Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
220 South King Street
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Final Environmental Assessment (EA) for the Molokai Livestock Cooperative
Slaughterhouse, Hoolehua, TMK: 5-2-4:16

We, herewith, submit four (4) copies of the Final Environmental Assessment for your review and acceptance.

All comments and communications have been reviewed by this office regarding the proposed project as required by law.

We, therefore, are submitting a negative declaration for the Molokai Slaughterhouse, Hoolehua, Molokai.

If you have any questions please call Louis Hao at 243-7885.

Sincerely,

RICHARD H. HAAKE
Managing Director
FINAL ENVIRONMENTAL ASSESSMENT & NEGATIVE DECLARATION
FOR THE MOLOKAI SLAUGHTERHOUSE, HOOLEhua, MOLOKAI

Applicant/Owner
Molokai Livestock Cooperative
P.O. Box 1569
Kaunakakai, Hawaii 96748
President: George Maiho
Project Manager: Catherine Kahoe

Approving Agency
Department of Land & Natural Resources
Division of Land Management
54 South High Street
Wailuku, Hawaii 96793

Prepared by
David W. Curtis Architect AIA
P. O. Box 1829
Kaunakakai, Hawaii 96748
May 15, 1996
OEGC BULLETIN PUBLICATION FORM

TITLE OF PROJECT: Slaughterhouse for Molokai Livestock Cooperative

LOCATION: ISLAND Molokai DISTRICT Hoolehua

TAX MAP KEY:

PLEASE CHECK THE FOLLOWING CATEGORIES:

Type of Action: AGENCY X APPLICANT

Applicable State or Federal Criteria:
X Chapter 343, HRS Chapin 205A, HRS NEPA (Federal Actions Only)

Type of Document:
Draft Environmental Assessment
(Negative Declaration anticipated)

Chapter 205A, HRS NEPA NOP

Final Environmental Assessment
(Negative Declaration)

Final EIS NEPA Draft EIS

Final Environmental Assessment
(EIS Preparation Notice)

NEPA PDNSI NEPA Final EIS

Type of Revision if applicable:

Revise Supplemental Addendum Other (please explain)

Prior to general distribution, please submit to OEGC: 4 copies of the Draft EA, Final EA (Negative Declaration or EIS Preparation Notice), 4 copies of the Draft EIS or Final EIS (For Draft and Final EISs an additional copy is mailed to OEGC.)

PROPOSING AGENCY OR APPLICANT SHOULD SUBMIT COPIES OF THE DOCUMENTS TO THE APPROVING AGENCY OR ACCEPTING AUTHORITY PRIOR TO SUBMITTING COPIES TO OEGC.

APPROVING AGENCY OR ACCEPTING AUTHORITY:
County of Maui
200 South High Street
Wailuku, Hawaii 96793

CONTACT: Louis Hao PHONE: 808-813-7011

PROPOSING AGENCY OR APPLICANT:
Molokai Livestock Cooperative
P.O. Box 1569
Kaunakakai, Hawaii 96748

CONTACT: Catherine Kahae, Project Manager PHONE: 553-3393
George Maioha, President

CONSULTANT:
David W. Curtis, Architect AIA
P.O. Box 1829
Kaunakakai, Hawaii 96748

CONTACT: David W. Curtis PHONE: 558-8284

COMMENT PERIOD END DATE: ____________________________
CONDITIONS WHICH TRIGGER THE EIS LAW PLEASE CHECK ALL THAT APPLY TO THE PROPOSED ACTION:

- Use of State or County lands or funds
  HRS 143-5(a)(11)

- Use of Conservation District Lands
  HRS 143-5(a)(12)

- Use of Shoreline Special Area
  HRS 143-5(a)(13)

- Use of Historic Site or District
  HRS 143-5(a)(14)

- Use of lands in the Waialua Special District
  HRS 143-5(a)(15)

- Amendment to a County General Plan
  HRS 143-5(a)(16)

- Redistricting of Conservation Lands
  HRS 143-5(a)(17)

- Construction or modification of health care facilities
  HRS 143-5(a)(18)

OTHER CONDITIONS:

- Use of Special Management Area (City & County of Honolulu)

* Other

* If the project does not trigger HRS 143, please explain why document is being submitted to OEGC.

SUMMARY of the proposed action or project to be published in the OEGC Bulletin. Please submit it as a summary ready for publication. The description should be brief (300 words or less), yet provide sufficient detail to convey the full impact of the proposed action.

The project consists of a single one-story masonry building and two ponds for the oxidation and storage of effluent discharged from the facility. The building is designed to slaughter beef and swine for human consumption. The operation will employ approximately five persons and will be constructed and operated in full compliance with state and federal standards. The ponds are designed to oxidize the effluent created from the slaughter of an average of twenty-five - 1,000 lb. animals per week. The ponds will be impervious to any infiltration into the soil. Excess water will be removed by evaporation. Solid offal by-products will be consumed by incineration which creates neither smoke nor odors.

The building will contain an office, toilets, inspector's office and toilet, kill floor, refrigeration and cutting room, storage and other support facilities. The project will replace the only existing slaughterhouse on the island which has been condemned and inoperative for several years.

NOTE: Since the deadline for EIS submission is so close to the publication date for the OEGC Bulletin, please assist us by bringing the Document for Publication Form and a computer disk with the project description (size 3 1/2" or 5 1/4" disk are acceptable; preferably WordPerfect 5.1 or ASCII text format) to the Office of Environmental Quality Control as early as possible. Thank you.
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PROJECT OVERVIEW

A. Funding Status of Project

The Molokai Livestock Cooperative has received or has been allocated some $820,000 of public funds for design, construction and operation of all facilities.

