TG Energy, Inc.

June 29, 2006

Mr. Norm Peck
Investigator, Toxic Cleanup Program
Department of Ecology
Northwest Regional Office
3190- 160th Avenue, SE
Bellevue, WA 98008-5452. USA

Dear Mr. Peck,

As required within the criteria of The Department of Ecology, Brownfield's Cleanup Program and voluntary cleanup, enclosed is SEPA Checklist, contact list, and other necessary information pertaining to TG Energy, Inc including the entire process information outlining how our system works. The information shows a closed loop system for Methoxide and wash water which is used over again enabled by purification of water within the system. Although the process of producing Biodiesel is a known entity the critical points such as recovery and recapture of Methanol, wash water recovery and reintroduction into the system and the dry process do vary from one plant operation to the other.

These are the critical points that are deemed proprietary and it is to this point I must be assured "In Writing" by you that no such information will be given or provided for review under "any" circumstance or reason and that such information will be used only for the purpose of your staff and the office to determine production and process methods being employed that would fall within regulated parameters of your agency.

In the event you require any other information that is not within the application packet, please do contact me personally. I do hope to receive approvals for our company to start production of our final product in the near future. Enclosed is a CD with current photos of the Plant site for your reference and records. Thank you for your interest and consideration of our application.

Sincerely,

John Caleb
cc: file

1685 H. Street, #562, Blaine, WA. 98230
Telephone: 360-332-4031. Facsimile: 360-332-4087
Email: tgenergy@telus.net

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SEPA "Environmental Impact Statement"

A. BACKGROUND

Q.1. Name of Proposed project, if applicable
A.1. Not applicable

Q.2. Name of applicant
A.2. TG Energy, Inc.

Q.3. Address and phone number of applicant and contact person
A3. 4242 Aldergrove Road, Ferndale, WA. 98248. **John Caleb** – 360-332-4031

Q.4. Date checklist prepared
A.4. June 21, 2006

Q.5. Agency requesting checklist
A.5. Department of Ecology

Q.6. Proposed timing or schedule (including phasing, if applicable)
A.6. August - September 2006 for Initial Startup of Operations & production of Biodiesel

Q.7. Do you have any plans for future additions, expansion, or further activity related to or connected to this proposal? If yes, explain.
A.7. Not at present

Q.8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
A.8. At present there are no Environmental Reports prepared or will be prepared in the near future pertaining to this property.

Q.9. Do you know if applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
A.9. At present, the following Governmental applications will be submitted for approvals but are not pending as of this writing. Federal (EPA), State (NW Clean Air Agency), (Department of Ecology), County (Whatcom County), Municipal (City of Ferndale).

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Q.10. **List any government approvals or permits that will be needed for your proposal, if known.**

A.10.

A. Environmental Protection Agency (EPA) (Federal)
B. Internal Revenue Service (IRS) (Federal)
C. NW Clean Air Agency (State)
D. Department of Ecology (State)
E. Department of Ecology – Boiler Permit (State)
F. Corporate Registry (State)
G. Department of Industry & Compliance (State)
H. Department of Labor & Industry (L&I) (State)
I. Whatcom County – SEPA (County)
J. Whatcom County – Fire Marshall (County)
K. Whatcom County – Change of Use (County)
L. Whatcom County – Certificate of Occupancy (County)
M. Whatcom County – Health Department (County)
N. Whatcom County - NFPA (Plackarding) (County)
O. Whatcom County - Business License (County)
P. Whatcom County – Land use Development (County)
Q. City of Ferndale – Department of Engineering & Utilities (Municipal)
R. City of Ferndale – Business License (Municipal)

Q.11 **Give a brief, complete description of your proposal, including the proposed uses and the size of the project and the site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

A.11.(1) TG Energy, Inc. is in the process of converting a former "Tall Oil" processing plant into a viable production facility to produce Biodiesel. Small tests were conducted to determine operating parameters, requirement of machinery, Material Handling, Dangerous Goods Containment and the like. The base product is still biodegradable oil and is not a hazardous material.

A.11.(2) Biodiesel, is an environmentally friendly and stable source of fuel derived from renewable source crops namely Soy Beans, Canola Seeds and many other edible oils. At TG Energy, Inc. we anticipate productions levels to start at a mere five hundred gallons a day to ensure and maintain plant operating levels within design parameters and capacities. The next ramp up will be up to levels of five thousand gallons a day and then to ten thousand gallons a day and so forth to a maximum capacity of fifty thousand gallons of biodiesel a day.

