & welfare

107.1.12 Disposal of trash, scrap, debris

Please indicate how trash generated during the operation of the mine will be disposed of. (DJ)

107.1.13 Plugging or capping drill holes

There is no plan for closing drill holes or water wells. Please provide this information if pertinent. (TM)

107.1.14 Posting warning signs

Signs should be posted warning the public of heavy equipment operation and occasional blasting at the site. Please indicate where these signs will be located. (DJ)

107.1.15 Constructing berms, fences, etc. above highwalls

In areas where access to areas above highwalls is possible, safety berms need to be installed and maintained. (DJ)

107.2 Drainages to minimize damage

The EA does not provide an adequately detailed map to assure the Division regarding the placement of drainage control structures and the location of mining disturbance in proximity to the natural drainage. A detailed drainage control map showing all drainage controls and sediment control structures will need to be provided. The operator needs to provide the sizing criteria for all structures based on runoff calculations. The Division also needs descriptions of these structures, including dimensions. (TM)

107.3 Erosion control & sediment control

The location of all drainage control must be shown on a map that includes culverts, diversions, sediment ponds etc.. The necessary calculations regarding sizing of these structures and their ability to treat storm drainage is required. (TM)

107.5 Suitable soils removed & stored

This is discussed under R647-4-106.6, Plan for protecting & redepositing soils. (PBB)

107.6 Concurrent reclamation

According to the EA, the operator intends to have no more than five acres of active disturbance at any one time. As one area is mined out and mining begins on another area, the mined out area would be reclaimed.

The operation has expanded beyond five acres of disturbance, and this needs to be reflected in the NOI. The operator has indicated verbally that he plans to reclaim part of the area and thus reduce the amount of active disturbance to five acres. The area of active disturbance would then be maintained at a maximum of five acres. The NOI should contain a commitment to this effect. (PBB)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems

According to the EA, there will be no impacts to the surface or groundwater from sediment or mining. Because the EA is not an actual mining plan, it is impossible for the Division to fully assess impacts to surface and groundwater systems until more details and site specific plans are provided. (TM)

109.2 Impacts to threatened & endangered wildlife/habitat

According to the EA and to reports included in the NOI, there are no listed or candidate threatened or endangered species or sensitive species in the area. There is a potential the

mine could adversely affect four threatened and endangered fish species of the upper Colorado River drainage through water depletions; however, according to the EA, the mine would use a maximum of 4.7 acre-feet of water annually. The Forest Service expects the mine to actually use about one acre-foot annually. Both of these figures are well below the threshold limit of 100 acre-feet at which a mitigation fee is required by the Fish and Wildlife Service for projects with a connection to federal lands. (PBB)

109.3 Impacts on existing soils resources

If topsoil is properly salvaged, stored, and protected from contaminants, the operator will have minimized impacts to the soil resources. This review contains a requirement for the operator to commit to proper storage methods and to prevent contamination. (PBB)

109.4 Slope stability, erosion control, air quality, safety

The EA provides information about projected impacts on air quality but does not specify what methods will be used to control dust and other pollutants. The NOI should discuss what control methods will be used. The Division understands the contractor conducting mining operations has an Air Quality Approval Order, and the required information is probably in this approval order or the associated notice of intention submitted to the Division of Air Quality. Please include a copy of the approval order or Air Quality notice of intention in the NOI. (PBB)

R647-4-110 - Reclamation Plan

Appendix E of the EA is titled "Reclamation Best Management Practices for Deseret Generation and Transmission." The appendix contains a statement that the information presented in this appendix would be implemented in the reclamation phase, but the appendix is also described as containing guidelines and recommendations which are not commitments. If the operator desires to commit to the plan in this appendix, the NOI needs to contain a statement to this effect. Otherwise, the NOI needs to contain details of the reclamation plan. (PBB)

110.1 Current & post mining land use

The NOI and EA do not say specifically what the pre- and postmining land uses are, but since this is Forest Service land, the Division assumes it is being managed for multiple uses, including recreation, wildlife habitat, and grazing. The NOI needs to state what these uses are. (PBB)

