25 JOHN A. BURNS Governor

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LAND USE COMMISSION

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

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COMMISSION MEMBERS Alexander J. Napier Shelley M. Mark Sunao Kido James R. Carras Tanji Yamamura Mitsuo Oura

> TATSUO FUJIMOTO Executive Officer

Hawaii Planning Commission 25 Aupuni Street Hilo, Hawaii 96720

Attention: Mr. Raymond Suefuji Planning Director

Gentlemen:

At its meeting on October 17, 1973, the Land Use Commission voted to approve a special permit to the Mauna Kea Sugar Company, Inc. (SP73-158) to allow the construction of a sewage treatment plant, injection well and sewer lines within the State Land Use Agricultural District at Pepeekeo, South Hilo, Hawaii, approximately 1,250 feet makai of the Old Government Main Road, on a 4-acre portion of parcel 1, identified as Tax Map Key 2-8-07; subject to the conditions set forth by the Hawaii County Planning Commission.

A copy of the staff report is enclosed for your information.

Very truly yours,

TATSUO FUJIMOTO Executive officer

Encl.

cc: Mauna Kea Sugar Co., Inc. Dept. of Taxation, Hawaii Property Technical Office, Dept. of Tax. Tax Maps Recorder, Dept. of Tax. Real Property Tax Assessor, Dept. of Tax.

STATE OF HAWAII LAND USE COMMISSION

MEMORANDUM

October 17, 1973 10:30 a.m.

TO: Land Use Commission

FROM: Staff

SUBJECT: SP73-158 - MAUNA KEA SUGAR COMPANY

A public hearing was held by the Hawaii County Planning Commission on July 19, 1973 on this special permit application by Mauna Kea Sugar Company to allow the construction of a sewage treatment plant, injection well and sewer lines within the State's Agricultural District at Pepeekeo, South Hilo, Hawaii. These facilities will service the Kulaimano Heights subdivision and are to be located approximately 1,250 feet makai of the Old Government Main Road, on a 4-acre portion of parcel 1, Tax Map Key 2-8-07.

The subject parcel is classified as Class C land indicating an overall productivity rating of "fair", with deep, well drained soil of a fine texture. Slopes are between 0 and 10% with rainfall in the 120 to 200 inch range annually.

The subject parcel, as well as the immediately surrounding areas, are currently in cane cultivation. The nearest residence is approximately 800 feet south of the proposed site and the Pepeekeo Urban District is situated approximately 600 feet to the west. Prevailing winds are straight in from the ocean. The Hawaii County General Plan indicates the area for alternative urban expansion and intensive agriculture.

When the rezoning petition for the 225 acre Kulaimano development was approved by the Land Use Commission on January 19, 1973, the site of the sewage treatment plant was under study by Sunn, Low, Tom and Hara, Inc., environmental consultants. In the petition it was stated that the sewage treatment plant would be makai of the development, below the Old Government Main Road. The proposed site is in this approximate area.

A petition has been submitted signed by 22 residents of the Pepeekeo, Kulaimano area, opposing the proposed site. They feel that unpleasant odors will be emitted from the plant and therefore it should be located further away from established residences.

Correspondence to the County includes a letter of opposition from Alex Inouye, homesteader in the vicinity of the proposed sewage treatment plant. He maintains that C. Brewer & Company, Ltd. owns thousands of acres to the north, so the plant should be sited in an area away from the homestead area; that Mr. Gomez, Pepeekeo Manager admitted the Paauilo treatment plant smells when it is overloaded; that the cost of relocating the plant can be absorbed by those in the new houselots and that they will benefit from its relocation; that he will be giving up sugar cane, going full time in vegetable farming, and he does not want to both see and smell the plant at the same time; that he has dedicated his land to farming for ten years; that it will devalue his property; and that it is better to relocate now to the satisfaction of the community because they will have to live with it for the rest of their lives.

Another letter of opposition was received from Geraldine Carvalho who states that the plant is not pretty; that the plant will smell and that there is no such thing as an odorless sewage treatment plant; that although the relocation of plantation homes will be delayed six months, the residents of Pepeekeo, feeling that their land is prime land, are of the opinion that a delay even beyond six months is justified, and that the environmental consultants cannot control the wind and therefore cannot say that the community will not be affected.

A letter supporting the application was received from Akira Omonaka, Business Agent with the ILWU Local 142, Hawaii Division stating that the Union has worked with government agencies, C. Brewer officials and others to make low cost housing available to their members, pensioners, and others in the Kulaimano areas; and that these efforts have been frustrated by long delays in the development of Increment 5.

Another letter of support came from Ernest Smith, Manager of the Ka'u Development Company. He states that he met with representatives of the Pepeekeo Community, ILWU Housing Committee, Mauna Kea Sugar Company, Hilo Coast Processing Company, the Planning Commission and Sunn, Low, Tom, and Hara, Inc. for an on-site plan review; that the distance from the outer perimeter of the site to the nearest dwelling is 800 feet, noting that the Board of Health regulations call for a buffer distance of at least 25 feet to the nearest business or residential lot line; that relocating the plant will involve a six month delay in home building and will result in an estimated cost increase of \$1,000 per home because building costs are rapidly rising; and that the consulting engineers have advised him that relocating the plant will cost an additional \$50,000 at the minimum.