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Q.12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

A.12.(1) The Plant is located at 4242 Aldergrove Road, Ferndale, Washington. The property is in the general vicinity of Cherry Point and is well outside the City Limits of Ferndale. Major roads providing access to subject property are Grandview Road running East - West from Birch Bay East to Lynden and beyond. For all intentional purposes the property is actually closer to Custer than it is to Ferndale. I-5 Interstate Highway is approximately six miles plus from subject property and is easily accessible from Aldergrove Road to Kickerville Road to Grandview Road and finally to I-5 Interstate Freeway. (Please see attached maps)

B. ENVIRONMENTAL ELEMENTS

(B) - SECTION (1): EARTH

Q.a. **General description of the site (circle one) Flat, rolling, hilly, steep slopes, mountainous, other .....**

B.1.a. The topography of subject site is Flat

Q.b. **what is the steepest slope on the site (approximate percent slope)?**

B.1.b. The steepest slopes are;

1. 2° South by East West
2. 2° East by Northwest

Q.c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

B.1.c. Some Clay, Sand and regular soil and brush germane to that region. Other soil makeup of this site is totally indigenous and no foreign soils have been brought on site.

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Q.d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

B.1.d None known to me or in recorded History

Q.e. **Describe the purpose, type and approximate quantities of any filing or grading proposed.**

B.1.e.(1) The plant has been non functional and derelict for the past thirteen years and there is a lot of unused foreign material on site. Persons who have been (supposedly) care takers of the property have used it for their own private Bone Yard and a lot of material not connected to the past business and the proposed current business, is on site.

B.1.e.(2) This pieces of equipment, vehicles, construction materials and other pieces too numerous to outline must all be moved off the property and other pieces contained within a containment area.

B.1.e.(3) Once all foreign materials and other pieces cited above are removed and relocated, contractual obligations of subject persons are to have the property brought back to the original state and better before we will sign off on it and accept it back for our own uses.

B.1.e.(4) It is at this juncture we propose to clear the sight (leaving natural gradients) grading only immediate property and have it readied for use as a biodiesel facility. Tanker trucks will be bringing in Feedstock (Edible Oils) and taking out Finished Product (Biodiesel) on a regular basis. Other trucks will bring in Catalysts (Methanol & Caustic) on a regular basis as well including smaller traffic of Water trucks, plumbers, Electricians, gas fitters and the like and for the property to accept this type of traffic gravel must be "ADDED" to the existing roadway and pathway surfaces to harden them where heavy rolling stock weights must be supported and ensuring these trucks will not get stuck.

Q.f. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

B.1.f.(1) Runoffs from heavy rain have had little or no impact in the past and other than small puddles of water most dissipates into the ground or runs off to the sides. Shrubberies and other plants indigenous to this area seem to be growing normally, however I am not qualified to make a final statement to this point. Containment of soil or earthen material is important to our operations and all efforts will be implemented to ensure that no loose dirt will become involved in a run off from a down pour of rain.

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B.1.f.(2) The three to three and a half acres which is the current footprint of the existing Plant and surrounding land is the immediate area of concern to us to start our operations. However, it is also our intent to move forward to clean up the rest of the unsightly mess on subject acreage in a very timely manner. There are approximately fifteen + - large tanks on the property which will never be utilized and will have to be stored in a containment area either for disposal or sale. The rest of the materials will be stored in closed and locked containers accessible for use at a later date and time.

B.1.f.(3) The containment area will have grading done to it to clear a pathway and make accessible all stored materials for a later date. A containment wall made from natural materials will be used as a burm with a runoff point graded into a containment tank for filtration of all runoff water.

Q.g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

B.1.g. We have no plans to have any such materials cover any part of the land and would like to maintain the integrity of the land as it stands. The only areas that will be directly impacted is within the tree to three and half acre footprint of land that the plant currently occupies and the surrounding pathways which will have gravel put on them to assist heavy truck turn around when the come in and out of the property. There are two buildings on site as present and there are no plans to build others. There is a cement slab at the north end of the Plant site, roughly 20' X 30' + - and nothing else.

Q.h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

B.1.h. As cited previously our intent is to maintain continuity of the site and not disturb the integrity of the land other than the proposed areas for use. The rest and remainder of the property will remain in its original state. Wherever we will need to move either derelict equipment, parts, tanks or the like, they will be placed on blocks and off the ground (if not too heavy to do so) and contained within a natural containment wall. (Please refer to paragraph (f).

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(C) - SECTION (1) AIR

Q.a. **What type of emissions would result from the proposal(i.e. dust, automobile, odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

C.1.a.(1) The word construction encompasses a huge area in an operation and undertaking which we are proposing at subject site. I must establish there is "NO" construction of any buildings, digging of large holes to accommodate such buildings or digging of deep holes to bury tanks, storm drains and sewers, drain pipes, water pipes, gas lines, hydro lines and the like. There is and has been an existing facility on subject property since the late eighties and all permits and licenses were issued to build this plant, the buildings and the infrastructure in accordance to federal, State, County and if warranted, Municipal bylaws, rules and regulations.

