

House District 4
Senate District 2

THE TWENTY-NINTH LEGISLATURE
APPLICATION FOR GRANTS
CHAPTER 42F, HAWAII REVISED STATUTES

Log No:

For Legislature's Use Only

Type of Grant Request:

GRANT REQUEST – OPERATING

GRANT REQUEST – CAPITAL

"Grant" means an award of state funds by the legislature, by an appropriation to a specified recipient, to support the activities of the recipient and permit the community to benefit from those activities.

"Recipient" means any organization or person receiving a grant.

STATE DEPARTMENT OR AGENCY RELATED TO THIS REQUEST (LEAVE BLANK IF UNKNOWN): HAWAII DEPARTMENT OF AGRICULTURE

STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNOWN): _____

1. APPLICANT INFORMATION:

Legal Name of Requesting Organization or Individual:
Hawaii Oil Seed Producers LLC
Dba:
HOSPRO
Street Address:
200 Kanoelehua Avenue # 205
Mailing Address:
200 Kanoelehua Avenue, # 205
Hilo, Hawaii 96720

2. CONTACT PERSON FOR MATTERS INVOLVING THIS APPLICATION:

Name WILLIAM WALLACE MOEKAHU STEINER, PH.D.
Title General Manager and Co-founder
Phone # 808-294-0750
Fax # _____
E-mail wwmsteiner@gmail.com

3. TYPE OF BUSINESS ENTITY:

- NON PROFIT CORPORATION INCORPORATED IN HAWAII
 FOR PROFIT CORPORATION INCORPORATED IN HAWAII
 LIMITED LIABILITY COMPANY
 SOLE PROPRIETORSHIP/INDIVIDUAL
 OTHER

6. DESCRIPTIVE TITLE OF APPLICANT'S REQUEST:

ESTABLISHING A NEW BIOFUEL INDUSTRY IN HAWAII I. CAPITAL REQUEST

4. FEDERAL TAX ID #: [REDACTED]
5. STATE TAX ID #: [REDACTED]

7. AMOUNT OF STATE FUNDS REQUESTED:

FISCAL YEAR 2018: \$312,000

8. STATUS OF SERVICE DESCRIBED IN THIS REQUEST:

- NEW SERVICE (PRESENTLY DOES NOT EXIST)
 EXISTING SERVICE (PRESENTLY IN OPERATION)

SPECIFY THE AMOUNT BY SOURCES OF FUNDS AVAILABLE AT THE TIME OF THIS REQUEST:

STATE \$ _____
FEDERAL \$ \$49,000 (USDA-FOR MILL-SPENT)
COUNTY \$ 15,000 (APPLIED FOR)
PRIVATE/OTHER \$ 1,580 (ON HAND)

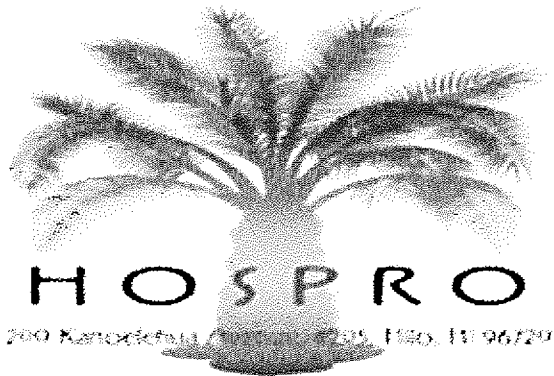
WILLIAM WALLACE MOEKAHU STEINER, GENERAL MANAGER
NAME & TITLE

JANUARY 18, 2017
DATE SIGNED



RECEIVED

1/19/17 [Signature]



January 18, 2017

William Wallace Mokahi Steiner
General Manager and Chair, Board of Directors
Hawaii Oil Seed Producers (HOSPRO) LLC

To Whom It May Concern:

I am the General Manager, Co-Founder and Chair of the Board of Directors for a two-year old organization who seeks to establish oil palms in Hawaii as a biofuel and edible oil source. You can learn more about our 501C5 Farmer's cooperative and organization at our website at hawaiioilseedproducers.com. We seek to establish the first fully productive and robust oil seed crop in Hawaii using hybrid oil palms, the phytosanitized, USDA approved seed of which comes from Costa Rica.

Please accept and consider the two proposals I am submitting for funding under the Hawaii State Grants in Aid program. One is for operations and one is for capital investment. This is a one-time request as we are close to producing and need your support to bridge our funding gap. The titles are "*ESTABLISHING A NEW BIOFUEL INDUSTRY IN HAWAII I AND II*". The Operations proposal is for \$268,340, and the Capital request is for \$312,000. We urgently need this funding and believe once established, hundreds of new jobs and potentially new industries can be spun off of this industry. It can be a huge contribution to fuel security in Hawaii and help reach the 2045 mandate of energy self-sufficiency. The robust vision we have for this home grown and home owned industry is one we are proud of and believe it will be a permanent fixture of future Hawaii industrialization. We hope you will feel the same way.

Please contact me at the given addresses, emails or phone numbers should you have any questions.

Mahalo

William Wallace Moekahi Steiner, Ph.D.
HOSPRO

I. Background and Summary for *A CAPITAL GRANT: ESTABLISHING A NEW BIOFUEL INDUSTRY IN HAWAII I. CAPITAL REQUEST*

This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request. Please include the following:

1. A brief description of the applicant's background.

The applicant is Dr. William Wallace Moekahi Steiner, former Dean of the College of Agriculture, Forestry and Natural Resource Management at the University of Hawaii. Dr. Steiner stepped down from the College Deanship in 2012 and is also a retiree of the Department of Interior Biological Resources Division of the USGS. He previously served as USGS Director of the Pacific Island Ecosystems Research Center from 1995-2005, as a research geneticist for the USDA Agricultural Resource Service (1984-1995) with a joint appointment as Associate Professor at the University of Missouri, as Associate Research Scientist at the University Natural History Survey (1981-1984) and as Assistant Professor of Genetics at the University of Illinois (1974-1981). He obtained his Ph.D. from the University of Hawaii-Manoa (1974), a M.S. equivalency in Systems Engineering from the USDA Graduate School, Beltsville, a B.S. in Zoology from UHM (1970) and an A.S. in Agriculture (1964) from Boise State University when it was still known as Boise State College. Born in Honolulu his mother is of Punahale, Veracruz, Haleakala, Kahalepaiwi and Machado descent, and his father is of a Swiss-French homesteading family from the mainland and came to Hawaii in 1941 to work on the Navy's Redhill underground storage tanks. Dr. Steiner grew up on the 16,000 acre Steiner family cattle, hay and grain ranch in Owyhee County Idaho where he helped mill wheat and barley into ground meal for cattle and horse feed.

