



# MILPITAS PLANNING COMMISSION AGENDA REPORT

PUBLIC HEARING

Meeting Date: August 25, 2010

**APPLICATION:** **Conditional Use Permit No. UP10-0006 and Environmental Assessment No. EA10-0002, Bintang Academy**

APPLICATION SUMMARY:

A request to operate a 35, 930 square foot indoor badminton facility consisting of 23 badminton courts, 2,838 square feet of ancillary space and minor site modifications.

LOCATION: 746 S. Milpitas Blvd. (APN 86-30-063)  
APPLICANT: Phu Kuu, Bintang Academy, 1375 Geneva Drive, Sunnyvale, CA 94089  
OWNER: Board of Administration, C/O Depart. Retire Serv. Mr. Edward F. Overton, 1737 N. First Street, San Jose, CA 95112

**RECOMMENDATION:** **Staff recommends that the Planning Commission:**  
**1. Adopt Resolution No. 10-037 approving the project subject to conditions of approval.**

PROJECT DATA:

General Plan/  
Zoning Designation: Manufacturing and Warehousing (MW)/Heavy Industrial (M2)  
Overlay District: Site and Architectural Overlay  
Specific Plan: N/A

Site Area: 6.25 Acres  
Parking Required:  
Parking Provided:

CEQA Determination: A Mitigated Negative Declaration has been prepared and circulated for this project in accordance with the requirements of the California Environmental Quality Act (CEQA)

PLANNER: Cindy Hom, Assistant Planner

PJ: 2637

ATTACHMENTS: A. Resolution No. 10-037/Conditions of Approval  
B. Project Plans

- C. Project Description
- D. Risk Assessment
- E. Initial Study and Mitigated Negative Declaration

# LOCATION MAP



No scale

## **BACKGROUND**

In July 1978, the Planning Commission granted site and architectural approval for the construction of a 145,000 square foot concrete tilt up industrial warehouse building. Subsequent approvals also include a conditional use permit (UP 1107) for the installation of a new freestanding sign.

On April 20, 2010, Phu Kuu of Bintang Academy submitted a conditional use permit application for the operations of a 35,930 square foot indoor badminton facility within an existing multi-tenant industrial building. The application is submitted pursuant to Milpitas Municipal Code XI-10-7.02-1 (2) (Commercial Athletic Facility) and XI-57.04 (Conditional Use Permit) for Planning Commission review and approval.

## **PROJECT DESCRIPTION**

The project proposes to convert an existing vacant 35,930 square foot industrial warehouse space into an indoor badminton facility that consist of 23 badminton courts and approximately 2,838 square feet of ancillary space and support areas (lobby/waiting areas, storage, men's and women's locker facilities). The facility would operate seven days a week between the hours of 9:00AM to 11:00PM and open to the general public. The applicant also proposes to host tournaments four times a year. No on-site food service or daycare facilities will be provided other than vending machines selling sports drinks and snacks. The project also proposes minor site modifications consisting only of parking restriping to add 28 additional parking stalls.

The project is sited on a 6.25 acre parcel improved with an existing 143,812 square foot multi-tenant industrial building, mature landscaping, and surface parking. The project site is located on the southeast corner of the intersection at S. Milpitas Boulevard and Yosemite Drive. The site is bounded by Yosemite Drive to the north, S. Milpitas Boulevard to the west, Union Pacific railway on the east, and industrial buildings to the south. The site is zoned Heavy Industrial and surrounded by industrial uses. A vicinity map of the subject site location is included on the previous page.

### *Existing Site Layout*

The project proposes no changes to the existing site access, circulation, landscaping, and building exterior. Currently, there are two driveways located on S. Milpitas Boulevard that provide vehicle access to the site. Internal circulation is provided by a two-way drive aisle located along the west and south side of the project site. The 145,000 square foot multi-tenant building is located on the east portion of the site. Two of the four spaces are currently occupied by Splendor Lighting and Mancini Floor Covering. The site provides 151 standard and compact parking spaces. The applicant is proposing to add striping for additional 28 parking spaces that will be located near the facility's front entrance to comply with the parking requirements for the proposed badminton facility. Parking is discussed in further detail in the next section.

### *Parking*

The proposed badminton facility requires a total of 56 parking spaces based on the parking ratio of two per court for commercial indoor sport courts, and one per 240 square feet for office and ancillary space. Based on the all the uses of the building including the proposed indoor badminton facility, a total of 179 parking spaces are required. The site currently provides 151 parking spaces. To comply with the parking requirements, the applicant proposes to stripe 28 additional parking spaces located near the

front entrance of the facility, so that the entire site will have sufficient amount of parking. A parking summary is provided in Table 1 and 2 below.

**Table 1.**  
**Parking Requirements for Proposed Badminton Facility**

Use	Proposed	Parking Standard	Required Parking
Badminton courts	23	2/Court	46
Lounge	1,536 sq ft	1/200 sq ft	6
Office	1,050 sq ft	1/200 sq ft	4
Storage	252 sq ft	1/1500 sq ft	0
Total required			56
Number of Parking Spaces Allocated to the tenant space			28
Number of Parking Spaces to be added			28
<b>Total Number provided</b>			<b>56</b>

**Table 2.**  
**Parking Requirements for Project Site**

Tenant	Uses	Parking Standard	Required Parking
Bintang	23 courts Office/Lounge: 2,586 s. f. Storage: 252 s. f.	2/Court 1/240 1/1500	56
Vacant	Office: 1,400 s. f. Warehouse: 34,888 s. f.	1/350 sq. ft. 1/1500 sq. ft.	28
Splendor Lighting	Office: 2,056 s. f. Warehouse: 34,232 s. f.	1/200 sq. ft. 1/1500 sq. ft.	29
Mancini Floor Covering	Office: 16,570 s. f. Warehouse: 27,750 s. f.	1/350 sq. ft. 1/1500 sq. ft.	66

Tenant	Uses	Parking Standard	Required Parking
Total required			179
<b>Total Number provided</b>			<b>179</b>

As conditioned, the applicant shall submit a parking restriping plan that demonstrates compliance with the Milpitas Parking Ordinance development standards and regulations prior to building permit issuance.

***Development Standards***

The project proposed no modifications to the existing building or site improvements. The only modification is the accommodation of additional parking through new striping for 28 parking stalls to satisfy parking requirements for the proposed badminton facility and the site. With the additional parking spaces, the project complies with parking requirements and development standards as discussed above.

**ADOPTED PLANS AND ORDINANCES CONSISTENCY**

***General Plan***

The table below outlines the project’s consistency with applicable General Plan Guiding Principles and Implementing Policies:

**Table 2**  
**General Plan Consistency**

Policy	Consistency Finding
<p><b>Guiding Principle 2.d-G-2:</b>  <i>Encourage development of adequate civic, recreation and cultural centers in locations for the best service to the community and in ways that will protect and promote community beauty and growth.</i></p>	<p><b>Consistent.</b> The proposed badminton facility provides for recreational opportunities for people who live, work, and play in Milpitas.</p>
<p><b>Implementing Policy 2.a-I-6:</b>  <i>Promote endeavors to maintain a balanced economic base that can resist downturns in any one economic sector.</i></p>	<p><b>Consistent.</b> The project would provide fill a vacancy with commercial recreational activity that is in proximity to workers, Milpitas residents and residents from other neighboring cities.</p>

***Zoning Ordinance***

The proposed badminton facility is consistent with the Heavy Industrial (M2) zoning district and Section 57.04 of the Milpitas Zoning Ordinance, which conditionally permits commercial athletic

facilities following review and approval by the Planning Commission. In addition, as a condition of approval, the applicant will be required to implement mitigation measures that include an evacuation/shelter-in-place procedure, an Emergency Action Plan and annual reviews by the Fire Department. With those conditions, the proposed project is consistent with Section 57.04 of the Milpitas Zoning Ordinance regarding promoting public health, safety, peace, morals, comfort and welfare.

## ENVIRONMENTAL REVIEW

An Initial Study and Draft Mitigated Negative Declaration were prepared for this project. The commenting period began on August 6, 2010 and will close on August 25, 2010. Potential environmental impacts from the project include exposure to potential hazardous materials, which is discussed in detail in the section below. However, with the proposed mitigation measures, it is expected that the impacts will be reduced to a less than significant level. Further discussion of other potential impacts and mitigation measures are included in the attached Environmental Assessment No. EA10-0002.

### *Risk Assessment*

The project site is located within the Heavy Industrial zoning district, which includes various businesses that transport, store and utilize various hazardous materials. The proposed project will locate sensitive receptors (i.e. young children and elderly adults) to potential exposure of hazardous materials upon an accidental exposure event. Based on the Risk Assessment dated June 7, 2010 prepared by Enviro Safetech for this project, the assessment identified the following chemicals of concern that can be accidentally released in event of a catastrophe:

- Boron Trichloride
- Chlorine
- Ammonia
- Dichlorosilane
- Hydrogen Bromide
- Hydrogen Chloride
- Phosphine
- Arsine
- Diborane

The Risk Assessment determined potential impacts from these off-site risks can be reduced to a less than significant level by installation and maintenance of a airborne chemical monitoring, detection and response system and implementation of an Emergency Action Plan (EAP) as described further in the below mitigation measures:

The ***Fire Department recommends*** the following mitigations measures that will adequately notify the occupants of the facility of the potential hazards:

- Installation of a chemical monitoring system with chemical sensors for the specific chemicals identified in the risk assessment (i.e. chlorine and hydrogen bromide) that alerts Fire dispatch and occupants of the site and provides direction on emergency procedures via a recorded message;

- Manual and automatic shutoff capabilities of the building ventilation system;
- Installation of a windsock to determine the wind direction in case of a gaseous release;
- Installation of warning notification signs posted at all building entrances to advise occupants of potential hazards;
- Implementation of a notification process for all patrons who use the facility for which records must be kept and reviewed by the Fire Department on an annual basis;
- Implementation of an Emergency Action Plan including shelter in place, training and drills with the Fire Department; and
- Annual updates of both the risk assessment and the Emergency Action Plan.

The implementation of these mitigation measures would assist in adequately informing all occupants using or visiting the facility of the potential risks associated with the hazardous materials in the area and would provide proper safety procedures in the event of an accident, thus reducing the impact to less than significant.

### **PUBLIC COMMENT/OUTREACH**

Staff publicly noticed the application in accordance with City and State law. In addition, the Mitigated Negative Declaration was also publicly noticed and made available to the public for review and comment. As of the time of writing this report, there have been no inquiries from the public.

### **CONCLUSION**

The proposed indoor badminton facility is consistent with the General Plan and Milpitas Zoning in terms of land use and compliance with development standards. As conditioned the project will be required to implement mitigation measures to reduce potential significant impacts accidental exposure to hazardous materials in the industrial zone to a less than significant level.

### **RECOMMENDATION**

**STAFF RECOMMENDS THAT** the Planning Commission close the public hearing and adopt Resolution No. 10-037 approving Conditional Use Permit No. UP10-0006 and Environmental Assessment EA10-0002, Bintang Academy, subject to the attached Conditions of Approval.

#### *Attachments:*

- A. Resolution/Conditions of Approval
- B. Plans
- C. Project Description
- D. Risk Assessment
- E. Mitigated Negative Declaration (EA10-0002)

**RESOLUTION NO. 10-037**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. UP10-0006 AND ENVIRONMENTAL ASSESSMENT NO EA10-0002, BINTANG ACADEMY, TO ALLOW FOR THE OPERATIONS OF A 35,930 SQUARE FOOT INDOOR BADMINTON FACILITY AT 746 S. MILPITAS BLVD.**

**WHEREAS**, on April 20, 2010, a conditional use permit application was submitted by Phu Kuu, 1375 Geneva Drive, Sunnyvale, CA 94089, to allow for the operations a 35, 930 square foot indoor badminton facility consisting of 23 badminton courts, 2,838 square feet of ancillary space and minor site modifications. The property is located at 746 S. Milpitas Blvd. (APN 86-30-063) within the Heavy Industrial Zoning district; and

**WHEREAS**, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and determined this project requires a Mitigated Negative Declaration; and

**WHEREAS**, on August 25, 2010, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties.

**NOW THEREFORE**, the Planning Commission of the City of Milpitas hereby finds, determines and resolves as follows:

**Section 1:** The recitals set forth above are true and correct and incorporated herein by reference.

**Section 2:** The Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA). A Mitigated Negative Declaration was prepared and publicly circulated for public review on August 6, 2010 to August 25, 2010 and wherein it was determined that environmental impacts could be reduced to a level of less than significant through implementation of project requirements and mitigation measures; and

**Section 3:** The project is consistent with the Milpitas General Plan in that it provides a recreation facility that would meet the community's needs and promotes endeavors to maintain a balanced economic base. The project would be filling a vacancy with a recreational use that is located within proximity to employment centers and residents. The proposed use would also provide a unique form of indoor sport not commonly found in existing parks or fitness centers within Milpitas.

**Section 4:** The project is consistent with the Milpitas Zoning Ordinance in that the commercial athletic facility is a conditionally permitted use in the Heavy Industrial Zoning district with Planning Commission approval of a conditional use permit. As, conditioned, the project complies with the parking requirements and development standards.

**Section 5:** The project will be required to implement mitigation measures that include an evacuation/shelter-in-place procedure, Emergency Action Plan and annual reviews by the Fire Department. Therefore, the proposed project is consistent will not be detrimental to public health, safety, peace, morals, comfort and welfare.

**Section 6:** The Planning Commission of the City of Milpitas hereby approves Conditional Use Permit No. UP10-0006 and Environmental Assessment No. EA10-0002, subject to the above Findings, and Conditions of Approval attached hereto as Exhibit 1.

**PASSED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Milpitas on August 25, 2010.

\_\_\_\_\_

Chair

**TO WIT:**

**I HEREBY CERTIFY** that the following resolution was duly adopted at a regular meeting of the Planning Commission of the City of Milpitas on August 25, 2010, and carried by the following roll call vote:

<b>COMMISSIONER</b>	<b>AYES</b>	<b>NOES</b>	<b>ABSENT</b>	<b>ABSTAIN</b>
Cliff Williams				
Lawrence Ciardella				
Sudhir Mandal				
Gurdev Sandhu				
Steve Tao				
Noella Tabladillo				
Mark Tiernan				

**EXHIBIT 1**

**CONDITIONS OF APPROVAL  
CONDITIONAL USE PERMIT NO. UP10-0006 AND ENVIRONMENTAL  
ASSESSMENT NO EA10-0002, BINTANG ACADEMY,  
A request to operate a 35,930 square foot indoor badminton facility.  
746 S. Milpitas Blvd.**

**General Conditions**

1. The owner or designee shall develop the approved project in conformance with the approved plans approved by the Planning Commission on August 25, 2010, in accordance with these Conditions of Approval.

Any deviation from the approved site plan, floor plans, elevations, landscape plan, or other approved submittal shall require that, prior to the issuance of building permits, the owner or designee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the Planning Commission, in accordance with the Zoning Ordinance. **(P)**

Conditional Use Permit No. UP10-0006 shall become null and void if the project is not commenced within two (2) years from the date of approval. Pursuant to Section 64.06(B) of the Zoning Ordinance of the City of Milpitas:

- a. Completes a foundation associated with the project; or
  - b. Dedicates any land or easement as required from the zoning action; or
  - c. Complies with all legal requirements necessary to commence the use, or obtains an occupancy permit, whichever is sooner.
2. Pursuant to Section 64.06(1), the owner or designee shall have the right to request an extension of Conditional Use Permit No. UP10-0006 if said request is made, filed and approved by the Planning Commission prior to expiration dates set forth herein. **(P)**
  3. Prior to the issuance of building permits, the owner or designee shall include within the four first pages of the working drawings for a plan check, a list of all conditions of approval imposed by the final approval of the project. **(P)**
  4. Prior to building permit issuance, the applicant shall provide a parking striping plan to demonstrate compliance with parking requirements and development standards. The parking striping plan shall provide 179 parking spaces. Compact spaces shall not exceed 40% of the total number of parking spaces provide.
  5. This use shall be conducted in compliance with all appropriate local, state and federal laws and regulations, and in conformance with the approved plans. **(P)**

6. If at the time of application for a certificate of occupancy there is a project job account balance due to the City for recover of review fees, a certificate of occupancy shall not be issued until the balance id paid in full. (P)
7. If at the time of application for permit there is a project job account balance due to the City for recover of review fees, review of permits will not be initiated until the balance id paid in full. (P)
8. Any occupancy of the tenant space shall not occur until all conditions of approval have been satisfied and verified by the City. (P)
9. After receiving a Certificate of Occupancy, the project is subject to a six month review by the Planning Commission. The review shall be a public hearing to review conformance with conditions of approval. (P)

### **Environmental Mitigation**

10. HAZ MM1 - Prior to building permit issuance, the tenant improvement plans shall indicate an airborne chemical monitoring system (sensors), with detection and response/notification capabilities that shall be designed and installed by the applicant. The sensors shall be specific for the gases identified in the Risk Assessment as having the potential of impacting the site (Boron Trichloride, Chlorine, Ammonia, Dischlorosilane, Hydrogen Bromide, and Hydrogen Chloride). Notification shall alert Fire dispatch of an alarm and also provide in-place communication, both inside and outside of the building, to alert occupants of an emergency, via pre-recorded message, and shall direct them on emergency procedures to follow. As part of the monitoring system, building ventilation shall have manual and automatic shutoff capabilities with the control device located per Fire Department direction. (P) (F)
11. HAZ MM2 - Prior to building permit issuance, the tenant improvement plans shall indicate the location of a windsock or other approved wind/weather-monitoring device on site to aid in determining wind direction in the event of a nearby hazardous material release. (P) (F)
12. HAZ MM3 - Prior to building permit issuance, the tenant improvement plans shall indicate the location of warning notification signs posted at all entrances to the building. The signs shall serve to advise building occupants of potential hazards within the surrounding industrial area. Proposed verbiage shall be submitted for Fire Department review. Signs may be required in multiple languages, as appropriate for occupants of the building. (P) (F)
13. HAZ MM4 - Prior to certificate of occupancy issuance, the applicant shall submit an Emergency Action Plan (EAP) to the Milpitas Fire Department for approval, which recognizes the nature of the risk at the project site in the surrounding industrial area. The EAP shall include identification of key personnel in the implementation of the plan, training documentation, written evacuation plan showing evacuation routes, shelter in-place and assembly areas, and location of emergency equipment. (P) (F)
14. HAZ MM5 - Prior to certificate of occupancy issuance and before implementing the EAP, the employer shall designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees. The employer shall advise each employee of his/her responsibility under the plan. Furthermore, drills with EAP designated staff and the Fire Department shall be conducted on site to test and document implementation of the EAP. An additional drill including building occupants shall occur immediately following

occupancy. Drills shall be conducted and documented monthly and on an annual basis with the Fire Department on site. (P) (F)

15. HAZ MM6 – The applicant shall provide a disclosure and acknowledgement form to all guests which discloses potential hazards and includes a description of emergency procedures. Recordkeeping of the notification are to be maintained at all times. **(P) (F)**

(P) = Planning

(B) = Building

(E) = Engineering

(F) = Fire Prevention

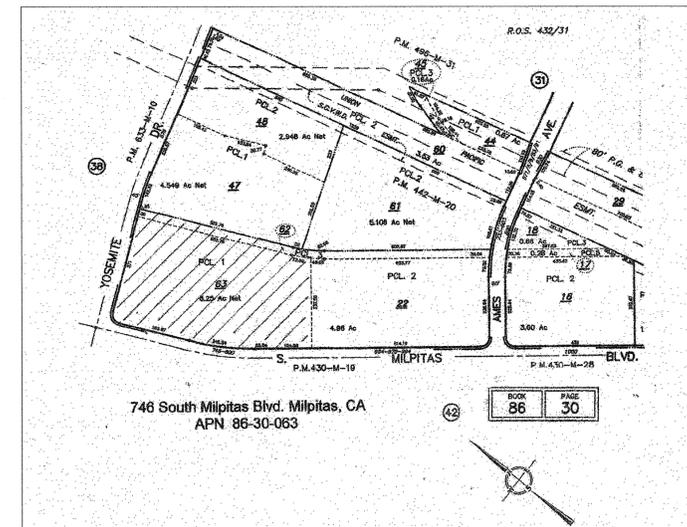
# BINTANG BADMINTON

## 746 SOUTH MILPITAS BLVD - MILPITAS, CA 95035

### INTERIOR TENANT IMPROVEMENTS - C.U.P.

ASSESSOR'S PARCEL MAP

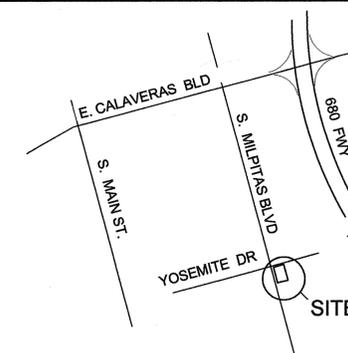
APN 86-30-063



#### PROJECT DATA

GENERAL PLAN DESIGNATION: MANUF / WAREHOUSING  
 ZONING: M2 HEAVY INDUSTRIAL  
 CURRENT USE: VACANT - WAREHOUSE  
 EXISTING LAND USE: INDUSTRIAL BUILDING  
 NUMBER EXISTING LEASE SPACES: FOUR  
 746 S. MILPITAS BLVD - PROPOSED BINTANG BADMINTON ACADEMY  
 776 S. MILPITAS BLVD - VACANT  
 880 S. MILPITAS BLVD. - SPLENDOR LIGHTING  
 876 S. MILPITAS BLVD. - BT MANCINI INC., FLOORING  
 SITE AREA: 6.25 AC - 272,250 SF  
 BUILDING FLOOR AREA: 143,812 SF  
 TENANT/APPLICANT LEASE AREA: 35,930 SF  
 TYPE OF CONSTRUCTION: III-B  
 NUMBER STORIES: ONE  
 FIRE SPRINKLERED: YES

#### VICINITY MAP



#### PARKING

746 LEASE SPACE - TENANT / APPLICANT

USE	PROPOSED AREA	PARKING STANDARD	PARKING REQUIRED	PARKING PROVIDED
BADMINTON COURTS	23 COURTS	2 / COURT	46	46
OFFICE	1,050 SF	1/240 SF	4	4
LOUNGE & EXERCISE	1,536 SF	1/240 SF	6	6
<b>TOTAL REQUIRED</b>			<b>56</b>	<b>56</b>
ACCESSIBLE PARKING REQUIRED: 51-75 = 3 (1 VAN ACCESSIBLE), INCLUDED WITH TOTAL ORIGINAL BUILDING CONSTRUCTED 1976 ORIGINAL PARKING REQUIRED: OFFICE: 1,400 SF / 350 = 4; WAREHOUSE: 34,876 SF / 1500 = 24; TOTAL: 28			PARKING PROVIDED: 56	3

#### DRAWING INDEX

- A-1 TITLE SHEET
- A-2 SITE PLAN
- A-3 PROPOSED FLOOR PLAN

#### MINIMUM PLUMBING FACILITIES

OCCUPANCY: A-3 ASSEMBLY - PUBLIC USE B OFFICE

FACILITIES	FIXTURES REQUIRED:		FIXTURES PROVIDED:	
	MALE	FEMALE	MALE	FEMALE
WATER CLOSETS	1	3	2	4
URINALS	1	-	1	-
LAVATORIES	1	1	3	3
DRINKING FOUNTAIN	1		2	

RESTROOM TO BE EQUIPPED WITH FIXTURES, ACCESSORIES AND REQUIRED CLEARANCES, PER TITLE 24 STANDARDS.  
 2007 CALIFORNIA PLUMBING CODE TABLE 4-1  
 TABLE A OCCUPANT LOAD FACTOR (NOT USED) ACTUAL OCCUPANT LOAD USED

#### CODES AND REGULATIONS

ALL WORK SHALL COMPLY WITH REQUIREMENTS OF APPLICABLE CODES AND LOCAL JURISDICTION'S AMENDMENTS:

- BUILDING: 2007 CALIFORNIA BUILDING CODE
- MECHANICAL: 2007 CALIFORNIA MECHANICAL CODE
- PLUMBING: 2007 CALIFORNIA PLUMBING CODE
- ELECTRICAL: 2007 CALIFORNIA ELECTRICAL CODE
- FIRE/LIFE SAFETY: 2007 CALIFORNIA FIRE CODE
- ENERGY: 2007 CALIFORNIA TITLE 24 ENERGY REGULATIONS
- ACCESSIBILITY: 2007 CALIFORNIA TITLE 24 ACCESSIBILITY STANDARDS

#### SCOPE OF WORK

**BUILDING INTERIOR**  
 INTERIOR TENANT IMPROVEMENTS REQUIRED FOR CONVERTING EXISTING VACANT WAREHOUSE STORAGE S-2 OCCUPANCY TO INDOOR RECREATION BADMINTON - ASSEMBLY A-3 OCCUPANCY (NO SPECTATOR SEATING). CONSTRUCTION MODIFICATIONS ARE PROPOSED FOR INTERIOR REMODEL OF EXISTING RESTROOMS FOR ADDITIONAL PLUMBING FIXTURES AND TITLE 24 ADA COMPLIANCE. NO INTERIOR MODIFICATIONS ARE REQUIRED FOR THE BADMINTON COURT AREA EXCEPT CONSTRUCTION OF NEW 1-HR RATED NON-LOAD BEARING DEMISING WALL. NO MODIFICATIONS REQUIRED FOR THE EXISTING HVAC SYSTEM FOR OFFICES AND RESTROOMS, EXCEPT MINOR DUCTWORK.