C.1.a.(2) TG Energy, Inc. has effectively taken over a site with an existing plant and surrounding buildings with the entire infrastructure in place. The reasons for acquiring the site were for the fact there was to be little or no construction at all. "Construction" will be done inside the buildings to bring them back to code and make them usable again as unknown people have taken a lot of articles from within these buildings and surrounding areas.

C.1.a. (3) The word "Construction" can be utilized in the area of fabrication of metal platforms to stabilize reactors within a confined area. "Construction" will be of pipes, valves; pumps, heat exchangers and the like to bring them all back to working condition after years of neglect. "Construction" will also take place to connect tanks to meters and check valves containing storage materials. "Construction" of other pipes for water, oil and gas will also be reconnected, retested, removed and or replaced in their entirety if they are redundant or old and replaced with newer material wherever necessary and pressure testing will dictate the final results if more needs to be done prior to compliance evaluations.

C.1.a.(4) Production of Biodiesel does not require high heat nor does it make any great amount of noise when production is under way. Operating temperatures at start are at approximately 210° for feedstock. Excess heat can be utilized for heating purposes in winter. When the plant is operating the process is a very quiet operation with alternating sounds from the boiler firing up or the air compressor keeping pressure to specs or pumps running to facilitate movement of Feedstock into the Reactor, then into the settling tanks and subsequently to other tanks for final delivery of the finished product.

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C.1.a.(5) The only fluid that needs controlling is Methanol and this substance when introduced into the process in proper amounts mixed in with another catalyst, re Caustic, causes a chain reaction to separate Oil from any Free Fatty acids. Drop off occurs in a timely manner of a by product, Glycerin.

C.1.a.(6) In conclusion to this answer there are no hazardous emissions into the atmosphere as it is imperative to totally reduce flash point of the finished product, Methyl Ester. Recovery of Alcohol and Caustic is an important part of the entire process and this is done through a wash cycle utilizing water. The water is in a closed loop system and does not need to leave the system and can be used a few times over without any of it leaving the process system and into drains, ditches, holding tanks or canals.

Q.b. **Are there any off-site sources of emissions or odors that may effect your proposal? If so, generally describe.**

C.2.b. The entire system is a tightly controlled process and does not allow for any offsite emissions or direct emissions from the plant when it is operating.

Q.c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

C.2.c. As cited in Section (C1) Subsection (a.6) the process is a closed loop system and continuous monitoring of all fluids and mixing chambers, reaction chambers, wash process and delivery of the final product does not at any time expose materials within the system to become exposed to the outside.

(C) - SECTION (3): **WATER**

Subsection (a): **SURFACE**

Q.1. **Is there any surface water body or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands0? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

C.3.a.(1). To the best of my knowledge and by information provided by Whatcom County there are no bodies of water, either ponds, streams or marsh lands on the subject property. It is also quite obvious from aerial photographs that subject property is situated well away from any large body of either salt or fresh water and it is equally apparent from (attached) photograph there is no body of water on the entire 34.24 Acre parcel.

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Q.2. **Will the project require any work over, in, adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

C.3.a.(2). As cited in (C) (Sub 3.a.1.) there is no body of or quantity of any type of water that could be construed as a pond, marshland or the like.

Q.3. **Estimate the amount of dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.**

C.3.a.(3). Not Applicable

Q.4 **Will the proposal require surface water with drawls or diversions? Give general description, purpose and approximate quantities if known.**

C.3.a.(4). Not Applicable

Q.5. **Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.**

C.3.a.(5). Not Applicable

Q.6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

C.3.a.(6). Refer to Section (C) (1.a.6) last paragraph.

(C) - SECTION (3) **WATER**

Subsection (b): **GROUND**

Q.1. **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

C.3.b.(1). Refer to Section (C) (1.a.6) last paragraph. (Re Closed loop system and water recovery)

Q.2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any(for example: Domestic sewage; Industrial, containing the following chemicals... agricultural; etc) Describe the general size of the system, the number of such systems, the number of houses to be served(if applicable) or the number of animals or humans the system(s) are expected to serve.**

C.3.b.(2.1) There are two washrooms on site, one in each building and a Lunch Room for staff. Each washroom has a toilet, wash basins and one washroom (as of this writing) has a shower stall which is inoperable. All waste and water is discharged into a septic field outside of immediate property and is more than adequate for demands placed on the septic field.

C.3.b.(2.2) When the plant is fully operational we are expecting to have a compliment of between ten and twelve individuals working at the site on a twenty four hour rotational basis. Other than washroom facilities and a little water used for clean up in the lunch room is all the water that will be discharged from the site. There are no other provisions to have any animals or agricultural or chemical wastes discharged into the septic field.