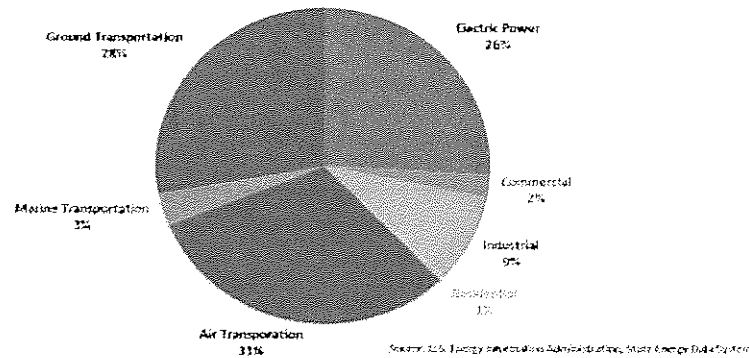
Since retiring as Dean at UHH, in 2014 Dr. Steiner co-founded the Hawaii Oil Seed Producers (HOSPRO) LLC as a nonprofit 501C5 agricultural cooperative whose aim is to establish the first fully functional bio-oil producing crop in Hawaii on abandoned sugar cane lands beginning with Hawaii Island and moving up the island chain. Dr. Steiner is General Manager of the cooperative and represents HOSPRO LLC for this proposal.

2. The goals and objectives related to the request.

The objective of this request is to obtain capital funding to enable HOSPRO to begin its Phase 2 expansion of the oil palm business from its current 8,000 trees. The request is to help purchase land with a warehouse, housing for intern support, and a large shade house to begin the Phase II goal of expansion; provide housing for an oil extraction mill, and oil palms for a list of farmers who want to participate. Funding is also requested for irrigation and shade house repairs, equipment to start seedlings and a soil sterilizer to reduce fungal attacks on the seedlings.

3. The public purpose and need to be served.

FIGURE 1. Source: Hawaii State Energy Office, Nov. 2016



2016 Total crude oil imports (million barrels per year) ⁷	39.0	2016 Fuel for electricity production (million gallons per year) ⁸	394
2016 Total petroleum use (million gallons per year) ⁹	1,639	2016 Fuel for air transportation (i.e. jet fuel) (million gallons per year) ¹⁰	569
2016 Hawaii's rank among 50 states for energy prices ¹¹	1	2016 Fuel for ground transportation (million gallons per year) ¹²	468

Hawaii's economic growth rate for 2017 is projected to be 1.9% compared to 2.2% for the USA overall (DBEDT report on Hawaiian economy, August 2016). One source of suppressing growth is the high cost of energy in Hawaii, considered to be the highest in the nation. Hawaii imports 93% of its energy used. The information sheet for Hawaii from the U.S. Energy Information Agency (IEA-updated in December of 2014) and the Hawaii Energy Facts and Figures November (2016)¹ shows the total cost of energy in Hawaii's economy is about \$6.1 billion today (Figure 1). This is money that largely leaves the state and pays for import of 42.5 million barrels of oil (1,785,000,000 gallons). This does not include ethanol imports from the mainland US or Brazil. Interestingly, Hawaii Energy Forum in their latest (2017) report to the legislature makes no comment about the need for biodiesel for transportation, seeming to believe that electrical fuel will supply all Hawaii's transportation needs.

About 93% of this energy goes into the transportation sector with approximately 1/3 each going to citizen use, tourism and military use.¹ The only production in Hawaii comes from refining of used cooking oil by Pacific Biodiesel, and this amounts to about 4 million gallons/year. In the meantime, the State has mandated a biofuel production capacity of 350 million gallons by 2025; only nine years away. There is enough abandoned sugar cane and pineapple land in the state to produce 60 million gallons or (\$180 million worth) of fuel. Everything we grow is money that stays in Hawaii's economy. It does not compete on the international commodities market

because the entire crop can be utilized in Hawaii. Even if cheaper and more efficient transportation fuels were to come along, the palm oil would continue to have a Hawaiian market because of spin off industries in animal feed, compost, cosmetics, pharmaceuticals and plastics to further reduce imports.

Although hundreds of millions of dollars have been spent in Hawaii to developing pilot projects for transportation biofuel, investments in algae, grass, corn, sunflowers, wood and *Jatropha* has not resulted in significant production to offset the millions of gallons of petroleum Hawaii imports each year for transportation fuel. Some 120,000 acres of agricultural land lies mostly fallow or underutilized growing mostly invasive weeds and grasses even though some are leased for coffee and cacao plantations. These lands could grow oil palm crops with cacao, coffee and tea inter-planted between the trees. Oil palms on these lands would not dislocate native forest or forest species as occurs in SE Asia and Indonesia. In fact, endangered, listed species might be grown under palm canopies for restoration projects.