**BUILDING EXTERIOR**  
 NO MODIFICATION ARE PROPOSED TO EXTERIOR OF BUILDING. EXISTING MONUMENT SIGN WITH EXISTING ADDRESS AND NEW NAME "BINTANG BADMINTON ACADEMY" WILL BE USED AND NO NEW SIGNAGE PROPOSED.

**SITE**  
 AN ADDITION ACCESSIBLE PARKING SPACE TO BE DESIGNATED PER TITLE 24 REQUIREMENTS. SITE PATH OF TRAVEL AND ENTRANCES ARE IN COMPLIANCE. NO MODIFICATIONS TO THE SITE OR PARKING ARE PROPOSED.

#### OWNER

BOARD OF ADMINISTRATION DEPART. OF RETIRE SERVICE  
 1737 NORTH FIRST STREET  
 SAN JOSE, CA 95112  
 ATTN: EDWARD F. OVERTON TEL: 408 -

#### TENANT / APPLICANT

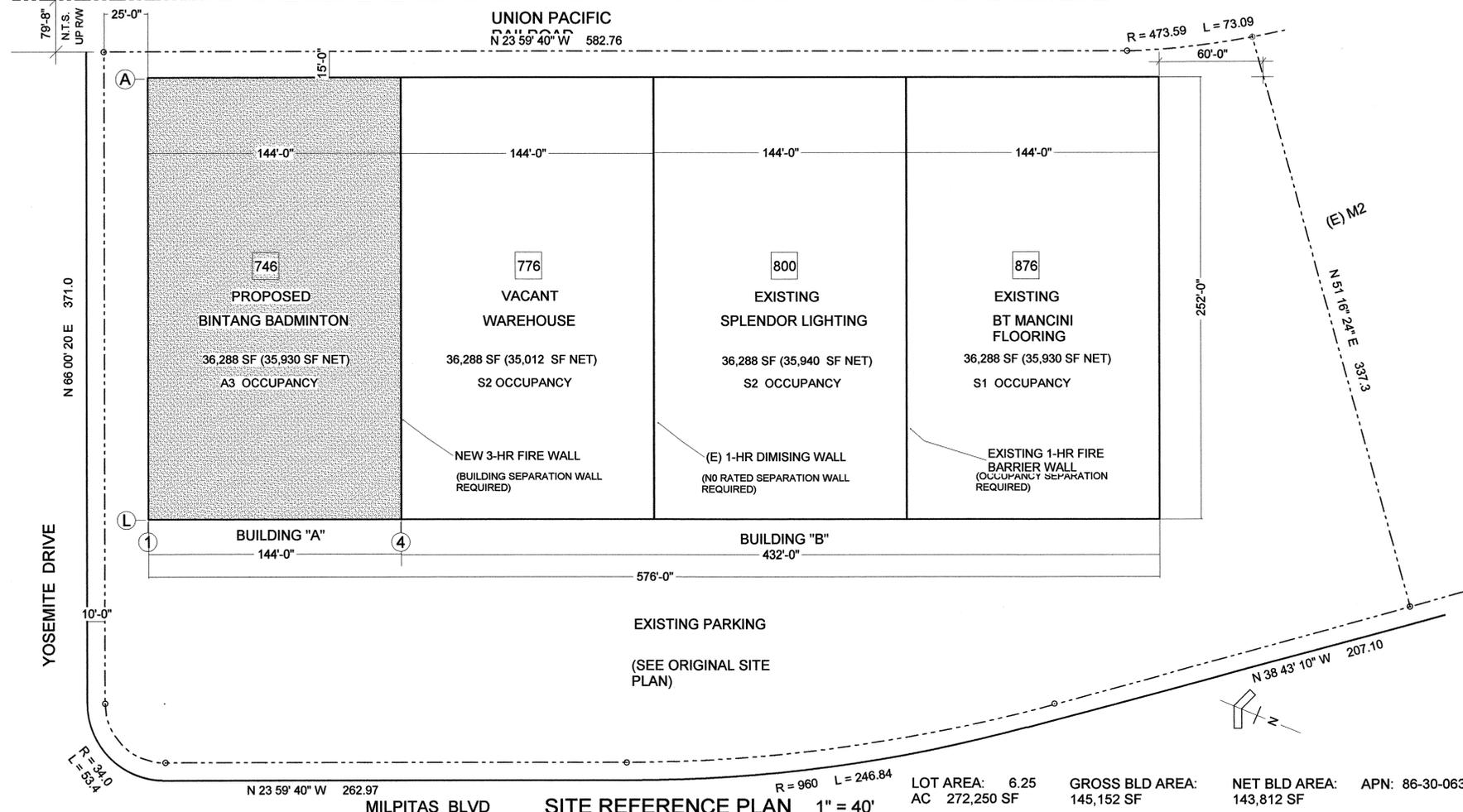
BINTANG BADMINTON ACADEMY  
 1375 GENEVA DRIVE  
 SUNNYVALE, CA 94089  
 ATTN: PHU KHUU TEL: 510-396-9885

#### OWNER

1737 NORTH FIRST STREET  
 SAN JOSE, CA 95112  
 ATTN: EDWARD F. OVERTON TEL: 408 -

#### TENANT / APPLICANT

BINTANG BADMINTON ACADEMY  
 1375 GENEVA DRIVE  
 SUNNYVALE, CA 94089  
 ATTN: PHU KHUU TEL: 510-396-9885



#### EXIT ANALYSIS SUMMARY

ROOM	USE	OCCUPANCY GROUP	OCCUPANT LOAD FACTOR	SQUARE FOOT	OCCUPANTS	REQUIRE EXIT WIDTH	WIDTH PROVIDED
101 OPEN OFFICE	BUSINESS	B	100 SF/O	933 SF	10	10 X 0.15 = 1.50"	36" MIN.
102 OFFICE	BUSINESS	B	100 SF/O	117 SF	1	1 X 0.15 = 0.15"	36" MIN.
103 MEN TOILET	ACCESSORY	B	N/A	N/A	N/A	N/A	36" MIN.
104 WOMEN TOILET	ACCESSORY	B	N/A	N/A	N/A	N/A	36" MIN.
105 OPEN LOUNGE	BUSINESS	B	15 SF/O (TABLES)	348 SF	23	23 X 0.15 = 3.45"	36" MIN.
106 JANITOR	ACCESSORY	B	N/A	N/A	N/A	N/A	36" MIN.
107 WOMEN TOILET	ACCESSORY	B	N/A	N/A	N/A	N/A	36" MIN.
108 MEN TOILET	ACCESSORY	B	N/A	N/A	N/A	N/A	36" MIN.
109 COURTS	ASSEMBLY	A-3	4' COURT	23 X 4 =	92	92 X 0.15 = 13.8"	36" MIN.
110 EXERCISE	ASSEMBLY	A-3	50 SF/O	1,186 SF	24	24 X 0.15 = 3.60"	36" MIN.
111 STORAGE	ACCESSORY	S-2	500 SF/O	252 SF	1	1 X 0.15 = 0.15"	36" MIN.
<b>TOTAL</b>					<b>151</b>	<b>151 X 0.15 = 22.65"</b>	<b>36" MIN.</b>

OCCUPANT LOAD FOR BADMINTON COURTS BASED UPON MAXIMUM 4 PERSON PER COURT AND APPROVED BY BUILDING OFFICIAL

NUMBER EXITS REQUIRED: CBC TABLE 1015.1 A-3 OCCUPANCY 137 > 49 = 2 MINIMUM B OCCUPANCY 52 > 50 = 2 MINIMUM

#### EXIT WIDTHS PROVIDED

EXIT COMPONENT	STAIRS	CORRIDORS	DOORS	NUMBER EXITS PROVIDED	TOTAL WIDTH PROVIDED
OFFICE (BUSINESS)	NONE	NONE	32" CLEAR	3	96"
COURTS (ASSEMBLY)	NONE	NONE	32" CLEAR	5	160"

MAXIMUM TRAVEL DISTANCE TO EXITS: CBC TABLE 1016.1 SPRINKLERED B OCCUPANCY 300 FEET 70 FEET MAXIMUM PROPOSED A-3 OCCUPANCY 250 FEET 203 FEET MAXIMUM PROPOSED

NOTES  
 1 EXIT DOOR ARRANGEMENT CBC 1015.2.1 (EXCEPTION SPRINKLERED) SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-THIRD MAXIMUM OF THE MAXIMUM DIAGONAL DIMENSION OF AREA SERVED MEASURED IN A STRAIGHT LINE BETWEEN EXITS. MAXIMUM ROOM DIAGONAL DISTANCE 295' X 0.33 = 97 FEET SHALL MINIMUM DISTANCE BETWEEN EXITS. DISTANCE PROPOSED = 134'

#### BUILDING OCCUPANCY AREA SUMMARY

BLD	SUITE NO.	TENANT	OCCUPANCY / USE	HTG./STORIES	TYPE CONST.	SPRINKLERED	(E) AREA	ALLOWABLE SF	RATIO ACTUAL / ALLOWABLE
"A"	746	BINTANG BADMINTON	A-3 INDOOR RECREATION BADMINTON	1	III-B	YES	35,930 SF	9,500 + (9900 X 0.25) + (9500 X 3) = 40,375 SF	35,930 SF / 40,375 SF = 0.89 < 1
"A"	776	VACANT WAREHOUSE	S-2 LOW HAZARD STORAGE - ELECTRICAL	1	III-B	YES	35,012-35,940 = 70,952 SF	26,000 + (26,000 X 1.12) + (26,000 X 3) = 133,120 SF	70,952 SF / 133,120 SF = 0.53
"B"	800	SPLENDOR LIGHTING	S-2 LOW HAZARD STORAGE - ELECTRICAL	1	III-B	YES	70,952 SF	70,952 SF	70,952 SF / 70,952 SF = 1.00
"B"	876	BT MANCINI FLOORING	S-1 MODERATE HAZARD STORAGE FLOORING	1	III-B	YES	35,930 SF	17,500 + (17,500 X 1.2) + 17,000 X 3 = 89,600 SF	35,930 SF / 89,600 SF = 0.40
<b>TOTAL</b>							<b>142,812 SF</b>		<b>0.92 &lt; 1</b>

NOTE: ASSESSOR'S RECORD SHOW RENTABLE BUILDING AREA = 145,152 SF WHICH IS THE ROOF AREA

#### TYPE OF CONSTRUCTION

CBC 602.3 TYPE III-B  
 FULLY FIRE-SPRINKLERED

#### CBC GENERAL HEIGHT & AREA LIMITATIONS NOTES - CHAPTER 5

- CBC 705.1 BUILDING SEPARATION PROPOSED WITH NEW 3-HR FIRE WALL TO SEPARATE A-3 FROM S2 OCCUPANCY AND SHALL BE CONSIDERED AS SEPARATE BUILDINGS FOR PURPOSE OF MAXIMUM ALLOWABLE AREAS.
- CBC TABLE 508.3.3 REQUIRED SEPARATION OF OCCUPANCIES:
 

SPRINKLERED	
S-1	S-2
A	N
S-1	1
- CBC TABLE 503 TYPE III-B ALLOWABLE AREA MAY BE INCREASED PER 506.3 FOR AUTOMATIC SPRINKLER SYSTEM FOR SINGLE STORY BUILDING BY 300%.
- CBC 506.2 AREA INCREASE PER FRONTAGE WHERE 25% OR MORE OF ITS PERIMETER IS ON A PUBLIC WAY OR OPEN SPACE HAVING A MINIMUM OF 20 FEET.
- 508.3.2 ALLOWABLE AREAS IN EACH STORY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH OCCUPANCY DIVIDED BY THE ALLOWABLE AREA OF EACH OCCUPANCY SHALL NOT EXCEED ONE.

#### FIRE RESISTIVE RATING REQUIREMENTS

BUILDING ELEMENTS	TABLE 601	REQUIREMENT
STRUCTURAL FRAME		0-HR
BEARING WALLS EXTERIOR		2-HR
BEARING WALLS INTERIOR		0-HR
INTERIOR NON-BEARING WALLS		0-HR
FLOOR CONSTRUCTION		0-HR
ROOF CONSTRUCTION		0-HR
OCCUPANCY SEPARATION	S1 - S2	1-HR

REVISIONS	BY
1	JDM

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**MORELAN ARCHITECTURE**  
 ASSOCIATES, INC. CONSTRUCTION

TIM D. MORELAN, A.I.A. - ARCHITECT - C-5471  
 101 S. WINCHESTER BLVD. - SUITE G-181 - SAN JOSE, CALIFORNIA 95128-3917  
 TEL: (408) 247-3322 FAX: (408) 247-8520



TITLE SHEET  
 INTERIOR TENANT IMPROVEMENTS FOR  
 BINTANG BADMINTON  
 746 SOUTH MILPITAS BLVD. - MILPITAS, CA 95035

DRAWN	JDM
DATE	04/19/10
SCALE	AS NOTED
JOB NO.	2010.15
SHEET	A-1
OF	3 SHEETS

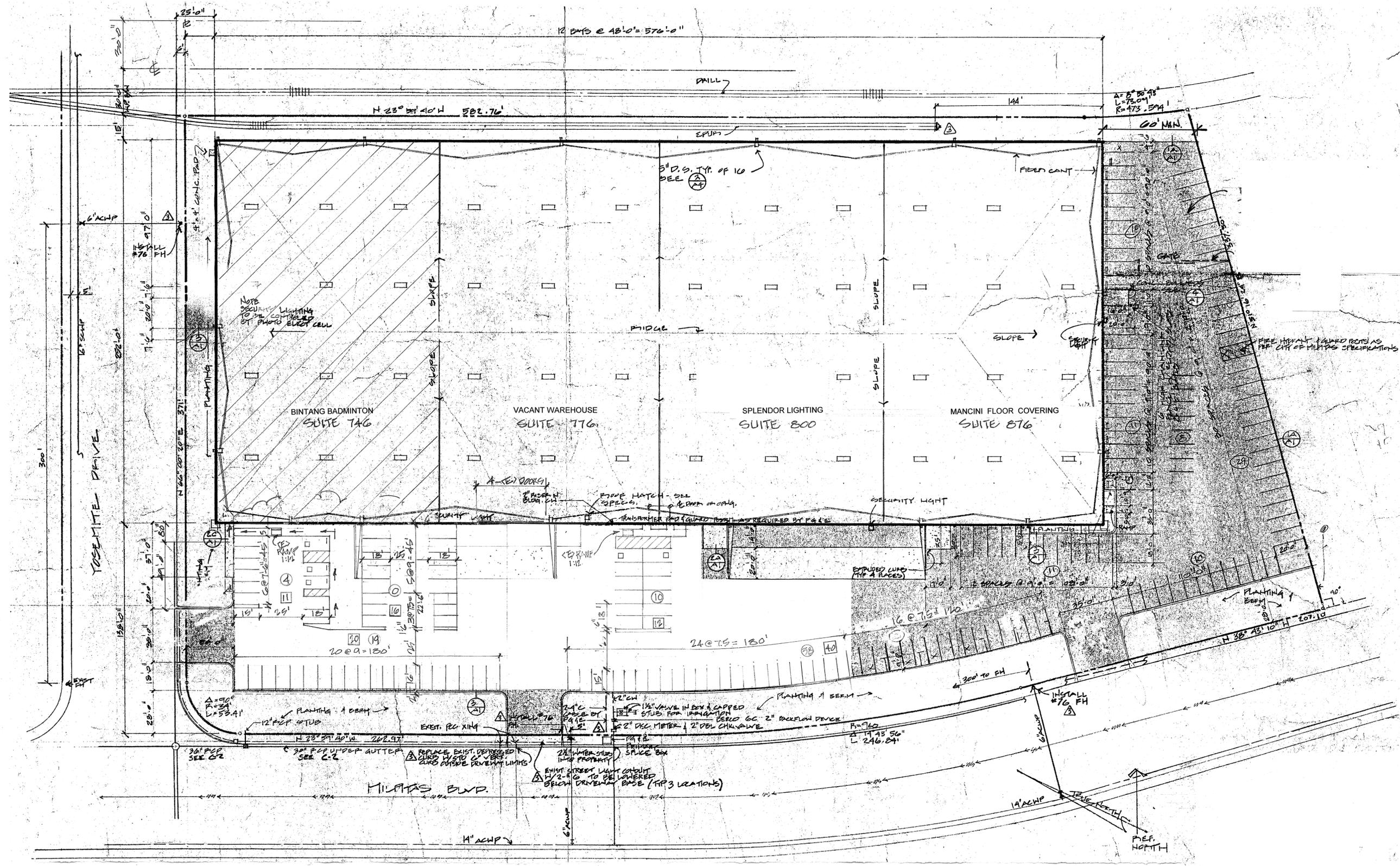
REVISIONS	BY
1	JDM
2	JDM

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 TEL. (408) 247-5522



**SITE PLAN**  
**INTERIOR TENANT IMPROVEMENTS FOR BINTANG BADMINTON**  
 746 SOUTH MILPITAS BLVD. - MILPITAS, CA 95035



SITE PLAN - SCALE: 1" = 30'

ORIGINAL CONSTRUCTION DRAWING

FOR REFERENCE ONLY

**PARKING REQUIREMENT**

LEASE SPACE	TENANT	EXISTING PARKING	NEW	TOTAL
746	BINTANG BADMINTON	28	28	56
776	VACANT	28	-0-	28
800	SPLENDOR LIGHTING	29	-0-	29
876	MANCINI FLOORING	66	-0-	66
TOTAL		151	28	179

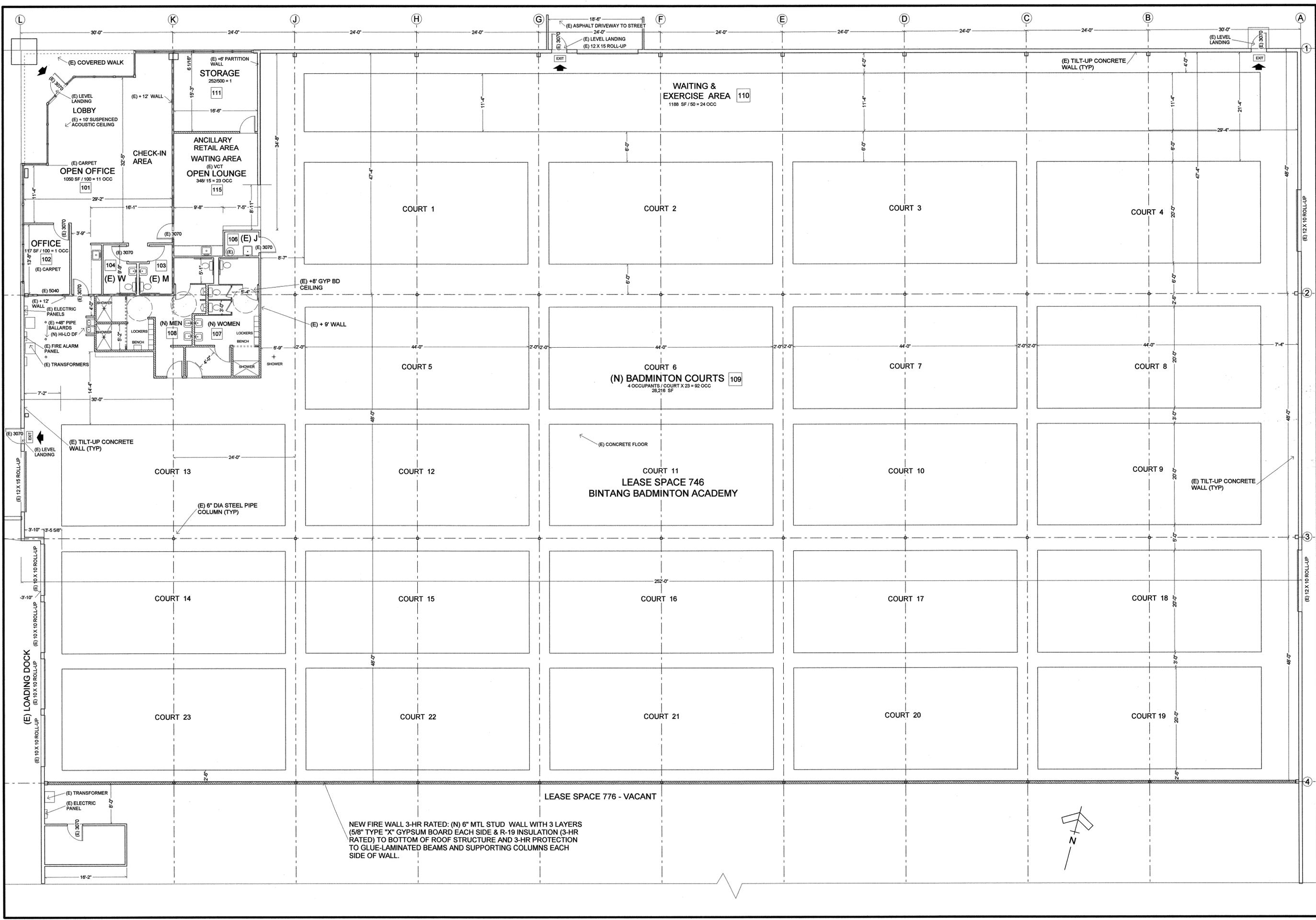
COMPACT SPACES ALLOWED: 40% X 179 = 72  
 EXISTING COMPACT SPACES: 58  
 NEW COMPACT SPACES: 14  
 TOTAL: 72

ACCESSIBLE PARKING REQUIRED: (151-200) = 6  
 ACCESSIBLE PARKING PROVIDED: 6  
 VAN ACCESSIBLE REQUIRED: (1-8) = 1  
 VAN ACCESSIBLE PROVIDED: 2

SCOPE OF WORK - RESTRICTED PARKING SPACES PER 915/10

○ EXISTING NO. PARKING  
 □ NEW NO. PARKING

DRAWN	JDM
DATE	04/19/10
SCALE	AS NOTED
JOB NO.	2010.15
SHEET	A-2
OF	3 SHEETS



REVISIONS	BY
1	JDM
C.U.P.	
6/18/10	

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**PROPOSED FLOOR PLAN**  
**INTERIOR TENANT IMPROVEMENTS FOR**  
**BINTANG BADMINTON**  
**746 SOUTH MILPITAS BLVD. - MILPITAS, CA 95035**

DRAWN	JDM
DATE	04/19/10
SCALE	AS NOTED
JOB NO.	2010.15
SHEET	A-3
OF	3 SHEETS



LETTER OF EXPLANATION  
City of Milpitas

Project: Bintang Badminton  
Application for C.U.P.  
746 South Milpitas Boulevard  
Milpitas, CA 95035

April 19, 2010

This application is a request for approval to change the use of an existing 35,930 s.f. vacant warehouse tenant space from storage to indoor recreation, without spectator seating. This use will be for indoor badminton courts, offices, lounge, and restrooms with lockers and showers.

