Date: June 4,2004 Agenda Item: 4Time: After 1:00 p.m.

APN: 066-211-07

STAFF REPORT TO THE ZONING ADMINISTRATOR

APPLICATION NO.: 03-0304 APPLICANT: Dassel's Petroleum attn. Jim Dassel OWNER: Wood VMS Family LP

PROJECT DESCRIPTION: Proposal to install a 30,000 gallon steel propane distribution tank and fencing at an existing industrial facility. Requires an Amendment to Commercial Development Permits **89-0953** and **84-277**.

LOCATION: Project is located on the south side of Graham Hill Road, 300 feet southeast from the intersection of Graham Hill and Zayante Roads, Felton **PERMITS REQUIRED:** Amendment to Commercial Development Permit **ENVIRONMENTAL DETERMINATION:** Mitigated Negative Declaration COASTAL ZONE: Y e s <u>XX</u> No

PARCEL INFORMATION

PARCEL SIZE: - 52 acres				
EXISTING LAND USE:				
PARCEL:	Commercial/Industrial- Lumber yard, liquid propane gas distribution tank (Coast Gas), light manufacturing, warehouses, tree service yard, PG&E equipment yard			
SURROUNDING: State Parks (Henry Cowell – Big Trees) including a trailer complex fo State Parks employees and a California Highway Patrol satellite office to the west and south, a commercial horse boarding stable to the north Roaring Camp (a private amusement area) to the east, the town o Felton, which includes commercial and residential uses, lies furthe north and west of the subject parcel				
PROJECT ACCESS:	Graham Hill Road			
PLANNING AREA:	San Lorenzo Valley			
LAND USE DESIGNATIO	N:I (Industrial)			
	R-M (Mountain Residential)			
	Felton Town Plan			
ZONING DISTRICT: M-1-GH (Light Industrial with Geologic Hazards combining district)				
PR-GH (Parks Recreation)				
SU-GH (Special Use)				
SUPERVISORIAL DISTRICT: 5"				
ENVIRONMENTAL INFO	DRMATION			

a. Geologic Hazardsb. Soilsc. Bortions of the property within the 100-year Floodplainc. Soquel loam, Soils Report filed with the Planning Dept.

c. Fire Hazard	с.	Nonemapped
d. Slopes	d.	Project site is nearly level
e. Env. Sen. Habitat	e.	Riparian corridor for the San Lorenzo River
f. Grading	f.	Excavation for foundation
g. Tree Removal	g.	None proposed
h. Scenic	h.	Highway 9 – a designated Scenic Road (project site is not
		visible)
i. Drainage	1.	Final drainage plans required at building phase
j.Traffic	j.	Minor increase
k. Roads	k.	No new roads or changes to existing access from public roads
l. Parks	1.	N/A
m. Sewer Availability	m.	Septic in place – project does not utilize septic system
n. Water Availability	n.	Yes, existing service
o. Archaeology	0,	Mapped, see Initial Study
SERVICES INFORM	IATION	
Inside Urban/Rural Se	rvicesLine:	_Yes <u>XX</u> No
Water Supply:	Private well	
Sewage Disposal:	Septic – exist	ing system
Fire District:	Felton Fire	

PROJECT DESCRIPTION AND BACKGROUND

Zone 8

The applicant seeks approval to install a 30,000 gallon steel tank for storage of propane fuel, serving as a distribution center for the San Lorenzo valley and outlying regions. The proposed distribution center will fence a 4,875 square foot area **of** a 50-acre parcel, using six-foot high chain link.

ANALYSIS AND DISCUSSION

ZONING ISSUES

Drainage District:

The property is approximately SO acres in size. The majority of the parcel, including the project site, is zoned M-I-GH (Light Industrial with Geologic Hazards combining district). The area of the parcel immediately adjacent to the San Lorenzo River is zoned SU-GH (Special Use with Geologic Hazards combining district) and the area between the San Lorenzo River and the M-1 zoned portion is zoned Parks and Recreation. The General Plan designation is I (Industrial) in the M-1 area and Mountain Residential (R-M) in the Special Use and Parks and Recreation areas.

The subject parcel has a number of industrial uses on site including manufacturing, mini storage, a lumberyard, a tree service yard, PG&E equipment yard and an existing 18,000-gallon propane distribution tank. The existing propane facility was approved under Commercial Use Permit 89-0953. The proposed propane facility is located near the existing propane tank and the PG&E and tree service equipment yards. The proposed propane storage and distribution facility use is consistent with the allowed uses in the M-1 zone district. The proposed tank location is 175 feet From the nearest property line.

The proposed tank is located within the 100-year flood plain of the San Lorenzo River. The tark will be

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elevated one foot above the expected flood level of 261 feet mean sea level consistent with the flood elevation requirements of the Geologic Hazards Ordinance (Chapter 16.10). Minimal flooding is expected as this site even in the 100-year flood event, and the proposed foundation system will cause negligible displacement of floodwaters. Section 16.10.070(f) requires facilities shall be located outside of the 100-year flood plain unless there is no other feasible location and construction will not increase hazards to life on property within or adjacent to the floodplain. In this instance, locating the LPG tank outside of the flood plain in the vicinity **of** the proposed location is not feasible due to the small area outside of the floodplain and the cut bank, and the proximity to other buildings in that area. Locating the tank on the higher western side of the property would place the tank immediately adjacent to existing buildings and/ or next to either the railroad tracks or **Graham** Hill Road, presenting potential fire protection difficulties in the event the buildings should catch fire and increasing the potential for impacts to the tank. Finally, the tank will be anchored to prevent flotation and dislodgementof the tark during an extreme flooding event.

GENERAL PLAN ISSUES

The project is located within the San Lorenzo Valley Planning area south and east of the Felton Town plan boundaries. Thus, the project is not subject to the guidelines of Felton Town specific plan. As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and the General Plan/LCP. The subject parcel is bordered by Highway **9** and **Graham** Hill Roads, which are both County designated scenic roads, nevertheless, the project is not visible from either of these roads due **to** topography, orientation and existing trees. The project is visible from the portion of State Parks property (Big Trees area of Henry Cowell Park), which is used for employee housing and a CHP substation.

As discussed in the Zoning Issues above, the project is consistent with the intent of the General Plan policies for development within the 100-year flood plain.

The project is consistent with the General Plan for the protection of public health and safety. **As** discussed in detail in Section G of the Initial Study (Exhibit D), the project will meet all safety measures mandated by the National Fire Protection Association (NFPA) Code #58 with respect to liquid propane gas facilities to mitigatepotential hazard to life and **properly**. The hazard generating most concern is the potential for explosion and associated fire. The Felton Fire Departmenthas reviewed the plans and has not stated objections or concerns. The potential for tark failure and bleve (explosion) is remote due to the siting of the new tank. Specifically, tank failures have been caused by physical damage causing failure (struck by trucks traveling at relatively high speeds, train derailment) or intense heat from fire. The site is isolated from public roadways and internal through traffic. The tank will be surrounded by a chain link barrier, minimizing the potential for accidental collisions. There is about 300,000 gallons of water stored on the site, which is adequate for fire protection for the project (personal communication with Ron Rickabaugh 2/04). According to Felton Fire, a minimum 500 gallon per minute volume of water combined with the on-site water storage capabilities should provide adequate fire protection.

The proposed propane distribution center is consistent with the Industrial (I) General Plan land use designation and the goals of the General Plan to provide industrial commercial services in areas having adequate access and where the impacts of noise traffic and other nuisances and hazards associated with this type of use will not adversely affect other land uses.

Design Review

The proposed commercial development is subject to the regulations set **forth** in the Design Review Ordinance(Chapter 13.11). The project site is not visible from Highway **9** or **Graham** Hill Road (1994 General Plan designated Scenic Roads). The property is located just outside of the designated Felton Town Plan area, therefore, is not subject to the Town Plan's regulations and policies. The County Urban Designer reviewed the project and determined there were no issues related to the Design Review Ordinance.

RECOMMENDATION

Staff recommends:

- 1. **APPROVAL** of Application Number **03-0304**, based on the attached findings and conditions.
- 2. Certification of the Mitigated Negative Declaration in accordance with the California Environmental Quality Act.

EXHIBITS

- A. Project plans
- B. Findings
- C. Conditions
- D. Mitigated Negative Declaration and CEQA Initial Study
- E. Assessor's Parcel Map
- F. Zoning and General Plan Maps
- G. Comments & Correspondence

SUPPLEMENTARY REPORTS AND INFORMATION REFERRED TO IN THIS REPORT ARE ON FILE AND AVAILABLE FOR VIEWING AT THE SANTA CRUZ COUNTY PLANNING DEPARTMENT, AND ARE HEREBY MADE A PART OF THE ADMINISTRATIVE RECORD FOR THE PROPOSED PROJECT.

lera an Report Prepared By:

Cathleen Carr Santa Cruz County Planning Department 701 Ocean Street, 4th Floor Santa Cruz CA 95060 Phone Number: (831) 454-3225 (or cathleen.carr@co.santa-cruz.ca.us)

COMMERCIAL DEVELOPMENT FINDINGS

1. THAT THE PROPOSED LOCATION OF THE PROJECT AND THE CONDITIONS UNDER WHICH IT WOULD BE OPERATED OR MAINTAINED WILL NOT BE DETRIMENTAL TO THE HEALTH, SAFETY, OR WELFARE OF PERSONS RESIDING OR WORKING IN THE NEIGHBORHOOD OR THE GENERAL PUBLIC, AND WILL NOT RESULT IN INEFFICIENT OR WASTEFUL USE OF ENERGY, AND WILL NOT BE MATERIALLY INJURIOUS TO PROPERTIES OR IMPROVEMENTS IN THE VICINITY.

The location of the proposed 30,000-gallon liquid propane gas storage and distribution facility and the conditions under which this commercial development would be operated or maintained will not be detrimental to the health, 'safety, or welfare of persons residing **or** working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity. Specifically, the project is located in an area designated for industrial uses and is not encumbered by physical constraints, which preclude this development. The project will incorporate all safety measures, including but not limited to a remote control thermal-activated shutoff, an internal mechanism that does not allow the truck to be started while connected to the tark and a mechanism that automatically shuts off the release valve within **20** seconds of a break in the hose or hose connection as mandated by the National Fire Protection Association (NFPA) Code #58 with respect to liquid propane gas facilities omitigate potential hazard to life and property. These safety measures would allow a maximum release of **3.5** gallons of propane in the event of a hose break, due to the redundant shut off system. This amount of propane gas would be widely dissipated before reaching the closest property line (**175** feet away) or structure(175+ feet).

The hazard generating most **concern** is the potential for explosion and associated fire. The potential for tank failure and bleve (explosion) is remote due to the siting of the new tank. Specifically, tank failures have been caused by physical damage causing failure (struck by trucks traveling at relatively *high* speeds, train derailment) or intense heat from fire. The site is isolated from public roadways and internal **through** traffic. The tank will be surrounded by a chain link barrier, minimizing the potential for accidental collisions. The response time for the Fire Department to this site is three minutes. There is an existing water storage *tank* on site that contains over 300,000 gallons of water with two standby pumps and motors. This system can provide the 500 gallons per minute to cool the container should the LPG in the hose ignite. According to the Felton Fire Department, a minimum 500 gallon per minute volume of water combined with the on-site water storage capabilities should provide adequate fire protection. Finally, the release valves for the new tank will be oriented perpendicular to the existing propane tank so that the release valves will not be directed toward each other to also minimizepotential fire hazards.

Construction will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. A geotechnical report has been completed and all foundation excavations will be inspected by the project soils engineer to ensure an adequate foundation design.

2. THAT THE PROPOSED LOCATION OF THE PROJECT AND THE CONDITIONS UNDER WHICH IT WOULD BE OPERATED OR MAINTAINED WILL BE CONSISTENT WITH ALL PERTINENT COUNTY ORDINANCES AND THE PURPOSE OF THE ZONE



DISTRICT IN WHICH THE SITE **IS** LOCATED.

The project site is located in the M-1-GH (Light Industrial with Geologic Hazards combining district) zone district within an "T" (Industrial) General Plan designation. The M-1 zoning allows a broad range of commercial and industrial uses, particularly uses needing relatively large sites, outdoor areas and large truck access. The proposed propane tank facility is an allowed use only within the C-4 and M-1 zone districts and the project is consistent with the site's I (Industrial) General Plan designation. The location of the propane storage and distribution facility and the conditions under which it would be operated or maintained will be consistent with the pertinent County ordinances.

The proposed 30,000-gallon propane tank will be located within the 100-year flood plain of the San Lorenzo River. This location is consistent with Chapter 16.10 of the County Code in that locating the LPG tank outside of the flood plain in the vicinity of the proposed location is not feasible due to the small area outside of the floodplain and the cut bank, and the proximity to other buildings in that area. Moreover, locating the tank on the higher western side of the property would place the tark immediately adjacent to existing buildings and/ or next to either the railroad tracks or Graham Hill Road, presenting potential fire protection difficulties in the event the buildings should catch fire and increasing the potential for impacts to the tank. The tank will be elevated one foot above the expected flood level of 261 feet mean sea level in accordance with the flood elevation requirements of the Geologic Hazards Ordinance (Chapter 16.10). Minimal flooding is expected as this site even in the 100-year flood event, and the proposed foundation system will cause negligible displacement of floodwaters. In addition, the tank system is designed to prevent flotation and displacement of the tank during extreme flooding events.