As former Dean at UHH, Dr. William Steiner, inished a Phase 1 proof of concept study Importing, rearing and transplanting to collaborating farmers some 8,000 oil palm trees.² He has determined that (a) the trees grow well on the Big Island, and are able to fight off local insect pests and fungal pathogens, (b) the optimum elevations are for planting lie between sea level and 3,000 feet elevation, which is the best hybrid strain to use of three that were imported for testing (Figure 2), and that most Hawaii soils will accept these trees. Oil palm nuts (Figure 3) have been a proven source of oil for centuries. Central America, Africa and SE Asia produce as high as 750 gallons/acre of oil, about 14X more than soybeans can on the mainland USA.²

Figure 2. Deli x Nigeria hybrid from Curtis farm, Hilo, showing heavy seed set at base of palm fronds; this cross also has a higher germination rate. Figure 3. The seeds removed from the seed pods and ready for processing.

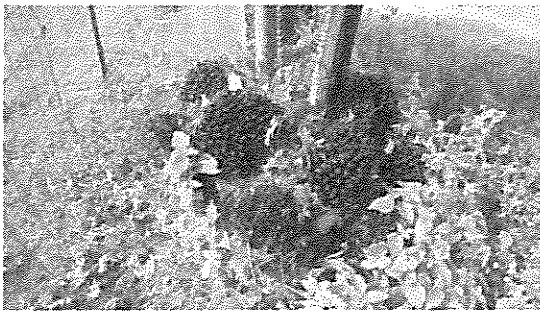


Figure 2.

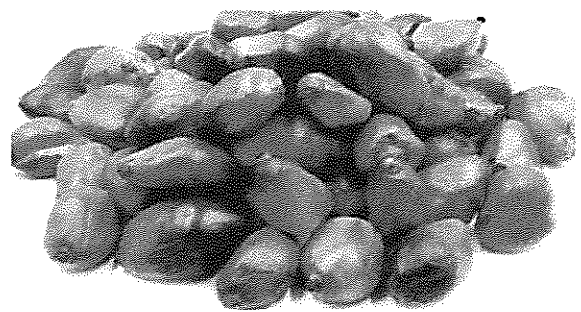


Figure 3.

Hawaii is aiming to have 100% renewable energy by 2045. Hawaii has and is suffering job losses from the closing down of the sugar and pineapple industries on various islands, leaving thousands of acres of land available for other agricultural purposes. An oil palm industry would create new jobs while bringing some level of energy security to the islands. This new industry could also provide spin-off industries in composting, animal feed, cosmetics, pharmaceuticals and even plastics further reducing outflow of our dollars. This new industry would be centered on growing and harvesting the fruit of the hybrids of the American and African Oil Palms, *Elaeis oleifera* and *Elaeis guinensis*. In the past year HOSPRO has verified that production is already at 500 gallons/acre on trees that will likely mature at 700 gallons in two more years. This oil also makes an edible cooking oil for which it was originally developed over its 2,000-year history. Currently, there are 80 acres of oil palms planted by half a dozen growers recruited by Dr. Steiner for his studies that are now beginning to produce. A list of another 20 growers would like to obtain trees and one large landowner on the Big Island has offered 2,000 acres on the Hamakua coast for further expansion. Pacific Biodiesel has agreed to purchase at \$3/gallon all raw vegetable oil HOSPRO can produce to refine into biodiesel which in turn will ensure a sustainable biodiesel source in the islands. We estimate that, like sugar in its heyday, this industry can produce a minimum of one job for every 20 acres planted.

4. Describe the target population to be served.

The target population is all the people of Hawaii who depend on diesel to operate their trucks, tractors and production engines. It will also benefit the farmers participating in the Cooperative who are growing the oil palms. It will benefit rural communities by establishing new jobs and industries. All islands populations can benefit since land to grow palm trees for production is available on each. In addition, it is possible that the Department of the Defense will find a use for this fuel (e.g.; see the news excerpts of the "Green Fleet" of the past few years and/or greenfleet.dodlive.mil), as might the Hawaii Electric Companies (HECO), who funded a portion of the Proof of Concept studies mentioned above and use 394 million gallons of oil in 2016 (Figure 1).

5. Describe the geographic coverage.

This request is to set up on the Big Island the extraction mill we now own and begin operating the mill at the site described in IV (B) below. Purchase of this site provides a covered, concrete floored, 4,400 sq. ft. warehouse in which to build the mill. The mill has been purchased with a USDA Rural Development grant and currently is sitting in storage till we can set it up. A portion of the warehouse purchase proposed in this proposal will be used to set up incubators to germinate the thousands of seeds we need to begin the expansion effort. There is on site a shade house with a water system to enable grow out from seedling to 2.5' height, and land to then harden the young oil palms before moving them to participating farms for grow out. Once established, this nursery can supply thousands of acres on the Big island. Future expansion beyond the Phase 2 effort will see the building of future mills and nurseries on Maui, Oahu and other islands to serve those island systems. Expansion of Phase 3 will depend on how fast we can obtain a profitable picture for funding (e.g. our current production income is estimated at \$90,000/year

based on 80 acres once the mill is operating; expansion to 2,000 acres will bring in \$1.5 million/year after 4 years). These estimates do not include income from composting waste material, or making animal feed from crushed nut meal.

II. Service Summary and Outcomes: The Service Summary shall include a detailed discussion of the applicant’s approach to the request. The applicant shall clearly and concisely specify the results, outcomes, and measures of effectiveness from this request.

1. Describe the scope of work, tasks and responsibilities.

The scope of work includes purchasing the 11 acre-warehouse-shade house site in HOSPRO’s name, moving the mill components to this site and setting it up, repairing waterlines and drip irrigation systems, repairing greenhouse tables, replacing shade house screening where necessary, and setting up incubators. We will need a tractor with front-end loader to lift mill components into place, move potting soil mixes, unload trucks of oil palm nuts, etc. We will need a soil sanitizer to steam sanitize potting soil mixes in order to reduce fungal infections in palm sprouts, and incubators to germinate and start oil palm seeds. Set up of the mill would guarantee production of raw vegetable oil within 4 weeks of land purchase.