State of Hawaii (construction) $750,000.00
County of Maui (operations) $ 70,000.00

The architectural drawings have been completed for a landscaped, esthetically pleasing building of approximately 3,000 sq.ft., two aeration ponds and an incinerator. The project has gone out to bid and the low-bid contractor has been selected. Construction is planned to start as soon as governmental approvals have been received.

B. Technical Aspects

1. LOCATION AND SURROUNDING LAND USE

The proposed location for this facility is on the island of Molokai (Fig.1), seven (7) miles from the main town of Kaunakakai, near the intersection of Maunaloa Highway and the turnoff to the Hoolehua Airport. It will be sited on a 7.236 acre portion of a 20 acre parcel of land, owned by the State Department of Land and Natural Resources, Tax Map Key (2) 5-2-04:16, lot 2-A-2 (Fig.2 & Fig.3). It is currently under general lease to the County of Maui for use as the Molokai Agriculture Park (see attached correspondence).

The State Land Use Designation and the Maui County Zoning are both for agricultural use. The parcel is sur-
rounded on the south and east by the Hoolehua-Palaaau Homestead area and open agricultural fields currently not in use (Fig.2).

Located to the west and on the same twenty-acre Molokai Agricultural Park parcel are the Hikiola Farmers Cooperative (a general farm supply and equipment store) and the Molokai Cooling Plant Cooperative. Across the highway and to the northwest, is the Hoolehua Airport. The Molokai Slaughterhouse will have direct access to Maunaloa Highway.

2. **LAND USE**

The site will include the slaughterhouse building, domestic sewage treatment, a parking lot, an oxidation pond, a storage pond, an incinerator and a small holding pen for livestock. The building is an enclosed, sanitary structure designed to slaughter between twenty and thirty head of cattle and hogs per week. The animals will be held in a small pen with a concrete floor until slaughtered. They will not be held overnight as there will be no feed lot facilities.

The visual impact of the facility from the highway, the only observable view-plans, will be minimal. The one-story structure will be surrounded on two sides by landscaping, the pen and ponds will not be seen due to a planned planting of native trees and shrubs. Suitable native plants for this dry geographic location could include, among others, such trees as wiliwili (*erythrina sandwicensis*), the *chee* (*reynoldsia sandwicensis*) and the *hao* (*rauaolfia sandwicensis*), the shrubs 'a'ali'i (*dodonaea*) and kokia rocki'i, the red Molokai hibiscus.
3. EVAPORATION PONDS

The oxidation pond is one-half acre in area and contains 400,000 gallons of water, while the storage pond is one-quarter acre and contains 200,000 gallons.

Both ponds are unlined with an impervious surface created by compaction of the clay soil to 95% relative compaction in accordance with ASTM Designation D1557-91. This will allow for natural biological treatment without seepage into the ground.

The biological treatment is a symbiotic process wherein algae and bacteria act to decompose organic matter in the wastewater. Algae, created by sunlight and nutrients in the wastewater, uses carbon dioxide to create oxygen; aerobic bacteria then utilize oxygen to decompose organic matter and create carbon dioxide and water. This symbiotic process is an on-going organic activity.

Anaerobic decomposition, which could create obnoxious odors, will be controlled by mechanical aeration of the pond surface.

The land surrounding the ponds will be graded so that surface rainwater will be directed away from the ponds. The surface rainwater entering will be that falling directly on the ponds. Precipitation generated from a 24 hour, 25 year-period storm is estimated at 8 inches (SCS) which can be contained within the ponds as designed. Slopes adjacent to the ponds will be planted to Bermuda grass or similar grass to control erosion.

The evaporation rate at this site is 101.4 inches per year which exceeds the inflow from combined discharge
from the slaughterhouse and precipitation requiring the addition of water to maintain the pond levels. Should the inflow exceed the evaporation rate at any time, it is planned to pump the excess into a tank truck which would spread the effluent onto nearby grazing pasture or vacant agricultural lands.

We do not anticipate noxious odors to be a problem based on a recent visit to the Hamakua Slaughterhouse on the island of Hawaii, which uses the same type of evaporation ponds. However, should the ponds ever create unwanted odor, it is planned to introduce water-hyacinth plants into the ponds, which will convert the nutrients into oxygen.

A review of a system employed by the City of San Diego to treat sewage wastewater shows that these plants in combination with Tilapia fish and/or other aquatic animals, properly managed, eliminated all odors.

The removal of sludge which accumulates on the bottom of the ponds will be by a sludge pump and disposed of at the local land-fill, one mile to the southeast of the site.

4. **INCINERATOR**

Offal and other solids will be removed from the slaughterhouse to a high temperature incinerator which will reduce these by-products to ash without the emission of smoke or odors.

The incinerator is an Eneco Eco 500 P-T2 model type which is the same as one installed at the Maui Memorial Hospital. During emission tests required by the State Department of Health, Clean Air Branch, on
July 16, 1993, the main contaminants measured were particulate and hydrogen chloride which were less than the permitted levels.

The ash residue will be buried on the site. Should smoke or odors from the incinerator at any time become offensive, an alternate disposal method would be burial of the slaughterhouse byproducts.