3. THAT THE PROPOSED USE IS CONSISTENT WITH ALL ELEMENTS OF THE COUNTY GENERAL PLAN AND WITH ANY SPECIFIC PLAN WHICH HAS BEEN ADOPTED FOR THE AREA.

The project is consistent with the Industrial (I) land use designation of the County General Plan for a commercial development. As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and the General Plan/LCP. The project site is not visible from Highway 9 or Graham Hill Road (**1994** County General Plan designated scenic roads). The property abuts lands owned by the California State **Parks** Department and used for housing and office spaceby parks employees. The project site is not visible from the general public area of the State Park.

As discussed in Finding #1, the project has been designed to incorporate safety measures **to** minimize health and safety risks due to fire or accidental release of liquid propane gas.

The subject parcel is located outside of the Felton Village Core area, thus, is not subject to the guidelines of Felton Town specific plan.

4. THAT THE PROPOSED USE WILL NOT OVERLOAD UTILITIES AND WILL NOT GENERATE MORE THAN THE ACCEPTABLE LEVEL OF TRAFFIC ON THE STREETS IN THE VICINITY.

The project will increase traffic coming in and out of this industrial site by about **5** truck trips per day, comprised of one large transport truck to refill the tank and four bobtail trucks for deliveries. The site



is accessed via Graham Hill Road, a major arterial. Delivery trucks will then disperse via Graham Hill Road south or north to Mount Hermon or Highway **9** out to the outlying rural residences they serve. This area is already serviced by propane trucks, as a majority of homes in this area are heated using LPG. According to the Department of Public Works, Traffic Engineering, **this** increase in traffic will not adversely affect Graham Hill Road. The project will not increase traffic to unacceptable levels at the Graham Hill Road-Mount Hermon and Highway **9** intersections.

5. THAT THE PROPOSED PROJECT WILL COMPLEMENT AND HARMONIZE WITH THE EXISTING AND PROPOSED LAND USES IN THE VICINITY AND WILL BE COMPATIBLE WITH THE PHYSICAL DESIGN ASPECTS, LAND USE INTENSITIES, AND DWELLING UNIT DENSITIES OF THE NEIGHBORHOOD.

The proposed commercial development will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects and land use intensities of the neighborhood in the vicinity. Specifically, the propane facility is located on an industrially designated parcel containing a variety of industrial uses. While the property abuts lands owned by California State Parks, it is not an area open to the general public.

6. THE PROPOSED DEVELOPMENT PROJECT IS CONSISTENT WITH THE DESIGN STANDARDS AND GUIDELINES (SECTIONS 13.11.070 THROUGH 13.11.076), AND ANY OTHER APPLICABLE REQUIREMENTS OF THIS CHAPTER.

The proposed development is consistent with the Design Standards and Guidelines of the County Code in that the proposed commercial development will be of an appropriate scale and type of design for the industrial site. It is not visible from any designated scenic road or from the public areas of Henry Cowell State Park. The Urban Designer reviewed the project and found no conflicts with the Design Review ordinance.



CONDITIONS OF APPROVAL

Amendment to Commercial Development Permits 89-0953 and 84-277

Permit 03-0304

APPLICANT: Dassel's Petroleum

OWNER: Wood VMS Family LP

APN: 066-211-07

LOCATION. Located on the, the south side of Graham Hill Road, 300 feet southeast from the intersection of Graham Hill and Zayante Roads, 5843 Graham Hill Road, Felton.

Exhibit: A: Project Plans prepared by Roger Grimsley and Associates, Consulting Engineer, last dated 7/21/03

Safety Assessment by Scott & Associates

- I. This permit authorizes the construction of one 30,000-gallon tank for storage and distribution of liquefied propane gas, and to construct a six foot chain link fence surrounding the lease site. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/ owner shall:
 - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
 - B. Obtain a Building Permit from the *Santa* Cruz County Building Official.
 - C. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).
 - D. Record the agreement required by Condition VI and submit a copy of the recorded document.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
 - A. Submit Final Architectural and Landscaping Plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. The final plans shall include the following additional information:
 - 1. A copy of the conditions of approval for Use Permit 03-0304 shall be incorporated into the final building plans.



- 2. A final site plan showing the location of all site improvements, including but not limited to, points of ingress and egress, the lease space and existing and proposed fencing, location of all safety equipment, foundation design and architectural elevations.
- **3.** Submit final grading and erosion control plans. Grading plans shall clearly show existing and proposed finished grades and include grading volumes and calculations and disposal location for all excess fill material. Fill shall not be placed within the 100-year flood plain.
- 4. Plans shall include existing and proposed grade and the elevation of the bottom of the tank with respect to mean sea level. The bottom of the tank shall be elevated a minimum of 262 feet above mean sea level.
- **5.** Plans shall provide details showing compliance with Felton Fire Protection District and pay appropriate plan check fees
- 6. All new power, telephone, and cable television service connections shall be installed underground.
- B. Meet all requirements of the Department of Public Works Drainage Section, and pay all fees for Zone 8 of the Santa Cruz County Flood Control and Water Conservation, including plan check and permit processing fees.
- C. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.
- III. Prior to site disturbance and during construction:
 - A. Erosion shall be controlled at all times. Erosion control measures shall be monitored, maintained and replaced as needed. No turbid runoff shall be allowed to leave the immediate construction site.
 - B. To minimize noise and dust impacts to surrounding properties, comply with the following measures during all construction work:
 - 1. Limit all construction-related activities to the time between 8:00 **A.M.** and 6:00 P.M. weekdays.
 - 2. Dust suppression techniques shall be included as part of the construction plans and implemented during construction.
 - C. The soils engineer shall inspect all foundation excavations and submita letter of approval to the County Building Inspector prior to pour.
 - D. The soils engineer shall monitor all foundation excavations. To protect-potential



archaeological resources, excavations shall not exceed three feet below grade and shall not penetrate into native soils.

- 1. Should excavations penetrate native soils and/or three feet in depth, the applicant and project soils engineer shall notify the Project Planner (454-3225) and the Building Inspector and desist excavations. Excavation shall proceed only in the presence and under the supervision of a qualified archaeologicalmonitor.
- 2. If the foundation excavations exceed three feet in depth, the building inspector will issue a stop work order. Work shall not commence until a qualified archaeological monitor is hired and has evaluated the excavated materials for cultural resources, and is present to monitor any remaining excavation.
- 3. If at any time any artifact or other evidence of a Native **American** cultural site which reasonably appears to exceed one hundred years of age is discovered, of if human remains of any age are discovered, the archaeologicalmonitor and/or applicant shall:
 - (1) Notify the Planning Director. Cease and desist from all further activity within 200 feet of the discovery pending further evaluation by the monitor. A qualified archaeologist shall propose appropriate mitigation including a plan for preservation of the find, to be approved by County Planning staff and implemented prior to the continuation of the work.
 - (2) Notify the Sheriff-Coroner if the discovery contains human remains and implement notification provisions pursuant to P.R.C. 15064.5.
- IV. All construction shall be performed according to the approved plans for the building permit(s). For reference in the field, a copy of these conditions shall be included on all construction plans. Prior to final building inspection, the applicant/owner must meet the following conditions:
 - A. All site improvements, including erosion control and fencing shown on the final approved Building Permit plans shall be installed.
 - B. The project civil engineer/surveyor shall certify in writing that the bottom of the 30,000gallon tank meets or exceeds the minimum elevation of 262 feet above mean sea level. Copies of this letter shall be sent to the Building Inspector, Environmental Planning (attn: Jessica DeGrassi) and the Project Planner.
 - C. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
 - D. The water pumps shall be inspected by qualified pump service/repair personnel and verify in writing that the pumps are in good working **order** and each are capable of producing the minimum fire flow of 500 gallons per minute. Submit a copy of the letter to the Project Planner, Cathleen Carr, prior to final inspection and building permit final.
- **V.** Operational Conditions



- A. All fencing and site improvements shall be permanently maintained.
- B. A minimum of 30,000 gallons of water storage shall be maintained on site for fire protection.
- C. All water pumps shall be maintained in good working order and shall be capable of pumping a minimum rate of 500 gallons of water per minute for fire protection purposes.
- D. Access, loading and unloading of product and repair work are all prohibited between the hours of 9:00 P.M. and 7:00 A.M., except in the case of emergencies. Emergencies are situations which require immediate repairs to the tank or equipment or emptying of the **30,000** gallon tank to protect the health, safety and welfare of the surroundingresidents and properties.
- E. All **safety** measures mandated by National Fire Protection Association Code #58 shall be installed and shall be maintained in good working order at all times.
- F. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
- *G*. In accordance with Section 18.10.132(d) of the County Code, if the exercise of the use permitted by this permit ceases or is abandoned for a continuous period of one year, then without further action by the County, this permit shall become null and void.
- VI. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.
 - **A.** COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
 - B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
 - 1. COUNTY bears its own attorney's fees and costs; and



- 2. COUNTY defends the action in good faith.
- C. <u>Settlement</u>. The Development Approval Holder shall not be required to payor perform any settlementunless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifymg or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent **of** the County.
- D. <u>Successors Bound</u>. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.
- E. Within 30 days of the issuance of this development approval, the Development Approval Holder shall record in the office of the Santa Cruz County Recorder **an** agreement, which incorporates the provisions of this condition, or **this** development approval shall become null and void.
- **VII.** Mitigation Monitoring Program

The mitigation measures listed under this heading have been incorporated into the conditions of approval for this project in order to mitigate or avoid significant effects **on** the environment. As required by Section **21081.6** of the California Public Resources Code, a monitoring and reporting program for the above mitigations is hereby adopted as a condition of approval for **this** project. **This** monitoring program is specifically described following each mitigation measure listed below. The purpose of this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply with the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to Section **18.10.462** of the Santa **Cruz** County Code.

A. Mitigation Measure: Conditions I.A.3, I.A.4. and III, B.

<u>Monitoring Program</u>: The Environmental Planning staff will review the building permit application plans to veify fill disposal locations, erosion control plan and that the required flood elevation notations are shown on the **plans**. The project civil engineer must submit certification that **the** bottom of the tark meets the minimum flood elevation requirements. The building permit will not be finaled and the use of the **tank** will not commence until the proper certification of the flood elevation is received by Environmental Planning.

B. Mitigation Measure: Condition III.D.

Monitoring **Program**: The project soils engineer must submit a letter of foundation excavation to the building inspector prior to foundation pour. The earthwork will be stopped if the project soils engineer or the **County** Building Inspector verifies that the excavations exceed **two** feet in depth. The building inspector will be instructed to stop work if the foundation excavation exceeds **two** feet in depth. Work will not be allowed to commence until an archaeological monitor is on site to ensure any cultural resources are preserved.

Minor variations to this permit, which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

PLEASE NOTE: THIS PERMIT EXPIRES TWO YEARS FROM DATE OF APPROVAL UNLESS YOU OBTAIN YOUR BUILDING PERMIT AND COMMENCE CONSTRUCTION.

Approval Date:June 4.2004Effective Date:June 18.2004Expiration Date:June 18.2006

Don Bussey Deputy Zoning Administrator

Cathleen Carr Project Planner

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the **Planning** Commission **in** accordance with chapter 18.10of the Santa Cruz County Code.

Note: Appeal(s) must be filed and appeal fees paid before 5:00 P.M. June 18, 2004.



County of Santa Cruz

PLANNING DEPARTMENT

701 OCEAN STREET ,4TH FLOOR, SANTA CRUZ. CA 95060-4000 (831)454-2580 FAX: (831)454-2131 TOD: (831) 454-2123 TOM BURNS, DIRECTOR

NEGATIVE DECLARATION AND NOTICE OF DETERMINATION

Application Number: 03-0304

Dassel's Petroleum, for Wood VMS Family LP

Proposal to install a 30,000 gallon steel propane distribution tank and fencing at an existing industrial facility. Requires **an** Amendment to Commercial Development Permits 89-0953 and 84-277. The project location is on the south side of **Graham** Hill Road, 300 feet southeast from the intersection of Graham Hill and Zayante Roads, Felton. The exact address is 5843 **Graham** Hill Road, Felton, California.

APN: 066-211-07

Cathleen Carr, Staff Planner

Zone District: M-1-GH (Light Industrial with Geologic Hazards combining district)

ACTION: Negative Declaration with Mitigations REVIEW PERIOD ENDS: March 31,2004

This project will be considered at a public hearing by the Zoning Administrator. The time, date **and** location have not been set. **When** scheduling does occur, these items will be included in all public hearing notices for the project.

Findinas.

This project, if conditioned to comply with required mitigation measures or conditions shown below, will not have significant effect on the environment. The expected environmental impacts of the project are documented in the Initial Study on this project attached to the original of this notice on file with the Planning Department, County of Santa Cruz, 701 Ocean Street, Santa Cruz, California.

