

## Project Greenhouse Gas Emissions (GHG) and Reductions Summary

The Draft Napa County Climate Action Plan requires that staff calculate the GHG emissions of all discretionary projects in the year 2020 assuming "business as usual" (BAU) conditions. Below is a description of BAU, target emissions if the CAP were to be adopted, and GHG reductions from state, local, and project level actions.

<b>Project Name:</b>	Safe Harbor P13-00009	<b>Target Build-Out Year:</b>	2020
<b>Project Summary</b>	<b>As modeled:</b> 60,560 sq.ft light industrial; 1,319 sq.ft. office; 40 new parking spaces; 51,351 sq.ft. of new impervious (roads and driveways); 10 new FTE; connection to City of Am. Can. For water.		
<b>Project level actions:</b>	connects to NSD reclaimed water for landscape; 10 bike parking; 0.42 acres of grassland; EV charging station; pre-wired for solar; mechanical night cooling; build to Title 24 Tier 2		

### A. PROJECT'S BAU EMISSIONS IN 2020

	<b>424</b>
Energy	97
Mobile	321
Water & Wastewater	2
Solid Waste	5
Land use Change	9

### B. EMISSIONS REDUCTIONS NEEDED TO MEET TARGET

*Target Emissions - 38% BAU Emissions in 2020*

<b>161</b>
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### C. GHG REDUCTIONS FROM STATE LEVEL PROGRAMS

	<b>80</b>
Energy	13
Mobile	67
Other	TBD
Land Use Change	-

### D. GHG REDUCTIONS FROM LOCAL PROGRAMS AND PROJECT LEVEL ACTIONS

	<b>9</b>
Energy	6
Mobile	
Other	3
Land Use Change	0.02

Total Stock at 100 years (Reference): **2.16**

### E. TOTAL GHG REDUCTIONS IDENTIFIED

*State + Local + Project (D + E); Compare to Box C above*

<b>89</b>
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### F. ADDITIONAL GHG REDUCTION OR MITIGATION REQUIRED

*Balance of reductions needed to reach target (C-G)*

<b>72</b>
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### G. PERCENTAGE OF REDUCTIONS IDENTIFIED

<b>21%</b>
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A Tradition of Stewardship  
A Commitment to Service

## Data request for analysis of operational characteristics for Residential, Commercial, or Industrial projects

The Napa County Climate Action Plan requires that staff calculate the GHG emissions of all discretionary projects assuming "business as usual" (BAU), and that applicants reduce those emissions by 38%. This checklist identifies the data needed to complete the required calculations and allows applicants to select the emissions reduction measures they wish to use. Applicants may retain consultants to prepare their own calculations if desired. Default calculations will be based on thresholds derived from California Air Pollution Control Officers Association (CAPCOA) and Bay Area Air Quality Management District's CalEEMod model, as well as standard factors for vegetation removal and retention/replacement.

### Contact Information:

Name of project: <u>Safe Harbor II</u>	Project Number:
Project address & APN: <u>057-210-032</u>	
Primary contact name(s): <u>Beth Painter</u>	
Contact e/mail: <u>beth@bpnapa.com</u>	Phone: <u>707-287-9089</u>

### Part A: Business As Usual (BAU)

#### 1. Input for new construction or operations (or change in land use type)

Land Use Type	# of units	Square Footage removed	Square Footage Added	# of Full-time equivalent employees (use 0.5 for part-time)	
				Mon-Fri	Sat & Sun
Dwelling unit					
Warehouse			59745	8	8
Light Industrial (winery production)					
High quality restaurant (tasting room)					
Retail					
Office			1694	2	2
Other (please explain)					
Total			61439	10	10

#### 1.1 Input if you are a winery, if not, skip this section.

##### Visitation - Daily Tours and tasting N/A

	Tours and tasting	# of guests Mon-Fri	# of guests Sat & Sun	Total number of guests per	Number of days closed	Total number of guests per year
Proposed						
Existing						
Net change of tours and tastings						

##### Visitation - Special events and marketing N/A

Proposed Total Marketing Plan			Existing Marketing Plan			
# of events/yr	# of guests per event	Subtotal	# of events/yr	# of guests per event	Subtotal	Total Net Change (Proposed - Existing)



Total proposed annual visitation			Total existing annual visitation			
Net change of annual visitation						