5. WATER

Potable water for the project will be supplied from the Department of Hawaiian Home Lands Water System (see attached correspondence) and the estimated water use is at the rate of 11,500 gallons per day when in operation.

6. VEHICULAR ACCESS

It may be assumed that there will be a minor increase in traffic from local workers employed during the construction phase, as well as from trucks carrying materials to and from the site. To mitigate this impact, a temporary stop sign will be placed where the access road meets Maunaloa Highway, to be replaced by a permanently installed stop sign in the same location at the termination of construction. When this occurs, it is not expected that there will be a traffic problem to and from the site due to the limited nature of the business.

The access connection to the adjacent State Highway will meet all Maui County Department of Public Works and State Highway standards and the minor increase in traffic is not considered to pose a hazard.
7. APPROVAL

The slaughterhouse design and operation have been approved by the State Department of Agriculture, Meat Inspection Branch, and the wastewater system has been approved by the State Department of Health, Environmental Management Division (see attached correspondence).

8. ALTERNATIVES TO PROPOSED PROJECT

a. While renovation of the abandoned ruins of the old slaughterhouse in Kaunakakai was evaluated, the lack of adjacent land available for use for oxidation ponds precluded further consideration of this site. Also, the cesspool previously used for disposal of liquid waste would no longer be allowed under current State laws and regulations. The location is now within the city limits of the town of Kaunakakai, bounded on the south and the northwest by residential districts nearby, and on the west by the Kaunakakai Elementary School. It was quite obviously not a viable alternative choice.

b. The "do nothing" alternative to sanitary slaughter facilities on Molokai is to continue the existing so-called "backyard slaughter" of animals. This has been the only on-island slaughter method available since the one slaughterhouse was closed. This is an unacceptable practice due to the unsanitary conditions and health hazards it encourages.

c. The other alternative to building a slaughterhouse on Molokai is to ship cattle off-island to Maui, Hawaii, Oahu, or to the Mainland. Because of the excessive cost of shipping to any of these locations, this method would not discourage the "backyard" slaughter that we are proposing to eliminate.

SOCIOECONOMIC CONSIDERATIONS

A. Purpose of Project

The Molokai Livestock Cooperative was formed in 1987 to address the need for a slaughter facility on Molokai. The cooperative membership is made up of a group of livestock producers, 97% Native Hawaiians, most of them Homesteaders. All of the commercial beef producers on the island are members. The slaughterhouse will also serve the hog, sheep and goat operations.

The cattle raising industry on Molokai is beginning to recover from the island-wide, total slaughter of all beef animals in the State-sponsored effort to eradicate bovine tuberculosis in 1985-1986. This new facility will be a major incentive to the support and expansion of this agricultural industry. The employment of four to six persons at the slaughterhouse will be a direct benefit in an area of high unemployment such as Molokai. The boost to livestock raising operations in general will result in additional agricultural employment.

B. Benefits of Project

There will be a short-term economic benefit due to the employment of construction workers on the project. Long-term economic benefit will include the employment of those persons involved in the operation of the facility itself. The incentive to increase cattle and hog production will also result in additional employment for Molokai farmers.

The necessity of the "backyard slaughter" of animals, a common practice and a health hazard on the island, will be greatly reduced or eliminated altogether.
ENVIRONMENTAL CHARACTERISTICS

A. Physical Environment

1. SITING THE PROJECT

The buildings will be placed in an agricultural setting within a complex composed of two other farm/ranch cooperatives which are located to the west of the proposed slaughterhouse: the Hikiloa Farm Cooperative and the Molokai Cooling Plant Cooperative. The subject site (Fig.2) is surrounded on the south and east by adjacent vacant agricultural lands and across the Maunaloa Highway to the north are also unused agricultural fields. To the northwest, approximately one-half mile distant, is the Hooluehia Airport.

The nearest single farm residence is located approximately one-fourth mile northeast of the facility which puts it upwind relative to the usual trade wind pattern. No detrimental impact is expected on either the farm businesses nearby or on any of the few farm residences found farther to the east, due to the absence of obnoxious odors or sounds.

2. CLIMATE

The slaughterhouse is located at the 450 feet elevation, with a median average annual rainfall of 18 inches for the area. The site has an average annual evaporation rate of 104.0 inches. The temperature ranges from 60 to 80 degrees during various times of the year.

Molokai is well-known as "the windy isle" as its trade winds blow at somewhat above average figures for the
State. This condition will help to dissipate any noxious odors which may emanate from the facility. Hawaii’s tropical location in the hemisphere accounts for relatively consistent, uniform conditions throughout the year. However, during the rare periods of kona weather conditions at the site, if there is a problem, the slaughterhouse could be shut down until the prevailing winds return.

3. FLOOD AND TSUNAMI HAZARD

The project site is identified as Flood Zone C, an area of minimal flooding. The site is well beyond coastal inundation areas.

4. TOPOGRAPHY AND SOILS

The soil composition of the project site is identified as Molokai Silty Clay Loam, 3 to 7 percent, MvB. On this soil, the runoff is slow to medium and the erosion hazard is slight to moderate (USDA, SCS 1972:96 & see Fig.4).

A mass grading and drainage plan has been submitted to the U.S. Department of Agriculture, Natural Resources Conservation Service (Soil Conservation Service) for approval.