Rewired Mitigation Measures or Conditions:

_____ None

XX Are Attached

Review Period Ends March 31, 2004

Date Approved By Environmental Coordinator April \$, 2004

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KEN HART Environmental Coordinator (831) 454-3127

If this project is approved, complete and file this notice with the Clerk of the Board:

NOTICE OF DETERMINATION

The Final Approval of This Project was Granted by

on ______. No EIR was prepared under CEQA,

THE PROJECT WAS DETERMINED TO NOT HAVE SIGNIFICANT EFFECT ON THE ENVIRONMENT.

Date completed notice tiled with Clerk of the Board:



NAME: Dassel Petroleum APPLICATION: 03-0304 A.P.N: 066-211-07 Revised: 04/08/04

NEGATIVE DECLARATION MITIGATIONS

- A. In order to minimize flood related hazards and for the project to comply with floodplain management regulations prior to the public hearing the applicant shall revise the plans to indicate that the bottom **of** the lowest horizontal member of the tank and/or the supports is at the elevation of 262 feet M.S.L. or higher.
- B. In order to reduce the potential that archaealogical resources might be disturbed to a less than significant level all excavation shall be confined to the upper three feet of ground. This will ensure that the artificial fill which overlies the native soil will not be disturbed. Prior to issuance of a building permit the applicant shall submit a n archaeological survey of the area to be disturbed by excavation or grading, for review and approval by Manning statt. It a significant potential for resources is identified by the survey then letter from the geotechnical engineer indicating that s/he will be on site to observe all excavation and monitor the depth of penetration to remain at three feet or less. If the depth of excavation is exceeded the geotechnical engineer shall notify the Planning Department and shall halt earth disturbing activity until the applicant provides a professional archaeological monitor. Further ground disturbance shall only CE the presence, and under the supervision of a q diff :t i gi monitor. If it any time any tife t or th evidence fat American cultural site which reasonably s to exceed one hundred years of age is discovered, or if human remains of any ik in monitor hall: age are discovered, the
 - 1. Notify the Planning Director. s and desist from all further activity will 200 feet of the di o an J r iluation by the monitor. A qualified r iologis it llr ir appropriate mitigation incl a plan for preservation of the find, to b 1 pr by County planning staff and implemented prior to the at of the 1
 - 2. Notify the Sheriff-Coroner of the discover d im notification is insuant to C 5 if the discovery includes human remains.

EXHIBIT D

CALIFORNIA DEPARTMENT OF FISH AND GAME

CERTIFICATE OF FEE EXEMPTION

De minimis Impact Finding

Project Title/Location (Santa Cruz County):

Application Number: 03-0304Dassel's Petroleum, for Wood VMS Family LPProposal to install a 30,000 gallon steel propane distribution tank and fencing at an existingindustrial facility. Requires an Amendment to Commercial Development Permits 89-0953 and84-277. The project location is on the south side of Graham Hill Road, 300 feet southeast fromthe intersection of Graham Hill and Zayante Roads, Felton. The exact address is 5843 GrahamHill Road, Felton, California.

APN: 066-211-07 Cathleen Carr, Staff Planner Zone District: M-1-GH (Light Industrial with Geologic Hazards combining district)

Findings of Exemption (attach as necessary):

An Initial Study has been prepared for this project by the County Planning Department according to the provisions of CEQA. This analysis shows that the project will not create any potential for adverse environmental effects on wildlife resources.

Certification:

I hereby certify that the public agency has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Te a

KEN HART Environmental Coordinator for Tom Burns, Planning Director County of Santa Cruz

Date: 4/1/04

EXHIBIT

COUNTY OF SANTA CRUZ PLANNING DEPARTMENT

Date: February 23,2004 Staff Planner: Cathleen Carr

ENVIRONMENTAL REVIEW **INITIAL STUDY**

APPLICANT: Dassel's Petroleum OWNER: Wood VMS Family LP Application No: 03-0304 Site Address: 5843 Graham Hill Road, Felton

APN: 066-211-07

Supervisorial District: 5th

Location: Property is located on the south side of Graham Hill Road, 300 feet southeast from the intersection of Graham Hill and Zayante Roads, Felton

EXISTING SITE CONDITIONS

Parcel Size: Approximately 52 acres

Existing Land Use: Lumber yard, liquid propane gas distribution tank (coast gas), light manufacturing, warehouses, tree service yard, PG&E equipment yard

Vegetation: Weeds, single tree at proposed LPG tank site, dense trees and brush along western property margins (riparian woodland).

0-15% all_, 16-30% ____, 31-50% ____, 51+% ---- acreslsq.ft. Slope: Nearby Watercourse: San Lorenzo River

Distance To: Adjacent to western property line (about 800 feet at closest location) Rock/Soil Type: Soquel loam

ENVIRONMENTAL RESOURCESAND CONSTRAINTS

Groundwater Supply: Adjacent to river only Liquefaction: Mapped - low potential Water Supply Watershed: Within WSW Fault Zone: None mapped Groundwater Recharge: Only next to river Scenic Corridor: Graham Hill Rd. & Hwv 9 Historic: None mapped Timber or Mineral: None mapped Agricultural Resource: None mapped Archaeology: Not critical area Noise Constraint: None mapped **Biologically Sensitive Habitat: Riparian** Fire Hazard: None mapped Electric Power Lines: None Floodplain: Edge of 100-yearflood zone Solar Access: N/A Erosion: Low to moderate Solar Orientation: South Hazardous Materials: Yes

Landslide: None mapped

SERVICES

Fire Protection: Felton Fire District School District: San Lorenzo Valley UFSD Project Access: Graham Hill Road

Water Supply: Yes Sewage Disposal: Septic Drainage District: Zone 8 (publicly maintained)



PLANNING POLICIES

Zone District: M-1-GH (Light Industrial with Geologic Hazards combining district) Within USL: No General Plan: I (Industrial) Special Designation: Geologic Haza

Coastal Zone: Outside

Special Designation: Geologic Hazard (Flood Zone) Special Community: Felton Village Plan

PROJECT SUMMARY DESCRIPTION:

Proposal to install a 30,000 gallon steel propane distribution tank and fencing at an existing industrial facility. Requires an Amendment to Commercial Development Permits 89-0953 and 84-277.

DETAILED PROJECT DESCRIPTION:

The applicant proposes to install a 30,000 gallon steel tank for storage of propane fuel, serving as a distribution center for the San Lorenzo valley and outlying regions. The proposed distribution center will fence a 4,875 square foot area of a 50-acre parcel, with six-foot high chainlink. Some limb trimming of an existing tree (species unknown) will be necessary.

PROJECT SETTING:

The subject parcel is about 50 acres in size and is located in the San Lorenzo Valley planning area within the unincorporated portion of Santa Cruz County. The property is split zoned with roughly the eastern half zoned M-1 (Light Industrial), most of the western half as PR (Parks and Recreation) and SU (Special Use) in the area adjacent to and including the San Lorenzo River. All of these zone districts include the GH combining district denoting a know geologic hazards area, in this case the floodway and flood plain of the San Lorenzo River. The proposed propane distribution facility is located in the southwestern quadrant of the M-1 zoned area and is located near the edge, but within the 100-yearflood zone. The project area is essentially flat and covered with old paving and base rock. No new paving is proposed.

The San Lorenzo River and its extensive riparian woodland is located to the west of the project site. The river is about 800 to 1,000 feet from the project site at its closest point. The uses of the surrounding properties are State Parks (Henry Cowell – Big Trees) property to the west and south, a commercial horse boarding stable to the north. Roaring Camp (a private amusement area) to the east, the town of Felton, which includes commercial and residential uses, lies further north and west of the subject parcel. The State Parks property includes a trailer complex for State Parks employees and a California Highway Patrol satellite office immediately adjacent to the southern property line and south of the project site, and the Big Trees entrance to Henry Cowell Park is just south of this complex.



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23			Or Potentially Significant impact	Significant With Mitigation Incorporation	Less Than Significant Impact	NO Impact
		ENVIRONMENTAL REV	<u>/IEW C</u>	HECKLI	<u>ST</u>	
<mark>Geo</mark> es th	logy e pro	and Soils oject have the potential to:				
E a n	Expos ndver nater	se people or structures to potential se effects, including the risk of ial loss, injury, or death involving:				
A	A.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or as identified by other substantial evidence?			<u>_X</u>	

Significant

Less Than

All of Santa Cruz County is subject to some hazard from earthquakes. A Geotechnical Investigation wasprepared for this project by Haro, Kasunich and Associates (Attachment 7). The report evaluated the potential for liquefaction and dynamic settling, a secondary effects of seismicity. The expected differential settlement is small enough that it can be accommodated by constructing in conformance with the Uniform Building Code and following the Geotechnical report recommendations.

B. Seismic ground shaking?

See A.1.A. above.

C. Seismic-related ground failure, including liquefaction? ______X___

As discussed in A. ?, Aabove, a geotechnical investigation was completed for this project. The soils investigation found some cohensionless subsoils and man made fill at the project site. The report evaluated the site's potential for liquefaction and related settling and found a total settlementrange of 2-2.75 inches, which can be mitigated by foundation design and construction within the parameters of the Uniform Building Code and the recommendations set forth in the Geotechnical report.

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D. Landslides?

<u> X</u>

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EXHIBIT

Environm Page 4	nentalReview Initial Study	Significant Or Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
2.	Subject people or improvements to dama from soil instability as a result of on- or off-site landslide, lateral spreading, to subsidence, liquefaction, or structural collapse?	nge		<u>_X</u> _	
See di	iscussion in A.I.A. and A.1.C				
3.	Develop land with a slope exceeding 30%?	_			<u>_X</u> _
4.	Result in soil erosion or the substantial loss of topsoil?			<u>_X</u>	
There practic contro	will be no new clearing to accommodate ces will adequately control sedimentation d of plan will be required with the buildingpe	e the proj luringfour rmit applie	ect. Stand Indation.con Cation.	dard erosid struction. A	on <i>control</i> An erosion
5.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code(1994), creating substantial risks to property?			_ <u>X_</u>	
Soque geote	el loam soils are noted as having a mo chnical report did not find evidence of exp	oderate p ansive so	otential fo ils.	r shrink/sv	vell. The
6.	Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems?				<u>X</u>
<i>Will</i> no	ot utilize any septic facilities.				
7.	Result in Coastal cliff erosion?	<u> </u>			<u> </u>
B. Hy Doest	drology, Water Supply and Water Qual the project have the potential to:	<u>ity</u>			
1.	Place development within a 100-year floo hazard area?	od	<u> X </u>		
The p	roposedpropane tank is located within the	e 100-yea	arfloodplai	n of the Sa	in Lorenzo

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River. The base flood elevation according to the FEMA Firm map (060353 02208 - Attachment 3) at the project location is 261 feet mean sea level (msl). The ground level at the proposed tank site is 257 feet 2 inches msl. The new storage tank will be supported by concrete piers at a proposed height of four (4) feet between the bottom of the tank and ground level. While this provides a slight clearance above the expected 100-year flood level, it does not meet FEMA requirements and the regulations contained in Chapter 16.10 of the County Code for development within the flood plain. Specifically, the proposed tank must be elevated one foot above the expected 100-year flood level. Thus, the proposed tank must be suspended on concrete piers at a minimum height of 4 feet, 10 inches above existing grade.

The project's location within the flood plain will necessitate additional safeguards in the project design. Specifically, additional massing in the foundation will be required to offset potential buoyancy and the tank will need to be secured with cables over the top. The project Safety Consultant (Rob Scott, propane industry safety consultant, via personal communication on 12/23/03) determined that the loss of integrity due to debris load in floodwaters is not a safety concern, given that the tanks is construction of 7/8 to 1 inch thick steel. The tank will also be fitted with remote shutdown and thermally activated shufdown devices that can be activated even if flooding limits access to the tank.

The concrete supporting piers should have a negligible effect on displacing flood waters and increasing the 100-year flood elevation along the San Lorenzo River.

2. Place development within the floodway resulting in impedance or redirection of flood flows?

Project is located entirely outside of the FEMA mapped floodway.

3.	Be inundated by a seiche or tsunami?	 	<u> </u>	<u>X</u>
4.	Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table?	 		<u>_X</u>

The tank site is located outside of the mapped recharge areas and is in an area covered in baserock and old asphalt paving. No area currently providing recharge will be altered.

5. Degrade a public or private water supply? (including the contribution **of** urban contaminants, nutrient enrichments, or other



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	agricultural chemicals or seawater intrusion).	<u></u>	<u> </u>		<u>_X_</u>
6.	Degrade septic system functioning?			·	<u>_X</u>
No se	ptic is needed for the project.				
7.	Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which could result in flooding, erosion, or siltation on or off-site?				<u>_X_</u>
There assoc patteri	will be minimalsite disturbance, minimalne iated with this project. There will be no sign n.	ew, imper nificantalt	vioussurfa eration of t	acingandr he existing	no grading gdrainage
8.	Create or contribute runoff which would exceed the capacity of existing or planner storm water drainage systems, or create additional source(s) of polluted runoff?	d 		<u> </u>	<u>_X</u>
See B	2.7.				
9.	Contribute to flood levels or erosion in natural water courses by discharges				

See *B.7.*

10. Otherwise substantially degrade water supply or quality?

C. Biological Resources

Does the project have the potential to:

of newly collected runoff?