The existing building is 143,812 s.f. and the lot is approximately 6.25 acres. No modifications are proposed.

Bintang Badminton is an existing business with facilities in Campbell, Dublin, South San Francisco, and Sunnyvale. We provide quality indoor recreational badminton facilities, including courts and a small pro-shop for retail sales of shoes, bags, racquets and racquet repair.

Hours of operation will be 9 am – 11 pm, Monday through Sunday. The prime time during the weekdays is 7 pm – 11 pm and during the weekends is 3 pm – 6 pm. In addition, badminton tournament events are proposed four (4) weekends per year.

The number of employees will vary according to the scheduled activities and will range from one to three at any time.

We look forward to being in your community and providing an opportunity for everyone to experience badminton, an indoor sport that is fun to play and a wonderful physical activity.

Sincerely,

Phu H. Khuu  
President  
Bintang Badminton



## Conditional Use Permit - Risk Assessment

Proposed 746 S Milpitas Blvd Location

**Bintang Badminton Academy**  
**746 S Milpitas Blvd**  
**Milpitas, CA 95035**

**Project Number: Bintang 2010-1**  
**Revision: Final**

**Date Prepared: June 7, 2010**

**RECEIVED**

JUN 25 2010

**CITY OF MILPITAS  
PLANNING DIVISION**

Prepared by:

**Enviro Safetech**

*Your SAFETY is Our Business*

2160-B Oakland Road, San Jose, CA 95131

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# Conclusion

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## Overview

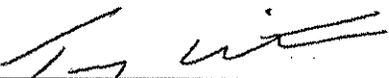
This is an engineering report of our opinions and conclusions based on the data evaluated, worst-case gas release modeling, and described in this report and provided by hazardous material inventory statement and communication provided by the City of Milpitas. This is to certify that report and the results documented in the report are based on visual observations on May 28, 2010, by Troy Christensen, PE. By this certification, I attest that:

The following chemicals of concern during a worst case release scenario may have negative environmental impacts at the 746 S Milpitas Blvd project site:

1. Boron Trichloride
2. Chlorine
3. Ammonia
4. Dichlorosilane
5. Hydrogen Bromide
6. Hydrogen Chloride
7. Phosphine
8. Arsine
9. Diborane

The mitigation measures listed on the next page will provide added safeguards reducing the potential impact of a toxic chemical release in the area and its negative effects for Bintang Badminton customers and employees.

The probability of one or more of these events occurring can not be determined from available information. Probabilities are determined during process hazard analysis in combination with an understanding of the engineering controls and safeguards in place at each site. The historical incident review did show that 3 incident of chemical of concern had been release in neighboring cities since 2006 ended up in the hospitalization of works and/or neighbors. The probability of the three pyrophoric materials to not start on fire when exposed to air is estimated to be once in the lifetime of the facility and therefore Phosphine, Arsine, and Diborane are not recommend to be monitored by the chemical monitoring system described on the next page.

  
\_\_\_\_\_  
(Signature)

/Troy Christensen, PE                      06/08/2010  
(Name) - (Date)

California - C64870 Expires - 06/30/2011  
(State of Registration) - (Registration Number)



## Mitigation Measures

The following mitigation measures are recommended based on the above conclusions and process chemical knowledge:

1. Implement an Emergency Action Plan with Evacuation and Shelter in Place procedures. This shall include document training of employees and drills to verify that emergency systems described below are well understood. A test shall be administered to verify the competence of employees.
2. Install a wind directional sock on the building for assessing wind direction and weather conditions.
3. Implement an in place communication system for notifying occupants via a prerecorded message in the event of an incident and then directing them on emergency procedures to follow.
4. Verify locations and existence of all manual shutoff controls for the building ventilation system. All of the following located at the facility must have a manual shutoff control:
  - a. Bathroom Exhaust Fans
  - b. Warehouse (Badminton Area)
    - i. Exhaust Fans
    - ii. Space Heaters
5. An airborne chemical monitoring system for the gases listed below should be installed for the following:
  - a. Boron Trichloride
  - b. Chlorine
  - c. Ammonia
  - d. Dichlorosilane
  - e. Hydrogen Bromide
  - f. Hydrogen Chloride

The chemical monitoring system shall automatically shutdown the ventilation system upon gas detection listed in 4 above.

Note that because the following chemicals are pyrophoric they are not recommended for chemical monitoring, because they are expected to start on fire with contact with air:

- a. Phosphine
  - b. Arsine
  - c. Diborane
6. Implement a parental notification process which includes a description of how each parent will be notified of the nature of hazards in the area. This shall include at a minimum:
    - a. A notification that include the emergency procedures that will be in place to protect their children and what procedures the parents need to follow in the event of each type of anticipated emergency.
    - b. Recordkeeping of the notifications are to be maintained, signed by parents, stating that they understand and accept the emergency procedures that are in place.

## Limitations

This Risk Assessment Report has been prepared by Otis Institute, Inc.'s consultants who have over 16 years of chemical release risk assessment experience and are knowledgeable about industrial manufacturing processes, including the types of hazardous materials used in these processes that were evaluated in this assessment. This assessment has been

Bintang Badminton Academy - Conditional Use Permit - Risk Assessment

prepared based on information provided by the City of Milpitas, Bintang Badminton, physical observations of conditions at the facility and surroundings during Otis Institute's site visit on May 28, 2010.

No warranty, expressed or implied, is made. In the event that changes in the nature, use, or layout of the facility or in the chemical usage of the facilities around 746 s Milpitas Blvd are made or discovered, the information contained in this Risk Assessment Report may not be valid. This evaluation is valid for one year.

# Section One

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## Project Overview

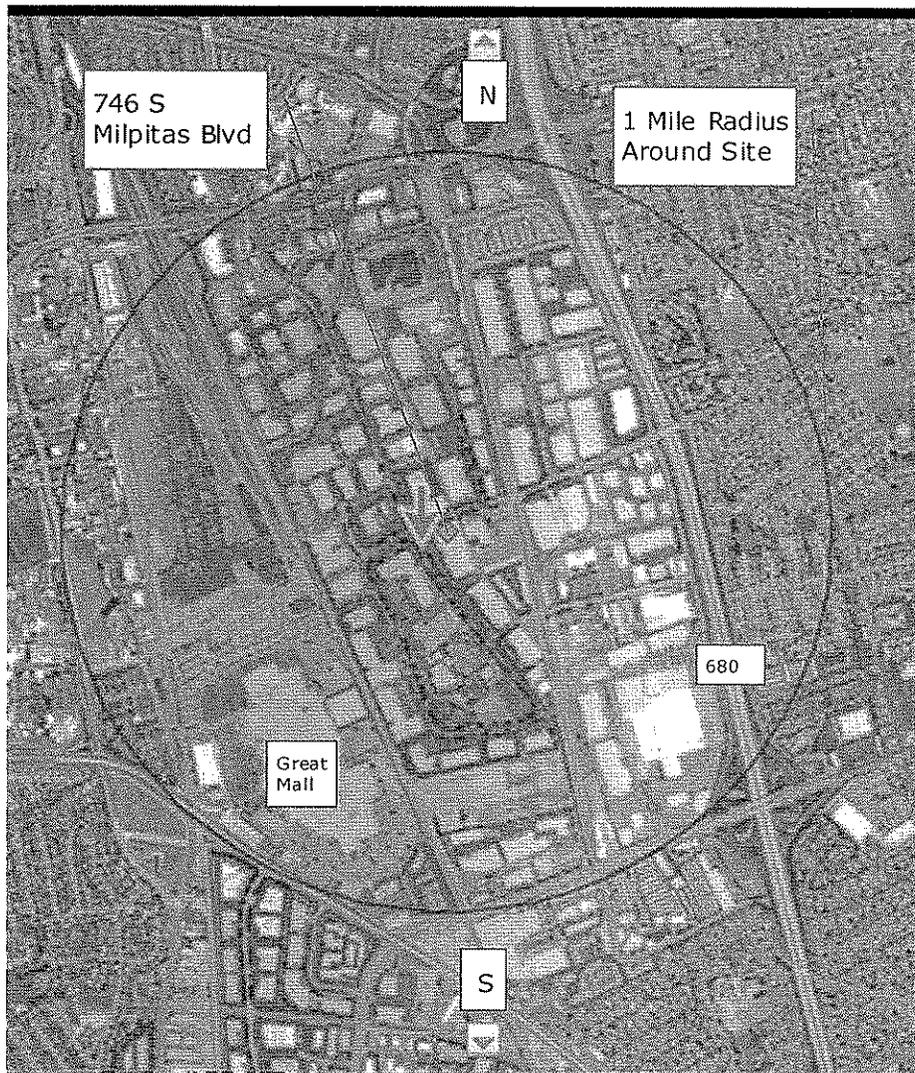
The proposed project is located at 746 South Milpitas Boulevard in Milpitas, CA. Bintang Badminton is requesting to be able to use an existing vacant warehouse as an indoor badminton facility. The current zone for this facility is Heavy Industrial - M2. Bintang proposes to use the existing 35,930 square foot of vacant storage warehouse tenant space as in indoor recreation, without spectator seating. The usage of the space will include indoor badminton courts, offices, lounge, and restrooms with lockers and showers. The existing building is 143,812 square feet and the lot is approximately 6.25 acres.

Bintang Badminton is an existing business with facilities located in Campbell, Dublin, South San Francisco, and Sunnyvale. They provide quality indoor recreational badminton facilities, including courts and a small pro-shop for retail sales of shoes, bags, racquets and racquet repair.

Hours of operation will be 9 am – 11 pm, Monday through Sunday. The prime time during the weekdays is 7 pm – 11 pm and during the weekends is 3 pm – 6 pm. In addition, badminton tournament events are proposed four (4) weekends per year.

The number of employees will vary according to the scheduled activities and will range from one to five at any time. The number of customers onsite will range from 0-60 people including 0-30 children and 0-5 elderly.

They are looking forward to being in your community and providing an opportunity for everyone to experience badminton, an indoor sport that is fun to play and a wonderful physical activity.



**Figure 1: 746 S. Milpitas Blvd.**

## Section Two

---

### Primary Land Use in Area

The Otis Institute evaluated the business in the area of the proposed 746 Milpitas Blvd. locations: The evaluation used to determine companies in the area was based on driving local streets in the area, reviewing Google map search by category and by viewing maps for names of companies, LandView 5, organizational knowledge of business that use toxic and corrosive gases, and verification with of Hazardous Materials and Environmental Services Unit (HMES) of the proposed list of companies. Each company listed was then looked up on the City of Milpitas's online services, public assess documents, fire facility pre-plans to review hazardous material inventory statements for toxic and corrosive chemicals. It should be noted that most inventories onsite where for 2008 or 2007. Kovio was the only site that the Otis Institute received a hard copy of the HMIS, because the facility was new and had chemicals of concern per HMES. This evaluation determined that the following organizations had chemicals that may have an environmental impact at the 746 Milpitas Blvd. site.

1. FIB Lab Inc - 1514 Centre Pointe Drive
2. Headway Technologies - 463 S. Milpitas Blvd
3. Kovio - 233 South Hillview Drive, Milpitas, CA
4. Linear Technology Corporation - 275 South Hillview Drive, Milpitas, CA
5. Magic Technologies - 463 S. Milpitas Blvd
6. NanoGram - 165 Topaz St
7. SSA (formerly McCabe's) - 1029 Montague Expressway

Attachment Two contains the spreadsheet documenting the results of the HMIS review, chemicals of concern, the distance to the 746 Milpitas Blvd. location, maximum amount of the chemical onsite, units of measure, and largest container of chemical onsite. See Section Four for discussion on the methodology to obtain the risk assessment results for each chemical of concern.

## Section Three

---

### Review of Historical Hazmat Incidents

The Otis Institute completed a review of historical incidents for the chemicals of concern documented in Attachment One. This determination including incident reviews documented by the:

- US Chemical Safety Board (CSB),
- San Jose Mercury Achieves,
- Goggle Search
- City of Milpitas website

for the chemicals of concern. This evaluation went back to 2001-2006 depending on source searched and no incidents had been documented in any of the public records available from these organizations.

It should be noted that incidents have been record for many of the chemicals of concern listed in Attachment One. These incidents have resulted in personnel and neighbors to be sent to the hospital treatment and have included fatalities.

The following incident took place in nearby cities:

**Mar 4, 2006 12:29 am US/Pacific Mystery Hazmat Gas Release Sickens 17 in San Jose - SAN JOSE (CBS 5)**

More than a dozen people were taken to area hospitals Friday, after being exposed to an apparent chemical leak at a San Jose high tech company, authorities said. By late Friday, authorities still were unable to identify the chemical or the source of the leak at JDS Uniphase Corp., a maker of optical switching and transmission components, said San Jose Fire Capt. Michael Shaw. Firefighters shut down and checked each of the more than 80 lines that carry gases inside the building at 80 Rose Orchard Way but found nothing unusual, officials said. Firefighters responded to a call around 10 a.m., evacuated about 90 people from the building and found one man inside who was semiconscious from the fumes, said Shaw, who did not know the man's condition late Friday. A total of 15 people, including two firefighters, were taken to area hospitals after reporting symptoms such as difficulty breathing, irritated eyes, scratchy throats and lethargy. Two firefighters also were treated for stress-related problems. Most were treated and released from the hospitals by late Friday, Shaw said.

A hazardous materials crew was called in to investigate the leak, which was confined to the clean room where pump lasers are assembled. Two toxic gases, arsine and phosphine, are used in the assembly process, said Rich Etheredge, who supervises JDS Uniphase's health and safety practices. The facility is currently closed while the investigation takes place. The investigation was expected to last through the weekend.

**Feb 29, 2008 7:46 pm US/Pacific No Serious Injuries From Fremont Ammonia Leak - FREMONT (CBS 5 / KCBS / BCN)**

Hazmat crews respond to an ammonia leak that prompted an evacuation in Fremont. A Fremont ice company was evacuated Friday afternoon and adjacent streets shut down as fire crews worked to clear an anhydrous ammonia leak in a commercial district near Auto Mall Parkway. Fremont fire battalion Chief Mark Meveau said a hazardous material team was able to pinpoint the source of the 2:30 p.m. leak at the Glacier Ice Company, at 43960 Fremont Blvd., after the building had been thoroughly ventilated.

"We opened up roof-hatches on the top of the ceiling and we used fans to blow out the remnants of the ammonia vapor that's inside the building to go out," said Meveau. Ammonia is flammable, corrosive and toxic. Meveau said the leak caused some workers at adjacent businesses, including REI and Home Depot, mild respiratory problems, but no one was hospitalized. The Fremont Fire Department received mutual aid from Alameda County fire teams, according to Meveau.

**Aug 28, 2009 11:31 am US/Pacific 2 Dozen Hurt In South SF Ammonia Leak - SOUTH SAN FRANCISCO (BCN)**

An ammonia leak at a meat processing plant injured 24 people - including eight who were hospitalized - and caused evacuations and road closures for several hours Friday morning in an industrial area of South San Francisco, according to Fire Marshal Luis Da Silva. The leak was reported at about 5:45 a.m. at the

Columbus Salame plant at 493 Forbes Blvd., Da Silva said. The leak caused authorities to close several roads, preventing hundreds of businesses from operating and thousands of people from traveling through the area. However, all roads were reopened by about 10:40 a.m. and people were being allowed to re-enter their businesses. A hazardous materials team was still working on confirming that the plant was safe to enter though at about 11 a.m., Da Silva said.

The ammonia is used in the plant's cooling system to chill the meat after it is processed, according to Da Silva. Exposure to the chemical, which affects the respiratory system, hospitalized eight people. Sixteen other people were treated at the scene and released, Da Silva said. The leaking valve was closed around 8 a.m.

A fire crew will remain at the plant throughout the day to monitor the situation, he said. Columbus Salame President Ralph Denisco said the leak was discovered on the roof of the building. The company is upgrading the ammonia system at the plant, and the contractor doing the work arrived this morning and realized something was amiss as he went up to the roof to begin working, Denisco said. "I don't believe it was even in the building," he said. "It dissipated into the air." Denisco said he hoped work could resume at the plant later Friday. He also apologized to the businesses and drivers affected by the events.

Dozens of employees from surrounding buildings spent the morning sitting on the grass along the street as fire crews worked inside the sealed-off area. Phil Arellano was 15 minutes away from finishing a 12-hour overnight shift at a nearby Budweiser distribution facility when firefighters entered the site wearing gas masks and full gear at 5:45 a.m. They told employees to shut themselves in an enclosed office and await further instructions, he said. "The smell was coming in and everybody starting coughing," he said.

## Section Four

### Evaluation of Risk

The largest container of each chemical of concern was evaluated to determine the off-site consequence during a catastrophic release and if the release could have a potential negative environmental impact at the 746 Milpitas Blvd site. Each release was evaluated if a release would produce concentrations of the chemical at the project site at 1/10 of the established 'Immediately Dangerous to Life and Health' (IDLH) level and/or the USEPA toxic end point with no engineering controls in place.

This off-site consequence determination was modeled using two software programs: ALOHA (Areal Locations of Hazardous Atmospheres) version 5.1.4.2 and RMP\*Comp version 1.07 to determine potential worst case release scenarios and distances. ALOHA is a modeling program provided by USEPA that estimates threat zones associated with hazardous chemical releases, including toxic gas clouds, fires, and explosions. A threat zone is an area where a hazard (such as toxicity, flammability, thermal radiation, or damaging overpressure) has exceeded a user-specified Level of Concern (LOC). RMP\*Comp is a free USEPA program you can use to complete the offsite consequence analyses (both worst case scenarios and alternative scenarios) required under the Risk Management Program rule. When you use RMP\*Comp, you don't need to make any calculations by hand and the program guides you through the process of making an analysis

The worst case release scenarios used the requirements listed in the California Accidental Release Prevention (CalARP) guidance and EPA Risk Management Program guidance documentation. The following parameter were used and required in determining a worst case release scenario:

<i>Release Duration:</i>	<i>10 minutes</i>
<i>Wind Speed:</i>	<i>1.5 meters per second</i>
<i>Atmospheric Stability Class:</i>	<i>F</i>
<i>Temperature:</i>	<i>77 degrees F (25 degrees C)</i>
<i>Topography (Surface Roughness)</i>	<i>Urban</i>

The results of catastrophic releases are documented in the table in Attachment Two.

### Explanation of Results

The following items are to be noted as a part of this risk assessment:

1. The software modeling programs differ between chemicals on which one produces a more conservative distance of concern. An example is ALOHA stated that
2. Chemicals that did not have a NIOSH Immediately Dangerous to Life or Health (IDLH), we took the LC50 value and multiplied by 0.01. This has been used and documented in UNIDOCS document number UN-015 "Common Toxic Gases as Defined by the Toxic Gas Ordinance and CFC".
3. Some toxic end points were lower than the 1/10 IDLH and therefore had longer distances of concern. Toxic end points cannot be changed in the RMP Comp software.

# **Attachment One**

---

## **Sites with Chemicals of Concern & Off-Site Consequence Analysis**

Bintang Risk Assessment Spreadsheet

Company	Location	Distance to Bintang Badminton (KM)	Distance in Miles	Chemical Name	Maximum Amount on Site	Amount of Toxic Chemical Mixtures in Largest Container	IDLH (PPM)	RMP CBARP Toxic End Point (ppm/ft)	Distance to IDLH ALOHA (miles)	Distance to IDLH ALOHA (miles)	Distance to Toxic End Point - ALOHA (miles)	Distance to Toxic End Point - RMP Comp (miles)	Comments
FIB Lab Inc	1514 Centre Pointe Drive, Milpitas	1.51	0.84	Chlorine	1624	1624.00	10	0.0087	0.07	0.27	0.15	0.10	25 PPM from UNIDOCs document UN-015 (LC50 Rate x 0.001)
Headway Technologies	463 S. Milpitas Blvd	0.4	0.22	Boron Trichloride	125	125	25	0.01	0.08	0.41	0.45	1.00	
Headway Technologies	463 S. Milpitas Blvd	0.4	0.22	Chlorine	205	205	10	0.0087	0.24	0.82	0.50	0.20	
Kovio	233 South Hillview Drive, Milpitas, CA	0.8	0.44	5% Hydrogen Chloride in 95% Helium	190	190	50	0.03	0.02	0.08	0.04	0.20	
Kovio	233 South Hillview Drive, Milpitas, CA	0.8	0.44	Hydrogen Chloride	5	5	50	0.03	0.02	0.06	0.02	0.10	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Ammonia	5750	1150	300	0.14	0.07	0.24	0.09	0.10	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Ammonia	150	50	300	0.14	0.07	0.24	0.09	0.10	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Arsine	2.7	0.9	3	0.0019	0.06	0.23	0.16	0.70	Arsine is pyrophoric and should ignite upon release
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Boron Trichloride	30	5	25	0.01	0.03	0.14	0.15	0.30	25 PPM from UNIDOCs document UN-015 (LC50 Rate x 0.01)
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Boron Trifluoride	0.9	0.3	25	0.028	0.01	0.04	0.02	0.30	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Chlorine	2150	540	10	0.0087	0.39	1.50	0.83	0.50	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Diborane 5% in Nitrogen	# was less than largest container	158	15	0.0011	0.10	0.56	0.45	0.40	LFL 0.9% - spontaneously combustible and should ignite upon release
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Diborane 87 PPMv in Nitrogen	316	158	15	0.0011	0.01	0.01	0.01	0.10	Lower than 0.9% LFL
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Dichlorosilane	932	310	50	Overpressure 1 PSIG	0.09	0.43	N/A	0.02	50 PPM from UNIDOCs document UN-015
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Dichlorosilane	50	10	50	Overpressure 1 PSIG	0.03	0.15	N/A	0.01	50 PPM from UNIDOCs document UN-015
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Hydrogen Bromide	329	329	30	0.024	0.13	0.53	0.36	0.37	No Toxic End Point listed in Guidance for Auditing Risk Management Plans/Programs - Toxic End Point Listed is from BAAQMD Table 2-5-1 Toxic Air Contaminant Trigger Levels (Chronic Inhalation REL) - Distance Levels calculated using ALOHA.
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Hydrogen Chloride	1620	540	50	0.03	0.18	0.66	0.21	0.10	

Bintang Risk Assessment Spreadsheet

Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Phosphine	0.6	0.2	50	5	0.0035	0.01	0.02	0.03	0.60	Phosphine is pyrophoric and should ignite upon release
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Phosphine (1%) & Hydrogen	189	189	50	5	0.0035	0.01	0.02	0.03	0.60	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Phosphine (15%) & Nitrogen	189	189	50	5	0.0035	0.04	0.14	0.20	0.60	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Phosphine (5%) & Nitrogen	567	189	50	5	0.0035	0.02	0.08	0.11	0.60	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.35	0.19	Tungsten Hexafluoride	55	55	30	3	N/A	0.05	0.16	N/A	N/A	
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	1% Fluorine in N2/Kr	500	250	3	0.3	0.0039	0.02	0.06	0.06	0.60	
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Ammonia	100	50	300	30	0.14	0.01	0.05	0.02	0.10	
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Boron Trichloride	100	100	25	2.5	0.01	0.14	0.57	0.75	0.30	25 PPM from UNIDGCS document UN-015 (LCSF.Rpt.X.0.0011)
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Carbon Monoxide	360	180	25	2.5	N/A	0.01	0.04	N/A	N/A	
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Chlorine	200	100	10	1	0.0087	0.39	1.50	0.83	0.30	
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Hexafluorobutadiene	146	73	26.67	2.667	N/A	0.06	0.20	N/A	N/A	The 26.67 PPM was taken from the toxic gas ordinance table stating that 26.67 PPM was not regulated for concentration of the gas. A comparison of IDLH values for other gases listed and the NON-Regulated values for those gases shows that this is a conservative estimate of the IDLH. See report for gases compared to.
Magic Technologies	463 S. Milpitas Blvd	0.4	0.22	Nitrogen Trifluoride	96	48	50	5	N/A	0.01	0.02	N/A	N/A	
NanoGram	165 Topaz St	1.12	0.62	diborane 1% in argon	154	154	15	1.5	0.01	0.01	0.04	0.05	0.10	LFL 0.9% - spontaneously combustible and should ignite upon release
NanoGram	165 Topaz St	1.12	0.62	Phosphine <=9.7% in inert gas	154	154	15	1.5	0.0035	0.03	0.10	0.15	0.60	Phosphine is pyrophoric and should ignite upon release
SSA (formerly McCabe's)	1029 Montague Expressway	1.18	0.66	Ammonia	12000	12000	300	30	0.14	1.50	4.30	1.60	1.20	