(C) - SECTION (3)

Subsection (c): **WATER RUNOFF** (Including Storm water)

Q.1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any, (include quantities, If known) Where will this water flow? Will this water flow into other waters? If so, describe.**

C.3.c.1.(1) Refer to (B) Environmental Elements, Section 1, Subsection(1.F.1). In addition to the aforementioned sections, plans are to use existing gradients to channel all water runoff from subject site of the plant and surrounding buildings into a drain field and collection area where a large filter approximately 12,500 + gallon capacity will filter all surface runoff before releasing it into surrounding areas.

C.3.c.1.(2) Natural Filters such as sand and porous gravel will be the main stay of proposed filter and water will only leave this vessel once it has gone through the filtration system and naturally flow out when the water levels get high inside.

Q.2. **Could waste materials enter ground or surface waters? If so, generally describe.**

C.3.c.2. As outlined previously, there are no waste materials, either solid or liquid, either chemical, natural, animal or agricultural that will be part of the runoff. Runoff is purely collections of rain water processed through the filter and released naturally when the levels get too high.

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Subsection (d): **WATER RUNOFF**

Q.d. **Proposed measures to reduce or control surface, ground, and runoff water impacts, if any;**

C.3.d.1 Refer to Subsection (C) paragraphs (C.1.1 & C.1.2) on containment and discharge of water. In the past twenty years, rain water and the like has been channeled into existing sites that are low lying and our intent is not to disturb but enhance these gradients to keep continuity of natural flows and runoffs.

(C) - SECTION (4): **PLANTS**

Subsection (a)

Q.a. **Check or circle types of vegetation found on the site;**

C.4.a.(1) Note: At the immediate Plant site there are no shrubs or trees for safety reasons. The site was cleared and logged off more than seventeen years ago to clear and make room for the plant and I presume, for equipment and tankage.

C.4.a.(2) However, surrounding areas on the west side of the property, bordering the BP Refinery and their land are the following;

1. **Deciduous Trees**, Alder and Aspen
2. **Coniferous Trees,** None
3. **Shrubs**, Native plant, well suited for acreages, Sage, Milk Weed
4. **Grass**, Bear grass, Blue-eyed Grass & Indigenous species of grass
5. **Pasture**, Perennial ryegrass, Tall fescue and maybe some 'Grassland Hula' New Zealand white clover
6. **Crop or Grain**, None
7. **Wet soil plants,** There is a possibility the following species do exist within the 34.24 acres as they are indigenous to the western coast line, however I cannot attest or outline with any authority of their existence on subject property. Species are as follows; Sub alpine Spirea, Snowberry, Kinnikinnick, Slender Wintergreen, Partridge foot, Vanilla Leaf, Western Columbine, Great Camas, Seaside Daisy.
8. **Water Plants,** None
9. **Other types of vegetation,** Subject property is mostly an overgrown pasture with no cultivation of land in the past twenty years. Current growth of grass, plants and shrubbery are natural to the type of soil and seem to be prolific in growth.

Site Address: 4242 Aldergrove Road, Ferndale, WA. 98248

Mailing Address: 1685 H. Street, #562, Blaine, WA. 98230
Telephone: 360-332-4031. Facsimile: 360-332-4087
Email: tgenergy@telus.net

It seems more deciduous trees take seed and do tend to take over the area as the soil on this property is just right in its natural & chemical makeup. Grass is long blades and clump taking root very quickly and spreading fast.

Q.b. **What kind of vegetation will be removed or altered?**

C.4.b.(1) Overgrown young trees and shrubbery that has grown wild over the past fifteen years need removal for our operation to function at an efficient level. Controlled growth will be reintroduced once all paths, roadways and moving of machinery, vehicles and the like are completed...
It is important to note the uprooting of young shrubs and trees is just reclamation of land that was previously already cleared to make use of the land for purposes of establishing a viable and efficient plant.

C.4.b.(2) Our intent is to only recapture necessary yardage without disturbing surrounding fauna and flora and also preserve this reclamation on a continuous basis. Since the entire operation of producing Biodiesel is a closed loop system wild plants and the like will continue to grow and flourish as they have been in the past years.

Q.c. **List threatened or endangered species known to be on or near the site.**

C.4.c. Refer to (B) - SECTION (4): PLANTS, Paragraph b.

Q.d. **Proposed landscaping, use of native plants or other measures to preserve or enhance vegetation on the site, if any;**

C.4.d. The purpose is to keep the plant site clear and clean of any plants and vegetation for the purpose of safety, both for personnel and operations and rolling stock that will be frequenting the site. It is for this reason and for the benefit of ensuring that the operations of the plant are not encumbered in any way by having either plants or tree posing a hazard. As outlined in subsection (c) and previous subsections our intent is to preserve and maintain current natural surrounding but subsequently also maintain our full focus on operating a business, efficiently and effectively.

