

**Geothermal Program - Strategy and Implementation Plan Status**  
**December 17, 2002**

Resolution options are noted in *bold italics*.

A. Management of Geothermal Program

Establish clearer direction and communication regarding program objectives and requirements. Minimize and/or eliminate duplication of effort. Clarify DLNR program objectives related to geothermal development activities. Discuss reestablishment of the mineral resources program LNR 403, staffing resources, and funding requirements. *Need administrative direction.*

B. Continued Regulatory Oversight of Puna Geothermal Venture (PGV) Operations and Interagency Communication/Coordination

Clarify DLNR regulatory responsibilities and related permitting requirements in advance of modifications to Plan of Operations (POO) by PGV.

Maintain communication/coordination with DOH and the County of Hawaii regarding regulation of ongoing geothermal development including future well drilling and expansion of facilities on the Island of Hawaii which would be regulated under DLNR and County permits. Update emergency contact numbers (DLNR, DOH and PGV). *Maintain communication/coordination and request administrative direction.*

- 1) County of Hawaii
  - a) Geothermal Resource Permit, GRP (Agricultural, Urban and Rural lands)
  - b) Grubbing and Grading Permits, etc.
- 2) Board of Land and Natural Resources
  - a) Geothermal Resource Subzones
  - b) Geothermal Resource Mining Leases
  - c) Plan of Operations
  - d) Conservation District Use Permit
- 3) Department of Land and Natural Resources Administrative Permits
  - a) Exploration
  - b) Well Drilling
  - c) Well Modifications
  - d) Well Abandonment
  - e) Historic Site Review
- 4) Department of Health
  - a) Authority to Construct
  - b) Permit to Operate
  - c) Ambient Air Standards  
(4a, 4b and 4c can be superseded by a Non-Covered Source Permit.)
  - d) Underground Injection Con.

- e) Noise Standards (Apply statewide noise level standards or specific GRP conditions)

Annual Asset Fund contribution requirement per GRP Condition 51 needs resolution between DLNR, PGV and County. State's contribution to the fund was \$250,000 in seed money around 1990. Whether this was an "initial amount" or, say, 5 years at \$50,000 is questionable. PGV initially contributed \$60,000 and then \$50,000 each year for 8 years thereafter for a total of \$460,000. Whether the State is still supposed to contribute to the Asset Fund is debatable, especially since a portion of royalties is paid to the County. *Need to initiate discussions with PGV and County. AG was to review agreement and issue an opinion.*

C. Plugging and Abandonment of Wells by the State

*Need to prepare budget request for funding. BLNR executive session should be held to discuss funding requirements and potential liability associated with these wells.*

Determine whether monitoring is needed to "assure and prolong casing integrity, and preclude any blowout consequent to a casing failure due to corrosion". *Need administrative direction. Discussions should be held with PGV to see if they have any interest in acquiring one or more of the SOH wells for future monitoring purposes.*

D. Compliance Review of Geothermal Resource Mining Leases (GRML)

- 1) GRML R-1: Bishop Estate, subleased to PGV. Canceled by PGV in 1996.
- 2) GRML R-3: Barnwell Industries, Inc. (Barnwell)  
Time period for the lease has expired. Status of lease rent payments needs review (Fiscal indicates lease rent being paid until 8/31/2046). Barnwell indicated to HDLO that it planned to cancel lease so we sent a response in 3/98 that Barnwell is responsible for remedial work to the existing wellpads and well. Leased area would be removed from inclusion in the subzone area upon termination of the mining lease.

Barnwell requested a permit to abandon Lanipuna 6 in 4/01. PGV performed mechanical integrity testing of Lanipuna 6 in 11/01. We returned Barnwell's permit filing fee in 12/01. Barnwell will resubmit plugging and abandonment application when appropriate.

Met with Land Division (Keith Chun) in 12/01 regarding PGV use of Lanipuna No. 6 which would be the first instance where a lessee utilizes the resources of another leased area. Our 10/01 memo to Land Division requested the assistance of a land agent because lease requirements such as notification/permission of landowners are undetermined.

- 3) GRML R-4: PGV Canceled by PGV in 1995.
- 4) GRML R-5: Campbell Estate/True/Mid-Pacific Geothermal Venture. Status of lease and lease rent payments needs review (Fiscal indicates lease rent being

paid).