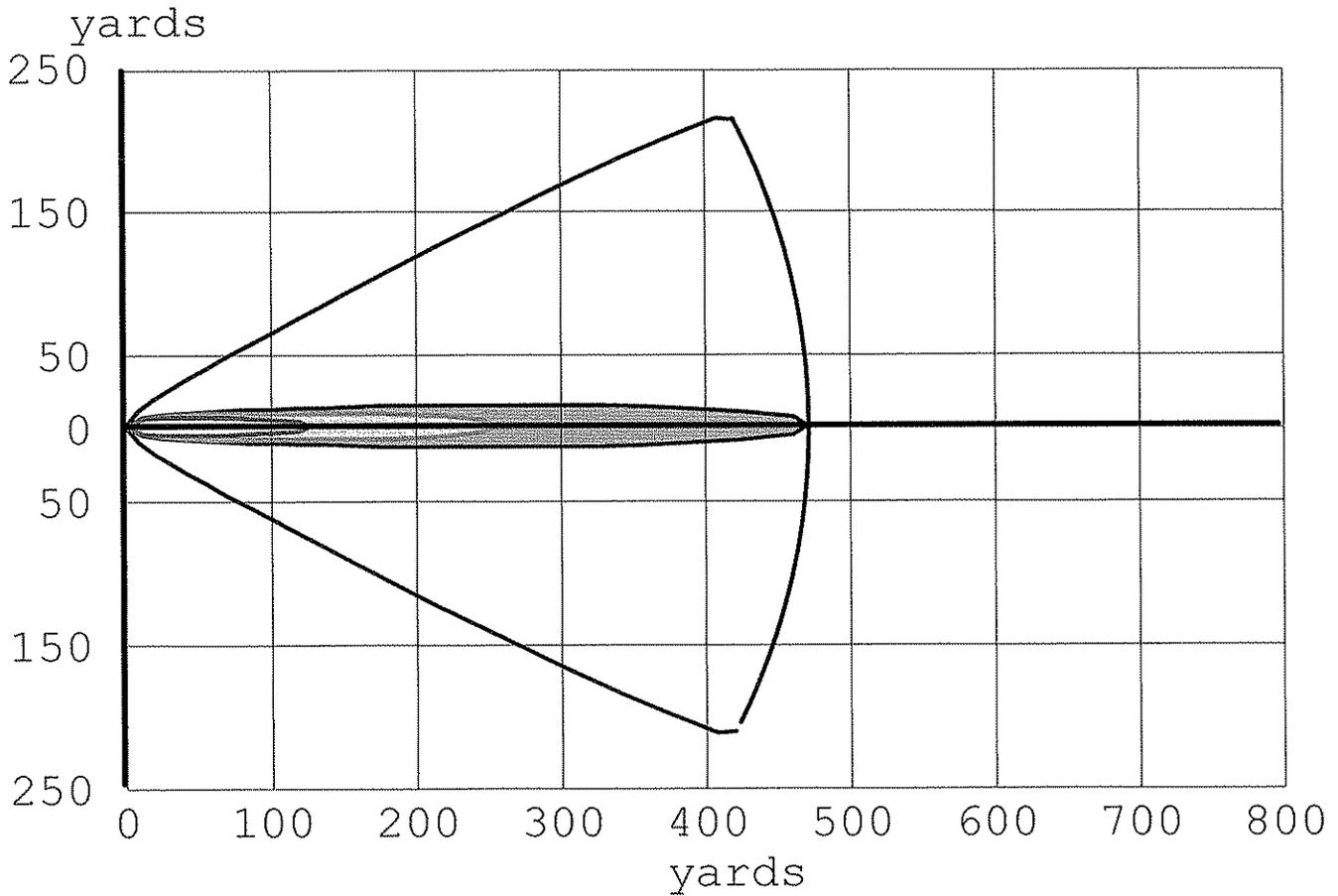
# **Attachment Two**

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## **ALOHA Printouts**



Time: June 1, 2010 1119 hours PDT (user specified)  
 Chemical Name: CHLORINE  
 Wind: 1.5 meters/second from W at 3 meters  
 THREAT ZONE:  
 Model Run: Heavy Gas  
 Red : 127 yards --- (10 ppm = IDLH)  
 Orange: 256 yards --- (.0087 mg/liter)  
 Yellow: 471 yards --- (1 ppm = ERPG-1)



-   $\geq 10$  ppm = IDLH
-   $\geq .0087$  mg/liter
-   $\geq 1$  ppm = ERPG-1
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: CHLORINE Molecular Weight: 70.91 g/mol  
AEGL-1(60 min): 0.5 ppm AEGL-2(60 min): 2 ppm AEGL-3(60 min): 20 ppm  
IDLH: 10 ppm  
Ambient Boiling Point: -29.3° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

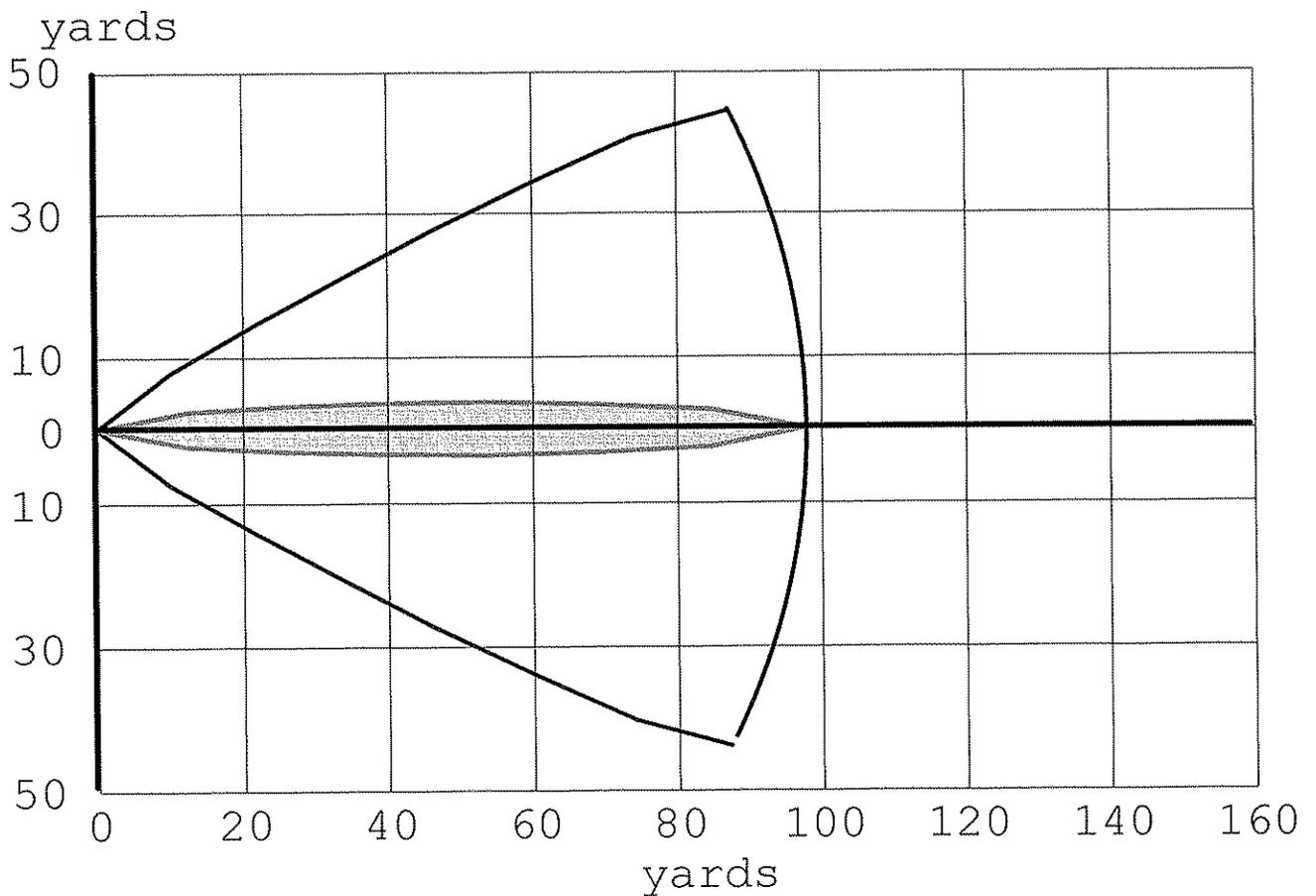
Direct Source: 162.4 grams/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 0.358 pounds/min  
Total Amount Released: 3.58 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

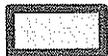
## THREAT ZONE:

Model Run: Heavy Gas  
Red : 127 yards --- (10 ppm = IDLH)  
Orange: 256 yards ---- (.0087 mg/liter)  
Yellow: 471 yards --- (1 ppm = ERPG-1)



Time: June 1, 2010 1119 hours PDT (user specified)  
 Chemical Name: FLUORINE  
 Wind: 1.5 meters/second from W at 3 meters  
 THREAT ZONE:  
 Model Run: Heavy Gas  
 Red : 29 yards --- (25 ppm = IDLH)  
 Note: Threat zone was not drawn because effects of near-field patchiness  
 make dispersion predictions less reliable for short distances.  
 Orange: 98 yards --- (.0039 mg/liter)  
 Yellow: 98 yards --- (2.5 ppm)



-   $\geq$  25 ppm = IDLH (not drawn)
-   $\geq$  .0039 mg/liter
-   $\geq$  2.5 ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: FLUORINE                      Molecular Weight: 38.00 g/mol  
ERPG-1: 0.5 ppm      ERPG-2: 5 ppm      ERPG-3: 20 ppm  
IDLH: 25 ppm  
Ambient Boiling Point: -306.8° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .25 cubic feet/min      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.0242 pounds/min  
Total Amount Released: 0.24 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 29 yards --- (25 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 98 yards --- (.0039 mg/liter)  
Yellow: 98 yards --- (2.5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: BORON TRICHLORIDE

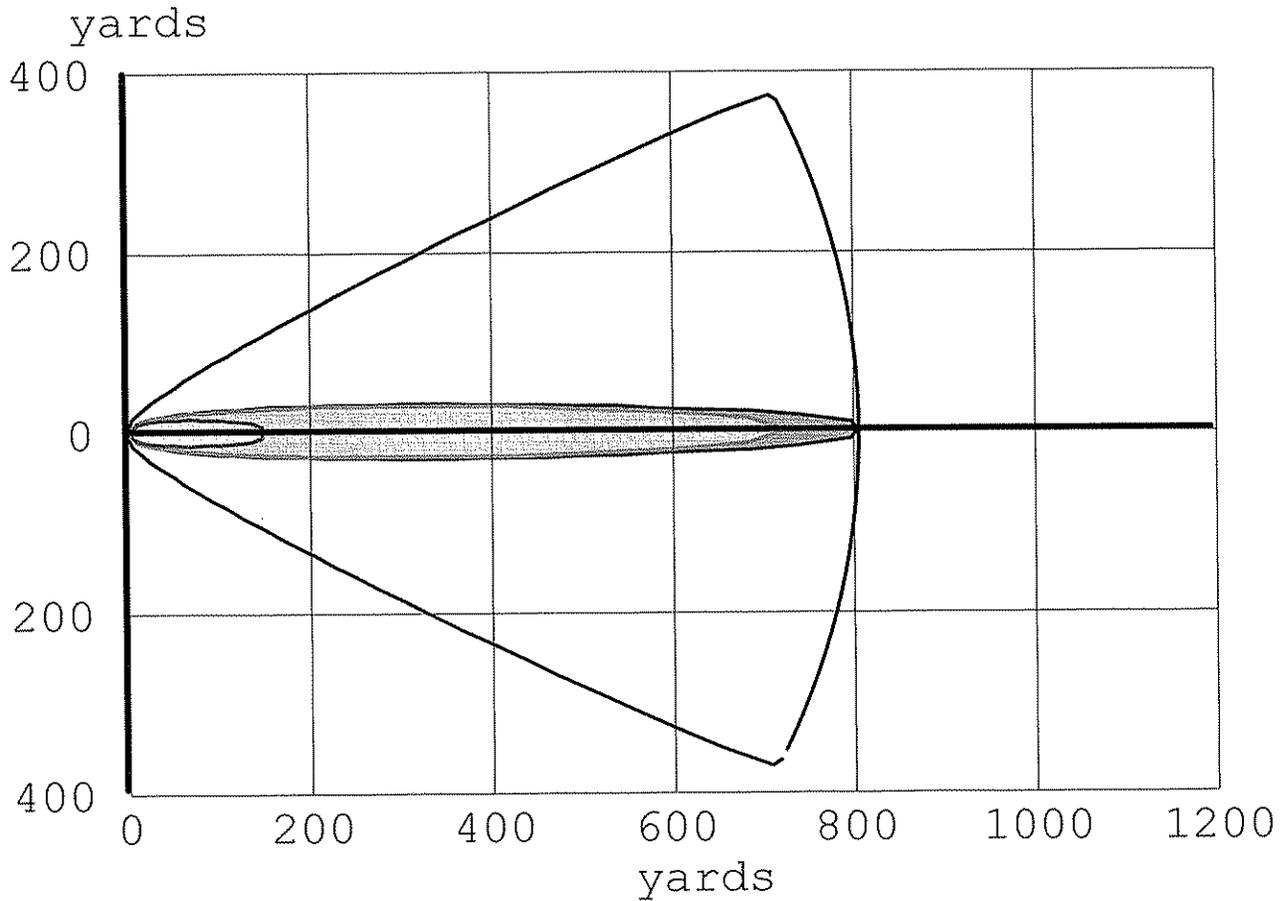
Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

**THREAT ZONE:**

Model Run: Heavy Gas

- Red : 149 yards --- (25 ppm)
- Orange: 727 yards --- (2.5 ppm = TEEL-3)
- Yellow: 806 yards --- (.01 mg/liter)



-  >= 25 ppm
-  >= 2.5 ppm = TEEL-3
-  >= .01 mg/liter
-  Confidence Lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

**CHEMICAL DATA:**

Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: BORON TRICHLORIDE Molecular Weight: 117.17 g/mol  
TEEL-1: 0.3 ppm TEEL-2: 2.09 ppm TEEL-3: 2.5 ppm  
Ambient Boiling Point: 54.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

**SOURCE STRENGTH:**

Direct Source: 12.5 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 3.85 pounds/min  
Total Amount Released: 38.5 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

**THREAT ZONE:**

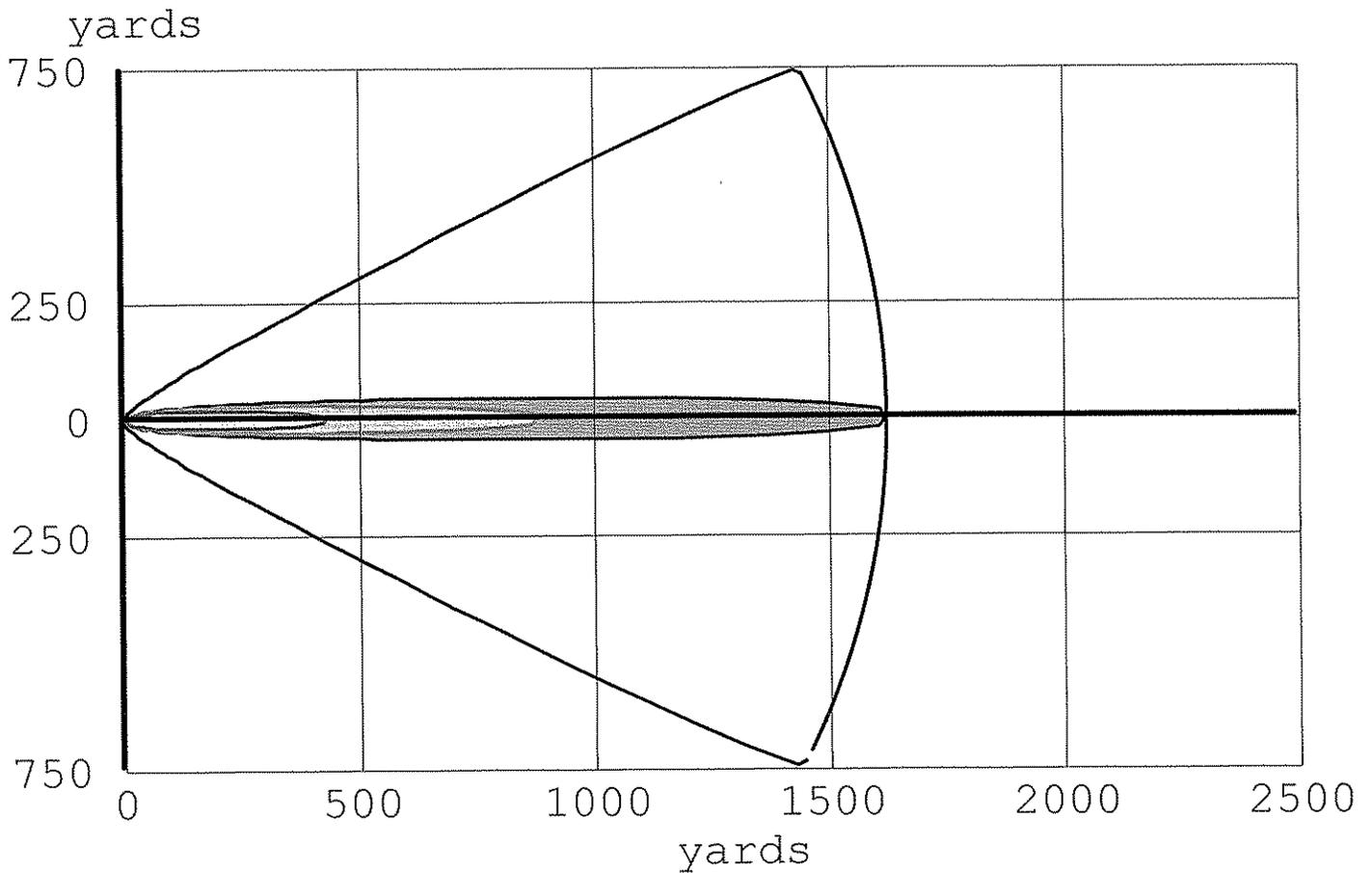
Model Run: Heavy Gas  
Red : 149 yards --- (25 ppm)  
Orange: 727 yards --- (2.5 ppm = TEEL-3)  
Yellow: 806 yards --- (.01 mg/liter)

Toxic Threat Zone

ALOHA® 5.4.1.2



Time: June 1, 2010 1119 hours PDT (user specified)  
Chemical Name: CHLORINE  
Wind: 1.5 meters/second from W at 3 meters  
THREAT ZONE:  
Model Run: Heavy Gas  
Red : 427 yards --- (10 ppm = IDLH)  
Orange: 881 yards --- (.0087 mg/liter)  
Yellow: 1620 yards --- (1 ppm = ERPG-1)

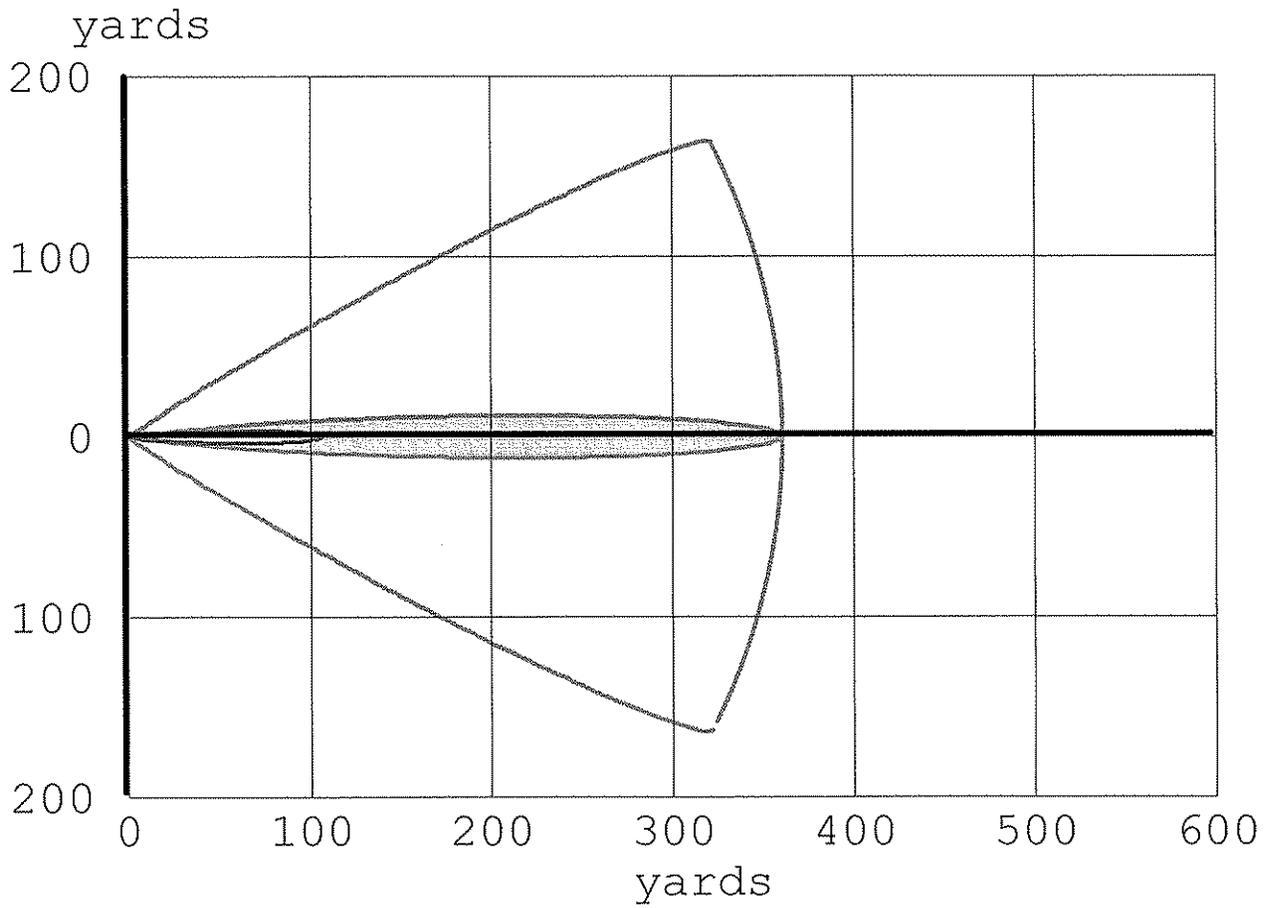


-  >= 10 ppm = IDLH
-  >= .0087 mg/liter
-  >= 1 ppm = ERPG-1
-  Confidence Lines





Time: June 1, 2010 1119 hours PDT (user specified)  
Chemical Name: 1,3-HEXAFLUOROBUTADIENE  
Wind: 1.5 meters/second from W at 3 meters  
THREAT ZONE:  
Model Run: Gaussian  
Red : 106 yards --- (26.67 ppm)  
Orange: 360 yards --- (2.67 ppm)