(C) - SECTION (5): ANIMALS

Q.a. **Circle any birds and animals which have been observed on or near the site or are known to be on or near the site;**

Birds -	**Hawks,**	**Heron,**	**Eagles,**	**Songbirds,**	**Other**
Mammals -	**Deer,**	**Bear,**	**Elk,**	**Beaver,**	**Other**
Fish -	**Bass,**	**Salmon, Trout,**	**Herring,**	**Shellfish**	**Other**

C.5.a It is quite apparent there are a number of wild rabbits flourishing at the plant site. It should be noted these animals would not be doing so well if the plant site was contaminated as previous reports indicate. Rabbits and other species of wild animals will not loose their habitats as they will continue to live and flourish amongst the trees and bushes outside of proposed plant site parameters. Our intent is not to disturb the entire 34.24 acres but to reclaim the land that is needed to function as a business and a production facility to produce another environmentally safe product.

Q.b. **List ant threatened or endangered species known to be on or near the site.**

C.5.b. Other than what has been mentioned in the above paragraph (C.5.a) there seems to be no collection of birds of any species on and about the acreage. Towards sunset there seems to be a migration of crows and gulls heading in no specific direction but to this date we have not noticed any migratory birds either flying over or using the site as their annual feeding or resting grounds.

Q.c. **Is the site part of a migration route? If so, explain.**

C.5.c. Refer to the above paragraph (C.5.b). I do believe every effort will be made to preserve the acreage. As cited previously, there will be reclamation of immediate and surrounding Plant property but the remaining 30 + acres will remain untouched.

Q.d. **Proposed measures to preserve or enhance wildlife, if any;**

C.5.d Refer to (C.5.b).

(C) - SECTION (6): ENERGY & NATURAL RESOURCES

Subsection (a)

Q.a. **What kinds of energy(electric, natural gas, oil, wood stove, solar) will be used to meet the completed projects energy needs? Describe whether it will be used for heating or manufacturing, etc.**

C.6.a.(1) There are two sources of power that can be utilized at the Plant. (Refer to (C.1.a.4) for additional information). Electric Power (Puget Power) and Natural Gas (Cascade Gas). In reality there are three Boilers on the Plant site, two are in the equipment building and the third is in a small shed just adjacent to the Biodiesel Plant.

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C.6.a.(2) The two boilers inside of the equipment building are non operational and do require a lot of parts and work to bring them back on line. One boiler uses natural Gas as a fuel and the other uses Oil (Bunker Oil).

The third Boiler outside is the smallest of the three uses Oil and Natural Gas for fuel and is being converted to use Natural gas at all times.

C.6.a.(3) Production of Biodiesel requires minimal heat and operating temperatures are constantly at 210° F. to 220° F. at the beginning of the process. Heating the edible oil allows for easier and faster control of oil and also ensures there will be no cloud point / pour point, especially in winter months.

C.6.a.(4) There is always excess heat available and it is used to heat water which will be piped into four radiators with a return system, totally closed loop. These radiators will be used to keep both buildings heated in winter and the two other radiators will be utilized to keep the plant heated. Electric fans will blow air through the radiators to spread heat.

Q.b. Would your project affect the potential use of Solar energy by adjacent properties? If so, generally describe.

C.6.b. Production process of biodiesel produces no smoke or vast quantities of steam or fumes. The entire process is a virtual closed loop system and as referenced in (C.6.a.3) does not emit anything that could be construed as pollution. Therefore, adjacent properties, whether residential, commercial or industrial will not be effected in any way if they were to utilize solar energy for their power needs.

Q.c. What kind of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, If any;

C.6.c. The sole working Boiler will use approximately 1,500,000 BTU's when full production is underway. This amount constitutes a very small figure of energy consumption on a daily, weekly and monthly basis. A biodiesel production facility, if engineered to the right specifications is a very energy efficient operation and does not require huge amounts of outside energy to produce the end and final product.

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(C) - SECTION (7): ENVIRONMENTAL HEALTH

Subsection (a)

Q.a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

C.7.a.(1) To produce Biodiesel there are two elements that can be potentially a health hazard to people. **Sodium Hydroxide** (NaOH), also known as lye or caustic soda, is a caustic metallic base. It is widely used in industry, mostly as a strong chemical base in the manufacture of Biodiesel and many other industries. Sodium Hydroxide is used as a catalysts in conjunction with **Methanol**, also known as methyl alcohol or wood alcohol, is a chemical compound with chemical formula CH3OH. It is the simplest alcohol, and is a light, volatile, colorless, flammable, poisonous liquid with a very faint odor.

C.7.a.(2) **Methanol**, for safety reasons is kept away from the main operating plant and in a contained area. At 4242 Aldergrove Road, the Plant site, there are two 4,000 Gallon Stainless Steel Tanks in line, properly valved, grounded and secured. Delivery of Methanol is conducted by the operator at specific times through proportioning valves allowing the right amounts to enter the mixing chambers and then into the reactors.