 Have an adverse effect on any species identified as a candidate, sensitive, or special status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service?

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The San Lorenzo River provides prime rearing and spawning habitat for the Southern Steelhead trout (<u>Oncorhvnchus mvkiss irideus</u>), Federally listed as a Threatenedspecies, and historically supported a Coho salmon (<u>Oncorhvnchus kisutch</u>), Federally listed as a Threatened and State listed as an Endangered species. The project site is over 800 feet from the river at its closest location. With its minimal changes to the site, minimal disturbance and significant physical separation, the project will have no impact on this important habitat.

Pursuant to Federal regulations, propane is not classified as a marine pollutant because it dissipates upon contact with air or water due to its extremely low boiling point (CFR 49 172.101 and personal communication with RobScott, propane industry safety consultant, on 12/23/03). Thus, the release of propane in the event of a tank failure will not adversely affect the riparian habitat.

2.	Have an adverse effect on a sensitive biotic community (riparian corridor), wetland, native grassland, special forests, intertidal zone, etc.)?			<u>_X</u>
See	C.1.above,			
3.	Interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites?		 	<u>_X</u>
4.	Produce night time lighting that will illuminate animal habitats?		 	X
5.	Make a significant contribution to the reduction of the number of species of plants or animals?		 	<u>_X</u>
6.	Conflict with any local policies or ordinances protecting biological resources (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of 6 inch			
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Environn Page 8	nental Review Initial Study	Significant Or Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	diameters or greater)?	_			<u>_X</u> _
7.	Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan?				<u>X</u>
<u>D. Er</u> Does	nergy and Natural Resources the project have the potential to:				
1.	Affect or be affected by land designated as Timber Resources by the General Plan?				<u>_X</u> _
2.	Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use?	_			<u>X</u>
3.	Encourage activities which result in the use of large amounts of fuel, water, or energy, or use of these in a wasteful manner?				<u>_X</u> _
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The project will result in more efficient fuel use by providing a propane distribution center close to the primary customer base and reduce the distance that delivery trucks must **travel** to refill with product for distribution to the San Lorenzo valley and the outlying region.

4. Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)?

E. Visual Resources and Aesthetics

Does the project have the potential to:

1. Have an adverse effect on a scenic resource, including visual obstruction of that resource?

While the subject parcel is bordered by Highway, and Gra. am Hill Roads, which are both County designated scenic roads, the project is not visible from either of these roads due to topography, orientation and existing trees. The project is visible from the portion of State



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Parksproperty (Big Trees area of Henry Cowell Park), which is used for employee housing and a CHP substation.

2. Substantially damage scenic resources, within a designated scenic corridor or public viewshed area including, but not limited to, trees, rock outcroppings, and historic buildings? X See discussion in E.1. above.

3. Degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridgeline?

Although the project is located adjacent to State Parkproperty and the San Lorenzo Rive, the project will not degrade the existing visual character as it is located within an industrial enclave and there is a PG&E equipment yard located between the project site and the State Parks property. The river area is visually screened by existing dense riparian vegetation.

4.	Create a new source of light or glare which would adversely affect day or nighttime views in the area?	<u></u>		_	<u>X</u>
5.	Destroy, cover, or modify any unique geologic or physical feature?				<u>_X</u> _
F. C Does	ultural Resources the project have the potential to:				
1.	Cause an adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5?				<u>X</u>
2.	Cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5?		<u> </u>		
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The site is within a broadly mapped area of potential archaeological resources. Past projects on this highly disturbed site have not resulted in the discovery of any archaeological resources. The project will create only minimal ground disturbance for the construction of the concrete piers and in erecting three sides of chain link fencing. However, in order to ensure archaeological resources are not compromised, the applicant must complete a survey by a professional archaeologist. If the survey is negative for resources, a condition will be placed on the project regarding procedures in accordance with County policy that must be followed should any artifact or other evidence of a Native American cultural site is found during site disturbance. If the survey indicates potential resources, a monitor will be required to be on-site during ground disturbance.

3.	Disturb any human remains, including those interred outside of formal cemeteries?	 	 <u>_X</u>
4.	Directly'or indirectly destroy a unique paleontological resource or site?	 	 <u>_X</u> _
<u>G. I</u> Doe	Hazards and Hazardous Materials s the project have the potential to:		
1.	Create a significant hazard to the public or the environment as a result of the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels?	<u>_X_</u>	

Theproject will be storage and distribution of propane, an inflammable gas commonly used for heating and cooking in rural areas of Santa Cruz County, particularly in the San Lorenzo Valley. This gas is stored in a semi-liquid state and in heavy concentrations can cause asphyxiation due to lack of oxygen. Safety measures proposed by applicant include: remote control thermal-activated shutoff, an internal mechanism that does not allow the truck to be started while connected to the tank, a mechanism that automatically shuts off the release valve within 20 seconds of a break in the hose or hose connection (see Attachment5). These safety measures are mandated by the National Fire Protection Association (NFPA) Code #58 with respect to liquid propane gas facilities to mitigate potential hazard to life and property. The Total Product Control System proposed for this project (Scott and Associates, Attachment 5), would allow a maximum release of 3.5 gallons of propane in the event of a hose break, due to the redundant shut off system. This would be widely dissipated before reaching the closest property line (I 75feet away) or structure (I 75+ feet).

Environmental Health Services administers hazardous materials permits. The owner must



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obtain a hazardous materials permit for the proposed propane distribution center. This permit is required prior to building permit final. Environmental Health Services staff have reviewed the application and supporting materials and have not indicated any concern about the proposed project.

The hazard generating most concern is the potential for explosion and associated fire. The Felton Fire Departmenthas reviewed the plans and has not stated objections or concerns. The potential for tank failure and bleve is remote due to the siting of the new tank. Specifically, tank failures have been caused by physical damage causing failure (struck by trucks traveling at relatively high speeds, train derailment) or intense heat from fire. The site is isolated from public roadways and internal through traffic. The tank will be surrounded by a chain link barrier, minimizing the potential for accidental collisions. There is about 300,000 gallons of water stored on the site, which is adequate for fire protection for the project (personal communication with Ron Rickabaugh 2/04). According to Felton Fire, a minimum 500 gallon per minute volume of water combined with the on-site water storage capabilities should provide adequate fire protection.

2.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5and, as a result, would it create a significant hazard to the public or the environment?	 	 _X_
3.	Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site?	 	 <u>X_</u>
4.	Expose people to electro-magnetic fields associated with electrical transmission lines?	 	 <u>_X</u>
5.	Create a potential fire hazard?	 X	

As discussed in G.7. above, the project would store about 30,000 gallons of liquefied propane gas (LPG) for distribution throughout the San Lorenzo Valley and outlying rural areas. This is an inflammable substance. According to Scott & Associates (Attachment 5) the highest danger area, in the event of a hose break and ignition would affect an area within an 789-foot radius of the propane tank. The State Parks housing area is located approximately 200 feet away from the tank site. The Felton Fire Protection Agency has reviewed the project plans and has offered no objection. The response time for the Fire



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Department to this site is three minutes. There is an existing water storage tank on site that contains over 300,000 gallons of water with two standby pumps and motors. This system can provide the 500 gallons per minute to cool the container should the LPG in the hose ignite. To minimize fire hazards, the release valve for the new tank should not face that of the existing tank. The proposed configuration is for the tanks and release valve to be oriented perpendicular to each other.

6. Release bioengineered organisms or chemicals into the air outside of project buildings?

H. Transportation/Traffic

Does the project have the potential to:

1. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

The project will increase traffic coming in and out of this industrial site by about 5 truck trips per day, comprised of one large transport truck to refill the tank and four bobtail trucks for deliveries. The site is accessed via Graham Hill Road, a major arterial. Delivery trucks will then disperse via Graham Hill Road south or north to Mount Hermon or Highway 9 out to the outlying rural residences they serve. This area is already serviced by propane trucks, as a majority of homes in this area are heated using LPG. According to the Department of Public Works, Traffic Engineering, this increase in traffic will not adversely affect Graham Hill Road. The project will not increase traffic to unacceptable levels at the Graham Hill Road-Mount Hermon and Highway 9 intersections. Furthermore, there are no restrictions on the use of Graham Hill Road by propane carrying vehicles.

2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?

Only temporaty parking is required for propane truck using the facility to refill its tank with product or the larger tanker truck refilling the tank.

3. Increase hazards to motorists, bicyclists, or pedestrians?



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SeeH	. 1. above.				
4.	Exceed, either individually (the project alone) or cumulatively (the project combined with other development),a level of service standard established by the county congestion management agency for designated intersections, roads or highways?			<u>_X</u> _	
<u>I. No</u> Does	<u>ise</u> the project have the potential to:				
1.	Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			<u>X</u>	

The new propane distribution center could result in an increase in ambient noise...vels in the immediate area, due to propane tanks trucks entering and leaving the premises. The loading area is setback about **240** feet from the property line with State Parks. The closest residential area on the State Parks property is about **275** feet away from the truck loading area. General hours of operation will be between 8 a.m. and 5 p.m., however, the operator intends to retain access to the site on a **24** hour/seven day a week basis. Due to the proximity to the nearby housing complex, access will be restricted between 9 p.m. and **7** a.m. to emergency maintenance and inspections only.



There may be temporary or periodic increases in ambient noise levels as a result of earth preparation and construction of the pier support for the propane tank. Because it is temporary and limited to weekday operations between 7a.m. and 6 p.m., the noise impacts are not significant.

Periodic increases in ambient noise levels will occur when trucks arrive and depart from the



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fuel station. The anticipated number of truck trips will be five per day between the hours of 8 *a.m.* to 5 *p.m.* However, 24 *hour/seven* day a week access is available in the case of emergency or extenuating circumstances that prevent access during normal hours of operation. Access for fuel pickup and/or delivery will be prohibited between 9 *p.m.* and 7 *a.m.* to minimize potential noise impacts to the residents of the State Parks employee trailers.

J. Air Quality

Does the project have the potential to: (Where available, the significance criteria established by the MBUAPCD may be relied upon to make the following determinations).

1.	Violate any air quality standard of contribute substantially to an existing				
	or projected air quality violation?	<u> </u>		<u>X</u>	
2.	Conflict with or obstruct implementation of an adopted air quality plan?		_	_	<u>X</u>
3.	Expose sensitive receptors to substantial pollutant concentrations?		<u> </u>		<u>X</u>
4.	Create objectionable odors affecting a substantial number of people?			<u>_x</u> _	

Release of gas which has been treated with a odorous compound for detection purposes would be minimized to 3.5 gallons per failure by redundant safety measures discussed above in G. Land G.5. The closest residences are the State Parks Employees housing 200 feet away.

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K. Public Services and Utilities

Does the project have the potential to:

- 1. Result in the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
 - A. Fire protection?

Environr Page 1	mental Re 5	view Initial Study	Significant Or Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	в.	Police protection?			<u>_X</u>	
	C.	Schools?	·	<u></u>		<u>_X</u> _
	D.	Parks or other recreational facilities?				<u>_X</u>
	E.	Other public facilities; including the maintenance of roads?		<u> </u>	<u> </u>	. <u> </u>
2.	Resu new expa cons signi	It in the need for construction of storm water drainage facilities or nsion of existing facilities, the truction of which could cause ficant environmental effects?				<u> </u>
3.	Resu of ne facili facili could effec	ult in the need for construction we water or wastewater treatment ties or expansion of existing ties, the construction of which d cause significant environmental cts?				<u>_X</u> _
4.	Cau treat Reg Con	se a violation of wastewater ment standards of the ional Water Quality trol Board?				<u>_x</u>
5.	Crea supp the p	ate a situation in which water blies are inadequate to serve project or provide fire protection?			<u>_X</u>	
The	Feltor	Fire Department has reviewed the	ne proiect	plans and	has not	placed a

The Felton Fire Department has reviewed the project plans and has not placed any additional conditions on the project (comments and personal communication). As discussed in G.5., the site has 300,000 gallons of water available for fire protection and can provide water at a fate of 500 gallons per minute.

6.	Result in inadequate access for fire protection?		 <u> </u>	<u>X</u>
7.	Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse?	<u></u>	 	<u> </u>

EXHIBIT D

Enviror Page	nmental Review Initial Study 16	Significant Or Potentially Significant Impact	Less Than Significant With Miation Incorporation	Less Than Significant Impact	No Impact
8.	Result in a breach of federal, state, and local statutes and regulations related to solid waste management?				<u>X</u>
L. L Does	_and Use, Population. and Housing as the project have the potential to:				
1.	Conflict with any policy of the County adopted for the purpose of avoiding or mitigating an environmental effect?	<u></u>		<u>_X</u>	
2.	Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect?		<u>_X</u>	_	

The project has the potential to conflict with the Geologic Hazards ordinance (Chapter 16.10 of the County of Santa Cruz Code) for development within a 100-yearflood plain, in that the lowest point of the tank is proposed to be elevated only 2 inches above the expected base 700-year flood level. Elevating the tank an additional 10 inches (4 feet, 10 inches total) would meet the requirements of Chapter 16.10 of the County Code with respect to flood elevation. The tank will be anchored to its foundation.