5. FLORA AND FAUNA

The land is presently covered with scrub growth, koa-haole (Leucaena glauca) and various introduced grasses and weeds. The area has been chain-dragged and cultivated in the past and it is highly unlikely that any of the original grasses are still extant.
The existence of fauna in the area is presently limited due to the lack of water. The endemic Polynesian rat (Rattus exulans), not on the endangered species list, the common roof rat (Rattus rattus), the ubiquitous field mouse (Mus domesticus), the mongoose (Herpestes auropunctatus) and a transient population of axis deer (Axis axis) have been observed in the area. As soon as the slaughterhouse facilities are completed and ready for use, a rodent eradication program of the immediate area will be undertaken under the supervision of the State Department of Health.

No endemic birds have been observed on the site, however an occasional pueo (Asio flammeus sandwichensis) has been seen perched on fence posts in the area and the three species of francolin found on Molokai (Francolinus ponicerianus interpositus, F. asiae and Francolinus e. ereckelii) are transient to the region. Due to the lack of a permanent bird population on the site, no mitigation measures will be taken.

6. ARCHAEOLOGICAL RESOURCES

As noted above, the project site had been previously chain-dragged and cultivated and according to a recent walk-through survey conducted by a State Historic Preservation Division representative, no evidence of historical or archaeological remains are to be found (see attached correspondence).
SUMMARY DESCRIPTION

A review of the State Environmental Policy, Chapter 344-3, "Policy", and Chapter 344-4, "Guidelines", indicates that the development of the Molokai Slaughterhouse facility and its operation will not be in conflict with any of the provisions, other than its restriction on alternative uses.

A negative declaration is requested due to the clean nature of this facility and operation, to the positive effect it will have on employment and the stimulation of the cattle raising industry and other livestock operations on Molokai.

Subterranean water will not be affected due to the impervious surfaces at the sides and bottom of the ponds.

The high temperature (2.4 million BTU per hour) incinerator used to reduce any solids to ash is the type used by hospitals and will not emit smoke or odors. A six-foot high chain-link fence will surround both ponds to prevent the intrusion of animals or persons.

In response to HAR Section 11-200-12 (B-2), the construction of the slaughterhouse and the two evaporation ponds would obviously curtail the range of other beneficial uses on this site (Fig.3).

It is important to understand that the protection of the environment, the safety of the people directly involved in the project and the community of Molokai will be the first priority of the Molokai Livestock Cooperative in the development and operation of this project.

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<th>AGENTIES CONSULTED</th>
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<td>U.S. Soil Conservation Service</td>
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<td>Deborah Kelly</td>
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<td>Keith Matsunaga</td>
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<td>Mayor</td>
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<td>Molokai Planning Commission</td>
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<td>CITIZENS GROUPS CONSULTED</td>
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12.
Nature Conservancy
Hawaii Farm Bureau
Molokai Agriculture Community Project

INDIVIDUALS CONSULTED

Rozalyn Baker, State Senator
Michael White, State House of Representatives
Patrick Kawano, Maui Councilman
Tom Morrow, Maui Councilman & cattle rancher
Henry Tancayo, neighbor
Joe Kennedy, neighbor
Baron Okimoto, Hikiola Farm Cooperative, neighbor
Dwayne Craney, Molokai Cooling Plant Cooperative, neighbor
Leif Gross, cattle rancher
Mike De Coite, cattle rancher
Alex Franco, Hawaii Beef Packers, Hamakua, Hawaii
Jim Masterson, Koch Supplies, Kansas City, MO
Sam Pedro, Operator of previous slaughter house
Duncan Annandale, Molokai Ranch
Chris 'D'Arcy, Molokai Ranch
Crystal Egusa, Friendly Market Center
Kevin Misaki, Misaki's Market
APPENDICES

MAPS INCLUDED

Overall Map of Molokai locating project site ........ 1.
Survey Map of project site, July 20, 1993 ............ 2.
Detailed Land Classification Map No.18, Island of
Molokai, Land Survey Bureau, UH .................... 4.

Figures

CORRESPONDENCE INCLUDED

Hikiola Cooperative, Inc., Brian Okimoto
(subdivision agreement)
State Department of Health, Thomas E. Arizumi, P.E.
(wastewater system application compliance)
State Department of Health, Dennis Tulang, P.E.
(individual domestic sewage system)
Department of Hawaiian Home Lands, Ray Soon
(portable water use agreement)
Environmental Center, UH Manoa, John T. Harrison
(Draft Environmental Assessment response)
Draft Environmental Assessment, David W. Curtis, A.I.A.
(Response to Harrison)
State Historic Preservation Division, Don Hibbard
(no historic preservation concerns)
David W. Curtis, Architect, to Molokai Planning Commission
Office of Environmental Quality Control, The Environmental
Notice, Molokai Notes, April 23, 1996
Cooperative Extension Service, Molokai, Glenn I. Teves
(needs of the Molokai livestock industry)
August 11, 1993

Robert Johnson
Economic Development Coordinator
Office of Economic Development
County of Maui
Wailuku, Maui, Hawaii 96793

Re: Molokai Livestock Cooperative

Dear Mr. Johnson,

The Hikiola Cooperative Board of Directors have agreed to subdivide TMK 5-2-04:18 to allow approximately five acres for a proposed slaughterhouse for the Molokai Livestock Cooperative.

The enclosed diagram noted as Schema 4, indicates Lot 2-C as the proposed site for subdivision. Lot 2-C is located along the southern border, the width is 200' and would connect to Keonelele Avenue.

Please contact this office if further action is required of the Hikiola Board to expedite the process to subdivide.