## 2. Site Development

	Acres removed	Acres planted	Net Change
Vegetation type			
Coniferous Forest	-	-	
Oak Woodland	-	-	
Riparian Woodland	-	-	
Shrub	-	Landscape Plan-see attached plans	
Vineyard	-	-	
Other (please explain) Grasses	2.97	0.42	2.55
Already Developed area (i.e. asphalt)			
Total acres of land developed	2.97 acres		

New Site Improvements	Amount	Unit
Caves		Square feet -
Grading		Square feet
Roads		Square feet -
Parking		Square feet 7,522
Hardscape (anything paved)		Square feet 43,829
Landscape		Square feet 18,356
Total square footage of site improvements		Square feet 69,707
Size of new or expanded wastewater lagoons		Square feet -
Amount of new or increased use of groundwater		Gallons per year -
on site garden for cultivation of food?		Square feet -

## Part B: Emission Reduction Measures

		amount	unit	yes	no
Operations					
1	If the project is a winery is your existing winery a Napa Certified Green Winery?	N/A			
2	If you are a new winery, have you applied to be a Napa Certified Green Winery?	N/A			
3	Do you intend to recycle more than what the local landfill provides, if so what percentage of reduction.	N/A	%	Verify with Civil	
Mobile Vehicle Trips					
4	Does the facility have alternative fuel vehicles in fleet, such as <u>electrical vehicles</u> or alternative diesel?	To be determined	provisions for electric vehicle charging.		
	If yes, what percentage of fleet?	TBD	%		



5	Does your project have bicycle access and parking?	10		x	
6	Does the employer have a employee transportation demand management plan with feasible commute incentives (i.e.: telecommute 1.5 days per week or alternative work schedules? If yes please provide example and percentage of employees that participate.	N/A	%		x
7	Does the employer sponsor a van/pool shuttle for visitors? If yes, what percentage of visitation will use it?	N/A	%		
8	Is the project requesting a parking reduction, if yes what percentage?		%		x
9	Does the parking lot provide a charging station for electrical vehicles? If yes, how many?	2	stations	x	
<b>Energy Use and Generation</b>					
10	Has the facility already installed renewable energy on-site since 2005?	N/A			
	If yes, how much?	N/A	KW hrs.		
11	Does the proposal include installation of renewable energy on-site?	Engineering and provisions for future solar - PV			
	If yes, how much?	unknown	KW hrs.		
	Is it connected to an integrated battery system?	unknown			
12	Does your project have specific heating/cooling demands (such as wine cooling) requirements? If yes, explain: Mechanical night cooling system			x	
<b>Building and Construction</b>					
13	Do you intend to build to Cal Green* Tier 2 1 standards?	Some; see Cal Green sheet			
14	Do you intend to build to Cal Green* Tier 3 2 standards?	Some; see Cal Green sheet			
15	Do you have areas such as a cave, or natural cooling, passive solar that will exceed 2005 Title 24 standards? Explain: Night cooling; mechanical and passive				x
	If so, how many square feet?	60,000	+/- Sq. Ft.		
	What is the percent reduction of 2005 Title 24 standards for that portion?	unknown	%		
16	If the project is a winery, does it propose any energy efficient equipment (i.e.: gravity flow rather than pumping, energy star appliances, etc)? Please list _____	N/A			



If so, ho many annual kilowat hours saved?		N/A	KW hrs.		
<b>Site Development</b>					
17	Does the project intend to restore degraded habitat?	N/A			
If so, how many acres?		N/a	acres		
18	Does the landscape plan include the planting of more than 6 shade trees within 40 feet of the			X	
If so, how many trees?		TBD	trees		
19	Will the project replace more than a 2:1 ratio of trees on site, and if so how many additional?	N/A	trees		X
What specie?		N/A			X
<b>Water &amp; Wastewater</b>					
20	Does the project connect to a munipical water source?			X	
21	Will the project rely on an onsite well?				X
22	How many gallons of water per day is dedicated to domestic water use? See Will Serve letter		g/day		
23	How many gallons of water per day is dedicated to landscape? See Will Serve letter		g/day		
24	Will the project connect to municipal sanitary sewer system?			X	
25	Will the project connect to municipal reclaimed water?			X	
26	Will the project have an on-site septic system?				X
27	If so, how big are the proposed lagoons?	N/a	sq. ft.		
28	Will the project have it's own treatment system? If so, explain: Pre-filter of wash water			X	
Other, Please explain: See attached Use Permit Project Statement for details of project features.					