In addition, section **16.10.070(f)** requires facilities shall be located outside of the 100-year flood plain unless there is no other feasible location and construction will not increase hazards to life onproperty within or adjacent to the floodplain. In this instance, locating the LPG tank outside of the flood plain in the vicinity of the proposed site is not feasible due to the small area outside of the floodplain and the cut bank, and the proximity to other buildings in that area. Locating the tank on the higher western side of the property would place the tank immediately adjacent to existing buildings and/ or next to either the railroad tracks or Graham Hill Road, presenting potential fire protection difficulties in the event the buildings should catch fire and increasing the potential for impacts to the tank. A map of the site is provided as Attachment 6 and the FEMA flood plain map is Attachment 3.

Minimal flooding is expected as this site even in the 700-year flood event. The proposed foundation system will cause negligible displacement of flood waters and as discussed above the tank will be flood elevated and anchored to prevent hazards of a loose tank during more extreme flooding events.

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- 3. Physically divide an established community7
- **4.** Have a potentially significant growth inducing effect, either directly (for

Environm Page 17	nental Review Initial Study	Signincant Or Potentially Significant impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	_			<u>_x</u>
5.	Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?		_		<u> </u>
<u>M. N</u> Doest federa	<u>on-Local Approvals</u> the project require approval of al, state, or regional agencies?		Yes <u>X</u>	No.	
Which <u>Enain</u>	agencies? <u>Inspection and approval of</u>	f the State	e Division of	f Industrial	Safety
<u>N. Ma</u>	andatorv Findings of Significance				
1.	Does the project have the potential to dea the quality of the environment, substantia reduce the habitat of a fish or wildlife spe cause a fish or wildlife population to drop self-sustaining levels, threaten to elimina plant or animal community, reduce the nu or restrict the range of a rare or endange plant, animal, or natural community, or eliminat important examples of the major periods	grade ally ccies, below te a umber umber red iminate of	Yes—	No <u>.</u>	<u>×</u>
2.	California history or prehisfory? Does the project have impacts that are individually limited, but cumulatively cons (Acumulatively considerable≅ means tha incremental effects of a project are consi when viewed in connection with the effect past projects, and the effects of reasonal foreseeable future projects which have e the Environmental Review stage)?	iderable t the derable cts of bly ntered	Yes— Yes—	No_ No_	<u>x</u>
3.	Does the project have environmental effe which will cause substantial adverse effe	ects cts on			

*



Environmental Review Initial Study Page 18

human beings, either directly or indirectly? Yes No X

TECHNICAL REVIEW CHECKLIST

	<u>REQUIRED</u>	COMPLETED*	<u>N/A</u>
APAC REVIEW			
ARCHAEOLOGIC REVIEW			
BIOTIC ASSESSMENT			
GEOLOGIC HAZARD ASSESSMENT			
GEOLOGIC REPORT			
RIPARIAN PRE-SITE			
SEPTIC LOT CHECK			
SOILS REPORT	ves	Ves	

OTHER:

*Attach summary and recommendation from completed reviews

List any other technical reports or information sources used in preparation of this initial study:

Environmental Review Initial Study Page 19

ENVIRONMENTAL REVIEW ACTION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described below have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

____ If ind the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

2-25-04

Date

Signature

For: Environmental Coordinator

Attachments:

- 1. Location Map
- 2. Zoning, General Plan and General Plan Resource Maps
- 3. FEMA Firm Map
- 4. Site Plan and Program Statement
- 5. Safety Assessment by Scott & Associates
- 6. Site Map for Alternative Location
- 7. Soils Report Conclusion and Recommendations










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EXHIBIT







LIVE LOADS

Wind ------ UBC Basic Expos Seismic — UBC Zone #4

DUNDATION

Foundation shall be on a total lo All footings shall be **founded** on inimum compaction of 80% per m

All disturbed sail shall be remov neat les

DNCRETE CAST IN PLACE

All concrete shall develop a min nsive linder of 2,500 P.S.I.

Concrete. forms, mixing, placing of ncrete practice, 1997 edition and

Concrete mix shall be 5 1/2 sack

DNCRETE REINFORCING STEE

All reinforcing steel for concrete 7-82 and STM A grade 40 for all.

All reinforcing steel shall be detailed, fabricated and placed in accordance with 1 Detailing Manuel 315-80.

All reinforcing steel shall be accurately and securely placed.

Reinforcing shall not be bent or displaced for the convenience of other trades less approved by the structural engineer.

Minimum cover from concrete surface to reinforcing steel shall be: 3" ---- iv to tom at footing

2" +/- 114" to earth face of wall

1 1/2" +/- 1/4" to face of wall

Lap all bars a minimum of 40 diameters except as otherwise noted.

VERAL

Beneral contractor shall verify all dimensions and conditions.

ure B, Zoned 70 miles/hr.
bad bearing soil pressure of 1,500 P.S.I. firm undisturbed original soil or achieve a modified proctor test. red by hand operation from excavation io r
imum 28 day laboratory cured compreher
g and curing shall conform to ACI manual of specifications. I specifications. k per cubic yard.
<u>1</u>
shall conform to UBC standards No. 26-7
alled fabricated and placed in accordance

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Environmental Review Ihital Study

ATTACHMENT

APPLICATION

Date

Nor

Description

Designed Drown

Checked

Use Permit Application

Dassel's Petroleum, Inc. Propane Bulk Tank Installation

At

Redtree Properties Graham Hill Road Felton, California

APN: 66-211-07

July 28,2003





DASSEL'S PETROLEUM PROJECT SUMMARY FOR PROPOSED PROPANE TANK AT <u>REDTREE PROPERTIES</u>

Background

Dassel's Petroleum was founded by Mr. Ray L. Dassel in 1939 as a liquefied propane gas operation in Hollister, California with the goal to serve the Central Coast Counties. As an independent California corporation, Dassel's currently serves San Benito, Santa Clara. Monterey, Santa Cruz, Kings, Fresno, Merced and Tulare counties with plants located in Hollister, Scotts Valley and Hanford. Wholesale shipment of liquefied propane gas is obtained from Northern and Southern California gas plants, refineries and terminals. Dassel's is actively involved in the National Propane Gas Association (NPGA), Western Propane Gas Association (WPGA), whose efforts dramatically affect the development of the industry and manufacture, regulatory and rule setting bodies, research, innovation, safety, standardization, personnel training and consumer safeguards

About Propane as fuel

Propane is one of the fastest growing clean fuel alternatives in California and throughout the nation. Propane is a clean burning fuel used for residential, commercial, agricultural and industrial purposes. It is an environmentally sound fuel alternative as recognized by the Environmental Protection Agency (EPA) and California **Air** Resources Board (CARB). As a leading industry, propane usage continues to increase in all states and in Canada. California alone consumes **4** percent of the nation's arrual propane consumption, with a total of 88.9 trillion BTUs annually equivalent to 34,137,000 gallons.

Propane is typically used for residences where natural gas is not available. Commercial uses include fleet vehicles, such as buses, taxis, trucks, police cars, and forklift vehicles. Industrial uses typically include as back **up** fuel for oven heaters, or electric generators with on-site storage tanks. Propane is a clean, clear, odorless, nontoxic gas. It is often used by Fire Departments for fire fighting exercises without causing soil or water contamination.

Propane is regulated by the National Fire Protection Association (NPFA) and the State of California Division of Industrial Safety (see attached request letter) that ensures safety in the use and handling of this alternative fuel and the permit process. Each installation also adheres to regulations imposed by local Fire Departments.

Environmental Review Inital Study ATTACHMENT 4, 6 of 12 APPLICATION 03-0304



Project Background Information

Dassel's Petroleum proposes io install one 30,000 gallon propane tank at the Redtree Properties property located at Graham Hill Road, Felton, CA. The proposed bulk tark storage installation is intended to provide immediate access and service to businesses and backup emergency generators, agricultural uses and rural residences beyond natural gas line reach located in the greater North Santa Cruz County areas. Dassel's Petroleum presently serves *this* community and it is our goal to strengthenits on-going service, while minimizing cost to its customers. The proposed tank installation reduces the cost of transportation from remote distances.

An Application Request Form was filed with the County of Santa Cruz Planning and Building Inspection Department. In response, the department issued a Development Project Application and directed the applicant, Dassel's Petroleum, to proceed with the filing of a Use Permit and Initial Study application, for July 28, 2003.

Property Description /Setting

The proposed propane tank will be installed in the rear portion of the Redtree Properties property located on 5877 Graham Hill Road, Felton (See Attached Vicinity **Map**). The subject property is (AFN: 66-211-07), presently developed with principal industrial buildings and parking lot facilities, The operations site was previously a lumber mill, which after closure in the 1960's the facility was converted as a multi-tenant industrial/warehouse use. Access to the property and project site is provided through existing private driveways.

The subject property is designated Light Industrial (M-1-GH) in the County of Santa Cruz zoning maps. The general topography of the area is generally flat in all directions, There is no significant vegetation, The adjacent properties are San Lorenzo River bottom and the State Park system. Graham Hill Road is directly east of the subject site.

Project Description

The proposed project will consist of the installation of one 30,000-gallon, steel propane tank for bulk propane distribution supported above ground by concrete engineered piers, and fenced in yard. Approximately 5,000 square foot area.

The proposed tank is approximately 9 1/2 feet in diameter and **57** feet in length. It will be placed in an area at the rear portion of the property where loading and circulation access facility is located. Additional plumbing appurtenances will be installed near the tank to facilitate the loading and unloading of fuel to delivery trucks.

Engineered concrete piers shall support the tank above ground (see attached calculations and engineered drawings). Driveways, loading and circulation areas adjacent to the project site will provide access to delivery trucks with adequate turn around space adjacent to the project site. Environmental Review Inital Study ATTACHMENT $4, 7 \pm 12$

APPLICATION 03-0304

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Statement of Operations

Dassel's Petroleum intends to use the proposed propane storage facility to distribute to its present and future businesses and **rural** route domestic propane customers in the greater unincorporated areas of North Santa Cruz County. The activity of operation will be centered on a normal business hour basis. The proposed facility is a passive use, which does not require water consumption or discharge, does not generate dust, smoke, glare, dirt, noise; vibrations, and odor. The facility will be served on a regular basis with minimal traffic increase to the area. Hours of operation will be during normal hours 8:00 am. to 5:00 p.m. however, during peak seasonal demands operations maybe increased somewhat. Access to the site however is on a 7/24 hour basis. Four bobtail truck trips per day and one transport truck trip per day are expected.

Installation of the project would take approximately 45-60 days after all appropriate permits are obtained. The installation will consist of construction of concrete piers, placement of the tark, transfer pump and motor, lighting, plumbing appurtenances, painting, crash post and fencing work. The color of the tark shall be white.

Zoning Analysis

The proposed propane facility is located within the Light Industrial (M-1-GH) Zoning District of Santa Cruz County. Pursuant to Code Section 21.28.060.A, this project requires an amendment to an existing Use Permit (84-277) and related permits.

The proposed propane tank installation will be a minor addition to the existing development on the property. The project intends to provide continuous service to local businesses and emergency back-up generators, agricultural businesses and rural residences outside the reach of natural gas services in *the* unincorporated areas of Santa Cruz County. The *tank* will be serviced by transport trucks. Smaller bobtail trucks will then refill their tanks from the proposed stationary tank and make deliveries to its customers in **the** greater North Santa Cruz County area. The total number of vehicle trips to and from the site will not be of consequence to change any traffic patterns or local road demands.

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General Development Plan

Proposed use:	One (1) 30,000 gallon propane tark on above ground concrete piers.
Proposed development area:	5000 square feet
Setbacks:	Setbacks for the subject tank shall be established per the approved plans. Height restrictions: Total



	height of structures will not exceed the allowable maximum of the Light Industrial district.
Hours of Operation:	Normal 8:00a.m. to 5:00 p.m. with 7/24 hour, access.
Fencing	Proposed 6' high chain link with appropriate access gates.
Circulation improvements:	Redtree Properties has duect access to Graham Hill Road and Mt. Hermon Road, paved, improve roads. This existing road facility will provide immediate access to Highway 17 for the operation of delivery trucks. No improvements are necessary.
Environmental considerations:	As indicated in the body of this proposal, propane is an environmentally friendly fuel source recognized by the California Air Resources Board and Federal EPA. The project location is suitable for the bulk distribution facility, which located within <i>an</i> already industrially developed parcel of land and is compatible to surrounding uses. The installation of the tark does not require expansion of water, sewer services. The facility does not generate dust, smoke, glare, dirt, noise, odor, or vibrations.
Conformance with local area plan policies:	The project seeks approval of an amendment to Use Permit 84-0277 for the establishment of bulk propane distribution tank The project will comply with local zoning and fire standards.