Sincerely yours,

Baron Okimoto
President
Hikiola Cooperative

cc: Molokai Livestock Cooperative
July 15, 1994

Mr. David W. Curtis, AIA
P.O. Box 1829
Kaunakakai, Hawaii. 96748

Dear Mr. Curtis:

Subject: Molokai Livestock Cooperative - Proposed Slaughter House

We have reviewed the "Pollution Prevention Plan" for the subject project. The plans indicate that the project is in compliance with applicable sections of the Hawaii Administrative Rules ("HAR"), Title 11, Chapter 62, "Wastewater Systems," and the Guidelines for Livestock Waste Management. Therefore, approval to construct the wastewater system is granted by the Department.

Please be informed that in accordance with the HAR Chapter 11-62 and the Guidelines, prior to operation, the wastewater system must be inspected and approved in writing by the Director of Health. Therefore, it is the owners responsibility to inform the Department of its completion such that arrangements can be made to conduct the inspection. Arrangements for the inspection should be made through the Department's Wastewater Branch.

Should you have any questions, please contact David Yamamoto of our Wastewater Branch at telephone 586-4389.

Sincerely,

THOMAS E. ARIZUMI, P.E.
Chief, Environmental Management Division

DY:shmn

c: District Health Office, Molokai
   Attn: Cathleen Sakamoto
January 26, 1996

Mr. Edmund Pedro
P.O. Box 1569
Kaunakakai, HI 96748

Dear Mr. Pedro:

Subject: Individual Wastewater System at
Hoolehua
Palaau, Molokai (Domestic waste only)
TMK: (2) 5-2-4: 016

Your plans for an individual wastewater system (IWS) consisting of a septic tank and soil absorption trenches serving an office on the subject property have been approved by the Department. Your plans are in compliance with all applicable provisions of Title 11, Chapter 62, Hawaii Administrative Rules, "Wastewater Systems" and construction of the IWS may begin.

Please be informed that we are requiring that your engineer concur or approve of any changes to the wastewater system plans submitted to the Department. Such changes that require resubmission to the Department include, but are not limited to changes in the wastewater treatment unit or disposal system location, changes in materials originally specified for the treatment units or disposal system and changes in brand names of products originally specified.

Furthermore, Section 11-62-08(a) requires that an IWS be installed-by a licensed contractor. In order for the Department to verify compliance with this provision, the attached form must be completed, signed and returned to the Department prior to final inspection.

You must have the completed IWS inspected and approved in writing before the IWS can be used. Arrangements for the final inspection can be made by calling Roland Tejano at our Wastewater Branch at 243-5095. Please allow between 2 to 3 working days for our engineers to make the necessary arrangements for your inspection.
As part of the final inspection, you are required to keep the following parts of the system open:

1. Inspection ports or manholes of the septic tank;
2. Distribution box to the disposal system; and
3. The ends of the absorption trenches such that the gravel, piping, and filter fabric are exposed or access holes or covers of the seepage pit(s).

If the above items are not open at the time of inspection, we may require that you dig or re-expose the items for our inspection.

Please be aware per Section 11-62-06(m), plans compliance and approval by the Department does not guarantee that your wastewater system will function or perform properly for any given period of time.

Should you have any questions, please call Roland Tejano at 243-5095.

Sincerely,

DENNIS TULANG, P.E.
Chief, Wastewater Branch

Attachment
May 17, 1994

Mr. Edmund Pedro, President
Molokai Livestock Cooperative
P. O. Box 86
Kaunakakai, Hawaii 96748

Dear Mr. Pedro:

SUBJECT: Water Agreement for Proposed Slaughterhouse, Molokai Livestock Cooperative, Hoolehua, Molokai

At the Hawaiian Homes Commission Meeting of April 26, 1994, your request for a Water Purchase Agreement to obtain water services from the Molokai Water System for a proposed slaughterhouse in Hoolehua was approved by the commission.

Please keep the department informed of your progress with the County of Maui for a sublease at the proposed location for this slaughter facility. Also, approximately 30 days in advance of the proposed date of water connection to the Molokai Water System, you must notify the department so that the Water Purchase Agreement documentation can be prepared and executed, prior to connection.

Should you have any question, please call Carolyn Darr, Land Agent, Land Management Branch in Honolulu at our toll free number, 1-800-468-4644 ext. 63821.

Sincerely,

Ray Soon, Administrator
Land Management Division

RS:CD/5652I
University of Hawai‘i at Mānoa
Environmental Center
A Unit of Water Resources Research Center
Crawford 317 • 2550 Campus Road • Honolulu, Hawai‘i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

May 8, 1996
EA: 00142

George Maioho
Molokai Livestock Cooperative
P.O. Box 1569
Kaunakakai, Hawaii 96748

Dear Mr. Maioho:

Draft Environmental Assessment (EA)
Molokai Livestock Cooperative Slaughter House
Kaunakakai, Molokai

The referenced project consists of a one-story masonry
slaughter house building and two ponds for the oxidation and
storage of effluent discharged from the facility. Beef and swine
for human consumption will be processed at the facility. The
slaughter house will be constructed and operated in full compliance
with state and federal slaughter house standards. The ponds are
designed to oxidize the effluent created from the slaughter of an
average of twenty-five-1,000 lb. animals per week. The ponds are
intended to be impervious to any soil infiltration. Excess water
will be removed by incineration which creates neither smoke nor
odors.

This review was completed with the assistance of Tom Hawley,
Environmental Center.