2. Provide a projected annual timeline for accomplishing the results.

In this Capital funding proposal, the first order of business (A) is to purchase the warehouse site. This is normally a 4-6 week process under Hawaii realty laws and requirements. The second order (B) is to move the mill to the site and set it up so that processing of available fruit can commence generating an income. This will take about 4 weeks. A 60-hp tractor/front end loader (C) can be ordered simultaneously. This may take up to 6 weeks if shipped from the mainland, but can be timed to coincide with the first order of business so the tractor is available for unloading and setting up the mill. Soil sanitizer and incubators (D) will have to be coordinated with the request for funding for the operations proposal but will likely be ordered by the 4th week of operations. Renovation of facilities (E=water system and table renovations) and (F=shade house repairs) will follow; these will take place after week 17 and be coordinated to enable worker and student assistantship aid. Item (F) will be coordinated with Seed orders (G) in the Operations proposal which must wait until the incubators are in place. Six-eight months into the buildout we anticipate having the mill fully operational and having small palm trees for sale.

Timeline:

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
event(A).....			(B).....			(E).....			(F).....				}coordinated							
event(C).....			(D).....			(G).....				}outcomes											

3. Describe the quality assurance and evaluation plans for the request.

Quality assurance will result from monitoring progress in site renovation, mill buildout and purchasing options. Timing is critical in all these areas and will be the first monitoring tool in terms of meeting the timeline. As long as the timeline is being met, the process should flow smoothly. The critical factor is (A), because without a site to erect the mill and prepare for seed germination and growth the project comes to a dead halt. All other processes have some days or weeks leeway to reach operational states. University of Hawaii Hilo College of Agriculture will provide two interns to aid as workers in this project and an experienced palm grower will provide mentorship and leadership in the nursery. Successfully hitting the timeframe points for each order of business will keep the project on track. Improvement can result from (A) being finished in 4 weeks, (B) being finished in 2 weeks, and (E) through (F) being finished within 8 weeks.

4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency).

Measures of effectiveness include (1) meeting timeline parameters; (2) showing invoices defining successful purchases and (3) producing vegetable oil for refining into biodiesel. These are all tangible product measurements that can be assessed at any time.

III. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.

Budget forms are attached.

2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2018.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$182,000	\$54,000	76,000	---	\$312,000

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2018.

- a. Crowdfunding on the AgFunding platform, to be submitted; \$500,000.
- b. Grant from County of Hawaii, to be submitted; \$15,000
- c. Grant request to 2017 SBIR Small Business Opportunities, inquiry is sent.

d. Energy Accelerator request for 2017 oil palm expansion, inquiry sent.

4. **The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years a listing of all state and federal tax credits they have applied for or anticipate applying for.**

There are no anticipated federal or state tax credits available for this project. There is a \$1/gallon federal subsidy for agricultural producers of biofuel which ended December 31, 2016 and will hopefully be renewed in the new Farm Bill.

5. **The applicant shall provide a listing of all federal, state, and county government contracts and grants it has been and will be receiving for program funding.**

A USDA Rural Development grant for \$49,000 was received in fall of 2014 to purchase and oil palm oil extraction mill. This objective has been accomplished. No other grants or contracts have been received.

6. **The applicant shall provide the balance of its unrestricted current assets as of December 31, 2016.**

The current balance of unrestricted current assets (\$\$) in First Hawaiian Bank HOSPRO account 20-135441 is \$1,580.16

IV. Experience and Capability

- A. **Necessary Skills and Experience: The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request.**

HOSPRO was founded in 2014 and has a Board of Directors who are participating in the buildout and expansion of the oil palm mill and the nursery expansion. These include:

William W.M. Steiner, Ph.D. (Genetics), Chair of the Board. Dr. Steiner's credentials are listed in I.1. above. He has obtained funding support for the oil palm proof of concept study from HECO and from several private donors including U.S. Biodiesel LLC when they had an office in Kona. U.S. Biodiesel provided the funding to purchase the oil palm seeds for the Phase1 study, and HECO provided the funding to grow the seedlings to tree stage and farm them out to local small farmers. Dr. Steiner has over 90 scientific publications to his credit, has attended and sponsored many scientific professional forums and symposia, and writes poetry and music in his spare time. He has over 20 units of federal management courses to his credit. He has served on the Boards of several educational and scientific societies and foundations including Hawaii Agricultural Tourism Foundation, Na Pua No'eau, Polestar Collaborative, and the Hawaii Academy of Arts and Sciences. He co-founded the Global Ecology Foundation and the Island Prosperity Foundation.

Curtis Beck (B.S. Engineering Physics-Washington U. St. Louis and M.S. Mechanical Engineering-Stanford U.) He worked at the Battelle National Laboratory prior to coming to Hawaii 30 years ago and retired from HELCO in 2013. He ended his career as a manager at HELCO and has a management degree from University of Idaho. He is a co-partner at Mahilani Farms above Hilo which grows oil palm, cacao, sweet potato, coffee and other fruit crops. He is a co-Founder of HOSPRO and is involved in community services such as Big Brothers and Big Sisters of Hawaii Island, Hawaii United Way, Hospice of Hilo and served on the past Mayor's Energy Advisory Committee.

Atto Assi (B.S. Petrochemical Engineering, U. of Bucharest Romania) grew up on the Ivory Coast in Africa where his family had very large plantations of oil palm. After obtaining his degree he worked at the Ivorian Crude Oil Refinery and then in Detroit at Exxon Mobile operations and fuel retailing. He is a co-Founder of HOSPRO after retiring in 2005, settling in Hawaii as co-owner of an integrated coffee, oil palm, honey, poultry and piggery farm where he is off-grid and makes his own electricity using solar and a biodiesel run generator from used vegetable oil he gathers and refines himself. His service to the larger community includes hosting work study students and student exchanges from Europe during the summer and conducting organic growing courses with the support of the County of Hawaii nonprofit program.