## Checklist of Voluntary Greenhouse Gas Emission Reduction Measures



A Tradition of Stewardship  
A Commitment to Service

An addendum to the Entitlement Application and a supplement for Initial Studies as required by CEQA

PROJECT NAME	Safe Harbor II		
PROJECT ADDRESS	Technology Way		
APPLICANT	Safe Harbor Partners, LLC		
CONTACT INFO	beth@bpnapa.com	707-289-9089	
	email	phone	

- 1 Have you designed to U.S.G.B.C.™ LEED™ or Build It Green™ standards? yes    no    I don't know  
[ ]    [x] Cal Green  
 If yes, please include a copy of their required spreadsheets.
- 2 Do you have an integrated design team? [x]    [ ]    [ ]  
 if yes, please list: See Attached Exhibit "A"

### 3 SITE DESIGN

- |   |     |     |     |
|---|-----|-----|-----|
| 3.1 Does your design encourage community gathering and is it pedestrian friendly?   | [x] | [ ] | [ ] |
| 3.2 Are you building on existing disturbed areas?   | [x] | [ ] | [ ] |
| 3.3 Landscape Design  |     |     |     |
| 3.31 native plants?   | [x] | [ ] | [ ] |
| 3.32 drought tolerant plants?   | [x] | [ ] | [ ] |
| 3.33 Pierce Disease resistant planting?   | [ ] | [ ] | [x] |
| 3.34 Fire resistant planting?   | [x] | [ ] | [ ] |
| 3.35 Are you restoring open space and/or habitat?   | [ ] | [ ] | [x] |
| 3.36 Are you harvesting rain water on site?   | [ ] | [x] | [ ] |
| 3.37 planting large trees to act as carbon sinks?   | [x] | [ ] | [ ] |
| 3.38 using permeable paving materials for drive access and walking surfaces?  | [ ] | [x] | [ ] |
| 3.4 Does your parking lot include bicycle parking?  | [x] | [ ] | [ ] |
| 3.5 Do you have on-site waste water disposal?   | [ ] | [x] | [ ] |
| 3.6 Do have post-construction stormwater on site detention/filtration methods designed?   | [x] | [ ] | [ ] |
| 3.7 Have you designed in harmony with existing natural features, such as preserving existing trees or rock outcroppings?  | [x] | [ ] | [ ] |
| 3.8 Does the project minimize the amount of site disturbance, such as minimizing grading and/or using the existing topography in the overall site design (such as cave design)? | [x] | [ ] | [ ] |
| 3.9 Is the structure designed to take advantage of natural cooling and passive solar aspects?   | [x] | [ ] | [ ] |
| <u>Solar panels (future), night cooling</u>   |     |     |     |

### 4 ENERGY PRODUCTION & EFFICIENCY

- |  |     |     |     |
|--|-----|-----|-----|
| 4.1 Does your facility use energy produced on site? <u>Future TBD</u>  | [ ] | [ ] | [ ] |
| If yes, please explain the size, location, and percentage of off-set:  |     |     |     |
| 4.2 Does the design include thermal mass within the walls and/or floors?   | [x] | [ ] | [ ] |
| 4.3 Do you intend to commission the performance of the building after it is built to ensure it performs as designed? | [x] | [ ] | [ ] |
| <u>Pre-engineered for future PV/Solar</u>  |     |     |     |
| 4.4 Will your plans for construction include:  | [x] | [ ] | [ ] |
| 4.41 High density insulation above Title 24 standards?   | [x] | [ ] | [ ] |
| 4.42 Zones for heating and cooling to provide for maximum efficiency?  | [x] | [ ] | [ ] |
| 4.43 Energy Star™ or ultra energy efficient appliances?  | [x] | [ ] | [ ] |
| 4.44 A "cool" (lightly colored or reflective) or a permeable/living roof?  | [x] | [ ] | [ ] |
| 4.45 Timers/time-outs installed on lights (such as the bathrooms)?   | [x] | [ ] | [ ] |
| If yes, please explain: <u>Per Cal Green Requirements</u>  |     |     |     |