General Comments

Environmental effects of the proposed action as described in
this draft EA appear relatively benign in its effects upon the
environment. Nevertheless, our reviewers note that some important
details concerning impacts of the proposed project are missing from
the draft EA. The EIS rules (Title 11, Chapter 200, H.A.R.),
define specific content requirements for environmental disclosure
documents. We suggest closer adherence to these guidelines in the
final EA in order to thoroughly describe the impacts of the
proposed project. Specific sections of the rules are noted in the
following commentary as relevant to the referenced draft EA.
Section 11-200-10(4).

Section 11-200-10(4), H.A.R., requires a "General description of the action's technical, economic, social, and environmental characteristics." Though the draft EA includes some information to this effect, the final EA should include more specific information, particularly concerning the disposal of solid offal by-products. Page 2 of the draft EA states that "wastewater is piped to the oxidation pond where any solids are reduced to non-toxic elements by aerobic action." Much important information about this pond is lacking. How much time is required for aerobic action to reduce solids to non-toxic elements? Are the ponds to be aerated, and if not, how will anaerobic decomposition and its attendant odors be curtailed? Will the pond create noxious odors which could impact surrounding residences or businesses? The draft EA states that there will be no "obnoxious odors or sounds," (pg. 4), but our reviewers suggest otherwise. The draft EA also states that potentially affected residences are upwind of the proposed action, (pg. 4). While this may reflect average prevailing conditions, what mitigative measures have been devised when nearby locales are affected by the smell of the oxidation pond?

The draft EA also states that "The pond level will be maintained by evaporation from the pond surface and the controlled addition of potable water. It is planned to spread any excess effluent onto animal grazing pastures nearby to prevent overflow of the ponds should the inflow exceed the evaporation rates at any given time" (pg. 2-3). What means are proposed for the spread of this excess effluent onto nearby pastures? Are there potential health hazards related to materials to be spread on these pastures? Similarly, what measures are planned to keep storm water and related run-off from contributing to the level of the oxidation pond? What will be the effect of the addition of water from a severe storm event and, should the pond overflow, what mitigative measures are proposed to ensure public health and safety?

Further, the draft EA states that "Offal and other solids will be removed from the slaughterhouse to a high temperature incinerator which will reduce these by-products to ash without the emission of smoke or odors" (pg. 3). What form of emission control will ensure the total removal of smoke and odor? How will ash from the incinerator be disposed of? Will it be transported to a landfill and if so, will this waste detract significantly from the capacity of the landfill? These questions must be addressed in the final EA to ensure the adequacy of information about the proposed project.

Section 11-100-10(5)

Section 11-200-10(5), H.A.R., specifies the inclusion of
Mr. George Maioho  
May 8, 1996  
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"suitable and adequate regional, location and site maps..." Though the draft EA includes both a USGS topographical map and a smaller-scale site map, neither are particularly clear as to just where on Molokai the proposed project is located. A complete map of Molokai showing the location of the proposed action should be included in the final EA.

Section 11-200-10(6)

Section 11-200-10(6), H.A.R., requires "Identification and summary of impacts and alternatives considered." The draft EA makes no mention of any alternatives to the proposed project. It does state on page 2 of the OSQC Bulletin Publication Form that the proposed project "... will replace the only existing slaughter house on the island which has been condemned and inoperative for several years." Renovation and resumption of operations at the existing facility qualifies as an "alternative" and should be discussed in the final EA, as should discussion of the "no-action" alternative.

Section 11-200-10(11)

The draft EA lacks sufficiently thorough information concerning required federal and state permits. Section 11-200-10(11), H.A.R., specifically requires a "list of permits and approvals required." The draft EA does state that the proposed project "will be constructed and operated in full compliance with state and federal slaughter house standards" (OSQC form, pg. 2), and that "The slaughterhouse design and operation have been approved by the State Department of Agriculture, Meat Inspection Branch..." (pg. 3). Nevertheless, this information fails to specify exactly which state and federal permits are required for the proposed project. The final EA must include this information.

Thank you for the opportunity to review this document.

Sincerely,

John T. Harrison  
Environmental Coordinator

cc: OSQC  
Roger Fujioka  
Louis Hao, County of Maui  
David Curtis, Architect AIA  
Malia Akutagawa  
Tom Hawley
May 15, 1996

Mr. John T. Harrison
Environmental Coordinator
Environmental Center
University of Hawaii at Manoa
2530 Campus Road, Crawford 317
Honolulu, Hawaii 96822

Subject: Draft Environmental Assessment (EA: 00142)
Molokai Livestock Cooperative Slaughterhouse
Hoolehua, Molokai

Thank you for your thoughtful comments, dated May 9, 1996, regarding the Draft EA for the proposed Molokai Slaughterhouse. The final EA has been prepared and the following concerns which you expressed have been included:

A. HRS Title 11-200 Section 10 (4)

1. The solid waste matter will be burned in a high temperature incinerator of the same manufacture and model type (Eneco Eco P-T2) as that installed at Maui Community Hospital. In the stack tests the residue did not exceed the standards for particulates and HCL set by the State Department of Health, Clean Air Branch. Ash will be removed to the Moloka Landfill in quantities that will not significantly impact the facility.

If noxious odors were ever to become a problem during days of non-trade wind conditions, the slaughterhouse would be shut down temporarily.

2. Anaerobic decomposition, which could cause noxious odors, will be prevented by mechanical aeration. Should it be necessary, further mitigation measures are planned by the introduction of water-hyacinth plants.