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Will mining in this area result in a highwall being left when mining is completed? If so what will be the final slope angle? (DJ)

The Forest Service has indicated in conversations with the Division that the mine access road will become the responsibility of the Forest Service upon mine closure. This fact needs to be stated in the plan so that reclamation of this feature will not become a part of the final surety. (DJ)

110.5 Revegetation planting program

Appendix E of the EA has a seed mix of native species that are adapted to this site, but a footnote says the seed mix is intended to provide a choice of species from which to make a seed mix based on availability. The operator needs to make a few changes to better specify the amount of seed that will be applied:

1. The amount of seed to be applied should be shown as units (pounds) of ***pure live seed*** per unit area (acre) rather than just pounds of seed.

2. A note with the seed mix says all grass and forb species within the seed mix must have a pure live seed ratio of at least 85%. This is not necessary as long as the seed mix specifies pounds of pure live seed per acre. In some cases, seed is damaged by cleaning operations, and seed longevity may be decreased if it is too clean.

3. Appendix E says the total seed mix application rate would be at 15 pounds per acre. The problem with specifying the weight in this manner is that it ignores the pure live seed content and differing weights of different kinds of seed. In general, the seed mix should be designed so that about 50-100 pure live seeds are planted in every square foot if the seed is broadcast.

The NOI needs to say how seed will be planted, and the seed mix may need to be adjusted accordingly. Less seed is generally required for drill seeding, but broadcast seeding would probably be much easier at this site because the surface will be left in a roughened condition. The Division recommends broadcast seeding.

Appendix E says seeding should be conducted in the early spring or late fall with fall seeding preferred, especially over one to six inches of snow over freshly scarified soil. When seeding in the spring, moisture conditions may not be adequate, and seedlings may not survive the summer. Thus, it may be necessary to re-roughen the surface and reseed if seeding is done in the spring.

The EA indicates mulch will be used and discusses various mulching methods. The Division does not require that mulch be used, but it has seen good success with about 1.5 tons of certified noxious weed free straw per acre tacked with a tackifier and about 500 pounds per acre of wood fiber hydromulch. This is similar to the recommendation in Appendix E. (PBB)

R647-4-111 - Reclamation Practices

111.1 Public safety & welfare

1.12 Disposal of trash & debris

See comments under R647-4-107.12. (PBB)

1.14 Posting warning signs

See comment R647-4-107.1.14

1.15 Constructing berms/fences above highwalls

See comment R647-4-107.1.15

111.2 Reclamation of natural channels

No details are provided regarding drainage crossings, so it assumed, until more details are given, that no drainages will be affected. (TM)

111.3 Erosion & sediment control

No details have been provided regarding any erosion and sediment control structures and their final disposition. (TM)

111.4 Removal/storage of deleterious material

The only information about storing deleterious materials is in the general description on page 1 where it says there will be a portable fuel tank that will hold no more than 1000 gallons. Although the tank will be portable, the operator will need to use a containment structure around this tank that will hold the entire contents of the tank plus freeboard (typically 110% of tank volume). If there are any other deleterious materials, the NOI should contain a discussion about them. (TM & PBB)

111.5 Land capable of post mining land use

Although the NOI does not specify the pre- or postmining land uses, the Division assumes the uses will be wildlife habitat, grazing, and recreation. It should be possible to return the land to these uses, but the reclamation plan requires modification as discussed in this review. (PBB)

111.6 All slopes regraded to stable configuration

All reclaimed slopes should be left at 3h:1v or less, but Appendix E indicates some slopes may be left steeper than 3h:1v. If this is correct, the operator will need to demonstrate that the steeper slopes have adequate long-term stability. Until the operator demonstrates that the slopes are stable, the Division will need to hold adequate bond to regrade these slopes if necessary. (DJ & PBB)

111.7 Highwalls stabilized at 45 degrees or less

If final reclamation results in a highwall, this feature should be stabilized to a slope angle of 45 degrees or less. (DJ)