Fire Protection Requirements

As required by this Use Permit application, Dassel's has met with Felton Fire Protection District, Chef Rickabaugh on May 20th. After extensive discussion, Chief Rickabaugh has no problems with the installation provided the backup water system on site is in proper operation. It was further understood the installation shall be installed to comply with NFPA #58 and Title 8, Division of Industrial Relations.

Environmental Review Inital Study ATTACHMENT. APPLICATION 03

EXHIBIT

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Project Justification and Specific Use Permit Findings

1) The establishment, maintenance, or operation of the use or structure applied for, will not, under the circumstances of the particular case, be detrimental to health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use: or be detrimental or injurious to property and improvement in the neighborhood: or to the general welfare of the County.

The project is being proposed within a light industrial designated parcel. The location of the tank is approximately 100 feet from the nearest property line and over 2,000 feet from the principal public roads. The tank will be screened from view by the existing buildings and will blend-in with the existing truck circulation/loading activities in this area.

The proposed project is a passive use, which does not require water consumption or discharge, does not generate dust, smoke, glare, dirt, noise, vibrations, or any odor. Therefore, it will not be detrimental to health, safety, peace, morals, comfort, and general welfare of the person working in the area. In contrast, the project will provide with a convenient local fuel resource for agricultural businesses, emergency back-up generator uses, and rural properties outside the reach of natural gas service. The public can therefore enjoy a more frequent and reliable service in-line to their needs, which promotes their general welfare and contributes to the financial welfare of the community.

2) The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of this Title and any zoning violation abatement costs have been paid.

The project as proposed will comply with County standards including setbacks, height limitations, building permit requirements, fire protection, etc. Granting of the Use Permit will not impair the integrity of the zoning district nor the on-site businesses or adjacent uses of the property. The proposed development is not on a topographical ridgeline and will be away from public roads and views sheds.

Benefits to the Community

As indicated above, the proposed propane tank facility will have many benefits to the local community. Business utilizing emergency back-up generator fueled by propane, and the rural community in the unincorporated area of Santa Cruz County that are located beyond the reach of natural gas service **will** also benefit from this project. Dassel's goal is to provide reliable propane supply to residential and commercial users in North Santa Cruz County area. Propane user will benefit in the following ways:

• Convenience – Provide alternative methods of fuel source to propane appliances, homes and vehicles in the immediate area.

Environmental Review Inital Study ATTACHMENT APPLICATION 03-03



- **Clean Environment** Propane provides a convenient fuel source that is nontoxic, and with its inherent properties, it cannot contaminate soil or water supply. Emissions for propane compared to gasoline and diesel fuel is significantly lower as recognized by EPA. California Assembiy Bili 234 includes the use of propane as a clean air alternative fuel. California **Air** Resources Board also recognizes propane as desirable alternative to wood and charcoal for use of barbecue grills and fireplaces.
- **Economy** California Energy Commission's Title 24 Energy Efficient Standards indicates high efficiency of propane for home appliances. A local distribution source also provides savings to customers requiring propane for their residential or commercial use. With affordable clean energy on everyone's mind this project can assist the users of propane on the central coast.

Emergency Fuel – Propane is a dependable back **up** source for heating and power of residences and commercial uses in the event of a natural disaster or emergency.

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July 15,2002

State of California Department of Industrial Relations Pressure Vessel Safety Div. **1515** Clay St. #1302 Oakland, Ca. 94612 Fax: 510-622-2063 Attention: Mr.Donald Cook

Re: Installation and use of propane storage tank at Felton, California

Dear Don,

As per code requirements, Dassel's is requesting to install a 30,000 gallon propane storage tank and appurtenances at 5877 Graham Hill Rd. Felton, Ca. As always the installation will comply with NFPA-58 and Title 8 California addendum. After your review, please let us h o w your thoughts so that we may *start* to coordinate the installation, inspection and permitting. Thank you in advance.

Sincerely

James P. Dassel DASSEL'S PETROLEUM, INC.

Environmental Review Inital Study ATTACHMENT <u>4</u>, 12 A 12 APPLICATION <u>03-0394</u>

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YOUR TOTAL ENERGY SUPPLIER SINCE 1939

P.O. **Box** 144 Kingsburg, Ca 93631 Phone 559-897-8812 **Fax** 559-897-5002

oak Scott

Scott & Associates

September 24,2003

Santa Cruz County Planning Department Ann: Cathleen Carr, Project Planner 701 Ocean Street. Ste 310 Santa Cruz, CA 95060 Fax 831-454-2131

RE. Dassel's application #03-0304

Dear Cathleen:

Jim Dassel and Peter Harrison of Dassel's Petroleum, Inc. have secured my services and background to address several issues brought up by their application process I will be addressing items 2b. 3a and 3b I am very certain **that** the following data shall mitigate your concerns. Before I present my review, it may be helpful for you to know a little about my background.

I have been working in the propane industry for the past 19 years I have been involved in many different aspects of the industry from training new employees to regulatory liaison For eleven years I worked in the ASME, DOT cargo tank manufacturing industry.

Currently, I serve as the consultant to the Western Propane Gas Association on hazardous material issues. I am also an instructor for certified employee training for the Western Propane Gas Association, as well as an instructor for the C.H.P. Propane Transportation Emergency Response Program. In addition, I am an instructor for the California Department of Forestry propane fire safety training class.

I am a member of the U.S DOT (COHMED) group; this is a cooperative effort between DOT enforcement and industry on hazardous material issues In addition, I also serve as a cargo tank instructor for the Transportation Safety Institute I have also written risk management programs for compliance with the clean air act 112 (r) of the U.S. EPA Lastly, Environmental Review Initial Study

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I have done fire safety analysis in Los Angeles, Santa Clara, Solvang, Los Banos and Susanville. serving both commercial and rural settings

Currently my company *is* a consultant to several companies in the industry concerning driver training, bulk plant design, driver records and vehicle information files and maintenance tracking and fire safety programs.

I have reviewed the questions that have been raised by the Santa Cruz County Planning Department. When you talk of blast and fireball radius, I believe the best modeling would be *to* use what the EPA supplied to the propane industry during the EPA Risk Management Program in 1999, *in* which propane facilities were removed from the reporting requirement. In their review the EPA determined with the prudent use of the sa equipment and proper training at a propane facility there was no risk posed to those located outside the facility property lines. If you were to look back at the program, we were *to* calculate the single largest container in the facility: which in this case would be 30,000-gallons. The modeling shows that on a worse case scenario such as a blast and radiant heat, there would be a factor of **225** yards. Once again this information was part of the Risk Management Program.

In regards to the questions you have outlined, I will be addressing the following questions Health and Safety 2b, and Public Response 3a, 3b.

Question 2b response:

With respect to the question, "would a catastrophic failure of one container involve the other and what would be the blast radius." In the mid 1970's in Woodriff Utah, propane facility had installed two 30,000-gallon tanks. *One* of the tanks was mistakenly installed with undersized relief valves, not meeting code requirements. One night a fully loaded cattle truck ran off the road and bit the container with the undersized valves, subsequently **a** fire developed and the container had direct flame impingement. The local fire department was stationed over an hour away resulting in a bleve some time later. The reason I looked into this incident *is* that the remaining 30,000-gallon tank was located just 5 feet away from this tank involved in the incident as allowed hy the code and it did not receive any damage in fact they were using it the next day to fill bobtails, Due to this incident the National Fire Protection Association started the process of

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introducing the concept of Total Product Control. This type system is designed with the concept of managing the product in a way that requires that a system he installed with a number of redundant safety valves that are not only manual operated hut have also been designed with thermal activation release point designed into them. If they fail they are to fail into the closed position, which will stop product flow from exiting the container. One of the valves used in this design is referred to as a product internal valve, which is placed in the tank and is equipped with excess flow capabilities and thermal protection. This valve will be used in all product loading and unload lines leading to and from the proposed container. This is one of the key valves in this design. The second valve that will he used in the design is an emergency shutoff valve, which is located at the loading, and unloading bulkhead, this value also can be operated manually and it has thermal protection built into it as well. The approach of National Fire Protection Association code #58 with respect to L.P. Gas facility safety is to minimize the release of the product and thereby reducing and mitigating the potential hazard to life and property. Therefore, the National Fire Protection Association Code has emphasized the need to provide Total Product Control Systems (to the best extent possible with technology and procedures) thereby eliminating hazards if an accidental release occurs. These requirements and the industry practices arising from them are as follows. The NFPA 58 requirements for product release control rely in part upon a number of different types of valves in the product storage containers, piping network and at liquid transfer locations. The valves include the positive shut off valves (both automatically operated as well as manually operated) hack flow check valves, excess flow valves, internal valves, emergency shut off valves, hydrostatic pressure relief valves, container pressure relief valves, etc. In general the valves are normally closed and are opened only when product transfer is taking place. In addition, the more critical valves require automatic shutoffs when either a fire (or heat is sensed or when other abnormal conditions occur, such as a break at the valve itself. Fixed product transfer piping systems are required to he protected by hydrostatic relief valves. They are to be installed where liquid can be isolated between two positive shutoff valves. This is done to protect the piping from becoming over pressurized a hack flow check valve and or an emergency shut off valve in a liquid line. The emergency shut off valve is required to be installed within 20 feet of the nearest hose or swivel type connection and is to he so located such that if a hose separation or pipe break occurs (due to a vehicle pull-away), the break is on the hose side of the connection while the valves and piping on the plant tank side are not affected. This is Environmental Review Inital Study generally achieved by ATTACHMENT 5

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providing a bulkhead through which the transfer piping is passed. The bulkhead is the location of the connections between the cargo tank truck hose and the facility piping, The transfer piping on the hose side is designed with a mechanical weakness (so that in case or a truck pull-away, the breakage occurs on the hose side of the bulkhead). The emergency shut off valve is also required to be installed with a thermal element in the valve or a supplemental temperature sensitive element (maximum 250° F) connected to actuate the valve and installed at a distance not greater than 5 feet from the nearest end of the hose or swivel-typing piping. In addition, an emergency shut off valve is required to be provided with a manual activation device that is clearly identified and easily accessible for manual operation, normally air or nitrogen activated. This manual activation device is to be located not less than 25 feet and not more than 100 feet in the path of egress from the emergency shut off valve. In addition to the valve equipment requirements discussed above, Section 3.11 of the National Fire Protection Association Code #58 permits the use of redundant failsafe product control measures and low emission transfer concepts for the purpose of enhancing safety and to mitigate distance and special protection requirements. These requirements for redundancy include such components as the use of internal valves, having remote and thermal activation in liquid withdrawal and vapor withdrawal openings of the container. In addition, internal valves shall he closed except during periods of operation. Futhermore, the requirements include the automatic system shutdown of all primary valves (internal valves and emergency shut off valves) through thermal actuation and remote shutdown capability, including switching off electrical power to the transfer equipment and primary valves. Lastly, the emergency shut down stations are to be identified by signage of large letters so that it is visible from the point of transfer. Based on the safety system design, the set back distance of a facility or a container of this size would be 50 feet from any important buildings or properly lines that maybe built upon. This standard has also been adopted and listed as guidance in the Uniform Fire code in standard 82 table 3-2.2.2 and it also states that a distance of 5 feet between containers is required.

To further assess the probability, I have reviewed information contained in a written report sent to the American Society for Testing and Materials on fire hazard and risk assessment I have reviewed the modeled two events, one of which involves a major rupturing of the *tank* (see attached model information), When you review the information it refers to the use of an emergency shutdown system and the effectiveness of such a system, based on the design as outlined in the National Fire Protection Association which is the guidance that is used by fire departments throughout the United States to review such an installation, which has been

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used to design and build this facility. It is very unlikely that this event would ever take place which would involve the entire container. The probability table in the report reveals such an incident may occur between 32 to 100 years during the lifetime of the plant. Although, it must be looked at from a worst case scenario, I have chosen to review an event that is more likely to occur during the life of the plant and that would be a hose failure. The failure rate data for the rupture of flexible hoses are dependent upon the age of the hoses, how the hoses are stored and handled, frequency of inspection and testing and operator training. From the review of historical incidents, the primary factors contributing to accidental release of LP Gas from hose failures are, bursting of hose due to improper connections, rupture of hose from failure of the operator not disconnecting hose prior to pulling away and leakage from a defective hose. The data is extracted from the U.S. EPA information compiled from hazardous material spills. Because there is a large human error implicitly in this data conservative judgment was applied in selecting case boundary failure probability of one (1) hose failure, per 10 years of usage based on 250 times usage per year (see attached modeling). Note that all modeling was done with the use of the EPA Aloha 5.2.3 modeling program.