-   $\geq 26.67$  ppm
-   $\geq 2.67$  ppm
-  Confidence Lines



SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: 1,3-HEXAFLUOROBUTADIENE  
Molecular Weight: 162.03 g/mol  
Ambient Boiling Point: 42.8° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%  
Note: Not enough chemical data to use Heavy Gas option

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height      Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 7.3 cubic feet/min      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 3.08 pounds/min  
Total Amount Released: 30.8 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

THREAT ZONE:

Model Run: Gaussian  
Red : 106 yards --- (26.67 ppm)  
Orange: 360 yards --- (2.67 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: HYDROGEN CHLORIDE

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

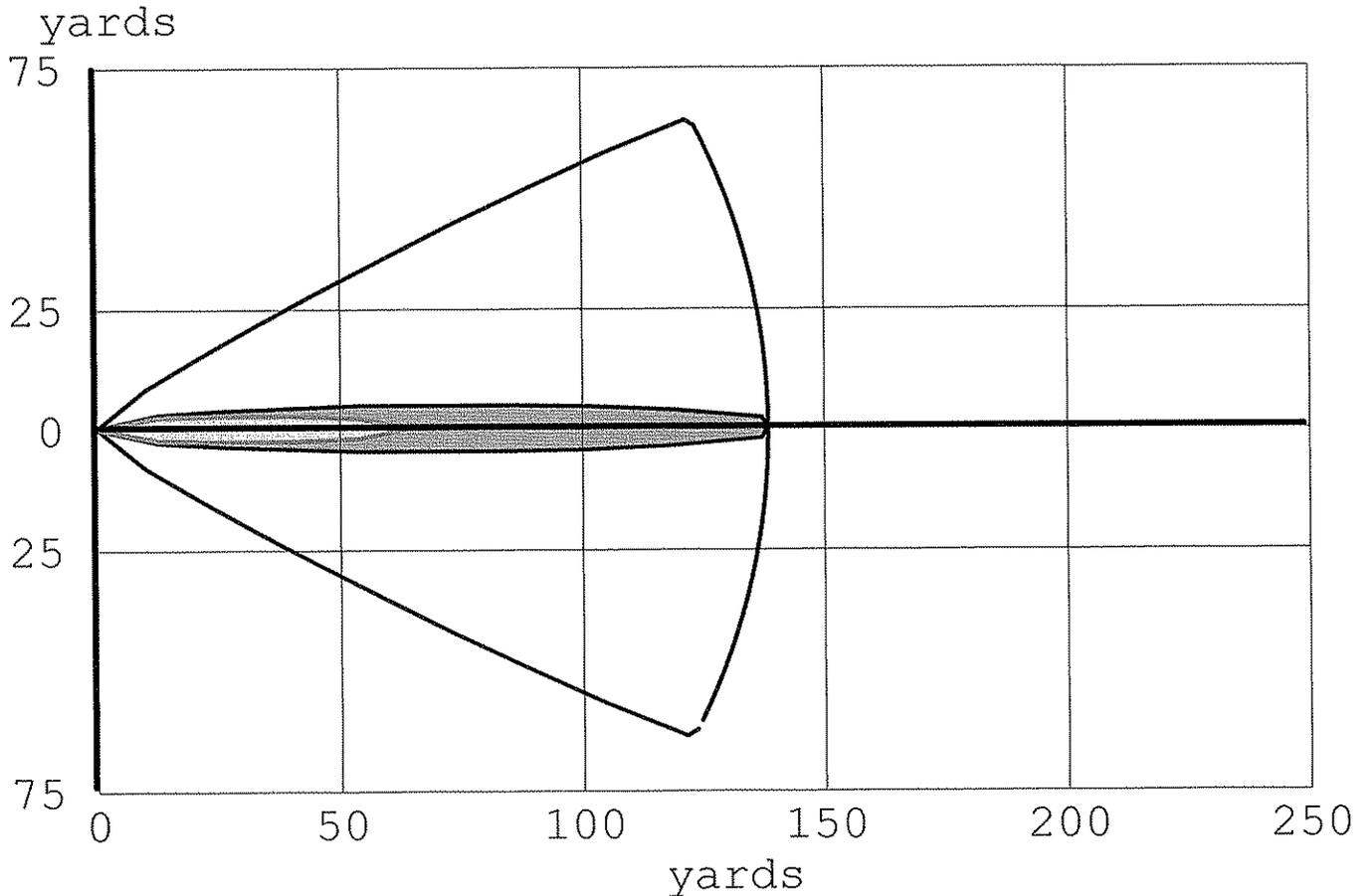
Model Run: Heavy Gas

Red : 39 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 65 yards --- (.03 mg/liter)

Yellow: 138 yards --- (5 ppm)



-  >= 50 ppm = IDLH (not drawn)
-  >= .03 mg/liter
-  >= 5 ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Chemical Name: HYDROGEN CHLORIDE                      Molecular Weight: 36.46 g/mol  
AEGL-1(60 min): 1.8 ppm    AEGL-2(60 min): 22 ppm    AEGL-3(60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -121.0° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest                      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height    Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .95 cubic feet/min                      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.0888 pounds/min  
Total Amount Released: 0.89 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 39 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 65 yards --- (.03 mg/liter)  
Yellow: 138 yards --- (5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: HYDROGEN CHLORIDE

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

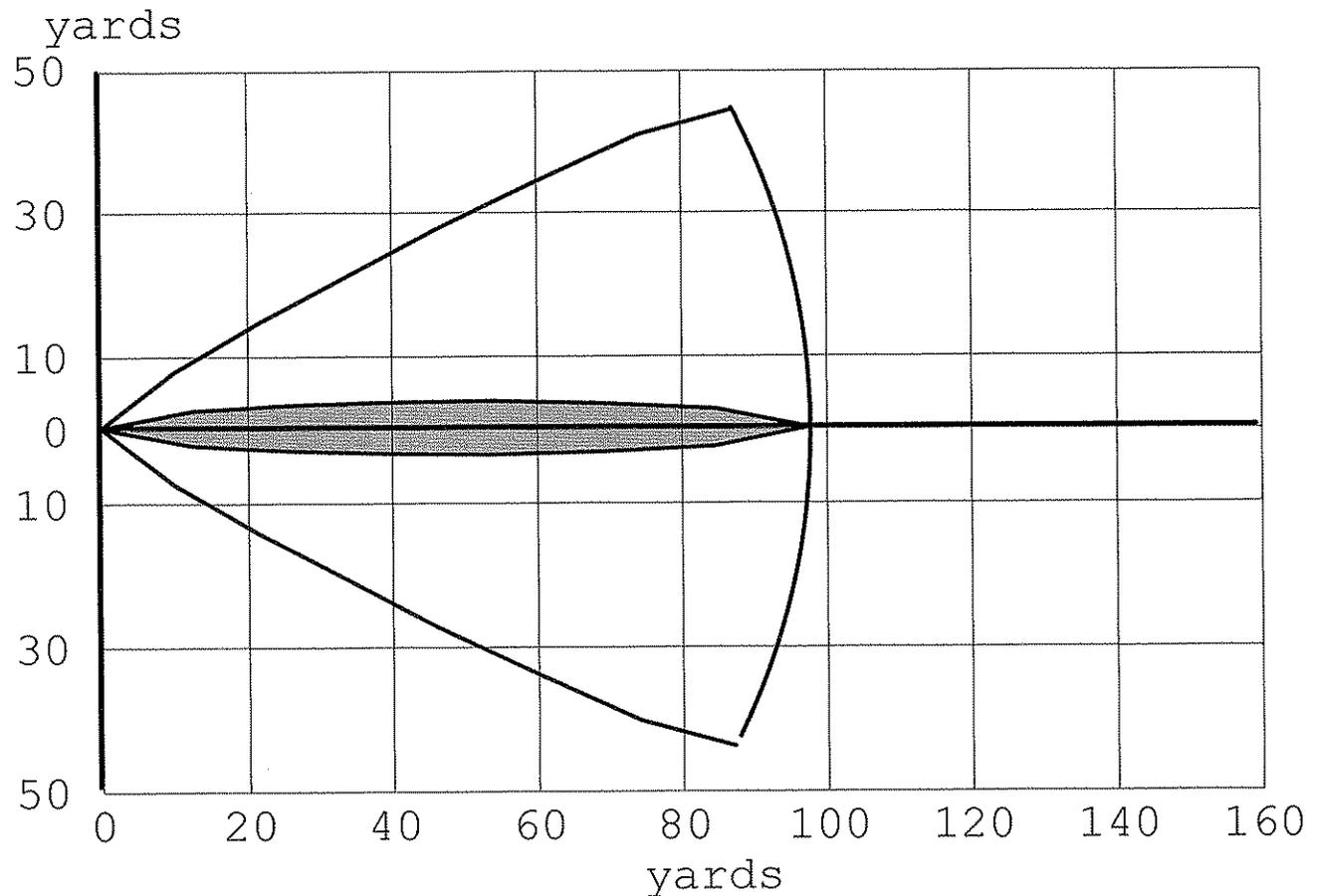
Red : 28 yards --- (50 ppm = IDLH)

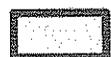
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 48 yards --- (0.03 mg/liter)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 98 yards --- (5 ppm)



-   $\geq 50$  ppm = IDLH (not drawn)
-   $\geq 0.03$  mg/liter (not drawn)
-   $\geq 5$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.  
Chemical Name: HYDROGEN CHLORIDE Molecular Weight: 36.46 g/mol  
AEGL-1(60 min): 1.8 ppm AEGL-2(60 min): 22 ppm AEGL-3(60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -121.0° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override) Relative Humidity: 50%  
No Inversion Height

## SOURCE STRENGTH:

Direct Source: .5 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.0467 pounds/min  
Total Amount Released: 0.47 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 28 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 48 yards --- (0.03 mg/liter)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Yellow: 98 yards --- (5 ppm)

Toxic Threat Zone

ALOHA® 5.4.1.2



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 meters/second from W at 3 meters

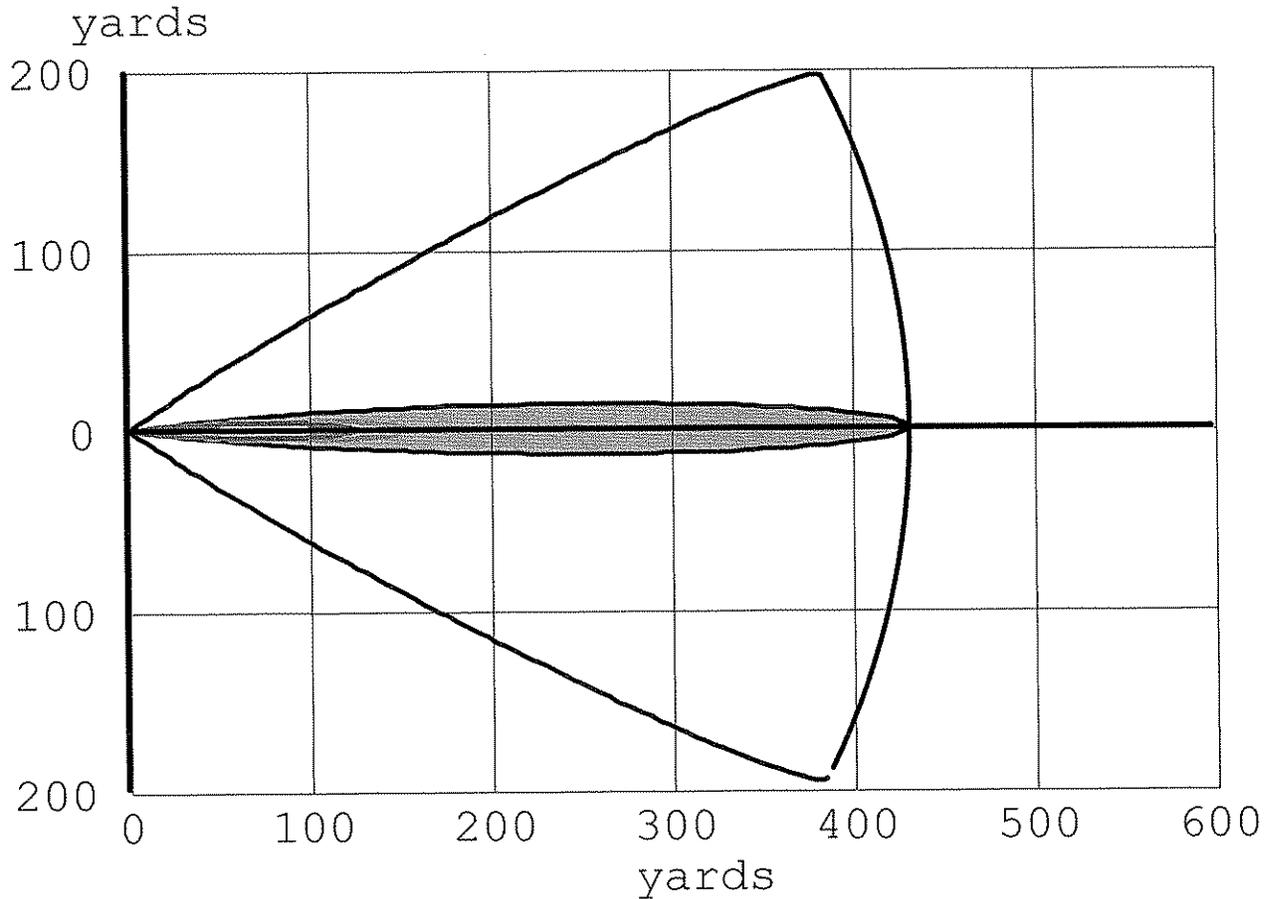
THREAT ZONE:

Model Run: Gaussian

Red : 125 yards --- (300 ppm = IDLH)

Orange: 155 yards --- (0.14 mg/liter)

Yellow: 431 yards --- (30 ppm = AEGL-1(60 min))



-   $\geq 300$  ppm = IDLH
-   $\geq 0.14$  mg/liter
-   $\geq 30$  ppm = AEGL-1(60 min)
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: AMMONIA Molecular Weight: 17.03 g/mol  
AEGL-1(60 min): 30 ppm AEGL-2(60 min): 160 ppm AEGL-3(60 min): 1100 ppm  
IDLH: 300 ppm LEL: 160000 ppm UEL: 250000 ppm  
Ambient Boiling Point: -28.2° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 115 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 5.03 pounds/min  
Total Amount Released: 50.3 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 125 yards --- (300 ppm = IDLH)  
Orange: 155 yards --- (0.14 mg/liter)  
Yellow: 431 yards --- (30 ppm = AEGL-1(60 min))

Toxic Threat Zone

ALOHA® 5.4.1.2



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 meters/second from W at 3 meters

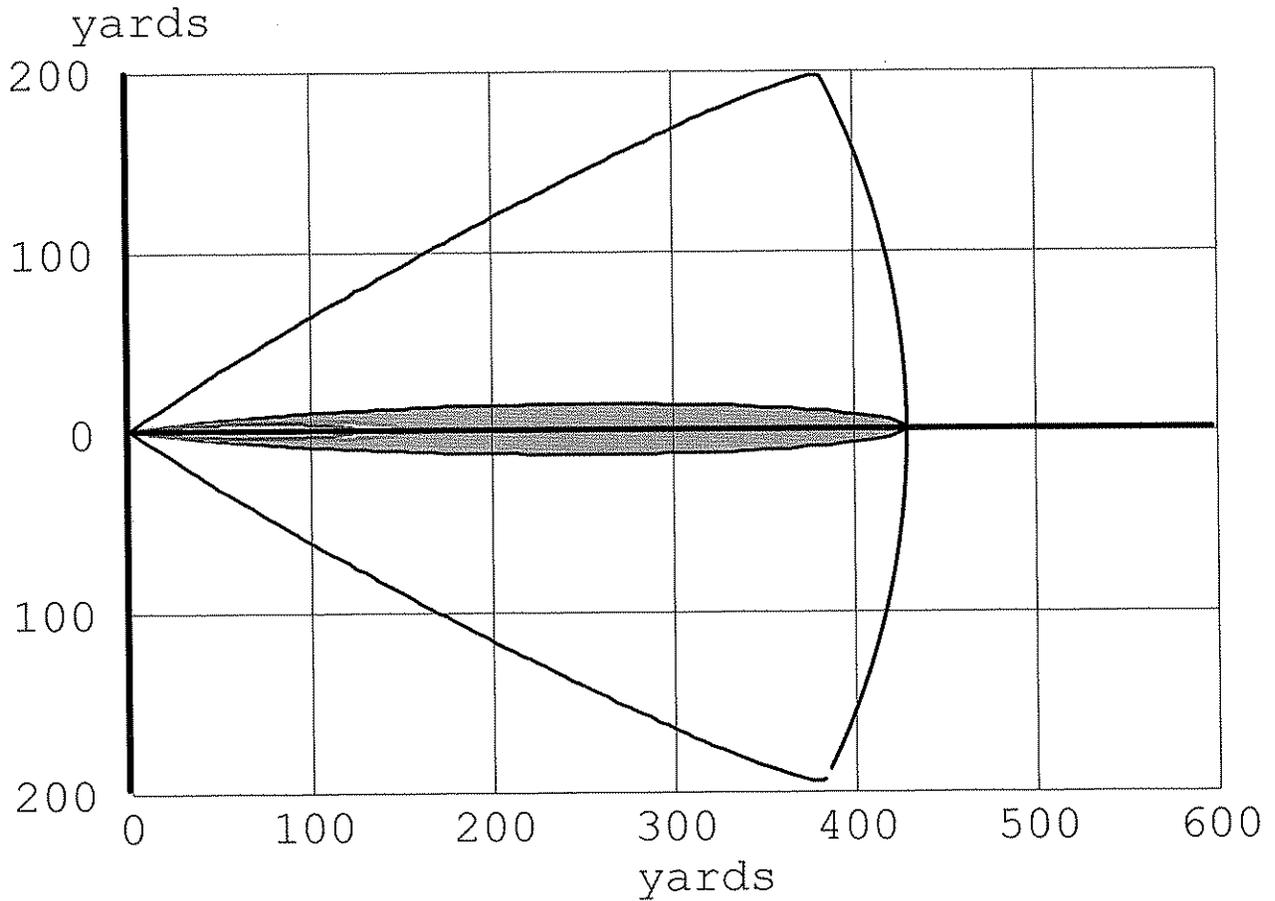
THREAT ZONE:

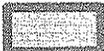
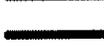
Model Run: Gaussian

Red : 125 yards --- (300 ppm = IDLH)

Orange: 154 yards --- (0.14 mg/liter)

Yellow: 430 yards --- (30 ppm = AEGL-1(60 min))



-   $\geq 300$  ppm = IDLH
-   $\geq 0.14$  mg/liter
-   $\geq 30$  ppm = AEGL-1(60 min)
-  Confidence Lines



SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: AMMONIA Molecular Weight: 17.03 g/mol  
AEGL-1(60 min): 30 ppm AEGL-2(60 min): 160 ppm AEGL-3(60 min): 1100 ppm  
IDLH: 300 ppm LEL: 160000 ppm UEL: 250000 ppm  
Ambient Boiling Point: -28.2° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

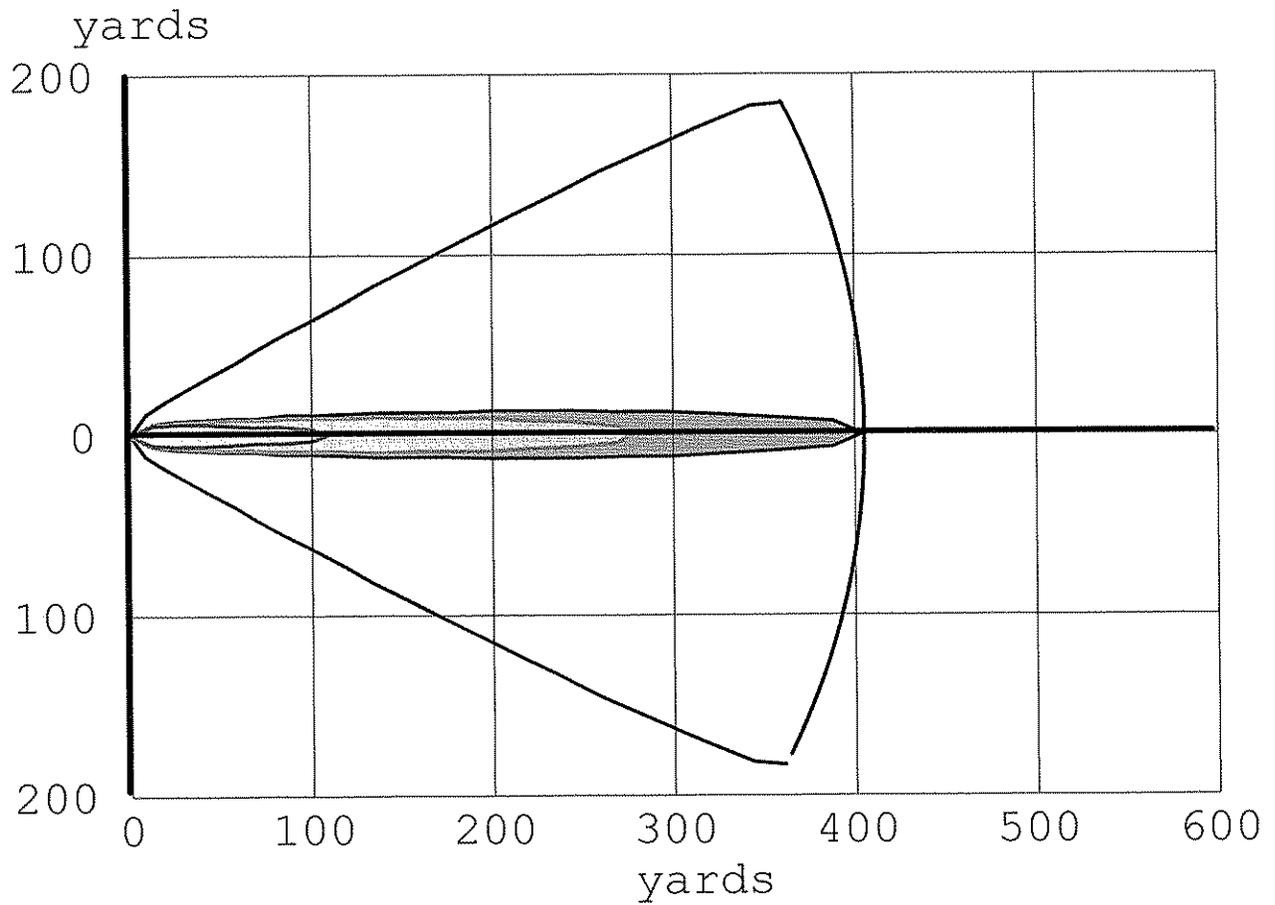
Direct Source: 5 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 5 pounds/min  
Total Amount Released: 50.0 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

THREAT ZONE:

Model Run: Gaussian  
Red : 125 yards --- (300 ppm = IDLH)  
Orange: 154 yards --- (0.14 mg/liter)  
Yellow: 430 yards --- (30 ppm = AEGL-1(60 min))



Time: June 1, 2010 1119 hours PDT (user specified)  
Chemical Name: ARSINE  
Carcinogenic risk - see CAMEO Chemicals  
Wind: 1.5 meters/second from W at 3 meters  
THREAT ZONE:  
Model Run: Heavy Gas  
Red : 109 yards --- (3 ppm = IDLH)  
Orange: 277 yards --- (0.0019 mg/liter)  
Yellow: 405 yards --- (.3 ppm)



-  >= 3 ppm = IDLH
-  >= 0.0019 mg/liter
-  >= .3 ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: ARSINE Molecular Weight: 77.95 g/mol  
AEGL-2(60 min): 0.17 ppm AEGL-3(60 min): 0.5 ppm  
IDLH: 3 ppm LEL: 510 ppm UEL: 7800 ppm  
Carcinogenic risk - see CAMEO Chemicals  
Ambient Boiling Point: -80.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .09 pounds/min Source Height: 0  
Release Duration: 60 minutes  
Release Rate: 0.09 pounds/min  
Total Amount Released: 5.40 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 109 yards --- (3 ppm = IDLH)  
Orange: 277 yards --- (0.0019 mg/liter)  
Yellow: 405 yards --- (.3 ppm)



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: ARSINE  
Carcinogenic risk - see CAMEO Chemicals

Wind: 1.5 meters/second from w at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 13 yards --- (3 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.