111.9 Dams & impoundments left self draining & stable

No site-specific information was provided for any sediment control structures to be built. Please provide this information. Also, see comments under R647-4-106.9. (TM)

111.12 Topsoil redistribution

Appendix E of the EA says topsoil should be uniformly distributed to a minimum compaction (assumed to mean depth) of four inches on slopes graded 3h:1v or steeper. A minimum of six inches would be applied on slopes flatter than 3h:1v. Since the NOI does not say how much topsoil would or could be salvaged, it is impossible to judge whether these requirements for redistribution depths are realistic or if they are too lenient compared to the amount of soil available. When the Division and operator have more information about the amount of soil available, it will be possible to better develop a redistribution plan.

Appendix E of the EA says areas to be seeded should be ripped or scarified to a minimum depth of three inches and that the area to be planted should be reasonably smooth and free of rills and gullies to provide the best possible soil conditions for seeding.

The depth of scarification depends on the depth of topsoil redistribution which, in turn, depends on the amount of topsoil that can be salvaged which is unknown. Rather than specifying a depth, the operator should commit to rip the soil as deeply as possible up to about two feet.

The Division agrees that the soil surface should be free of rills and gullies when it is seeded but emphatically disagrees that the area to be planted should be reasonably smooth. Smooth surfaces invite erosion and revegetation problems, where a rough surface reduces erosion and holds water on the slope where it can be used by plants. The operator should commit to leave the surface rough.

According to Appendix E, the Forest Service would specify fertilizer type and application rates once soil tests are performed. The NOI includes results of soil tests, so it should be possible for the Forest Service to determine these rates. This information is needed now because the operator intends to do concurrent reclamation and needs to know what fertilizer rates to use. The Division also needs this information for bonding calculations. Generally, the Division recommends that fertilizer rates be kept low for wildland settings.

Appendix E also says the seedbed should be firm so seed is not planted too deeply or in loose soil. This is correct for drill seeding, but a looser seedbed allows some of the broadcast seed to work into the soil and to end up at varying depths. (PBB)

R647-4-112 - Variance

The operator has not requested a variance. (PBB)

R647-4-113 – Surety

A blank copy of a reclamation bond estimate form is enclosed for the operator's use. (DJ)

R647-4-115 - Confidential Information

The NOI contains no confidential information. (DJ)

R647-4-116 - Public Notice & Appeals

The Division will address any public comments after advertising is complete. (PBB)

RECLAMATION SURETY ESTIMATE

Mine Operator — last revision **08/02/00**

mine name — filename M000-000.WB2 — page "estimate D8"

DOGM file number — County

Prepared by Utah State Division of Oil, Gas & Mining

-This estimate uses a D8 size dozer for most earthwork

Print block named "d8est" for the estimate page & "d8notes" for the notes page

Note: actual unit costs may vary according to site conditions — last unit cost update 2-Aug-00

-Amount of disturbed area which will receive reclamation treatments = 0 **acres**