C.7.a.(3) **Methanol** is intoxicating but not directly poisonous. It is toxic by its breakdown by the enzyme alcohol dehydrogenase in the liver by forming formic acid and formaldehyde which cause blindness by destruction of the optic nerve. Methanol ingestion can also be fatal due to its CNS depressant properties in the same manner as ethanol poisoning. It enters the body by ingestion, inhalation, or absorption through the skin. Fetal tissue will not tolerate methanol. Dangerous doses will build up if a person is regularly exposed to vapors or handles liquid without skin protection. If methanol has been ingested, a doctor should be contacted immediately.

C.7.a.(4) The usual fatal dose: 100–125 mL (4 fl oz). Toxic effects take hours to start, and effective antidotes can often prevent permanent damage. This is treated using ethanol or fomepizole. Either of these drugs acts to slow down the action of alcohol de-hydrogenise on methanol by means of competitive inhibition, so that it is excreted by the kidneys rather than being transformed into toxic metabolites.

C.7.a.(5) Though it is miscible with water, methanol is very hard to wash off the skin; it is best to treat methanol like gasoline. The initial symptoms of methanol intoxication are those of central nervous system depression headache, dizziness, nausea, lack of coordination, confusion, drowsiness, and with sufficiently large doses, unconsciousness and death.

C.7.a.(6) The initial symptoms of methanol exposure are usually less severe than the symptoms resulting from the ingestion of a similar quantity of ethyl alcohol. Once the initial symptoms have passed, a second set of symptoms arise 10–30 hours after the initial exposure to methanol: blurring or complete loss of vision, together with acidosis. These symptoms result from the accumulation of toxic levels of format in the bloodstream, and may progress to death by respiratory failure. The ester derivatives of methanol do not share this toxicity.

C.7.a (7) **Sodium Hydroxide** is purchased in either pellet form, powder or flakes. It is generally sold in triple bagged sacks each weighing approximately 40 Lbs. The sacks are on Pallets and must be stored in a dry enclosed area away from all elements.

C.7.a.(8) For the manufacture of biodiesel, **Sodium Hydroxide** is used as a catalyst for the tran-sesterification of methanol and triglycerides. Caustic is introduced into the Biodiesel manufacturing system by way of an automatic extruder with a perforator placed at the very start of the delivery system which splits each bag and the contents are pushed into an enclosed delivery area by way of a screw. Loading of caustic bags into the delivery hopper is also performed via mechanical forklift therefore at no time there is any contact to the human skin. Face masks and breathing apparatus is also on site, however dust emanating from emptying bags is contained within an enclosure.

Q.1. **Describe special emergency services that might be required.**

C.7.1.(a) Hospitalization would be necessary and timing crucial if a person is exposed to Sodium Hydroxide for any extended length of time. The skin surface does burn and immediate attention is required to either nullify the effects or control affected areas by a neutralizing solutions.

C.7.1.(b) Gloves and eye protection should be worn when using sodium hydroxide, since there is a high danger of causing chemical burns, permanent injury or scarring, and blindness. A PVC apron is also recommended when concentrated solutions or the solid form are used.

It should be stored well away from strong acids such as battery acid. It can create enough heat to ignite flammables (such as alcohols), so it should be added slowly in biodiesel processors.

C.7.1.(c) Vinegar is a mild acid that will neutralize lye, a strong base, but do not use vinegar or any other acid to neutralize a strong base that has contacted the skin; this will generate heat and cause a heat burn as well. If lye makes contact the skin, rinse well with copious amounts of water.

C.7.1.(d) Smoking is forbidden on the entire plant site other than inside buildings such as the Lunch room. There are no other flames or flammable materials that could potentially start a fire.

C.7.1.(e) There are four (4) fire hydrants on site and we have Hydrant pressure provided by the PUD for washroom facilities and use in the Plant as well as fire suppression.

Q.2. **Proposed measures to reduce or control environmental health hazards, if any;**

C.7.2 Refer to C.7.a.(1) through to C.7.1.(e). Exposure, symptoms, short term and long term remedies and solutions are outlined in some detail for reference.

(C) - SECTION (7): ENVIRONMENTAL HEALTH

Subsection (b) NOISE

Q.1. **What types of noise exist in the area which may affect your project (for example; Traffic, Equipment, Operation, Other)?**

C.7.b.1 The only noise we encounter at the Plant site is BNSF Railway using their rail spur on a daily basis. The noise from the locomotives and cars going to and from their destination is in total the entire noise for the day.

Q.2. **Proposed measures to reduce or control environmental health hazards, if any;**

C.7.b.2 Refer to C.1.a.1, C.1.a.2 and C.1.a.3. On a daily basis noise levels are so miniscule not much can be heard other than in the immediate area surrounding the Plant site. Noise from the Air Compressor bringing air pressure up, to pumps loading and unloading oil from one area to another or the boiler keeping temperature up to set specifications. There are no other noises associated with the entire operation. "Construction" constitutes "Fabrication" of metal parts to stabilize tanks and the like. These are short term noise generators.