Orange: 46 yards --- (.3 ppm)

Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.

Model Run: Heavy Gas

Red : 13 yards --- (3 ppm = IDLH)

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh

Orange: 46 yards --- (.3 ppm)

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: BORON TRICHLORIDE

Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

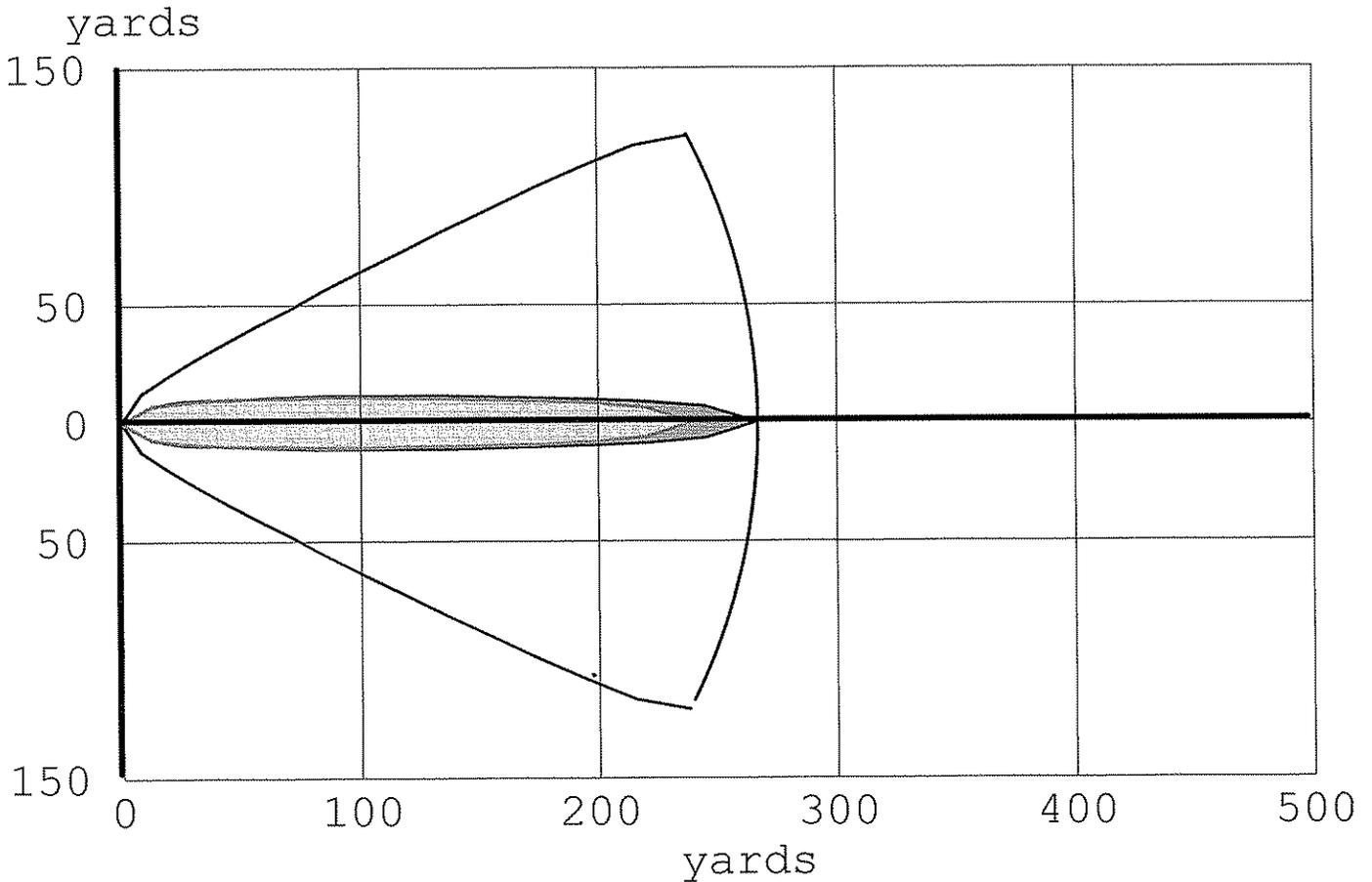
Model Run: Heavy Gas

Red : 52 yards --- (25 ppm)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 240 yards --- (2.5 ppm = TEEL-3)

Yellow: 267 yards --- (.01 mg/liter)



-  >= 25 ppm (not drawn)
-  >= 2.5 ppm = TEEL-3
-  >= .01 mg/liter
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: BORON TRICHLORIDE                      Molecular Weight: 117.17 g/mol  
TEEL-1: 0.3 ppm      TEEL-2: 2.09 ppm      TEEL-3: 2.5 ppm  
Ambient Boiling Point: 54.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .5 pounds/min                      Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 0.5 pounds/min  
Total Amount Released: 5.00 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 52 yards --- (25 ppm)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 240 yards --- (2.5 ppm = TEEL-3)  
Yellow: 267 yards --- (.01 mg/liter)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: BORON TRIFLUORIDE

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

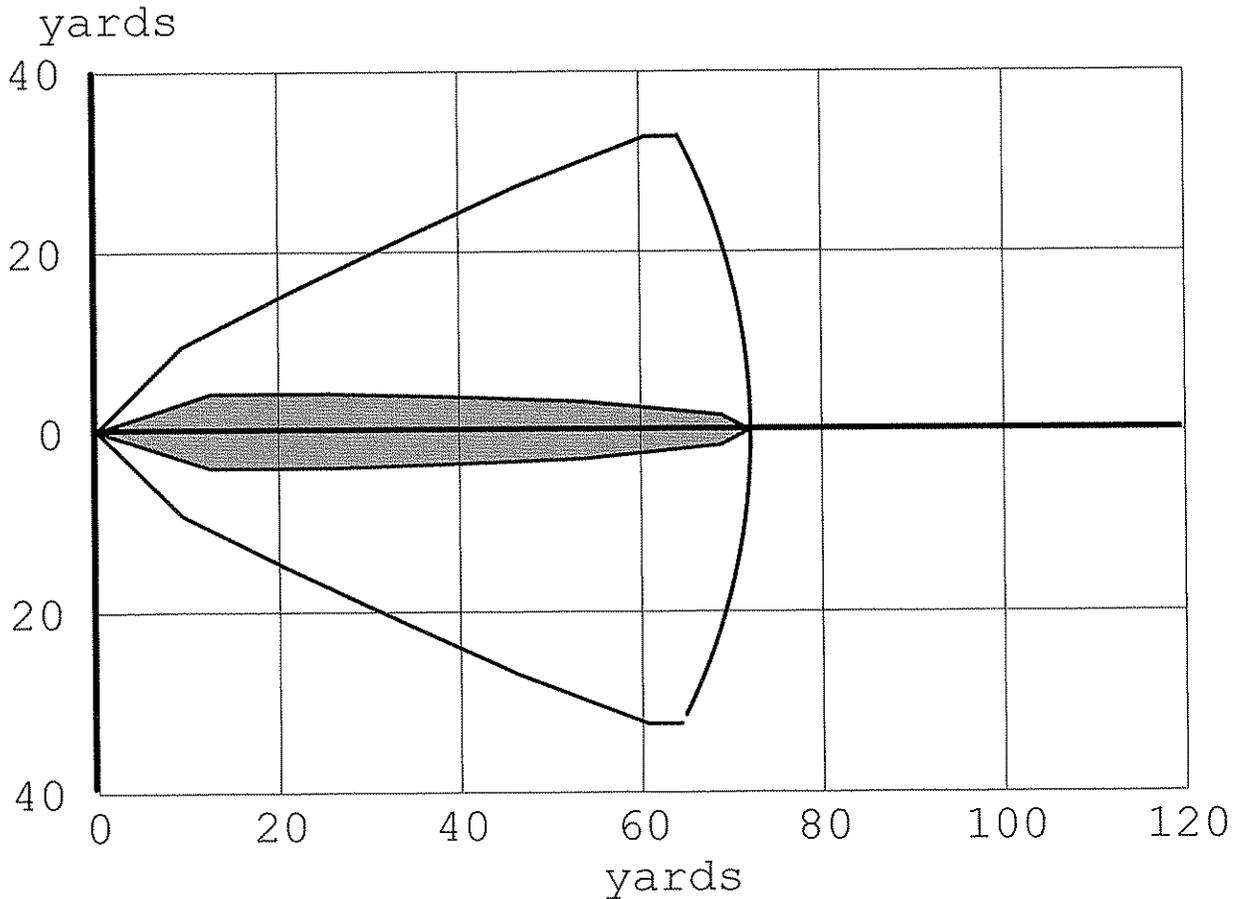
Red : 13 yards --- (25 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 29 yards --- (.028 mg/liter)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 72 yards --- (2.5 ppm)



-   $\geq 25$  ppm = IDLH (not drawn)
-   $\geq .028$  mg/liter (not drawn)
-   $\geq 2.5$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: BORON TRIFLUORIDE                      Molecular Weight: 67.81 g/mol  
ERPG-1: 2 mg/(cu m)    ERPG-2: 30 mg/(cu m)    ERPG-3: 100 mg/(cu m)  
IDLH: 25 ppm  
Ambient Boiling Point: -147.6° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest                      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height    Relative Humidity: 50%

## SOURCE STRENGTH:

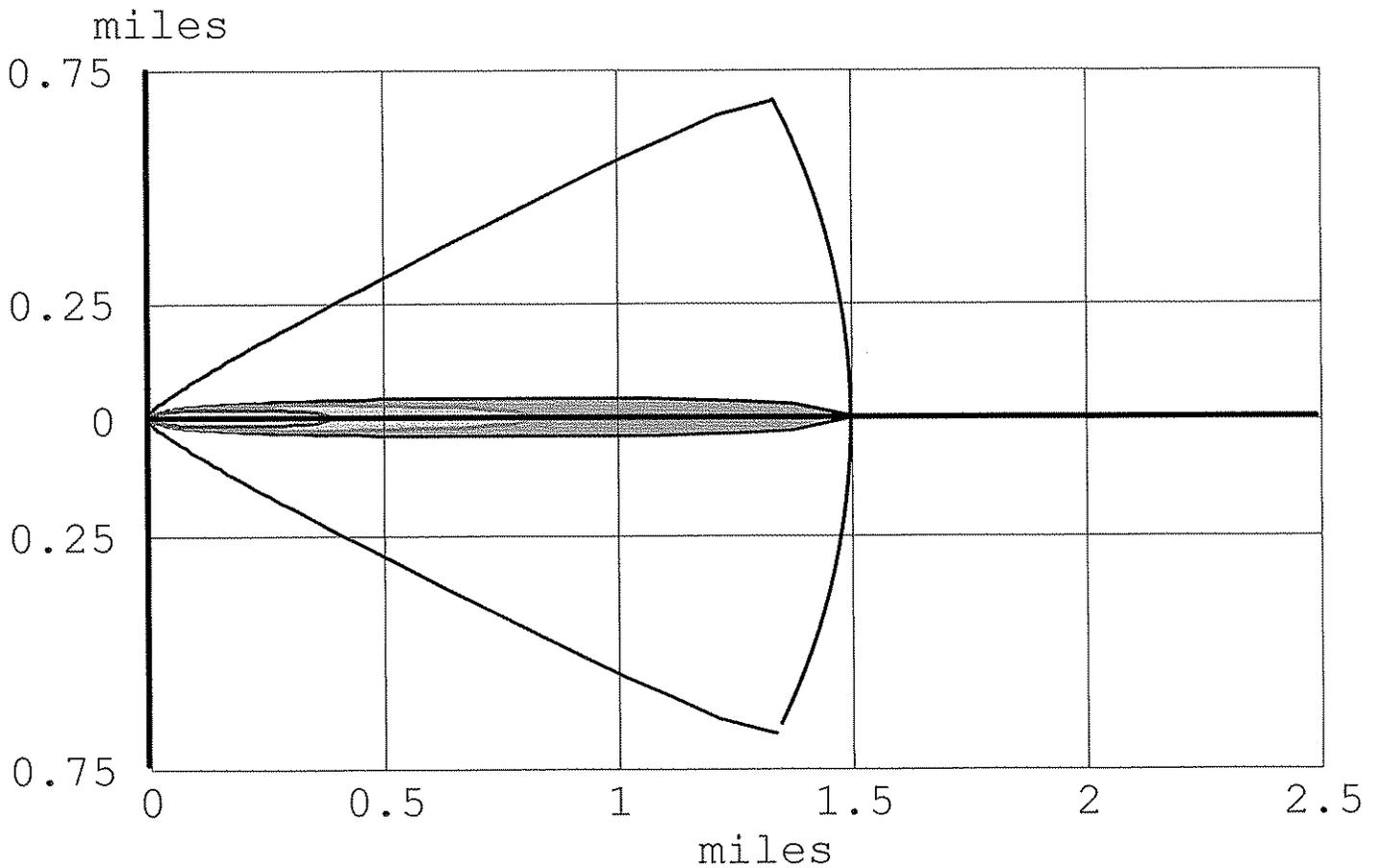
Direct Source: .03 pounds/min                      Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 0.03 pounds/min  
Total Amount Released: 0.30 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 13 yards --- (25 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 29 yards --- (.028 mg/liter)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Yellow: 72 yards --- (2.5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)  
Chemical Name: CHLORINE  
Wind: 1.5 meters/second from W at 3 meters  
THREAT ZONE:  
Model Run: Heavy Gas  
Red : 684 yards --- (10 ppm = IDLH)  
Orange: 1456 yards --- (.0087 mg/liter)  
Yellow: 1.5 miles --- (1 ppm = ERPG-1)



-  >= 10 ppm = IDLH
-  >= .0087 mg/liter
-  >= 1 ppm = ERPG-1
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: CHLORINE Molecular Weight: 70.91 g/mol  
AEGL-1(60 min): 0.5 ppm AEGL-2(60 min): 2 ppm AEGL-3(60 min): 20 ppm  
IDLH: 10 ppm  
Ambient Boiling Point: -29.3° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 54 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 9.88 pounds/min  
Total Amount Released: 98.8 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 684 yards --- (10 ppm = IDLH)  
Orange: 1456 yards --- (.0087 mg/liter)  
Yellow: 1.5 miles --- (1 ppm = ERPG-1)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: DIBORANE

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

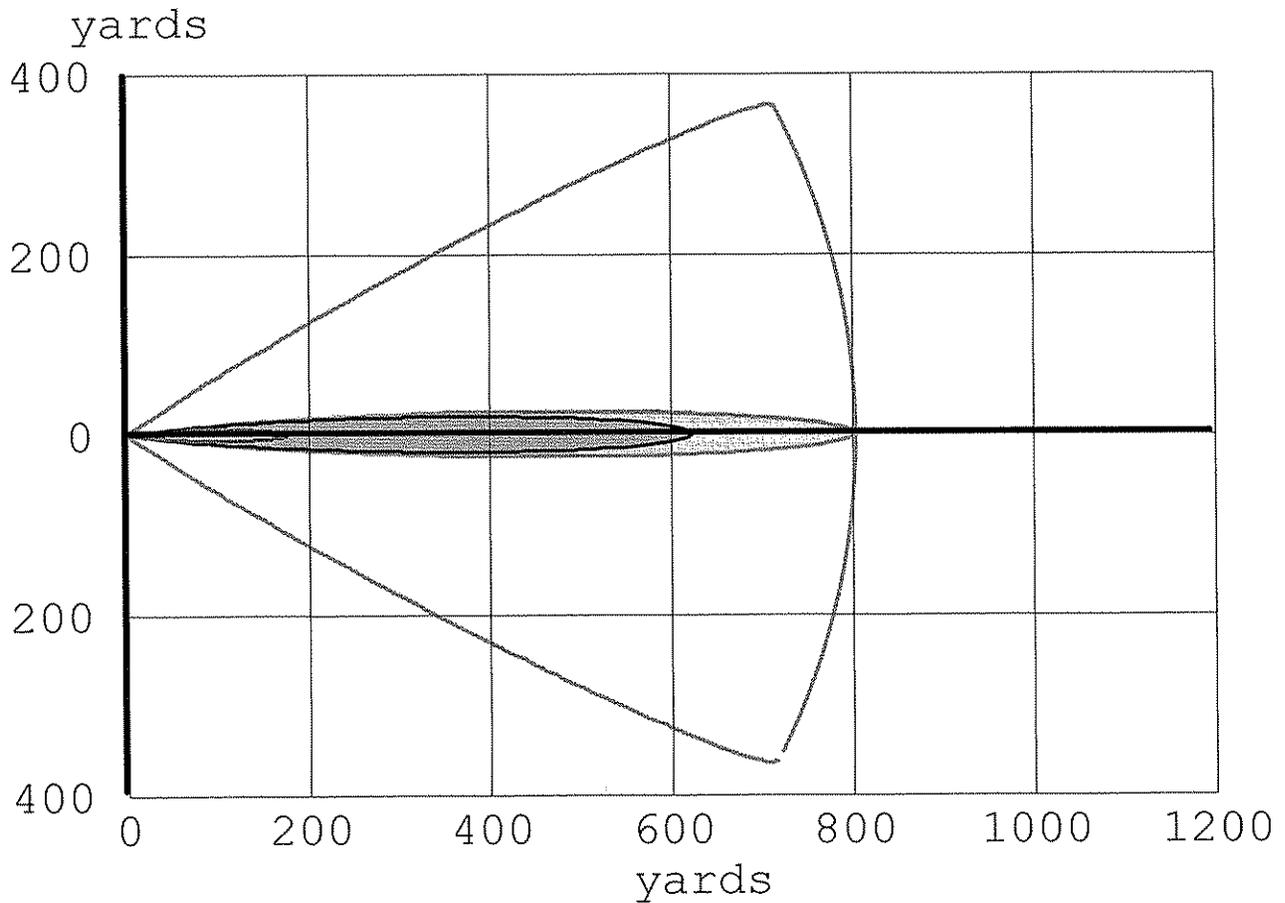
THREAT ZONE:

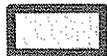
Model Run: Gaussian

Red : 177 yards --- (15 ppm = IDLH)

Orange: 805 yards --- (.0011 mg/liter)

Yellow: 626 yards --- (1.5 ppm)



-   $\geq 15$  ppm = IDLH
-   $\geq .0011$  mg/liter
-   $\geq 1.5$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: DIBORANE Molecular Weight: 27.67 g/mol  
AEGL-2(60 min): 1 ppm AEGL-3(60 min): 3.7 ppm  
IDLH: 15 ppm LEL: 9000 ppm UEL: 980000 ppm  
Ambient Boiling Point: -134.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override) Relative Humidity: 50%  
No Inversion Height

## SOURCE STRENGTH:

Direct Source: .79 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 0.79 pounds/min  
Total Amount Released: 7.90 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 177 yards --- (15 ppm = IDLH)  
Orange: 805 yards --- (.0011 mg/liter)  
Yellow: 626 yards --- (1.5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: DIBORANE

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Gaussian

Red : less than 10 meters(10.9 yards) --- (15 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: less than 10 meters(10.9 yards) --- (.0011 mg/liter)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: less than 10 meters(10.9 yards) --- (1.5 ppm)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Model Run: Gaussian

Red : less than 10 meters(10.9 yards) --- (15 ppm)

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh

Orange: less than 10 meters(10.9 yards) --- (.0011

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh

Yellow: less than 10 meters(10.9 yards) --- (1.5 pp

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: DIBORANE Molecular Weight: 27.67 g/mol  
AEGL-2(60 min): 1 ppm AEGL-3(60 min): 3.7 ppm  
IDLH: 15 ppm LEL: 9000 ppm UEL: 980000 ppm  
Ambient Boiling Point: -134.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .0013746 cubic feet/min  
Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 9.78e-05 pounds/min  
Total Amount Released: 9.78e-004 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : less than 10 meters(10.9 yards) --- (15 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: less than 10 meters(10.9 yards) --- (.0011 mg/liter)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Yellow: less than 10 meters(10.9 yards) --- (1.5 ppm)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: DICHLOROSILANE

Warning: DICHLOROSILANE can react with water and/or water vapor to produce hydrogen chloride and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from w at 3 meters

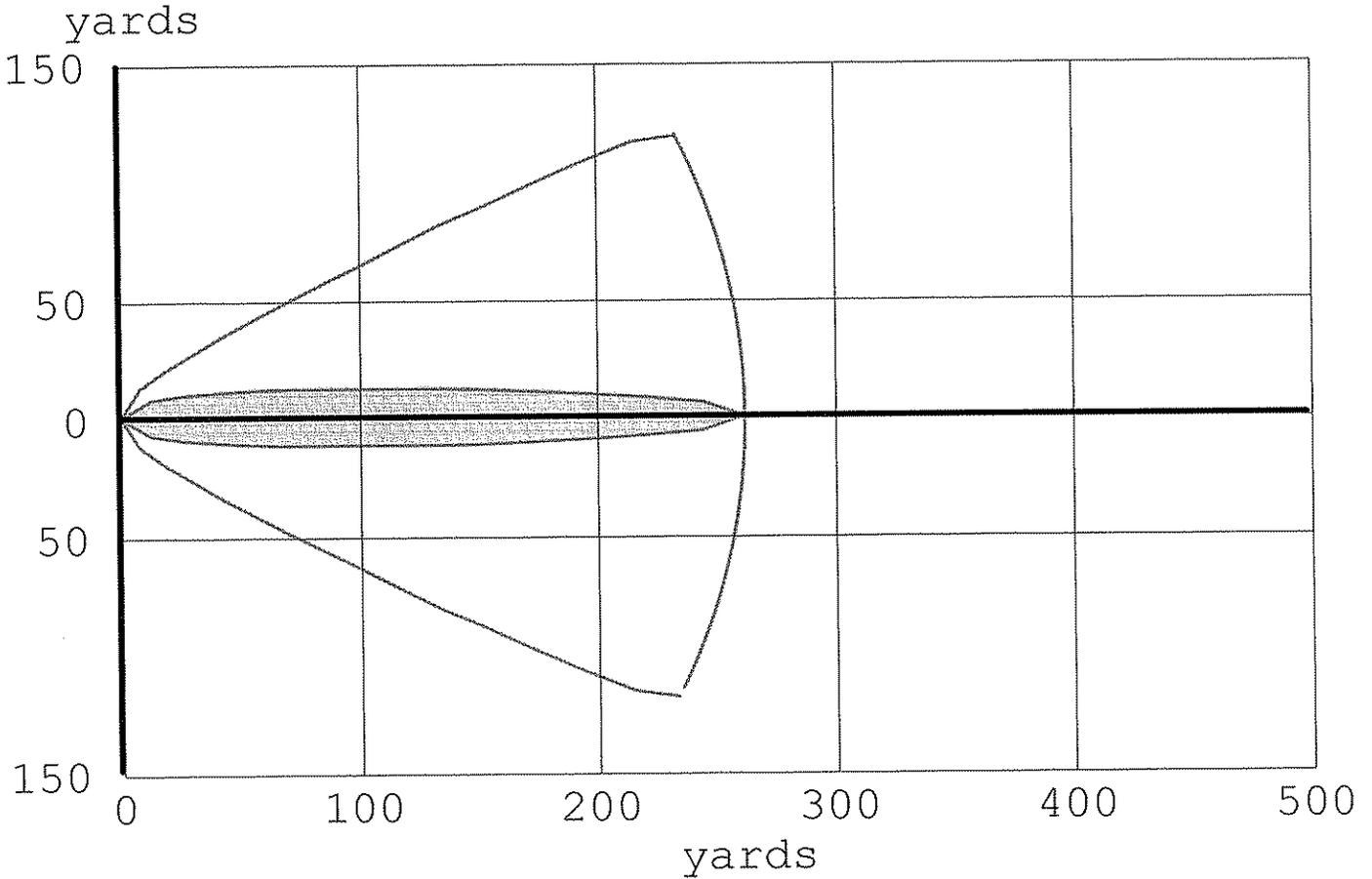
THREAT ZONE:

Model Run: Heavy Gas

Red : 53 yards --- (50 ppm = TEEL-3)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 263 yards --- (5 ppm)



-   $\geq 50$  ppm = TEEL-3 (not drawn)
-   $\geq 5$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: May 25, 2010 1200 hours PDT (user specified)

## CHEMICAL DATA:

Warning: DICHLOROSILANE can react with water and/or water vapor to produce hydrogen chloride and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: DICHLOROSILANE                      Molecular Weight: 101.01 g/mol  
TEEL-1: 0.9 ppm      TEEL-2: 11 ppm      TEEL-3: 50 ppm  
LEL: 40000 ppm      UEL: 960000 ppm  
Ambient Boiling Point: 46.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from w at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 1 pounds/min                      Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 1 pounds/min  
Total Amount Released: 10.00 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 53 yards --- (50 ppm = TEEL-3)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 263 yards --- (5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: DICHLOROSILANE

Warning: DICHLOROSILANE can react with water and/or water vapor to produce hydrogen chloride and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

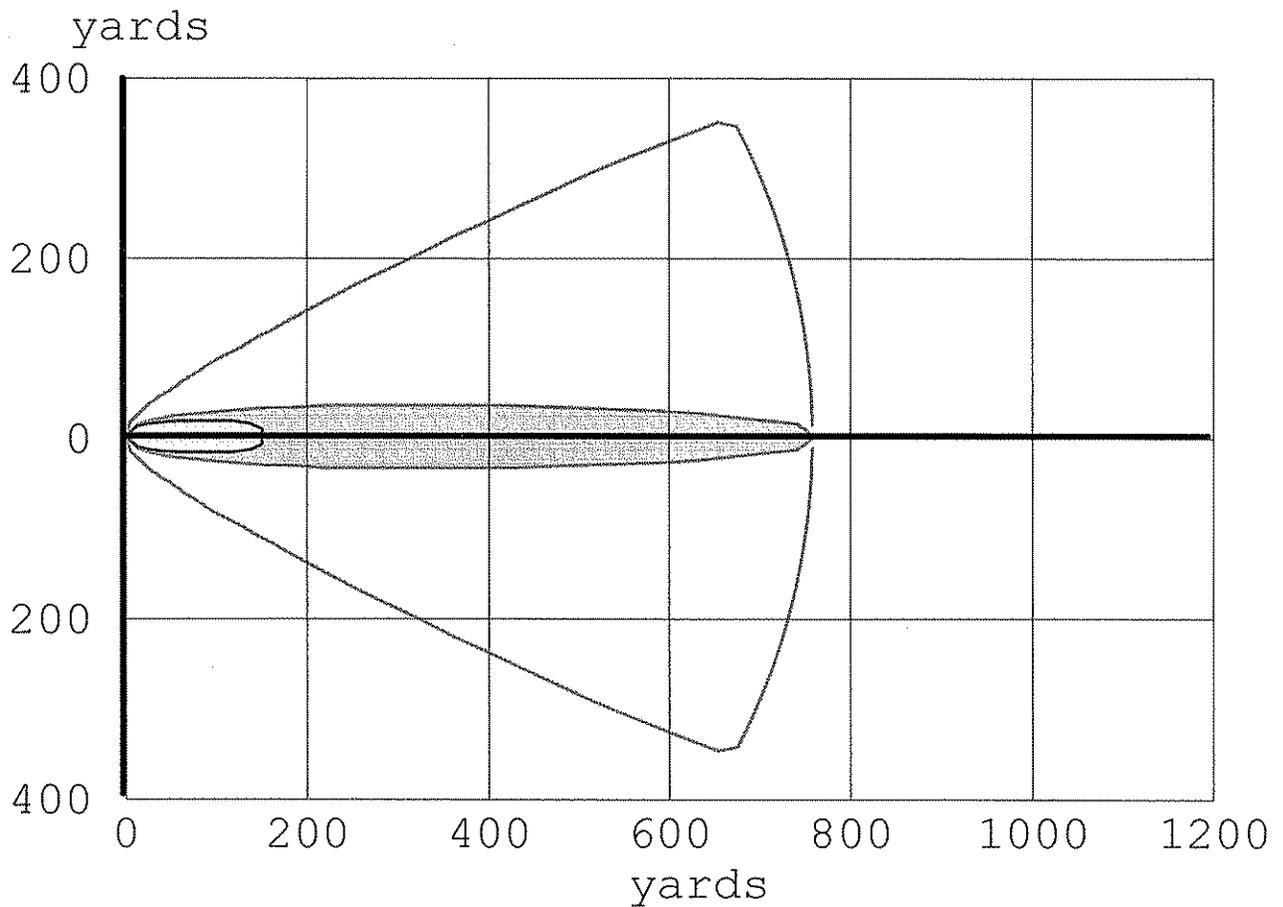
Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 151 yards --- (50 ppm = TEEL-3)

Orange: 757 yards --- (5 ppm)



-   $\geq 50$  ppm = TEEL-3
-   $\geq 5$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: DICHLOROSILANE can react with water and/or water vapor to produce hydrogen chloride and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: DICHLOROSILANE                      Molecular Weight: 101.01 g/mol  
TEEL-1: 0.9 ppm      TEEL-2: 11 ppm      TEEL-3: 50 ppm  
LEL: 40000 ppm      UEL: 960000 ppm  
Ambient Boiling Point: 46.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 31 cubic feet/min      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 8.19 pounds/min  
Total Amount Released: 81.9 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 151 yards --- (50 ppm = TEEL-3)  
Orange: 757 yards --- (5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: HYDROGEN BROMIDE

Wind: 1.5 meters/second from W at 3 meters

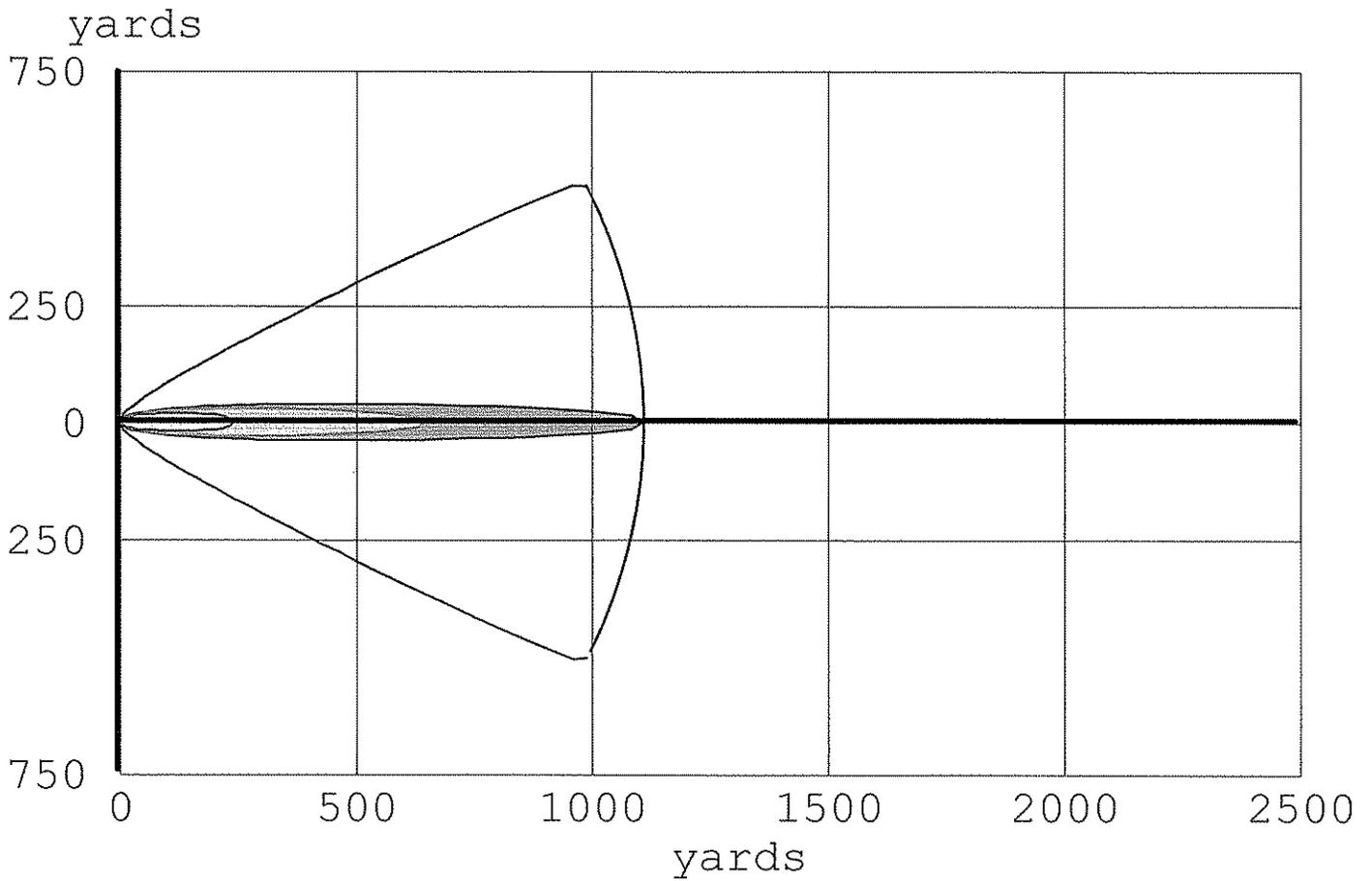
THREAT ZONE:

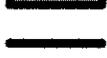
Model Run: Heavy Gas

Red : 236 yards --- (30 ppm = IDLH)

Orange: 641 yards --- (.024 mg/liter)

Yellow: 1112 yards --- (3 ppm)



-   $\geq 30$  ppm = IDLH
-   $\geq .024$  mg/liter
-   $\geq 3$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: HYDROGEN BROMIDE                      Molecular Weight: 80.91 g/mol  
TEEL-1: 1 ppm                      TEEL-2: 22 ppm                      TEEL-3: 120 ppm  
IDLH: 30 ppm  
Ambient Boiling Point: -88.1° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest                      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 32.9 cubic feet/min                      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 6.84 pounds/min  
Total Amount Released: 68.4 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 236 yards --- (30 ppm = IDLH)  
Orange: 641 yards --- (.024 mg/liter)  
Yellow: 1112 yards --- (3 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: HYDROGEN CHLORIDE

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Wind: 1.5 meters/second from W at 3 meters

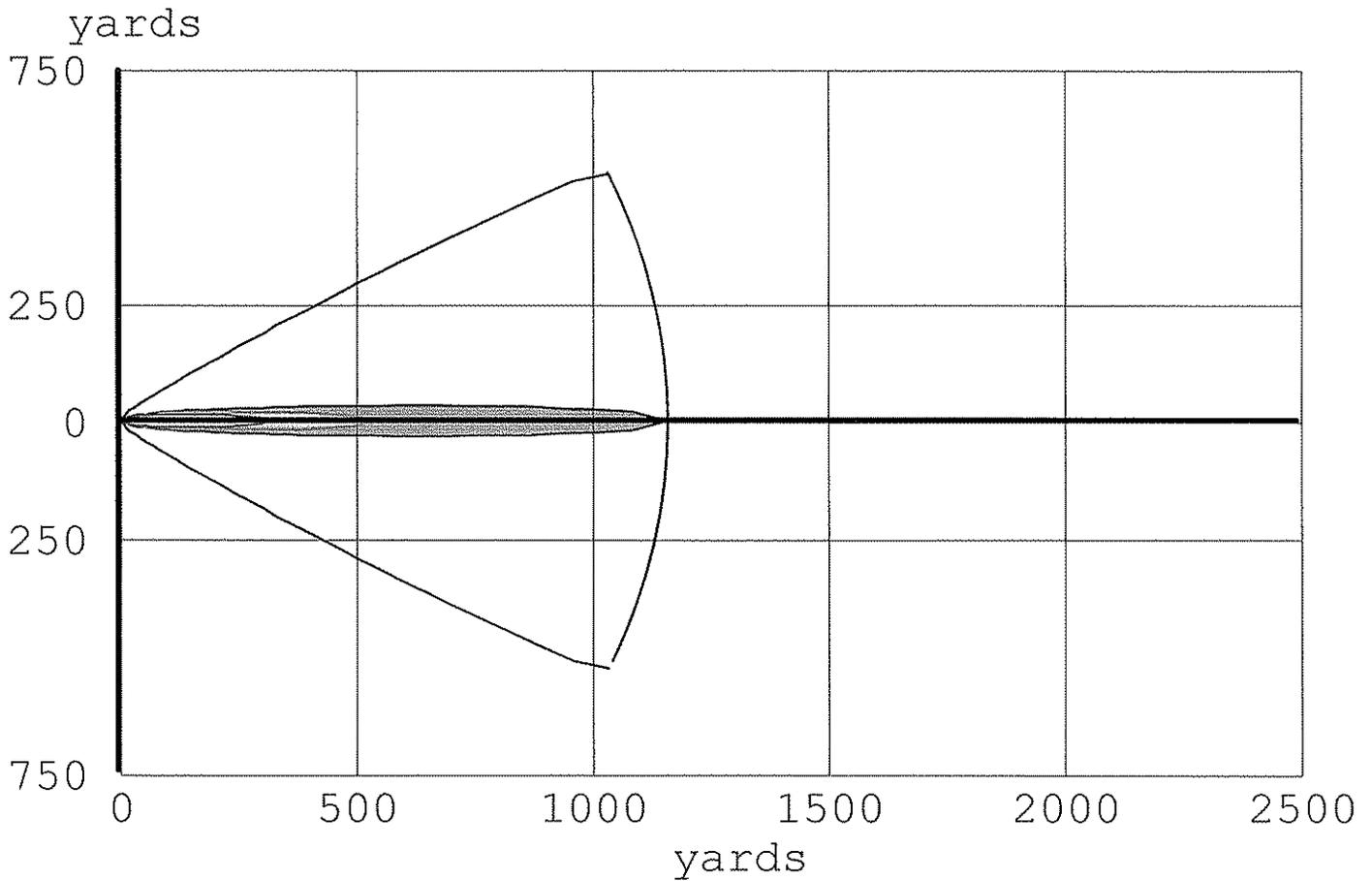
THREAT ZONE:

Model Run: Heavy Gas

Red : 317 yards --- (50 ppm = IDLH)

Orange: 537 yards --- (0.03 mg/liter)

Yellow: 1162 yards --- (5 ppm)



-  >= 50 ppm = IDLH
-  >= 0.03 mg/liter
-  >= 5 ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Chemical Name: HYDROGEN CHLORIDE                      Molecular Weight: 36.46 g/mol  
AEGL-1(60 min): 1.8 ppm    AEGL-2(60 min): 22 ppm    AEGL-3(60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -121.0° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest                      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height    Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 54 cubic feet/min                      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 5.05 pounds/min  
Total Amount Released: 50.5 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 317 yards --- (50 ppm = IDLH)  
Orange: 537 yards --- (0.03 mg/liter)  
Yellow: 1162 yards --- (5 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: PHOSPHINE

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Gaussian

Red : 12 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 54 yards --- (.0035 mg/liter)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 38 yards --- (5 ppm = ERPG-3)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Model Run: Gaussian

Red : 12 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of make dispersion predictions less reliable for s

Orange: 54 yards --- (.0035 mg/liter)

Note: Threat zone was not drawn because effects of make dispersion predictions less reliable for s

Yellow: 38 yards --- (5 ppm = ERPG-3)

Note: Threat zone was not drawn because effects of make dispersion predictions less reliable for s



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: PHOSPHINE Molecular Weight: 34.00 g/mol  
AEGL-2(60 min): 2 ppm AEGL-3(60 min): 3.6 ppm  
IDLH: 50 ppm LEL: 10000 ppm  
Ambient Boiling Point: -125.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .189 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.0165 pounds/min  
Total Amount Released: 0.17 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Gaussian  
Red : 12 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 54 yards --- (.0035 mg/liter)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Yellow: 38 yards --- (5 ppm = ERPG-3)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: PHOSPHINE

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

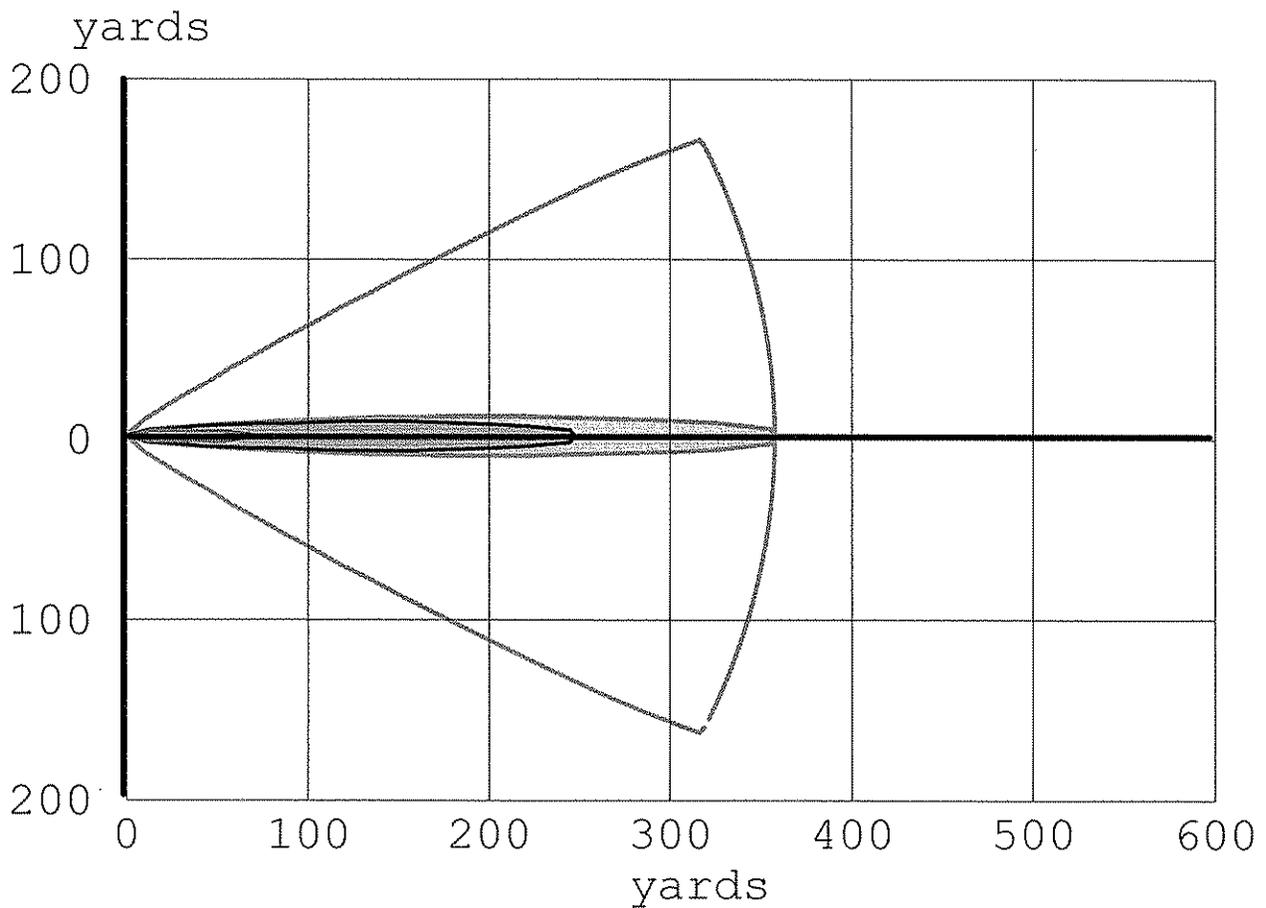
THREAT ZONE:

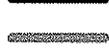
Model Run: Heavy Gas

Red : 70 yards --- (50 ppm = IDLH)

Orange: 358 yards --- (.0035 mg/liter)

Yellow: 248 yards --- (5 ppm = ERPG-3)



-   $\geq 50$  ppm = IDLH
-   $\geq .0035$  mg/liter
-   $\geq 5$  ppm = ERPG-3
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: PHOSPHINE Molecular Weight: 34.00 g/mol  
AEGL-2(60 min): 2 ppm AEGL-3(60 min): 3.6 ppm  
IDLH: 50 ppm LEL: 10000 ppm  
Ambient Boiling Point: -125.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 2.835 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.248 pounds/min  
Total Amount Released: 2.48 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 70 yards --- (50 ppm = IDLH)  
Orange: 358 yards --- (.0035 mg/liter)  
Yellow: 248 yards --- (5 ppm = ERPG-3)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: PHOSPHINE

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

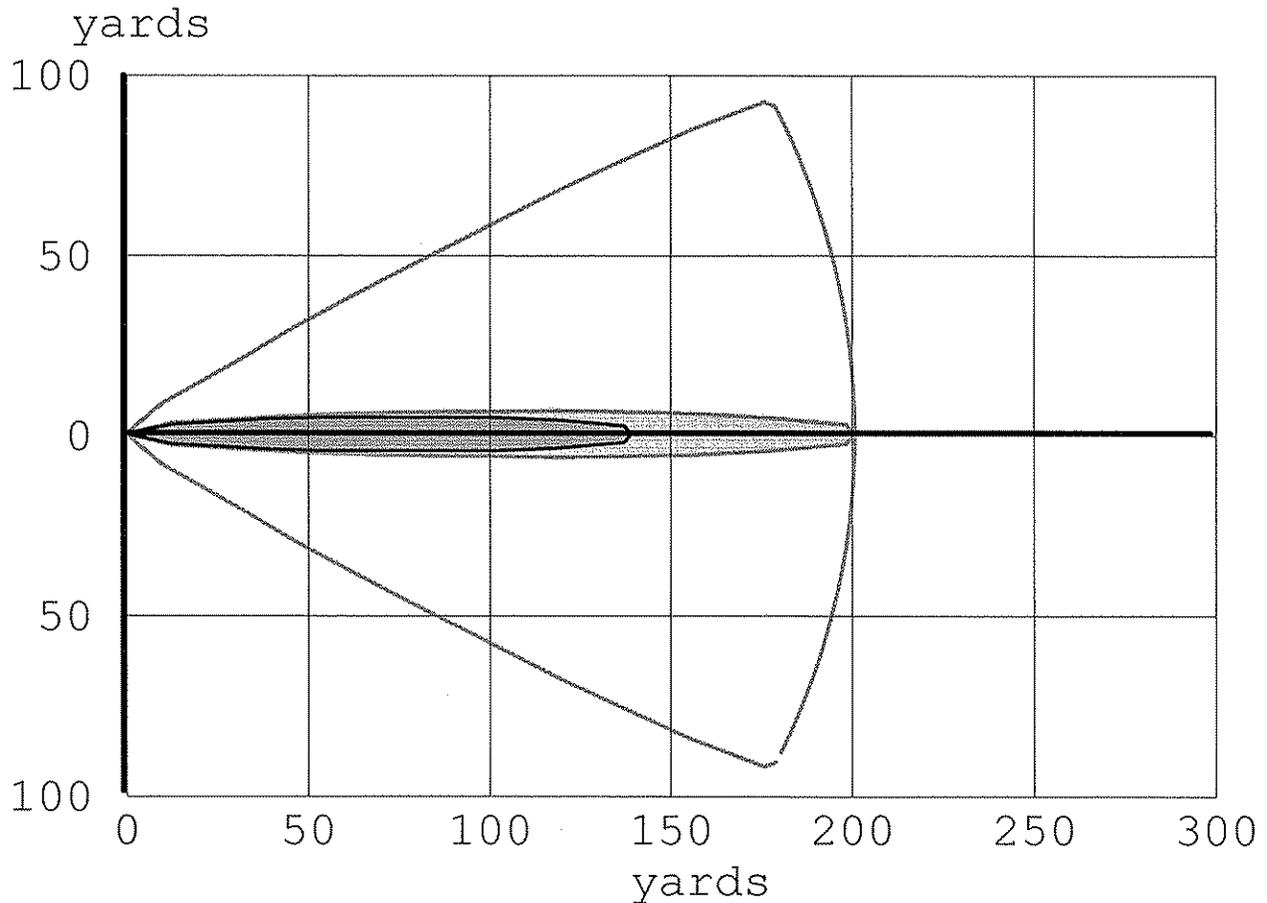
Model Run: Heavy Gas

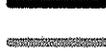
Red : 42 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 201 yards --- (.0035 mg/liter)