Rescinding a lease would affect existing subzone boundaries. *Request assignment of a land agent (?) to research status of leases and actions required for compliance with lease provisions.*

E. Finalize Disposition of Mining Lease GRML R-5

Finalize disposition of lease: Campbell Estate (Estate) had an operating agreement with True/Mid-Pacific Geothermal Venture (True). True developed well KA1-1 but ceased operations in 1994. BLNR rendered a decision to accept control and custody of the well. A license was executed by the Estate and DLNR and addresses the State's use of the well for monitoring. Need to determine the impact of plugging and abandonment of the well KA1-1 by the State to the lease. Even if the State plugs and abandons KA1-1, the State is held by license requirements. The license does not affect the lease with Campbell Estate. *We received unofficial correspondence in June 2000 that the Estate was considering entering into a sublease of a portion of the leasehold, subject to BLNR consent. The correspondence indicated that the potential sub lessee has asked the Estate to obtain an estoppel from the State, confirming that the Estate is currently in compliance with all of its obligations under the lease. It was also indicated that the potential sub lessee and the Estate both request confirmation that the lease: 1) does not require the Estate to construct a facility to utilize geothermal resources produced under the lease and 2) the May 1, 2002 deadline for the installation of that facility has been extended due to force majeure. AG was researching lease revocation due to inaction (automatic termination) to issue an opinion.*

F. HGP-A Well and Facilities, Natural Energy Laboratory of Hawaii Authority (NELHA)

Original purpose and terms of the lease ceased after plugging and abandonment of the HGP-A well. Continued operation of the facility and authorization under the current mining lease may be in question. If the lease is terminated, the leased area will be removed from the subzone area. Certain geothermal activities can only be permitted within geothermal resource subzones. *The AG was to issue an opinion that since the well has been plugged and abandoned and there is no geothermal activity, automatic lease termination is an option.* Lease is within a grandfathered subzone. *The AG would also issue an opinion that lease termination would terminate the subzone.*

PGV was selected by NELHA to operate the Noii O Puna research facility in 12/01. An option is to set aside the leased area (not the geothermal resource) by executive order. *The AG was researching the option to set aside the leased area by executive order to issue an opinion.* In mid-July 2002, NELHA was expediting an interim agreement with PGV and had hoped to execute the interim agreement in August 2002.

G. "Grandfathered" Subzones

Leases S-4602 and GRML R-3 were grandfathered by the Legislature as part of subzones

only for the duration of the leases. *Awaiting AG opinion stating that: 1) publication of a newspaper notice would be sufficient notification for the removal of a grandfathered subzone due to the termination of mining leases or for any other modifications to subzone boundaries, and 2) for an officially designated subzone, individual notification would be appropriate.*

H. Revisions to DLNR Administrative Rules, Chapters 13-183 and 13-184, HAR

Need to complete rule revisions since consultant Water Resource Associates' revisions were transmitted in November 1991. Statutory changes date back 5 years or longer. (Chapter 13-185, HAR, "Rules of Practice and Procedure for Geothermal and Cable System Development Permitting" which established guidelines and procedures for consolidated geothermal and cable system development permitting does not require revision). Schedule statewide public hearings on proposed rule amendments. ***Retain consultant to complete preparation of draft rule amendments. AG to edit rules during review.***

I. Pending Landowner Requests for Geothermal Resource Subzone Withdrawal

Evaluation and resolution of pending landowner requests for subzone withdrawal filed in 19??, including map preparation and compilation of withdrawal information. Withdrawal requirements and procedures shall be in accordance with DLNR Administrative Rules, Chapter 13-184, HAR. Need to be aware of geothermal development options and modification of subzone boundaries. ***Check if there is any case where a lease exists outside a subzone. Check all landowners. AG has indicated statutes are silent on modification to boundaries; AG to review statutes and rules, and issue an opinion.***

J. Annual Reports to the Legislature

Submission of annual reports to the Legislature in accordance with Chapter 196D-11, HRS, and DLNR Administrative Rules Chapter 13-185-8, HAR, regarding the status of consolidated geothermal and cable system development. Annual reports are being submitted to the Legislature. Need to discuss annual reporting requirement and continued applicability of statute since no large-scale project currently exists. ***Need administrative direction.***

K. Mr. Jack Dean's 12/22/99 Questionnaire Regarding Geothermal Development

***AG to review questionnaire and issue an opinion.***

L. Documents

Contested case hearing and other program-related information (15 boxes) needs to be sorted and incorporated into existing files. ***To be accomplished as time allows.***

M. Hawaii Geothermal Blowout Prevention Manual Circular C-125

Review and revise manual within 5 years (of January 1994). *Identify/authorize funding; retain consultant.*