Steve Shropshire was raised in the nursery business in S. Florida. At the age of 18 he started the Green Connection, the largest tropical foliage leasing and maintenance business in the State of Alaska with annual revenues of \$3 million. He sold the company in 2001. He assisted former Alaska governor Walter J. Hickel in establishing the Northern Forum, an NGO of the United Nations in which he served as Executive Director. The organization consisted of 31 regional governors throughout the Arctic world. He served as President of Shropshire International, a company involved in export trade between the USA and Russia which focused on food and beverage products. He later formed Aloha Green LLC, a diversified agriculture operation based on the Hamakua Coast of the Big Island growing tropical ornamentals, exotic fruit, heart of palm, timber and livestock on former sugar cane land. He also formed a real estate holding company Shrophsire Group with over 1,400 acres on the Hilo-Hamakua Coast. His community service includes Founder of Green Star (1990) a nonprofit that encourages businesses to practice waste reduction, energy conservation and pollution prevention. He is a member of the Rotary, the Hawaii Island Chamber of Commerce, Hawaii Export Nursery Association, Alaska Horticultural Association, and others and was named Entrepreneur of 1989 (Alaska), 1996 Rotarian of the year (Alaska) and Farmer of the year (1999) among other honors. He brings a sharp business acumen to the HOSPRO organization.

Dan Davis Davis graduated Magna Cum Laude from UC Monterey Bay. He has worked for Navitas Naturals in e-commerce and design, as a property manager and maintenance expert, and he learned mechanic skills by revamping old cars to resell as a sideline hobby. He has an interest in physical health and muscular systems of the human body and worked for a while in massage therapy and spa management conducting customer care, product merchandising, customer scheduling and employee management. He returned to the family farm near Mt. View and has assumed management of the fruit and oil palm production systems there. His extensive skills in

graphic design software, digital design, web design and computer architecture will serve HOSPRO well as Communications Director for the LLC

Steve Jacquer is a Ph.D. candidate (Biology-University of Alaska Fairbanks) and holds teaching certificates (Alaska Programs), an M.S. (1989) in Village Ecology from Cal State Stanislaus, a B.S. in Biological Sciences with a Chemistry minor from CAL State Stanislaus (1984), and an Associates in Biological Sciences from Modesto Jr. College (1979). He has worked in education serving from elementary teacher to adjunct professor at various schools in Alaska developing educational opportunities for native Alaskans and was a finalist for the 1999-2000 USA TODAY First Teacher Team award. and elsewhere. He has studied or taught in non-degree programs at various state and international Universities including Ohio State, Rutgers, Berkeley and the Indonesian Institute of Ecology. He is a member of many professional organizations including the Hawaii Island Rat Lungworm Disease Research Team, College of Pharmacy UH-Hilo. He has won many awards for his service, including twice winner of the Baan O Yeel Kon Native Traditional Council Award for work on preventing FAS through science education in Alaska (1993, 1998). Since coming to Hawaii he has been involved in working farm partnerships with D&S Aloha LLC and D&S LLC and with providing educational consulting through his Northern Educational Consulting LLC service. He has worked with a variety of fruit trees (peaches, almonds) and operated his own nursery and landscape business growing orchids among other jobs. He is a member of the Big Island Self Sufficiency group, the Big Island Society for Creative Anachronism, the Center for Spiritual Living of East Hawaii, Friends of Puna's Future, Hawaii Island Palm Society, Ka Pilina Interactive Arts Society, and a supporter of local charter schools and the Palace Theatre among other things. He is very aware of Hawaii's need for ecological restoration and grows oil palms on his land near Pahoa.

Ina Wolfe is a registered CPA with over 30-years experience in public and private accounting services. She serves as Director of Special Projects with Taketa, Iwata, Hara and Associates in Hilo where she assists clients in solving business issues such as software implementation, inventory management and internal control assessments. She provides traditional tax and reporting services as well. She has held Controllershship positions in a variety of companies including automobile and motorcycle dealerships, a fitness equipment and training company, a private equity firm, a city government and a union. Ina received her BBA from UHH and has been licensed as a CPA in HI and CA. In her spare time, she enjoys gardening and attending musical events. She serves as HOSPRO accountant and comptroller.

The experience HOSPRO brings to this request for grant monies is large and varied, ranging from agriculture, genetics and engineering, to entrepreneurship and management. Several members of the Board have had previous exposure to working in nurseries, growing oil palm and with working in energy programs for large corporations. These backgrounds and experiences benefit the program to establish and expand oil palm as a secure biofuel and energy source in Hawaii, establishing a new sustainable resource to benefit the Hawaii economy and her people.

- B. Facilities: The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities.**

The site we wish to purchase is an 11 acre, south-sloping, graded and gated site on Pohoiko (Mango) road in lower Puna about 4 miles from Pahoia on the Big Island which has been on the market for 360+ days (27% longer than the average for this type of property). This site was used to grow palms for yard landscaping some 10 years ago. The site is well maintained and clean and contains many palm trees including about 30 royal palms of great structure and many and varied fruit trees. This site houses a 4,400 sq. ft. concrete floored warehouse with a delivery dock and a with metal roof. The warehouse contains a 450 sq. ft. office, a conference room and a large room now used for tool storage but which could be adapted over to seed germination with installation of incubators. North of the warehouse is a 1.25 acre shade house with graded screening to allow sunshine through, ranging from 40% to 65% shade cloth. About 40% of the shade cloth needs replacing. There are tables throughout the shade house and a water delivery system from which County Water can be used to water young growing oil palm trees. About 1/3 of the tables need some repair and the water system needs to be adapted over to drip irrigation. Outside the shade house and nearby are concrete cinder, gravel and soil holding areas where these accoutrements can be directly delivered and mixed for use. There are cleared terraces for transplanting and holding young oil palm trees as they harden. Removed from these work facilities about 100 yards South is a two story, wooden house with one bedroom and kitchen but with open spacing to add more bedrooms on the lower level. This would make a great structure to house student interns, or student trainees. The nurseryman who has worked there for some 25 years growing palms for previous owners would like to continue working there and would be an excellent mentor and manager of trainees as he has done this sort of thing for many years and he knows palm trees. He currently owns and runs his own foliage business. The price on this site is \$550,000 of which \$200,000 is requested up front to buy out the current (sub) owner who will go into foreclosure by the title owner if they do not move it soon. The real owner has sold this place twice before to people who did not have a good set of plans in place to make a go there. The real owner is also interested in investing in HOSPRO and may commit once we have the property in escrow. Figures 4-9 are photos of the facilities follow and are attached to give perspective.