Question 3ab response:

Regarding the distance to the State Park employee housing and the California Highway Patrol office and the concern of damage or injury from a blast at the propane storage container. The information from the hose scenario showed it would affect an area of 63 yards from the tank that is a distance of 189 feet and the housing is outside this area. The second tank located on the property is located 200 feet away from the proposed location and would not be affected. My only concern would be the heads of the tanks should not pointing at one another. I cannot foresee any safety issues with this site. Even if there were a fire at one container, the heat would not be enough to affect the other container to the point *to* cause a failure of the **tank**. By installing the Total Product Control System described there would not be enough fuel in the piping to supply a fire for a long enough period to heat the tank to a critical point. If we were to look at the requirement listed in the fire code with respect to fire protection, the amount of water that would be required would be 500 gallons per minute to cool the container in which the flames are impinging upon. Currently the water storage that is located on site is in excess of 300,000 gallons coupled with two standby pumps and motors

Environmental Review Inital Study ATTACHMENT 5 APPLICATION 03-030

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September 26, 2003

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The two internal combustion engines and 6' pumps will provide more than enough water supply and pressure to satisfy fire department needs. This system would be more than adequate to protect this facility. Furthermore, there is an estimated response time of the fire department of only three minutes from the responding station which is located 1.1 miles away. With respect to the location of the houses and surrounding offices, that are currently adjacent to the locations, it should be noted that the usage is consistent with the current zoning for his location. An installation such as this must go through extensive inspection programs not only from the local Fire Marshall's office but the State of California Department of Industrial Relations to insure compliance with the California Health and Safety Code in Title S. Each agency must approve and permit the container, piping systems, fencing and crash post protection before product is placed into it and then every three years there must be an update inspection of the facility. The LP Gas stored on site is anon toxic gas and requires no special protective equipment when it is being handled, in fact there are many schools and hospitals and housing developments in California that use propane as an energy source and store it in containers of the same size without affecting property values or the health and safety of the people living and working in the area. I find it interesting to note. that the State of California is one of the largest consumers of L.P. Gas (propane) in the state with literally thousands of propane tanks at State Beaches and Parks, Cal Trans, C.H.P., Forestry camps, residences; offices, shop-maintenance facilities, etc. to name a few. Propane has, and will continue to serve the clean air energy needs of the North Santa Cruz County areas of society and commerce affordably, efficiently and safely. The proposed bulk tank storage installation is intended to provide immediate access and service to businesses and backup emergency generators, agricultural uses and rural residences beyond natural gas line and electrical line reach located in the greater North Santa Cruz County areas.

In conclusion, although the concern expressed in questions 2b, 3a and 3b presumably seem to be warranted and are fair questions. I feel Dassel's Petroleum, Inc. has more than mitigated any potential exposure. The installation will be a state of the art facility: installed to meet the code requirements listed in the National Fire Protection Association Code #58, the Uniform Fire Code Standard 82 and the California Industrial Relations Code Title 8 and shall be finally inspected and permitted by qualified State Division of Industrial Safety Engineers. This code is charged with permitting all pressure vessels located and used within the state. In addition the project meets all zoning requirements, and is consistent with the existing usages on the property and is in fact an amendment to an existing use permit #84-

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SITE DATA INFORMATION;		i
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FCOTPRINT INFORM Model Run: Hea User-specified Max Threat Zon	MATION: avy Gas d LOC: equals IDLH (2100 ppm) he for LOC: 224 yards	
yards		,



559 897 5002

P.9

Footprint Window ALOHA® 5.2.3 Time: September 11, 2003 1545 hours PDT (user specified) Chemical Name: PROPANE Wind: 5 mph from sw at 3 moters FOOTPRINT INFORMATION: Model Run: Heavy Gas User-specified LOC: equals IDLH (2100 ppm) Max Threat Zone for LOC: 63 yards Note: Footprint was not drawn because effects of near-field patchiness make dispersion predictions unreliable for short distances.

Model Run: Heavy Gas

User-specified LOC: equals IDLH (210(Max Threat Zone for LOC: 63 yards Note: Footprint was not drawn because near-field patchiness make dispersi unreliable for short distances.

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p.10 559 897 5002 Scott & Associates Sep 18 03 11:18a Text Summary ALOHA@ 5.2. -----SITE DATA INFORMATION: Location: FELTON, CALIFORNIA Building Air Exchanges Per Hour: 0.51 (unsheltered single storied) Time: September 11, 2033 1545 hours FDT (user Specified) CHEMICAL INFORMAT ION : Chemical Name: PROPANE Molecular Weight: 44.10 kg/kmol TLV-TWA: -unavail- IDLH: 21 Footprint Level of Concern: 2100 ppm IDLH: 2130 ppm Boiling Point: -43.67" F Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.03 ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 mph from sw at 3 meters Inversion Height: 125 feet Stability Class: C Air Temperature: 55" F Relative Humidity: 50% Ground Roughness: urban or forest Cloud Cover: 5 tenthe SOURCE STRENGTH INFORMATION: Direct Source: 80 pounds/min Source Height: 0 Release Duration: 10 minutes Release Rate: 80 pounds/min Total Amount Released: 800 pounds Note: This chemical may flash boil and/or result in two phase flow. FOOTPRINT INFORMATION: Model Run: Heavy Gas User-specified LOC: equals IDLH (2100 ppm) Max Threat Zone for LOC: 63 yards Note: Footprint was not drawn because effects of near-field patchiness make dispersion predictions unreliable for short distances. TIME DEPENDENT INFORMATION : Concentration Estimates at the point: Downwind 250 feet Off Centerline: 250 feet Note: Conc/Dose pictures not drawn because there is no significant concentration/dose at the point selected. Environmental Review Inital Study ATTACHMENT 5 1/ of 12 APPLICATION 03-0304 EXHIBIT Ð

SCOLE & USSUEIDLES ach 10 02 11:139 oncentration Window — — OHA® 5_ ····· Time: September 11, 2003 1545 hours PDT (user specified) Cnemical Name: PROPANE Building Air Exchanges Per Hour: 0.51 (unsheltered single storied) TIME DEPENDENT INFORMATION: Model Run: Heavy Gas Coccentration Estimates at the point: Downwind: 250 feet Off Centerline: 250 feet Note: Conc/Dose pictures not drawn because there is no significant concentration/dose at the point selected.

Note: Conc/Dose pictures not drawn because there is no significant concentration/dose at the poin







Environmental Review Inital Study ATTACHMENT 6, 2 4 3 APPLICATION 03-0304

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HARO, KASUNICH AND ASSOCIATES, INC.

CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

Project No. SC8461 28 January 2004

MR. JIM DASSEL Dassel's Petroleum Inc. 31 Wright Road Hollister, California 95023

Subject: Geotechnical Investigation

Reference. Dassel's Petroleum, Inc Storage Yard 5843 Graham Hill Road Felton, California

Dear Mr. Dassel:

In accordance with your authorization, we have performed a site specific geotechnical study for the referenced project in Santa Cruz County, California.

The accompanying report presents our conclusions and recommendations, and the results of the geotechnical investigation on which they are based.

Our investigation indicates that the site soil conditions are suitable for the proposed development provided the recommendations presented in this report are followed and incorporated into the plans and specifications. It is our opinion that conventional spread footing foundations can be used for this project.

If you have any questions concerning the data or conclusions presented in this report, please call our office.

Very truly yours,

HARO, KASUNICH & ASSOCIATES, INC.

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JAH/dk

Copies: 4 to Addressee 1 to Roger Grimsley & Associates, Inc.

Environmental Review Inital Study ATTACHMENT_ APPLICATION 03-030h

116 EAST LAKE AVENUE • WATSONVILLE, CALIFORNIA 95076

(831) 722-4175

Although in consideration of the site subsoil characteristics, it is presumed settlement would tend to be relatively uniform but should be anticipated to be differential. For design purposes differential settlement equal *to* the maximum compacted settlement should be considered, or about 1-inch in ten (10) feet. Note, calculated settlement is 2.75, therefore considering footing spacing of 28 feet center-to-center, the 1-inch in 10 feet is considered a reasonable assumption.

Building Code Seismic Information

Selection of the appropriate seismic design parameters for the tank structure should be made by the project civil engineer.

Based on the subsurface soil conditions encountered and local seismic sources, the site may be characterized for design based on Chapter 16 of the UBC using the information provided below. We have assumed seismic design will be in accordance with Chapter 16.

Categorization/Coefficient	Design Value
Soil Profile (Table 16-J)	S _D (stiff soil)
Seismic Zone (Figure 16A-2)	4
Seismic Zone Factor, Z (Table 16-I)	0.4
Seismic Source Typ (Table 16-U)	В
Near Source Factor Na (Table 16-S)	1.0
Near Source Factor Nv (Table 16-T)	1.0
Seismic Coefficient Ca (Table 16-Q)	0.44 Na
Seismic Coefficient Cv (Table 16-R)	0.64 Nv

Environmental Review Initial Study ATTACHMENT 7 2014 APPLICATION 03-0304

The active near-source fault used in this analysis is the Zayante-Vergeles Fault 9.7 km from the project site.

Flooding

The project civil engineer should be consulted on the potential for localized flooding at the subject site. The review should also include a determination of whether the site falls within the 100 year flood plain elevation.

Discussions with Mr. Grirnsley indicate the project site is at elevation 261 feet Mean Sea Level. This being the case, if a 100 year rainfall cycle were to occur, the site would be marginally influenced by flood waters. From a geotechnical viewpoint, the potential for erosion would be low (note, the areas are pavedlrocked).

Loose/Compressible Materials

The relatively loose alluvial materials at the site are typically less than 15 feet in thickness. In general, these sandy soils will compress as the dead loading is applied. And as discussed elsewhere, dynamic settlement (earthquake loading) is also possible. We anticipate total settlement due to dead plus live loading conditions and that due to seismic events will not be materially greater than that predicted for dynamic settlement.

> Environmental Review Inital Study ATTACHMENT <u>7 3 of S</u> APPLICATION <u>03-03 of</u>

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

<u>Genera</u>l

Based on the results of our investigation, it is our opinion that from a soil engineering standpoint the project can be made compatible for the proposed propane tank and pumping facility. The recommendations presented in this report should be incorporated in the project design and construction.

The most significant geotechnical issues that potentially can affect the design and construction of the proposed improvements are:

- 1) Settlement due to liquefaction; and
- 2) Settlement due to compressibility of the native alluvial soils.

These issues and their consequences are discussed below.

Settlement Due to Liquefaction/Dynamic Compaction

There is a potential for liquefaction to occur in the near surface layer of silty sands if a rise in the groundwater was to occur. Should the groundwater level rise to within 10 feet of ground surface elevation 251 feet, the layer is approximately3 to 5 feet. The consequence is 0.50 inch settlement.

Environmental Review Inital Study ATTACHMENT + APPLICATION 03

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On the other hand, dynamic compaction of the soils above the water table are predicted to compress greater than the settlement due to liquefaction. The settlement of unsaturated sands are calculated to settle approximately 2.7 inches over the 15 foot layer above the existing groundwater table.

It should be understood that dynamic compaction and liquefaction would only occur if strong ground shaking occurs. Liquefaction potential is greatest only if the groundwater table was to rise. Haro, Kasunich and Associates did not perform a risk analysis of the probability for concurrent high ground water and strong ground shaking events.

We have discussed the assumptions and the probabilities assumed in our analysis with Roger Grimsley. **RG&A** are aware of and believe the risks inherent at the site are not detrimental to the project and fall within tolerable limits.

Compressibility Due to Dead Loads

Long term settlement of alluvial strata under the anticipated new project static loads and footing size *of* 10' by 3.5' is estimated to be approximately 1.0 inch. Differential settlement is estimated to be less than I-inch across a distance of 28 feet (center-to-center spacing of footings). We estimate that 90 percent of the settlement would occur within a relatively short period after the dead loads are applied.

1. A design friction factor of 0.30 may be used for sliding resistance of the foundation elements against the soil. A passive pressure of 100 pcf (equivalent fluid pressure) may be used in conjunction with sliding resistance to counter lateral pressures transmitted to

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the soil. For design purposes, neglect the passive pressure developed in the top 1 foot of soil.

Site Preparation

In order to prepare the subgrade for foundation support, we recommend the following:

2. Strip all grass, organic material or debris from the building areas. We estimate the depth of stripping required will be about 1 to 3 inches. The intent is to remove the vegetation and debris, but as little soil as possible.

3. For subgrade preparation of paved areas scarifying the top 12 inches and compact it with heavy compaction equipment (we suggest a large vibratory roller or rubber tire roller) to at least 95 percent relative compaction. Iffinish grade requirements require engineered fill, fill to subgrade elevation with the excavated sandy soil, or with comparable imported soil. Place and compact in layers approximately 6 inches thick, to 95 percent relative compaction.

4. The plans indicate the footing depth is two (2) feet below grade. We recommend the bottom of the footing pad be compacted to 95 percent relative compaction. The compacted layer should be 12-inches thick.

5. Compaction requirements are based on ASTM Test Method D1557-78.

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Project No. SC8461 28 January 2004

6. The soil engineer should be notified at least four (4) working days prior to any site clearing *or* grading so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation of the stripping and grading operations can be made.

Foundation Considerations

On the basis of the field test data and our findings of the geotechnical-related engineering analysis regarding liquefaction potential and its consequences, it is our opinion the proposed propane tank can be supported on conventional spread footings bearing on compacted earth material as described under soil preparation.

The footings should be founded at least 24 inches below the lowest adjacent subgrade. The allowable soil bearing capacity is 1,000 psf for dead load 1,250 for dead plus live loads and 1,500 psf for total loading conditions that include temporary loads.