-Estimated total disturbed area for this mine = 0 **acres**

Activity	Quantity	Units	$/unit	$	Note
Safety gates, signs, etc. (mtls & installation)	0	sum	200	0	(1)
Demolition of buildings & facilities	0	CF	0.24	0	(2)
Debris & equipment removal - trucking	0	trips	50	0	(3)
Debris & equipment removal - dump fees	0	ton	55	0	(4)
Debris & equipment removal - loading trucks w/FE loader	0	hours	166	0	(5)
Demolition & debris removal - general labor	0	hours	15	0	(6)
Regrading facilities areas (1 ft depth)	0	acre	502	0	(7)
Regrading waste dump slopes	0	CY	0.5	0	(8)
Ripping waste dump tops	0	acre	234	0	(9)
Ripping stockpile & compacted areas	0	acre	234	0	(9)
Ripping pit floors	0	acre	234	0	(9)
Ripping pit access roads	0	acre	234	0	(9)
Creating safety berms or barriers around highwalls	0	LF	0.16	0	(10)
Ripping access roads - dozer	0	acre	234	0	(9)
Regrading access roads - dozer	0	acre	502	0	(7)
Sidecast mtl replacement on steep roads- trackhoe	0	LF	1.09	0	(11)
Surface drainage restoration or construction	0	LF	0.16	0	(10)
Topsoil replacement - dozer	0	CY	0.5	0	(12)
Topsoil replacement - scraper	0	CY	1.15	0	(13)
Topsoil replacement - truck & FE loader	0	CY	2.6	0	(14)
Mulching (2 ton/acre alfalfa)	0	acre	160	0	(00)
Fertilizing (100 lb/acre diammonium phosphate)	0	acre	90	0	(00)
Composted manure (10 ton/acre)	0	acre	300	0	(00)
Broadcast seeding	0	acre	225	0	(00)
Drill seeding	0	acre	205	0	(00)
Hydroseeding	0	acre	800	0	(00)
General site cleanup & trash removal	0	acre	50	0	(00)
Equipment mobilization	0	equip	1000	0	(00)
Reclamation Supervision	0	days	386	0	(15)
		Subtotal		0	
10% Contingency				0	
		Subtotal		0	
Escalate for 5 years at 3.12% per yr				0	
		Total		0	

Rounded surety amount in yr 2006-$ 0

Average cost per disturbed acre = #DIV/0!

RECLAMATION SURETY ESTIMATE

(o:/data/bonding/mine-bnd.wb2)

Operator Name

last revision 08/02/00

Mine Name

filename M000-000.WB2 page "estimate D10"

DOGM file number *County*

Prepared by Utah State Division of Oil, Gas & Mining

last unit cost update 2-Aug-2000

Note

(1) DOGM lump sum assumed

(2) Means Heavy Construction Cost Data 2000, 02220-100-0100, mix of bldg. types, avg., excluding dump fees
(3) Means 2000, 02225-730-5100, bldg demo, rubbish handling, $0.50/CY permile for >8CY truck; assumed 100 miles round trip
(4) Means 2000, 02225-740-0100, dump charges, typical urban city, tipping fees only, bldg construction mtls
(5) Rental Rate Blue Book 3Q/00, Cat 988B, 7CY $85.64hr+$39.60/hr, & Means 2000, Crew B-10U, loading trucks only$40.87
(6) DOGM assumed wage for unskilled general labor
(7) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, 1 ft depth

(8) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 100 ft push
(9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph

(9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph

(9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph
(9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph
(10) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, avg vol 0.5CY/LF-berm assumed

(9) Means 2000 & Blue Book 3Q/00: Cat D10N, U, multi shank rippers, speed 1.0 mph
(7) Means 2000 & Rental Rate Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 75 ft push, 1 ft depth
(11) Contractor's actual costs, 1991 at E/053/012 escalated to 2000-$, Cat 225 Excavator, 20 ft wide road
(10) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, avg vol 0.5CY/LF-berm assumed

(12) Means 2000 & Blue Book 3Q/00: Cat D10N, U, mtl 2550 lb/CY, 100 ft push
(13) Means 2000 & Blue Book 3Q/00: Cat 627F P-P, mtl 2550 lb/CY, 2,000 ft haul one-way, grade +/- 4%,
(14) Means 2000 02320-200-2030: earthwork, hauling excavated or borrow material, off highway hauler, 22 CY, 1 mile round trip, no loading included

(00) DOGM general estimate - mulching
(00) DOGM general estimate - fertilizing
(00) DOGM general estimate - manure $16/ton delivered, $14 ton/acre spreading
(00) DOGM general estimate - broadcast seeding
(00) DOGM general estimate - drill seeding
(00) DOGM general estimate - hydroseeding

(00) DOGM general estimate - site cleanup & trash removal

(00) DOGM general estimate - equipment mobilization

(15) Means 2000, 01300-700-0180, project manager, minimum $1,930/wk