V. Personnel: Project Organization and Staffing

A. Proposed Staffing, Staff Qualifications, Supervision and Training

The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request.

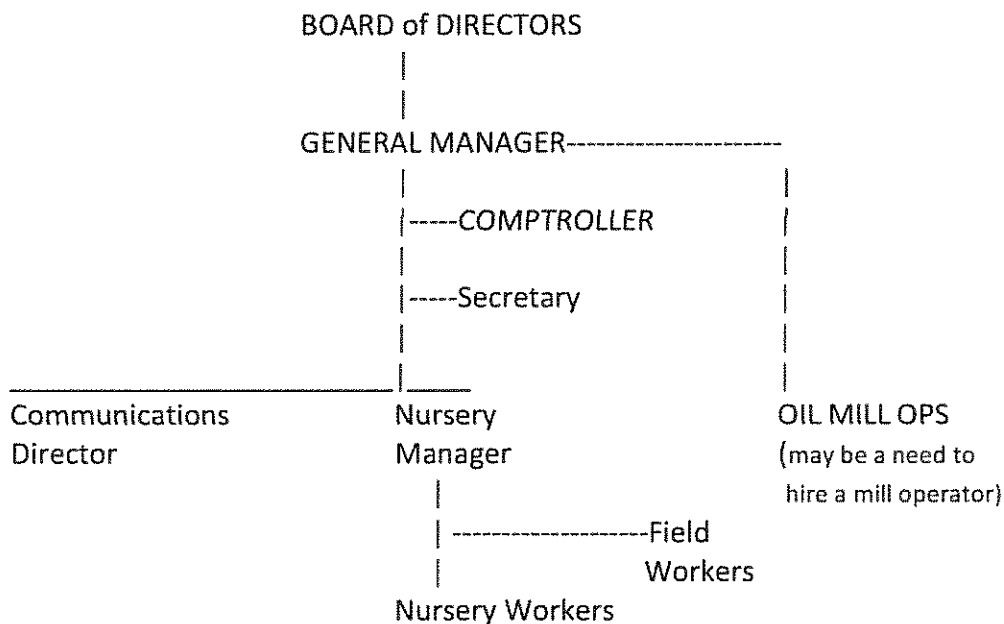
The first year staff shall consist of:

- 1 (one) general manager for operations who will provide vision, planning, fund-raising, sales, mill operations and oversight of all activities (fulltime). Should have at least a B.S. or equivalent experience and training in personnel management and supervision, and familiar with growing plants in greenhouses or open fields, pesticide applications, grinding mill operations, safety protocols and financial statements.
- 1 (one) secretary for recording Board and daily business daily transactions, keep track of hourly wages for workers, interns and student aids (fulltime). Prefer someone with some College training who understands

- 1 (one) comptroller/accountant/treasurer in one position for recording financial transactions and issuing checks to pay personnel (halftime). Prefer someone with a degree in business and/or accounting and at least 5 years experience. Should be familiar with corporate nonprofit tax preparations, balance sheets, and standard accounting procedures.
- 1 (one) communications Director for website maintenance, email donations, advertising and promotion of the company (halftime). Prefer someone with degree in automation and computer systems and experience setting up and maintaining websites including PayPal.
- 1 (one) nursery manager who will oversee oil seed germination, transplanting, fertilization, pest treatments and ordering of shade house and growing supplies (fulltime). At least 10 years of experience required including management, supervision and training of one or more personnel and pesticide training in safely handling pesticides and fungicides.
- 2 (two) or more aids, students or interns for labor in shade house and mill, some college experience and botanical or agricultural courses preferred.

NOTE: At this point we are only requesting funding halftime for the general manager, ¾ time for the nursery manager and half-time for the student interns. In Year 2 Managers will become full time positions and by Year 5 we anticipate having 20 people employed as the nursery grows and as trees are shifted to the field; we will be hiring student interns as they graduate.

B. Organization Chart; The applicant shall illustrate the position of each staff and line of responsibility/supervision.



C. Compensation

The applicant shall provide the annual salaries paid by the applicant to the three highest paid officers, directors, or employees of the organization by position.

Currently there are no salaried positions. This funding will help create such positions. Common Stock shares in the Cooperative are issued to the Manager, Secretary, Communications Director, and Comptroller as well as the Board of Director membership for their service once a year in lieu of payment with hopes the company will grow in value through time. Currently 5% of 1 million shares are committed in this manner and the rest are available for investors.

VI. Other

A. Litigation: Disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement.

There is no litigation or outstanding judgements against HOSPRO or its Board members.

B. Licensure or Accreditation: The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.

There are no special qualifications, licensures or accreditations relevant to this request.

C. Private Educational Institutions: specify whether the grant will be used to support or benefit a sectarian or non-sectarian private educational institution.