Two letters were received from Paul Low, Vice President of Sunn, Low, Tom, and Hara, Inc. The first letter concerns the visual esthetics of the plant and in summary states that with a proper combination of landscaping, architectural design and height limitations there should be little or no visual impact on the community. The second letter concerns possible septic odors of the sewage treatment plant and states:

"The question of possible septic odor problems at the proposed Kulaimano Sewage Treatment Plant has been raised and compared to odor conditions at the Hilo STP at Keaukaha. The situation at Kulaimano will certainly not be the same as that at Keaukaha for several reasons.

"The first is that the ultimate sewage flow envisioned for the Kulaimano STP is 0.5 mgd as compared to the 7 mgd for the Hilo STP. This low flow permits economic implementation of a completely aerobic treatment process, thereby eliminating the need for anaerobic treatment which is a potential odor source.

"Another reason is the detention time for sewage in the Kulaimano system will be relatively short as the system will consist entirely of gravity lines flowing a short distance to the STP. In comparison, the Hilo system consists of a combination of pump stations linked by sewer mains several miles in length. The combination of low flows (below the design flow) and long transmission distances to the Hilo STP causes long detention times in the system which promotes septicity in the Hilo system and is a major cause of odors at the Hilo STP.

"Further, the Kulaimano transmission system will be located at a high elevation which precludes brackish ground water infiltration which often contributes to high sulfate concentration and subsequent sulfide production with corresponding odor problems.

"The design of the Kulaimano treatment units is intended to be liberal to allow the operator a wide range of operating parameters to control the potential for odor as good housekeeping practices will further eliminate the potential for odor problems from the sewage treatment plant.

"Our experience at installations existing elsewhere with the same topographic conditions have already demonstrated the adequacy of control measures and have not had septic odor problems. It should be noted that some of these plants are as close as fifty feet to the nearest home.

"In summary, conditions leading to extreme difficulty in controlling septic odors do not appear to be present at the Kulaimano site."

The Department of Agriculture, in a letter dated October 3, 1973, comments that: "The subject application proposes to construct a sewage treatment plant and waste stabilization pond on approximately five acres of land zoned for agricultural use now planted in sugar cane. We feel that the use of this parcel for construction of sewer line, sewage treatment plant, waste stabilization pond, and injection well will serve community needs and will not have an adverse economic effect on agricultural activities in the area."

COUNTY RECOMMENDATION

On August 23, 1973 the Hawaii County Planning Commission voted to recommend approval of the request on the following bases:

- That the proposed facilities are needed to service existing and proposed residential development within the Kulaimano area, an area endorsed for urban development by State and County agencies;
- That the proposed facilities will not have an adverse economic effect on agricultural activities in the general area; they will be so situated so as to minimize disruptions to normal sugar cane operations such as planting and harvesting;
- 3. That the proposed facilities are designed to comply with pertinent federal and state environmental protection requirements. The provision of said facilities will increase government's capacity to protect Hawaii's precious physical and natural resources; and
- 4. While the character of the area will be altered to some degree, the facilities will be properly screened with landscaping so as to minimize visual pollution.

Approval by the County is subject to the following conditions:

- That construction conform substantially to that as presented and begin within one (1) year of the date of approval of the special permit;
- That required buildings be limited to a maximum height of fifteen (15) feet;
- 3. That all necessary landscaping be provided to assure no adverse visual impact to surrounding areas. The adequacy of landscaping shall be determined at the time of Plan Approval by the County Planning Department; and

4. That all other applicable regulations be complied with.

ANALYSIS

An evaluation of the special permit request finds that it would:

- 1. Create no obstruction to sugar cane planting, cultivation or harvesting, as it would be in the corner of a field.
- 2. Place no burden on public agencies to provide services. No objections were raised by State and County agencies involved. Cause little visual pollution if properly landscaped and the buildings are kept low rise as conditioned by the Hawaii County Planning Commission.
- Under conditions established and recommended, the 4. objectionable aspects of the facility will be minimized. Sunn, Low, Tom, and Hara stated in their letter that the design of the plant is liberal which will allow for proper housekeeping--this is one of the key odor factors. Secondly, the treatment used is to be the aerobic type which produces primarily water and carbon dioxide while anaerobic sewage plant such as the one at Keaukaha produces sulphuric gases which is the real cause of septic odors -according to the Sanitary Engineering Division of the Department of Health. Thirdly, by using free flowing gravity lines the raw sewage should move quickly to the plant, thereby eliminating one of the major odor causes at the Hilo sewage treatment plant. In short, if the plant's operation is properly managed, there should be no objectionable odor.

Further, if the plant is relocated, additional costs will include at least \$50,000 for the site change and about \$1,000 per house in the 5th increment because of the six months delay in development coupled with the rising costs of home construction. This would adversely affect prospective home owners who are pensioners or employees of the plantation whose incomes are limited.

5. The sewage treatment plant will meet the needs of the 225 acre community which was previously approved by the Commission. One of the chief reasons for approval of the urban designation was the elimination of the dumping of raw sewage into the ocean from plantation camps. In effect this plant will reduce pollution of the coastal waters of the Big Island. Based on the above considerations, the staff recommends approval of this special permit application subject to the conditions imposed by the County of Hawaii with the further stipulation that the petitioner construct an earth berm of at least 6 feet in height which will be adequately planted with ground cover and vegetative screening along a 50 foot setback from the boundary of the subject parcel and the homestead area in order to substantially block the view of the sewage treatment facility from that direction.