3. The agricultural land where the excess pond effluent would be spread by tank truck with spray nozzles to disperse the liquid, is zoned for agriculture which permits this type of activity.

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Kaunakakai, Molokai, Hawaii 96748
Telephone 808-556-8244
Mr. John T. Harrison  
May 15, 1996  
Page 2  

4. The size of the evaporation ponds are designed to accommodate the addition of water from excessive rainfall taking into account the increase caused by a 25-year 24 hour storm. The evaporation rate at this site as recorded by the Soil Conservation Service is sufficient to require the addition of domestic water to maintain pond levels. The site will be graded to keep on-site surface water from entering the ponds.

B. Section 11-200-10 (5)

A complete map of the island of Molokai locating the project site has been included.

C. Section 11-200-10 (6)

The renovation of the existing, condemned slaughterhouse has been considered and discussed in the final EA. Other alternates are also identified and addressed.

D. Section 11-200-10 (11)

The following permits and/or approvals are required:

1. County of Maui - Building Permit
2. State of Hawaii - Approval by Department of Health for Wastewater Disposal
3. Federal Government - Approval of Plans and Specifications for Construction (Form 5200-5)

Your points were well taken and we appreciate the opportunity to respond.

Yours sincerely,

David W. Curtis  
Architect, AIA

cc: George Maioho  
    Louis Hao
February 28, 1996

Mr. David Curtis, Architect
P.O. Box 1829
Kuuauakai, Molokai, Hawaii 96774

Dear Mr. Curtis:

SUBJECT: Request for Information on Historic Preservation Concerns at the Proposed Site for the Molokai Slaughter House
Hoolua and Palau, Molokai

Thank you for your letter of inquiry, dated February 21, 1996. According to your information, the planned Molokai Slaughter House is to be constructed on Lot 2-A-2 of the subject parcel. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division. In addition, Sara Collins of our staff conducted a field inspection of part of Parcel 16 in October 1994, on behalf of the Natural Resources Conservation Service and the Hikiola Cooperative.

We have no record of historic sites on this parcel. The field inspection indicated that the ground surface had been previously modified, possibly by chain-dragging since a few large boulders were still present. Historic aerial photographs, taken about 1972, also show that the parcel was formerly cleared, possibly for agricultural use. Thus, it is unlikely that any significant historic sites are still present on the subject parcel in the vicinity of Lot 2-A-2. Therefore, we believe that the proposed undertakings will have "no effect" on significant historic sites.

We would add the following precautionary note to any construction or grading plans that might be prepared: Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact the State Historic Preservation Division (587-0013), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

Should you have any questions, please feel free to call Sara Collins at 587-0013.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

SC:jen
February 15, 1996

Mr. Wren Wescoatt  
Chairman  
Molokai Planning Commission  
P.O. Box 81  
Kaunakakai, Hi 96748  

Subject: Molokai Slaughter House  

Dear Wren:

As you probably know, the Molokai Livestock Cooperative has been planning for several years to construct a new slaughter house to replace the condemned building at Kapahaua. The new facility will be located on 7.1 acres adjacent to the Hikiola Cooperative. Please refer to the enclosed site plan.

There may be no requirement for a formal approval from the planning commission, but since I am preparing an Environmental Assessment as required by the Department of Land & Natural Resources, I thought the commission should be aware of this program.

Also enclosed are copies of approvals from the Department of Health and a letter from the Department of Hawaiian Homes Lands indicating the source of domestic water.

Please let me know if you have any questions or if I can provide additional information.

Sincerely yours,

[Signature]  

David W. Curtis

c:  George Maioho, President,  
Molokai Livestock Cooperative  
encl.
Draft Environmental Assessments

(1) Molokai Livestock Cooperative Slaughter House

District: Molokai
TMK: 5-2-04:16
Applicant: Molokai Livestock Cooperative
P.O. Box 1569
Kuualii, Hawaii 96748
Contact: Catherine Kahae or George Malo (553-5392)

Accepting Authority: County of Maui
200 South High Street
Wailuku, Hawaii 96793
Contact: Louis Hsu (243-7885)

Consultant: Architect AIA
P.O. Box 1839
Kuualii, Hawaii 96748
Contact: David Curtis (358-8284)

Public Comment Deadline: May 8, 1996
Status: DEA Second Notice, pending public comment. Address comments to the applicant with copies to the accepting authority, the consultant and OEQC.

The building will contain an office, toilet, inspector's office and toilet, kill floor, refrigeration and cutting room, storage and other support facilities. The project will replace the only existing slaughter house on the island which has been condemned and inoperative for several years.

The project consists of a single one-story masonry building and two ponds for the oxidation and storage of effluent discharged from the facility. The building is designed to slaughter beef and swine for human consumption. The operation will employ approximately five persons and will be constructed and operated in full compliance with state and federal slaughter house standards. The ponds are designed to oxidize the effluent created from the slaughter of an average of twenty-five - 1,000 lb. animals per week. The ponds will be impervious to any infiltration into the soil. Excess water will be removed by evaporation. Solid offal by-products will be consumed by incineration which creates neither smoke nor odors.
MOLOKAI AGRICULTURAL DEVELOPMENT MASTER PLAN

NEEDS OF THE MOLOKAI LIVESTOCK INDUSTRY - PART I

PROPOSAL: MOLOKAI LIVESTOCK COOPERATIVE SLAUGHTER FACILITY

SUBMITTED BY: Glenn L. Teves, County Extension Agent, University of Hawaii,
College of Tropical Agriculture and Human Resources, Cooperative
Extension Service - Molokai