NOT APPLICABLE

D. Future Sustainability Plan

The applicant shall provide a plan for sustaining after fiscal year 2017-18 the activity funded by the grant if the grant of this application is:

- (1) Received by the applicant for fiscal year 2017-18, but**
- (2) Not received by the applicant thereafter.**

HOSPRO currently has 80 acres (8,000 trees) in production, the fruit of which are

going to waste or being fed to hogs on the Big Island. Once the mill is in place, we anticipate production to produce at least \$500/acre, or about \$90,000-\$120,000/year depending on the number of male trees versus female trees and maturity of the palms. Female trees are the fruit producers. We are assuming the lower figure for production purposes to be conservative in our income estimates. Since the trees are still two years from maturity, production will likely ramp up to \$1,700/acre by 2019, but we prefer to use the conservative estimate \$90,000/annum regardless. After 2018, sales of seedling oil palm should reach \$882,000 (\$18/tree) less a cost of \$5423,304 for raising the trees for a profit of \$317,452. Thus by year 1 we anticipate a \$90,000 income and by year 2 a \$90,000 +\$317,452 income. In Year 2 we will again order a second round of 49,000 seeds to begin a cycle that will continue into the near future. This robust picture is a conservative estimate but clearly indicates the oil palm production will be a profitable venture in the future. Expansion will continue and will be based on profits from as this venture goes forward. Profit allowing, we may enlarge the shade house to be able to buy 100,000 seeds at a time. *We need help the first year only to kick-start this venture.* Table 1 gives a breakdown of the income vs cost picture and we fully anticipate by year 5 to be aggressively expanding production on the Big Island and shortly thereafter to other islands in the chain.

Table 1. Income versus cost picture of the first 5 years of HOSPRO production. Income from composting of dry material waste (stems and kernel shells) and animal feed from wet crushed meal are not included. Note: The original base cost of operations is used in developing budgets for first year of this request.

Oil Yield	Gallons Produced ^a	Fuel Income	Seedlings----- no. trees	Income	Total Income	Less Base Costs	+Profit Carryover	- Misc Costs ^b	Profit
Year 1	30,000	\$ 90,000	25,000	\$450,000	\$540,000	\$259,340	-----	\$ 61,934	\$218,726 ^c
Year 2	30,000	\$ 90,000	24,000	\$432,000	\$522,000	\$259,340	\$ 218,726	\$163,934 ^d	\$317,452
Year 3	30,000	\$ 90,000	25,000	\$450,000	\$540,000	\$259,340	\$ 317,452	\$352,455 ^e	\$245,657
Year 4	103,200	\$309,600	24,000	\$432,000	\$741,600	\$259,340	\$ 727,917 ^f	\$572,455	\$155,462 ^e
Year 5	199,200	\$597,600	73,000	\$1,314,000	\$1,911,600	\$259,340	\$1,807,744	\$372,455	\$1,432,289 ^h

^a At \$3/gallon of raw vegetable oil as offered by Pacific Biodiesel; production lowered by 80% to adjust for differences in maturity and male vs female producers.

^b Assumes a 10% miscellaneous cost charge + \$3,000/month mortgage cost continuing through time.

^c Any profit will be used for next year operations and capital improvements and is carried over.

^d By Year 3 salary adjustments for General Manager and Nursery Manager are on full time, and student aides have doubled in number so cost goes up accordingly.

^e By year 3 we add a 2-ton truck with hydraulic lift bed for handling gravel, cinders, additional fruit hauling, and hauling trees to Coop farms.

^f Includes cost of doubling shade house space and purchase of an additional truck.

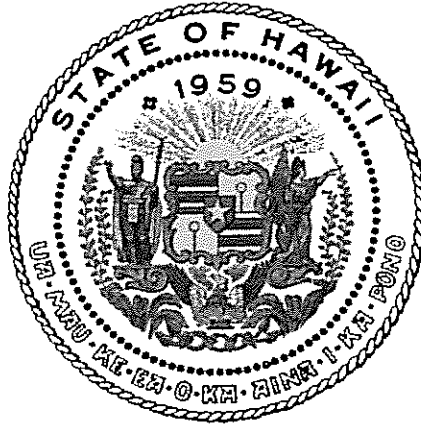
- ^a By Year 5 Field crews for planting and overseeing tree crops are in place. We expect 20 people to be employed by HOSPRO by Year 5.
- ^b By end of Year 5, HOSPRO begins looking at expansion beyond existing 2,200 acres estimated to be in production by this time by seeking purchase or lease of agricultural land.

E. Certificate of Good Standing (If the Applicant is an Organization) dated no earlier than December 1, 2016.

SEE ATTACHED.

F. References

1. DBEDT 2017 Hawaii Energy Facts and Figures, Hawaii Energy Office. 44 pages.
2. Steiner, W.W.M. 2012. *Final Report: Proof of Concept for Growing Oil Palm in Hawaii*. Final Report to HECO: 9 Figs, 4 Tables, 24 pp.



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

HAWAII OIL SEED PRODUCERS (HOSPRO) FDN

was incorporated under the laws of Hawaii on 06/13/2014 ; that it is an existing nonprofit corporation; and that, as far as the records of this Department reveal, has complied with all of the provisions of the Hawaii Nonprofit Corporations Act, regulating domestic nonprofit corporations.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Department of Commerce and Consumer Affairs, at Honolulu, Hawaii.

Dated: January 14, 2017

Director of Commerce and Consumer Affairs



THE PALM FARM LOCATED AT 13-733 POHOIKI ROAD NEAR PAHOA, HAWAII ISLAND.



Figure 4.
The entry way entering the site; the gate is behind the camera and the facilities and farm lay just over the hill and through the driveway of Royal Palms.



Figure 5.
The 1.25 acre shade house seen from the driveway as one drives past the Royal Palms on the driveway. Here, the observer is following the road down a slight incline into the facilities site. Just over the shade house can be seen the roof of the warehouse.



Figure 6.
Inside the shade house looking from the warehouse toward the hill with the driveway. The floor is cinder and needs some cleaning. The tables are not bad but need repair in various places. The water system main line follows the view. Plants in the background belong to the caretaker who will end up working for HOSPRO.



Figure 7.
View of the drive between the shade house and the warehouse. The warehouse is 4,400 sq. ft. The oil extraction mill will be set up on the end near the observer as the loading dock is just opposite of this near-side view. Water and power go to both the warehouse and the shade house.