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Q.3. **Proposed measures to reduce or control noise impacts, if any;**
C.7.b.3 None

(C) - SECTION (8): LAND AND SHORELINE USE

Q.a. **What is the current use of the site and adjacent properties?**
C.8.a. Current use of land is a three (3) plus acre footprint of a 34.24 acre parcel of land, zoned Heavy Impact Industrial (HII). The site is being used for production of Biodiesel. Adjacent properties are wooded areas and empty lots with no visible activity or construction of any sort.

Q.b. **Has the site been used for agriculture If so, describe.**
C.8.b. To the best of my knowledge the existing site was zoned "Heavy Impact Industrial" (HII) since the 1980's. The site was purchased because of its zoning. To the best of my recollection the site has never been used as a piece of agricultural land.

Q.c. **Describe any structures on the site**
C.8.c. There are two warehousing type buildings and both are Metal Clad. The other "Structure" is an existing "Tall Oil" Plant which is being converted over to produce Biodiesel.

Q.d. **Will any structures be demolished? If so, what?**
C.8.d. No demolition is planned for any structures currently on the property.

Q.e. **What is the current zoning classification of the site?**
C.8.e. Current zoning classification of the property and surrounding areas is "Heavy Impact Industrial" (HII). No Commercial or Retail business are permitted to operate within this zoning.

Q.f. **What is the current comprehensive plan designation of the site?**
C.8.f. Current comprehensive plans are to maintain status quo and not change any designation for use of land. The entire process is conversion of use at the site.

Q.g. **If applicable, what is the current shoreline master program designation for the site?**
C.8.g. Not Applicable

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Q.h. **Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

C.8.h. Not to my knowledge. I do believe the Whatcom County Land Use Management Team felt the "Cherry Point" area should be zoned as "Heavy Impact Industrial" to invite industry to setup. This designation must have been arrived at and approved by Council for its current uses because it was not an "Environmentally Sensitive "area.

Q.i. **Approximately how many people would reside or work in the completed project?**

C.8.i.(1) The Plant and production site is not designed for residential living and will not have any planned buildings constructed to accommodate anyone. There may be a possibility to place a Mobile Home at a later date for a Caretaker, if one is necessary.

C.8.i.(2) Production of Biodiesel will be a twenty four (24) hour operation and there will be a total staff of between nine (9) to twelve (12) people, if necessary, to process Biodiesel.

Q.j. **Approximately how many people would the completed project displace?**

C.8.j. Since TG. Energy, Inc is restarting an old Plant there are no persons working there at present, therefore no person will be in the position to be displaced. As cited in C.8.i (1) there are no spots for There are

Q.k. **Proposed measures to avoid or reduce displacement impacts, if any;**

C.8.k. Not Applicable

Q.l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any;**

C.8.l Since there are no plans to have any other buildings constructed or the landscape changed dramatically, all surrounding will remain status quo other than a major undertaking to clean the site and get it ready for use on a daily basis.

(C) - SECTION (9): HOUSING

Q.a. **Approximately how many units would be provided, if any? Indicate whether high, Middle, or Low Income housing.**

C.9.a Not Applicable

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Q.b. **Approximately how many units, if any, would be eliminated? Indicate whether High, Middle or Low Income housing.**

C.9.b Not Applicable

Q.c. **Proposed measures to reduce or control aesthetic impacts, if any;**

C.9.c Not Applicable

(C) - SECTION (10): AESTHETICS

Q.a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

C.10.a No Construction proposed. Not Applicable

Q.a. **What views in the immediate vicinity would be altered or obstructed?**

C.10.b None. Not Applicable

Q.c. **Proposed measures to reduce or control housing impacts, if any;**

C.10.c None. Not Applicable

(C) - SECTION (11): LIGHT & GLARE

Q.a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

C.11.a No new structures planned . All towers and tanks are of non glare materials. We are proposing to paint some tanks a flat pastel colors to deaden glare, if any exists.

Q.b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

C.11.b. No

Q.c. **What existing off-site sources of light or glare may affect your proposal?**

C.11.c. None

Q.d. **Proposed measures to reduce or control light and glare impacts, if any;**

C.11.d. As mentioned in (C.11.a) our intent, on a voluntary basis, is to paint six tanks that could reflect sunlight and cause a sharp glare. It is our intent to paint all six tanks in soft, flat pastel colors to help absorb light but also keep the tanks cool in the summer months.

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(C) - SECTION (12): RECREACTION

Q.a. **What designated and informal recreational opportunities are in the immediate vicinity?**

C.12.a. None

Q.b. **Would the proposed project displace any existing recreational uses? If so, describe.**

C.12.b. None.