Utility Trenches

7. The excavated native soil may be used for backfill. In areas under pavements, the structure, or other areas where good compaction is desired, we recommend that the backfill be conditioned to near optimum moisture content, placed in layers not thicker than 8 inches, and compacted by tamping or rolling to at least 90 percent relative compaction and 95 percent relative compaction in the upper one foot. We do not believe that jetting would provide a reliable method of obtaining good compaction.

Environmental Review Inital Study ATTACHMENT_7 APPLICATION 03

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GRIMSLEY & ASSOCIATES ENGINEERING INC. 1000 SAN BENITO STREET HOLLISTER, CA 95023 (831) 636-1104 FX(831) 636-1837 e-mail grimsleyassociates@hollinet.com

February 2, 2004

Planning Department County of Santa Cruz 701 Ocean Street 4th Floor Santa Cruz, Ca. 95060

Attention: Paia Levine Deputy Environmental Coordinator RE: Dassel Petroleum Inc. Application No 03-0304

Reference to your December 4, 2003 letter, we have calculated the scouring potential of the elevated tank at the location shown on the site plan dated 6-18-03. Based upon our calculations, the scouring potential is very low due to the open flat area between the easterly bank and the trees along the eastside of the San Lorenzo River. The cross section width of the flood area at the elevated tank is 1625 feet. The flood capacity of the cross section is significantly greater then the 100 year flood event. We have calculated only that portion that is open and without obstruction such as trees and shrubs. The hydraulic pressure from the 261.00 flood elevation has been evaluated on the two concrete pedestals. The friction resistance of the concrete embedded footing exceeds the lateral force against the two pedestals. (See calculations). Liquidfaction potential calls for a differential settlement of 2.75". This translated in to a tilt angle of 0" 13' 35". This is nominal and very minor for the 56 foot long tank.

Based upon our analysis and evaluations the elevated tank is adequate to withstand any scouring potential and hydralic pressure of the San Lorenzo River.

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If you need any additional information or supporting documents please call our office

Sincerely, ms 67 File: dassel's pet application telton 020204 Date: 02/02/04 TG

13-0304

Environmental Review Inital

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General Plan Map





MONTEREY BAY

Unified Air Pollution Control District serving Monterey, San Benito, and Santa Cruz counties AIR POLLUTION CONTROL OFFICER Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

DISTRICT BOARD MEMBERS

CHAIR Ellen Pirie Santa Cruz County

VICE CHAIR Jack Barlich Del Rey Oaks

Anna Caballero Salinas

Lou Calcagno Monterey County

Tony Campos Santa Cruz County

Bob Cruz San Benito County

Tony Gualtieri Capitola

Edith Johnsen Monterey County

Butch Lindley Monterey County

Arturo Medina San Juan Bautista

John Myers King City August 6,2003

Cathleen Carr County os Santa Cruz Planning Department 701 Ocean St., Suite 400 Santa Cruz, CA 95060-4073

SUBJECT: PROJECT REFERRAL FOR PROPANE BULK TANK

Dear Ms. Carr:

Staff has reviewed the referenced document and has no comments.

Thank you for the opportunity to review the document. Please do not hesitate to call if you have any questions.

Sincerely,

Genran

Janet Brennan Supervising Planner Planning and Air Monitoring Division

COUNTY OF SANTA CRUZ DISCRETIONARY APPLICATION COMMENTS

Project Planner: Cathleen Carr Application No.: 03-0304 APN: 066-211-07 Date: May 26. 2004 Time: 10:09:14 Page: 1

Environmental Planning Completeness Comments

NO COMMENT

Environmental Planning Miscellaneous Comments

----- REVIEW ON AUGUST 15, 2003 BY JESSICA L DEGRASSI ------Must meet all FEMA requirements by anchoring the tank to resist hydrostatic forces for the 100-year flood levels.

Environmental Health Completeness Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

Environmental Health Miscellaneous Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

Felton Fire Department Completeness Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

NO COMMENT

Felton Fire Department Miscellaneous Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

NO COMMENT

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GRIMSLEY & ASSOCIATES ENGINEERING INC. 1000 SAN BENITO STREET HOLLISTER, CA 95023 (831) 636-1104 FX(831) 636-1837 e-mail grimsleyassociatéséhollinet.com

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NOV. 1917 2003 FAX NO -213 Date: TIME: 10:30 AM.

TRANSMITTED TO: KATHLEEH CARR

ATTENTION:

ROGER A.GRI FROM:

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COMMENTS:

TOTAL OF PAGES:

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL OUR OFFICE.

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February 2, 2004

Planning Department County of Santa Cruz 701 Ocean Street 4th Floor Santa Cruz, Ca. 95060

Attention: Paia Levine Deputy Environmental Coordinator RE: Dassel Petroleum Inc. Application No 03-0304

Reference to your December 4, 2003 letter, we have calculated the scouring potential of the elevated tank at the location shown on the site plan dated 6-18-03. Based upon our calculations, the scouring potential is very low due to the open flat area between the easterly bank and the trees along the eastside of the San Lorenzo River. The cross section width of the flood area at the elevated tank is 1625 feet. The flood capacity of the cross section is significantly greater then the 100 year flood event. We have calculated only that portion that is open and without obstruction such as trees and shrubs. The hydraulic pressure from the 261.00 flood elevation has been evaluated on the two concrete pedestals. The friction resistance of the concrete embedded footing exceeds the lateral force against the two pedestals. (See calculations). Liquidfaction potential calls for a differential settlement of 2.75". This translated in to a tilt angle of 0° 13' 35". This is nominal and very minor for the 56 foot long tank.

Based upon our analysis and evaluations the elevated tank is adequate to withstand any scouring potential and hydralic pressure of the San Lorenzo River.

If you need any additional information or supporting documents please call our office.

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File: dassel's pet application felton 020204 Date: 02/02/04 TG

Page 1 of 1





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February 3,2004

Santa Cruz County Planning Department Deputy Environmental Coordinator Paia Levine 701 Ocean Street Santa Cruz, CA 95060

RE: Application No. 03-0304. (Dassel's Petroleum, Inc., Red Tree Project)

Dear Ms. Levine:

Within the framework of your December 4th letter requesting additional information please find following as requested.

1. GEOTECHNICAL REPORT

We have employed the services of Haro, Kasunich & Associates, Joe Haro to provide the information requested. The potential issues have been mitigated. Please see attached report.

2. CONTOUR LINE

Roger Grimsley of Grimsley & Associates has provided an updated plot plan and modified pier drawing providing information as requested. Although the entire Red Tree parcel is quite large, we *are* only leasing the described location. We simply do not have the option to set our storage at another location on the parcel. Once again, we feel we have in fact mitigated any issues and concerns and meet all code requirements. Please see attached report.

3. TRUCK TRIPS

A. Dassel's has provided the number of truck trips per month/week in our original application, July 28, 2003, under our statement of operation, page four. We anticipate four bobtail truck trips **per** day and one transport trip per day.

B. i have no idea how many truck trips are generated by the existing tank which is owned and operated by Coast Gas. That information is considered confidential and priority as Coast Gas is a competitor.

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4. SCOTT AND ASSOCIATES

Please review a *summary* of the phone conversation between you and Robbie Scott. We *are* pleased to report he was able to address your questions.

In conclusion, should you have any further questions of me or any of our consultants, please do not hesitate to contact me or them. Yes, we **are** anxious to keep our project moving along **as** expediously as possible. Thank you for your cooperation.

Sincerely, Van P. Massel 6

James P. Dassel Dassel's Petroleum, Inc.

cc Cathleen Carr, Planner Jose DeAnda, Environmental Health Services

EXHIBIT a



March 16,2004

County of Santa Cruz Planning Dept. 701 Ocean Street, 4th Floor Santa Cruz, Calif. 95060

Attn: Cathleen Carr, Staff Planner Paia Levine, Environmental Coordinator

Re: Dassel's Petroleum, Inc. Project APN:066-211-07

Hello Cathleen and Paia

I have reviewed the initial environmental, review study and have some comments concerning the review.

1. Under the negative declaration mitigation:

Item A – we will resubmit engineered, calculated drawings to raise the pier stem wall five feet above grade. This work will be done by Roger Grimsley of Grimsley and Associates.

Item B – I have asked Joe Haro, of Haro, Kasunich and Associates, Inc., to report to me the amount of fill over native soil. This information will be provided from core samples and analysis that were taken on the site from our geotechnical investigation. Primarily, it appears our pier footings are only going to be 24" below grade, thereby, not contributing to potential underground d sturbance of archaeological resources. That being said, would it still be necessary to submit an archaeological survey?

2. Page 4, Geology and Soils, item #4 – request that an erosion control plan will be required. We will only be displacing a small amount of soil for our (2) pier footings approximately 2 feet deep x 10 feet x 10 feet. The surface is level and most likely the soil will be compacted on site under the supervision of Haro, Kasunich and Associates. Is this still going to be necessary?

YOUR TOTAL ENERGY SUPPLIER SINCE 1939

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- 3. Page 5, Hydrology, B, 1, request that the tank will need to be secured with cables over the top. Our original calculated, engineered drawings provide anchor chairs, securing the piers to the tank. Wouldn't this request be redundant? Cables over the tank tend to be abrasive to the tank surface, causing corrosion between the tank shell and the cable. Please review the anchor/chair approach as provide additional calculations to verify that the tank would be more than adequately secured to the piers.
- 4. Page 13, I Noise, 1, we don't have a problem with the restrictions with respect to our neighbor's. We originally intended to have normal working hour operations. In extreme cold weather, when propane is in greatest demand we may need to utilize the facility between 9:00 p.m. and 7:00 a.m. on rare occasions. Would this be considered *an* emergency situation?
- **5.** Lastly. could you please let me know the status of the (CEQA) process at the State of California? In addition, any idea when a date for our public hearing may be made available? After, you review these question:;, please let me know your thoughts.

Sincerely,

James P. Dassel Dassel's Petroleum, Inc.

Cc: Roger Grimsley, Grimsley and Associates Joe Haro, Haro, Kasunich and Associates Rob Scott, Scott and Associates



May 10,2004

county of Santa Cruz Planning Department Attn: Cathleen Carr 701 Ocean Street, 4th Floor Santa Cruz, CA 95060

RE: Dassel's Petroleum, Inc. APN 066-211-07

Hello Cathleen:

Within the framework of our discussions please find final issues to clarify:

A. NOISE, HOURS OF OPERATIOV

On the issue of hours of operation, we appreciate the extension of time to 10:00p.m. Please understand we want to respect the concerns of our neighbors.

It is probably appropriate to discuss what constitutes **an** emergency. First however, please let me emphasis any activity at the storage site after normal business is to be extremely rare. That being said, during extremely cold weather there may be **a** need to operate the facility in order to service our accounts, who rely on propane for cooking, water heating, heating and generating electricity. Normally, of course this is in the winter time when bad road conditions compound the delivery challenges and fuel supplies can be tight. So flexibility on storage use is important.

B. EROSION CONTROL PLAN

(See attached plan, Grimsley and Associates).

C. CABLING OF TANK

(See attached letter, comments, Grimsley and Associates).

D. HYDROLOGY

(See attached, modified drawing, Grimsley and Associates).

YOUR TOTAL ENERGY SUPPLIER SINCE 1939

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E. HAZARDOUS MATERIALS PLAN (See Attached)

I believe this should mitigate all of the issues discussed. Should you have any further questions please do not hesitate to call. As soon as the staff report is completed, a copy would be appreciated for public hearing preparation.

Sincerely,

and laster

James P. Dassel Dassel's Petroleum, Inc.



YOUR TOTAL ENERGY SUPPLIER SINCE 1939

GRIMSLEY & ASSOCIATES ENGINEERING INC. 1000 SAN BENITO STREET HOLLISTER, CA 95023 (831) 636-1104 FX(831) 636-1831 e-mail grimsleyassociates@hollinet.com

May 6, 2004

Jim Dassel Dassel's Petroleum 31 Wright Road Hollister, Ca. 95023

> RE: Project Apn 066-211-07 Graham Hill Road Felton California

Dear Jim,

Enclosed please find the revised site plan delineating the erosion protection around the footing **of** the pedestal supports for the 30,000-gallon tank. The straw rolls will be installed during construction and maintained until the finish grading is completed.

In addition, we are enclosing our structural calculations of the tank attachment to the concrete pedestal piers. As you can see from the calculations, the attachments provide 84 KPS of lateral resistance and 125.4 KPS uplift resistance. This is greater than the lateral force necessary for seismic events. The anchorage will eliminate the need for cables over the tank.

Finally, we have revised the concrete pedestal piers and footing supports for the 30,000-gallon steel tank. The piers are raised so the bottom of the tank will be 5'-6' above the ground elevation. This will satisfy the FEMA requirements of **1'-0"** foot above the flood elevation of the 100-year storm event.

Please review our revised site plan and structural calculations. If you need any further details or supportive data, please contact our office.

Sinderely, Roger A. Grimsley Grimsley & Associates RCE 23003

File: dassel's pet letter 050604 Date: 05/06/04 TG Page 1 of l





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