### 5 WATER CONSERVATION

- |  |     |     |     |
|--|-----|-----|-----|
| 5.1 Does your landscape include high-efficiency irrigation?                            | [x] | [ ] | [ ] |
| 5.2 Does your landscape use zero potable water irrigation?                             | [ ] | [ ] | [x] |
| 5.3 Is your project in the vicinity to connect to the Napa Sanitation reclaimed water? | [x] | [ ] | [ ] |
| 5.4 Will your facility use recycled water?   | [ ] | [ ] | [x] |
| 5.41 If no, will you prepare for it by pre-installing dual pipes and/or purple lines?  | [x] | [ ] | [ ] |
| 5.5 Will your plans for construction include:  |     |     |     |
| 5.51 a meter to track your water usage?  | [x] | [ ] | [ ] |
| 5.52 ultra water efficient fixtures and appliances?                                    | [x] | [ ] | [ ] |
| 5.53 a continuous hot water distribution method, such as an on-demand pump?            | [ ] | [ ] | [ ] |
| 5.54 a timer to insure that the systems are run only at night/early morning?           | [x] | [ ] | [ ] |

	yes	no	I don't know
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6 MATERIAL RECYCLING

6.1 Are you using reclaimed materials? 

X		
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 If yes, what and where: Steel throughout - recyclable

6.2 Are you using recycled construction materials-

6.21 finish materials?	X		
6.22 aggregate/concrete road surfaces?	X		
6.23 fly ash/slag in foundation?		X	

6.3 Will your contractor be required to recycle and reuse construction materials as part of your contract? 

X		
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6.4 Does your facility provide access to recycle-

6.41 Kitchen recycling center?	N/A		
6.42 Recycling options at all trash cans?	X		
6.43 Do you compost green waste?		X	
6.44 Provide recycling options at special events?	N/A		

7 NATURAL RESOURCES

7.1 Will you be using certified wood that is sustainably harvested in construction? N/A

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7.2 Will you be using regional (within 500 miles) building materials? 

X		
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7.3 Will you be using rapidly renewable materials, such as bamboo? 

	X	
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7.4 Will you apply optimal value engineering (studs & rafters at 24" on center framing)? 

-	-	N/A
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7.5 Have you considered the life-cycle of the materials you chose? 

X		
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8 INDOOR AIR QUALITY

8.1 Will you be using low or no emitting finish and construction materials indoors-

8.11 Paint?	X		
8.12 Adhesives and Sealants?	X		
8.13 Flooring?	X		
8.14 Framing systems?	X		
8.15 Insulation?	X		

8.2 Does the design allow for maximum ventilation? 

X		
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8.3 Do you plan for a wood burning fireplace (US EPA Phase II certified)? 

	X	
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8.4 Does your design include dayling, such as skylights? 

	X	
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Night cooling vents and fans will be installed

9 TRANSPORTATION DEMAND MANAGMENT

9.1 After your project is complete, will you offer your employees incentives to carpool, bike, or use transit? 

X		
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9.2 After your project is complete, will you allow your employees to telecommute or have alternative work schedules? 

	X	
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9.3 Does your project include design features that encourage alternatives modes of transportation, such as  
 preferred parking for carpooling, ridesharing, electric vehicles?  
 secured bicycle parking, safe bicycle access?  
 loading zones for buses/large taxi services?

X		
X		
	X	

9.4 How close is your facility to public transportation?  
Does not apply - not available.

10 Are there any superior environmental/sustainable features of your project that should be noted?  
Steel tanks from recycled metal  
Night cooling system

11 What other studies or reports have you done as part of preparing this application?  
 1 Experience with building of the same use.  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_  
 4 \_\_\_\_\_

12 If your project involves an addition or modification to an existing building, are you planning to improve energy conservation of existing space (such as insulation, new windows, HVAC, etc.)?  
 If yes, please describe: N/A

13 Once your facility is in operation, will you:

13.1 calculate your greenhouse gas emissions?	TBD		
13.2 implement a GHG reduction plan?	TBD		
13.3 have a written plan to reduce your vehicle miles traveled of your operations and employee's commute?		X	

14 Does your project provide for education of green/sustainable practices?  
 If yes, please describe: To be determined

15 Any comments, suggestions, or questions in regards to the County's efforts to reduce greenhouse gases?  
See attached Use Permit Project Statement for details  
of GHG reduction measures incorporated in this project.

Form filed out by: \_\_\_\_\_