Q.c. **Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any;**

C.12.c. Not Applicable

(C) - SECTION (13): HISTORIC & CULTURAL PRESERVATION

Q.a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be or next to the site? If so, generally describe;**

C.13.a. None

Q.b. **Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

C.13.b. None

Q.c. **Proposed measures to reduce or control impacts, if any;**

C.13.c. Not Applicable

(C) - SECTION (14): TRANSPORTATION

Q.a. **Identify public street and highways serving the site and describe proposed access to the existing system. Show on site plans, if any;**

C.14.a. Refer to (A.12.1). Main roads to and from the site providing fast and easy access are I-5, (North - South), Grandview Road (East – West) as a secondary main road and Kickerville Road (North – South) (County Road) from which Aldergrove Road is accessible to the Plant site. All road are paved and in good condition.

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Q.b. **Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

C.14.b. The Plant site is not served by Public Transit. The nearest Public Transit stop is in Ferndale, WA. which is approximately a distance of ten (10) miles?

Q.c. **How many parking spaces would the completed project have? How many would the project eliminate?**

C.14.c. Current parking spaces are quite numerous, however when the Plant is activated there will be a select spot to park ten (10)personal vehicles. No site eliminated.

Q.d. **Will the proposal require any new roads or streets, or improvements to existing roads or street, not including driveways? If so, generally describe (Indicate whether public or private)**

C.14.d. There will be no need to upgrade existing roadways to and from the site in all directions as they are in good condition and capable of accommodating proposed traffic to and from the Plant site.

Q.e. **Will the project use(or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

C.14.e.(1) Access to the shoreline or a deep **water** sea port loading and unloading facility are not accessible to us.

C.14.e.(2) **Rail** service although necessary for operations is not available. BNSF is currently sending its engineering team to the Plant location to do a feasibility study and then advise us if a spur can be brought to the property for loading and unloading of feedstock and finished product. Preliminary quotes received to bring a spur to the Plant site are prohibitive and we believe not in our future plans for the interim.

C.14.e.(3) **Air service** is not utilized in our operation.

Q.f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

C.14.f. Each staff member will be obviously making two trips a day on County roads and incoming Feedstock and outgoing product would also cause trucks to do a return trip on a minimum of once a day and then slowly increasing to more trips as need would dictate.

Q.g. **Proposed measures to reduce or control transportation impacts, if any;**

C.14.g. Reduction of traffic is not possible as trucks would be needed to bring in feedstock and remove the finished product on a regular basis. But it should also be noted that other public traffic is non existent because there is nothing in that area of public interest that would generate unnecessary traffic and a burden on County roads.

(C) - SECTION (15): PUBLIC SERVICES

Q.a. **Would the project result in an increased need for public services (for example, fire protection, police protection, health care, schools, other)? If so, generally describe;**

C.15.a. There will be no increased impact to any Public Services.

Q.b. **Proposed measures to reduce or control direct impacts on public services, if any.**

C.15.b. Not Applicable

(C) - SECTION (16): UTILITIES

Q.a. **Circle utilities currently available at the site; electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

C.16.a.(1). Current utilities available at the Plant site are;

1. Electric Power
2. Natural Gas
3. Telephone
4. Water
5. A Septic sewer system

C.16.a.(2). There is no refuse pickup

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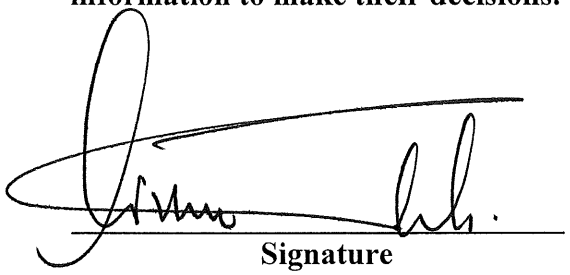
Q.b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

C.16.b. (1) The following utilities are already in place and an entire infrastructure exists at the site which negates the need to bring in any new service.

1. Electric Power (Puget Power)
2. Natural Gas (Cascade Gas)
3. Telephone Service (Verizon Communications)
4. Water (Public Utilities District #1 of Whatcom County)
5. Septic sewer system (Internal)

C.16.b. (2) All utilities are in place and require no construction on site. Water has been reactivated on site, natural Gas will be turned on as need dictates, Electric Power is already servicing the site and the phone system is active.

Please be advised the answers on this report are true and complete to the best of my knowledge and I am fully apprised that all lead agencies are relying on the above information to make their decisions.



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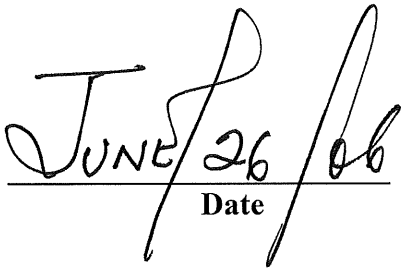

Date

John Caleb
Executive Vice President, Operations
TG Energy, Inc.