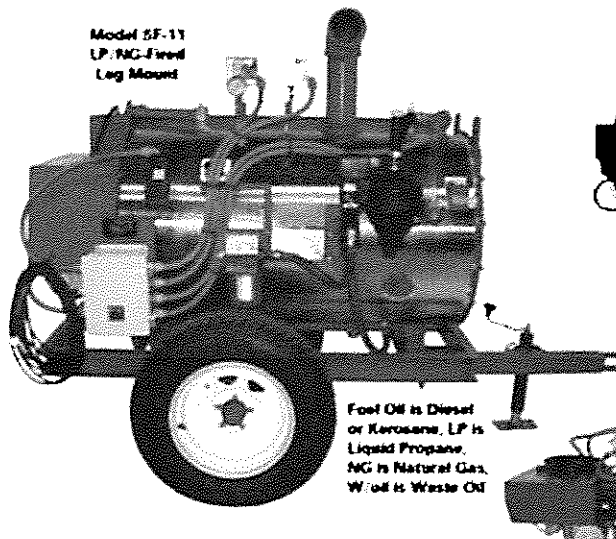
Figure 8.
Same view as above but now inside the warehouse. The office space is upstairs near and the conference room upstairs far. Next to the stair well and below the office area is the open space that could be re-purposed into a germination room for the seedlings. Behind the viewer is where the oil extraction mill will be located.



Figure 9.
The small, 2-story house is located further down the (South) hill from the warehouse. It has a shed built onto it on the far end and the bottom area could be re-purposed into 2 or 3 small bedrooms for interns or trainees.

FIGURES OF EQUIPMENT AND PROFILES WE WILL ORDER FOR THIS PROJECT.

59 HP John Deer with 9 frwd/3rear syncshuttle transmission; category 2, 3 point hydraulic equipment hookup, 81" wheelbase, rollover protection, and hydraulic loader, sells for \$32,000



Hummert mnfr model SF 20 handles 3x the soil but is similar and is suitable for our soil sterilization. The SF 20 sells for \$20,000, the trailer system, aerator and hose system brings the price to \$37,000. We will order a diesel powered system and use biofuel to power it. We are allowing \$3,000 for shipping in the cost request.



Avantco GDC69 79" incubator; this model can be used to sprout oil palm seeds. We will order ten to set up a sterile room to prevent contamination by fungal spores of the young palm sprouts

William W.M. Steiner
BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2017 to June 30, 2018

William W.M. Steiner, HOSPRO

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A. PERSONNEL COST				
1. Salaries	0			
2. Payroll Taxes & Assessments	0			
3. Fringe Benefits	0			
TOTAL PERSONNEL COST	0			
B. OTHER CURRENT EXPENSES	0			
1. Airfare, Inter-Island	0			
2. Insurance	0			
3. Lease/Rental of Equipment	0			
4. Lease/Rental of Space	0			
5. Staff Training	0			
6. Supplies	0			
7. Telecommunication	0			
8. Utilities	0			
9				
ALL THE ABOVE ITEMS ARE REQUEST IN THE OPERATIONS REQUEST, ESTABLISHING A NEW BIOFUEL INDUSTRY				
11	IN HAWAII II. OPERATIONS REQUEST			
12				
13				
14				
15				
16				
17				
18				
19				
20				
TOTAL OTHER CURRENT EXPENSES				
C. EQUIPMENT PURCHASES	76,000			
D. MOTOR VEHICLE PURCHASES	32,000			
E. CAPITAL				
TOTAL (A+B+C+D+E)	108,000			

SOURCES OF FUNDING		Budget Prepared By:	
(a) Total State Funds Requested	312,000	William W.M. Steiner	808-294-0750
(b) Total Federal Funds Requested	0		
(c) Total County Funds Requested	0		
(d) Total Private/Other Funds Requested	0		
TOTAL BUDGET	312,000	William W.M. Steiner General Manager, HOSPRO Name and Title (Please type or print)	1/18/17 General manager

BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2017 to June 30, 2018

William W.M. Steiner HOSPRO

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
				\$ -
ALL SALARIES, BENEFITS, TAXES ETC ARE REQUESTED IN				\$ -
THE ACCOMPANYING OPERATIONS BUDGET				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL:				
JUSTIFICATION/COMMENTS:				

BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2017 to June 30, 2018

Applicant: ___William W. M. Steiner, HOSPRO

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2015-2016	FY: 2016-2017	FY:2017-2018	FY:2017-2018	FY:2018-2019	FY:2019-2020
PLANS	0	0	0	0	0	0
LAND ACQUISITION	0	0	150000	0	0	0
DESIGN	0	0	0	0	0	0
CONSTRUCTION irrigation and shade	0	0	54000	0	0	0
EQUIPMENT oil mill (2015-16), tra	39000	10000	108000	0	0	0
TOTAL:			312,000		self paying	self paying

JUSTIFICATION/COMMENTS Oil Mill purchased with USDA funding. Construction consists of repairs to irrigation system, shade house roofing screen
Tractor is necessary for moving supplies, unloading trucks, etc; soil sanitizer will kill harmful soil fungi, incubators are for germination of seeds

LAND ACQUISITION
See section IV B for description.

11 acres to provide a base of operations and place to mill oil palm seeds and germinate and grow new palm trees to expand the industry to thousands of acres of old sugar cane land.

GOVERNMENT CONTRACTS AND / OR GRANTS

App:

William W. M. Steiner, HOSPRO

Contracts Total:

-

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	There currently are no government contracts or grants, a USDA Rural Development grant ended Dec 31, 2016.				
2					
3					
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**DECLARATION STATEMENT OF
APPLICANTS FOR GRANTS PURSUANT TO
CHAPTER 42F, HAWAII REVISIED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.
- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawaii Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

William W.M. Steiner, Hawaii Oil Seed Producers LLC



William W.M. Steiner
(Typed Name)

General Manager, HOSPRO
(Title)