BACKGROUND AND JUSTIFICATION:

The Molokai livestock industry has made a major transformation in the last ten years. Through federal and state cooperative regulatory efforts, depopulation of all cattle on Molokai to eradicate bovine tuberculosis brought the industry to a standstill in the mid-1980s. Eradication efforts were successful but also brought on economic hardship for ranchers as they attempted to expand their herds, advance their breeding programs, and maintain a positive cash flow. Large impacts were felt by subsistence beef producers who found they were unable to restart after the eradication program due to both increased costs of purchasing animals and limited cash flow. Legal challenges, made on behalf of ranchers, further strained relationships between ranchers and federal/state regulatory agencies responsible for the eradication effort.

During this period, the Molokai Graziers Association (MGA) was reactivated to address needs of the livestock industry and assist in the repopulation of cattle on the island. To aid in restocking efforts, the Molokai livestock industry received funds with the purpose of supplementing the cost of purchasing and transporting cattle to Molokai. The funds amounted to $50,000 from the legislature and $30,000 from a court-ordered settlement as a result of a suit brought against the state on behalf of a Molokai rancher. These funds were made available to all individuals who depopulated their beef herds, and were prorated and paid to ranchers on a per-head basis. This stipend has helped tremendously in facilitating the restocking of cattle on the island.

One of the priorities identified by this group was the need for a slaughter facility on the island. The result of this effort was the formation of the Molokai Livestock Cooperative (MLC), a state-licensed agricultural cooperative under Hawaii Revised Statutes 421. The cooperative was formed in 1987 to address the need for a slaughter facility after the closure of the Molokai Ranch slaughterhouse. The membership is comprised of ranchers who produce 95% of the cattle on the island. In 1989, the cooperative approached the legislature to investigate the possibility of developing a slaughter facility on Molokai. An appropriation of $50,000 was approved to look at the economic feasibility of such a venture. In 1991, the MLC approached the legislature for funds to design and construct a slaughter facility and $250,000 was appropriated for this purpose. In addition to receiving state funds, a grant proposal was submitted to the County of Maui to assist in construction costs and a grant of $70,000 was approved in June 1992. A site was selected in the Molokai Agricultural Park adjacent to two existing cooperative facilities to ensure long land tenure free from urban encroachment, as well as opportunities to share resources between cooperatives to cut costs. With this new direction, the cooperative again approached the legislature and received an appropriation of $500,000 for construction of the slaughter facility.

Through a grant from the federal Office of Community Services submitted by Aulilike Inc., a project manager and a contractor were hired to coordinate planning and development of this facility to the construction phase. An Environmental Assessment (EA) has been submitted to the state and is presently going through public review.
Subdivision of the parcel is being undertaken by this team in coordination with county and state agencies and will be the final obstacle before construction commences. Although it appears that the appropriated funds may not be sufficient to complete the facility, based on an approved bid for construction, the cooperative is present looking at innovative ways of decreasing the cost of construction and will also approach the Molokai Agricultural Community Committee for supplemental funding.

Prices paid to ranchers statewide have plummeted in the last two years from 55 cents to 30 cents per pound for recently weaned animals, with even lower prices paid for heavier cattle. Annually, over 55,000 head or over 95% of cattle produced in Hawaii are destined for Canada. With the softening of this market, the need to develop both slaughter facilities and local markets are critical to the survival of the industry. The cooperative has identified the need to develop a processing room, and also to construct the slaughter house to conform to federal health and safety regulations. This facility is expected to increase options for the marketing of livestock produced on Molokai. They include developing local and In-state markets as an alternative to shipping cattle out-of-state, providing subsistence livestock producers with a facility to slaughter animals for home use, and creating opportunities for the development of value-added meat products such as sausages, smoked meat, laulau, char siu, and other ethnic processed meat products. This infrastructure will also allow for a larger percentage of profits and potential tax revenues to remain in Hawaii. In addition, processing will allow the cooperative to supply the island needs for hamburger both in local stores as well as in tax schools and military installations statewide. For the interim, funds appropriated for construction are insufficient to cover the processing room. This component will have to be developed after completion of a basic slaughter facility.

Presently, there are ample land resources to substantially expand the livestock industry. The Molokai Agricultural Community Committee (MACC) special cost-sharing program has also accelerated the construction of perimeter fences in the Hoolehua Hawaiian Homesteads area. In addition, the Molokai Community Pasture Project expects to raise cattle for subsistence use and will center their activities in the upland areas of Kaunakakai and Kualanaula. To date, there are approximately 8000 head of cattle on the island. In addition to cattle, there is a growing need for fresh or hot pork to supply an expanding Oahu market as agricultural production areas succumb to urbanization, and Molokai producers are anxious to address the need for pork in the Honolulu market place. Molokai goat producers are also interested in utilizing this facility to developed processed goat or chevon products. The cooperative has focused on accommodating these segments of the Molokai livestock industry in its long-range plans for the slaughter facility.

PROPOSAL: MOLOKAI LIVESTOCK COOPERATIVE SLAUGHTER FACILITY

FUNDING AGENCY: USDA-NRCS/Molokai Agricultural Community Committee

TIMELINE: FY 97

BUDGET:

- Land clearing and preparation
- Construct holding pens and waste-management ponds $150,000

Total Budget: $150,000