Yellow: 139 yards --- (5 ppm = ERPG-3)



-  >= 50 ppm = IDLH (not drawn)
-  >= .0035 mg/liter
-  >= 5 ppm = ERPG-3
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: PHOSPHINE Molecular Weight: 34.00 g/mol  
AEGL-2(60 min): 2 ppm AEGL-3(60 min): 3.6 ppm  
IDLH: 50 ppm LEL: 10000 ppm  
Ambient Boiling Point: -125.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .945 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.0825 pounds/min  
Total Amount Released: 0.83 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 42 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 201 yards --- (.0035 mg/liter)  
Yellow: 139 yards --- (5 ppm = ERPG-3)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: PHOSPHINE

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Gaussian

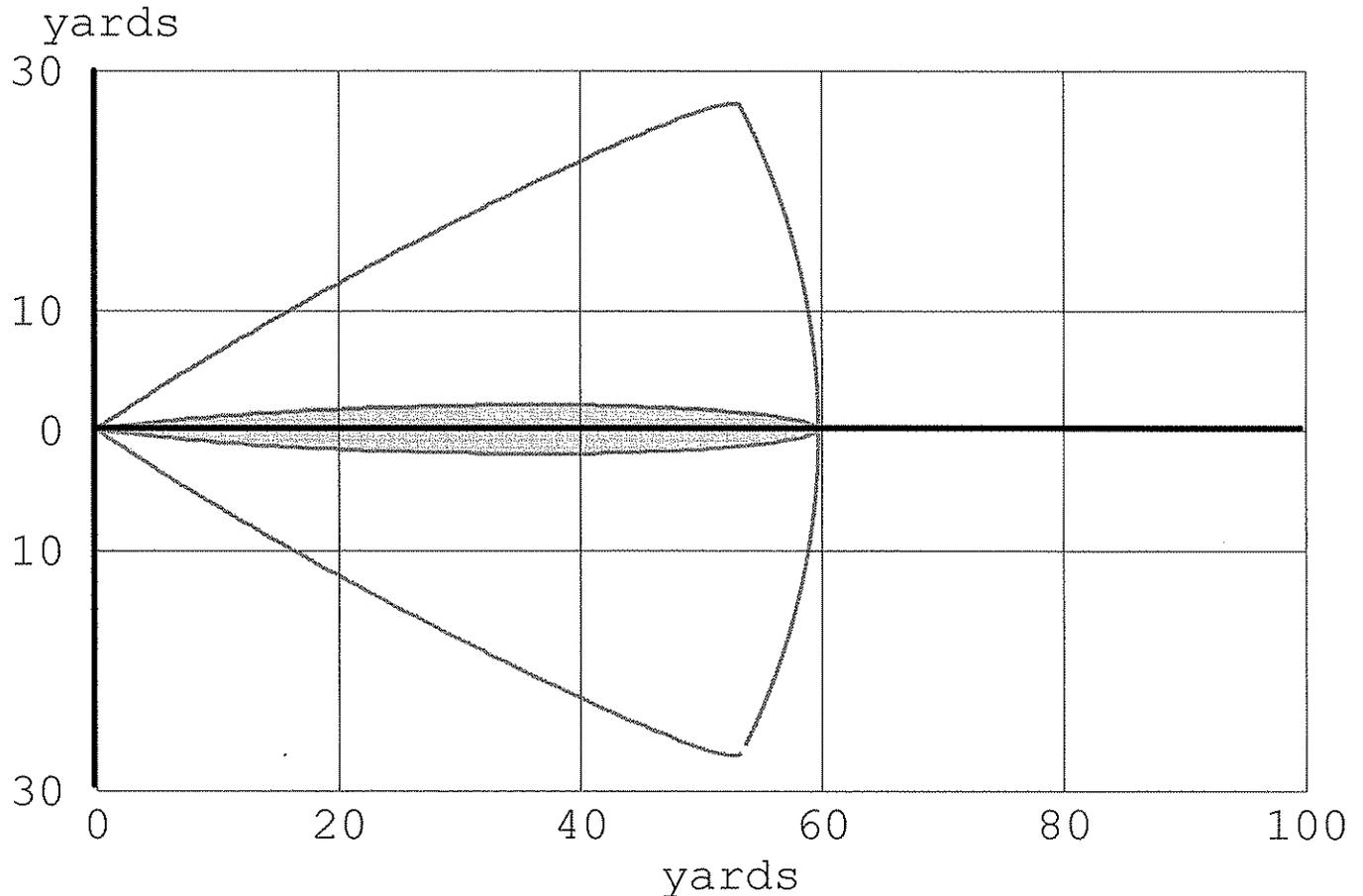
Red : 13 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 60 yards --- (.0035 mg/liter)

Yellow: 42 yards --- (5 ppm = ERPG-3)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.



-   $\geq 50$  ppm = IDLH (not drawn)
-   $\geq .0035$  mg/liter
-   $\geq 5$  ppm = ERPG-3 (not drawn)
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: PHOSPHINE Molecular Weight: 34.00 g/mol  
AEGL-2(60 min): 2 ppm AEGL-3(60 min): 3.6 ppm  
IDLH: 50 ppm LEL: 10000 ppm  
Ambient Boiling Point: -125.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .02 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 0.02 pounds/min  
Total Amount Released: 0.20 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Gaussian  
Red : 13 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 60 yards --- (.0035 mg/liter)  
Yellow: 42 yards --- (5 ppm = ERPG-3)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: SILANE

Warning: SILANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

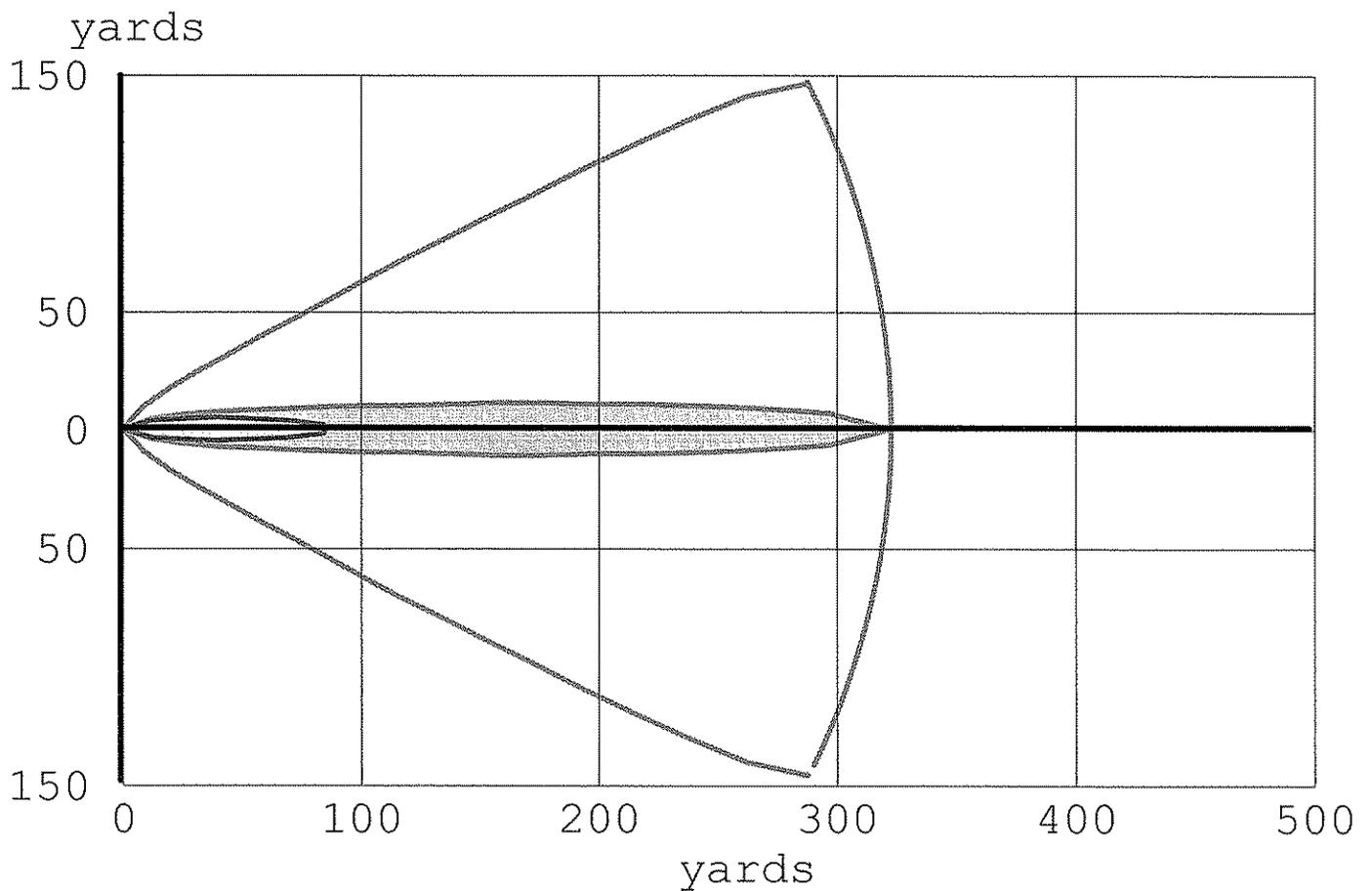
Wind: 1.5 meters/second from w at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 85 yards --- (270 ppm = TEEL-3)

Orange: 324 yards --- (27 ppm)



-   $\geq 270$  ppm = TEEL-3
-   $\geq 27$  ppm
-  Confidence Lines



Toxic Threat Zone

ALOHA® 5.4.1.2



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: TUNGSTEN HEXAFLUORIDE

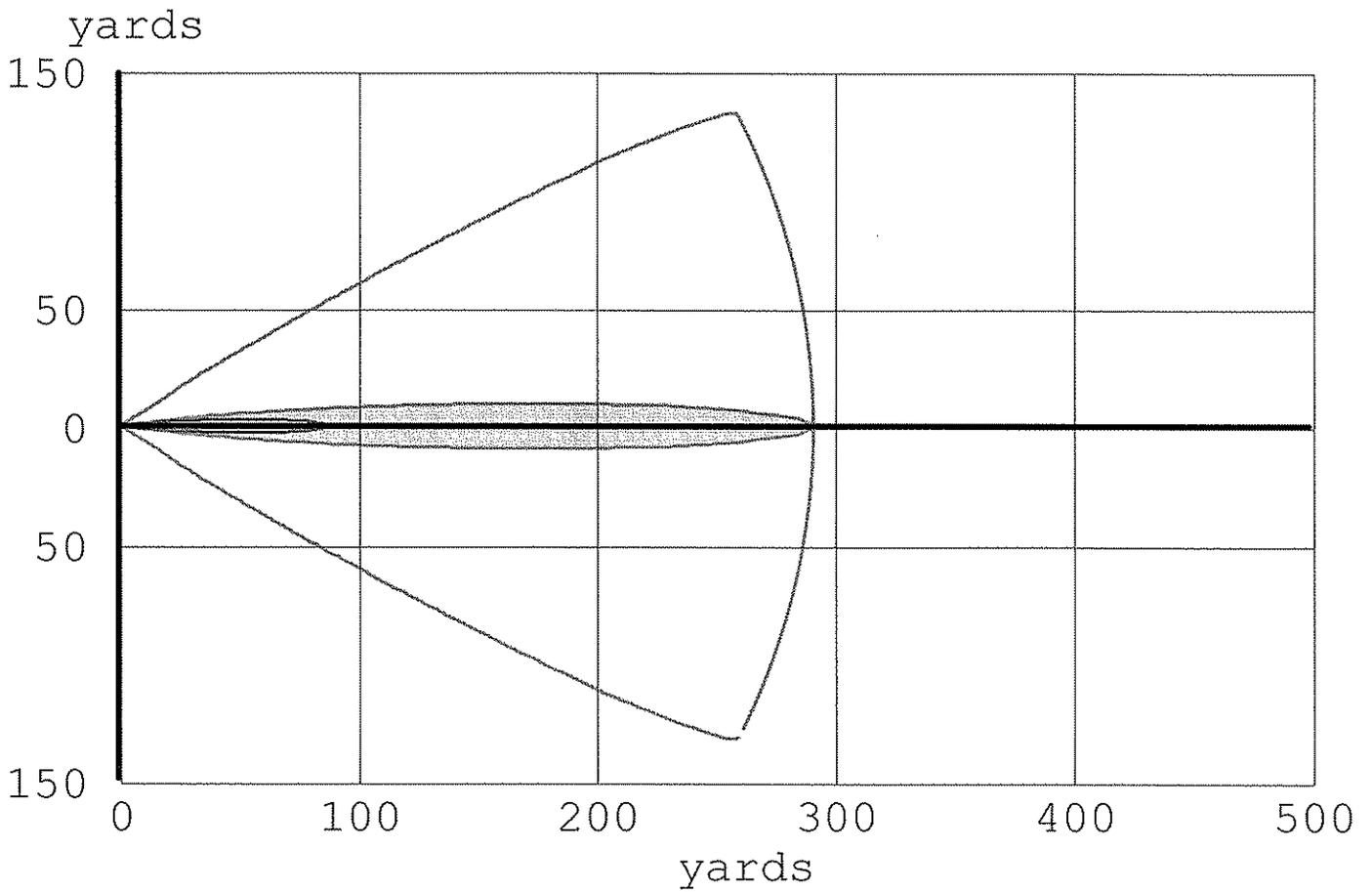
Wind: 1.5 meters/second from w at 3 meters

THREAT ZONE:

Model Run: Gaussian

Red : 86 yards --- (30 ppm)

Orange: 290 yards --- (3 ppm)



>= 30 ppm



>= 3 ppm



Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: May 25, 2010 1200 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: TUNGSTEN HEXAFLUORIDE  
Molecular Weight: 297.90 g/mol  
TEEL-1: 4.86 mg/(cu m) TEEL-2: 75 mg/(cu m) TEEL-3: 405 mg/(cu m)  
Ambient Boiling Point: 67.0° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%  
Note: Not enough chemical data to use Heavy Gas option

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from w at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 5.5 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 4.28 pounds/min  
Total Amount Released: 42.8 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Gaussian  
Red : 86 yards --- (30 ppm)  
Orange: 290 yards --- (3 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

Model Run: Gaussian

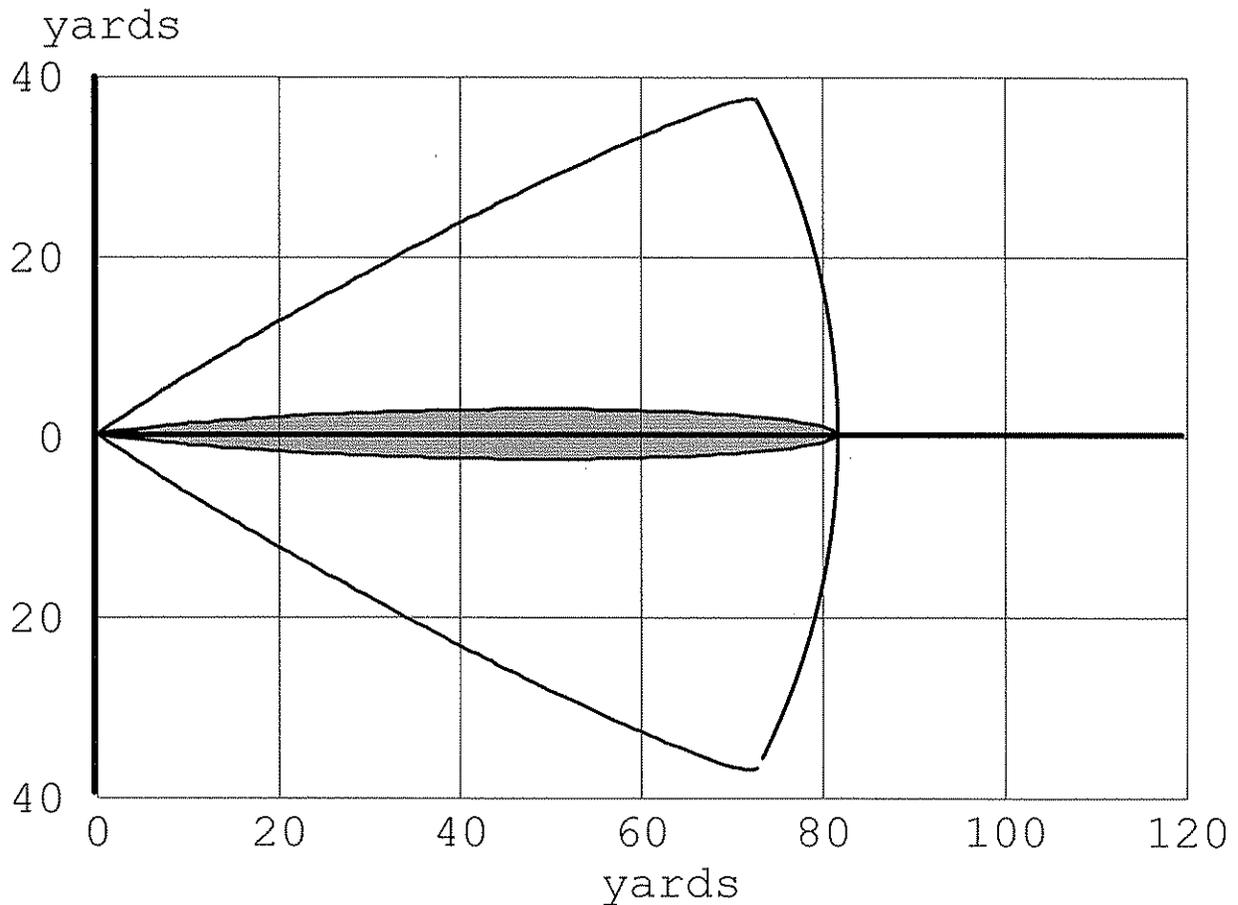
Red : 25 yards --- (300 ppm = IDLH)

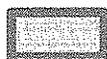
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 31 yards --- (0.14 mg/liter)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Yellow: 82 yards --- (30 ppm = AEGL-1(60 min))



-  >= 300 ppm = IDLH (not drawn)
-  >= 0.14 mg/liter (not drawn)
-  >= 30 ppm = AEGL-1(60 min)
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: AMMONIA Molecular Weight: 17.03 g/mol  
AEGL-1(60 min): 30 ppm AEGL-2(60 min): 160 ppm AEGL-3(60 min): 1100 ppm  
IDLH: 300 ppm LEL: 160000 ppm UEL: 250000 ppm  
Ambient Boiling Point: -28.2° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 5 cubic feet/min Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.219 pounds/min  
Total Amount Released: 2.19 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 25 yards --- (300 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 31 yards --- (0.14 mg/liter)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Yellow: 82 yards --- (30 ppm = AEGL-1(60 min))



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: BORON TRICHLORIDE

Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

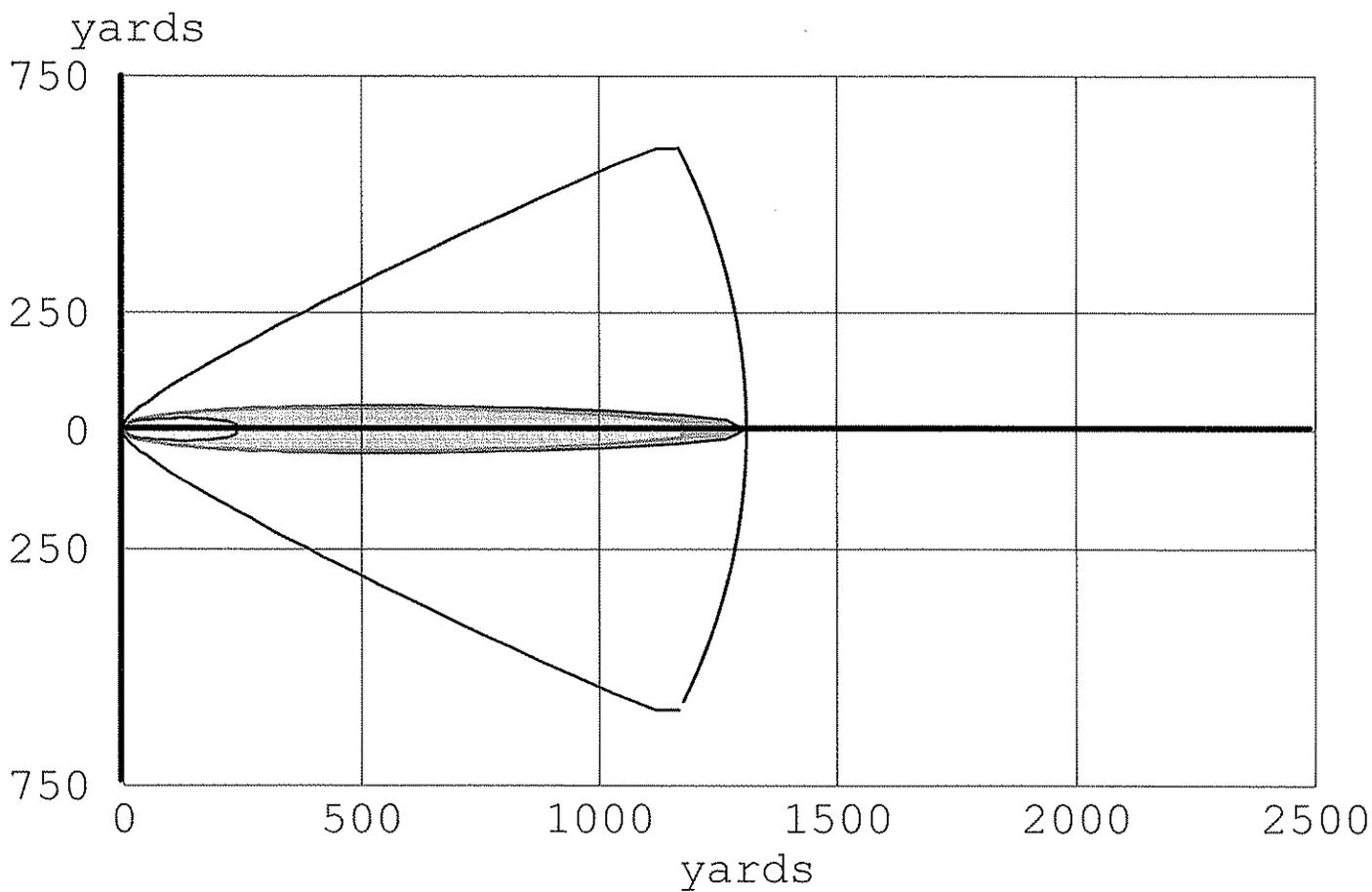
THREAT ZONE:

Model Run: Heavy Gas

Red : 239 yards --- (25 ppm)

Orange: 1182 yards --- (2.5 ppm = TEEL-3)

Yellow: 1312 yards --- (.01 mg/liter)



-  >= 25 ppm
-  >= 2.5 ppm = TEEL-3
-  >= .01 mg/liter
-  Confidence Lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

**CHEMICAL DATA:**

Warning: BORON TRICHLORIDE can react with water and/or water vapor to produce hydrochloric acid and heat. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: BORON TRICHLORIDE                      Molecular Weight: 117.17 g/mol  
TEEL-1: 0.3 ppm      TEEL-2: 2.09 ppm      TEEL-3: 2.5 ppm  
Ambient Boiling Point: 54.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest                      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height    Relative Humidity: 50%

**SOURCE STRENGTH:**

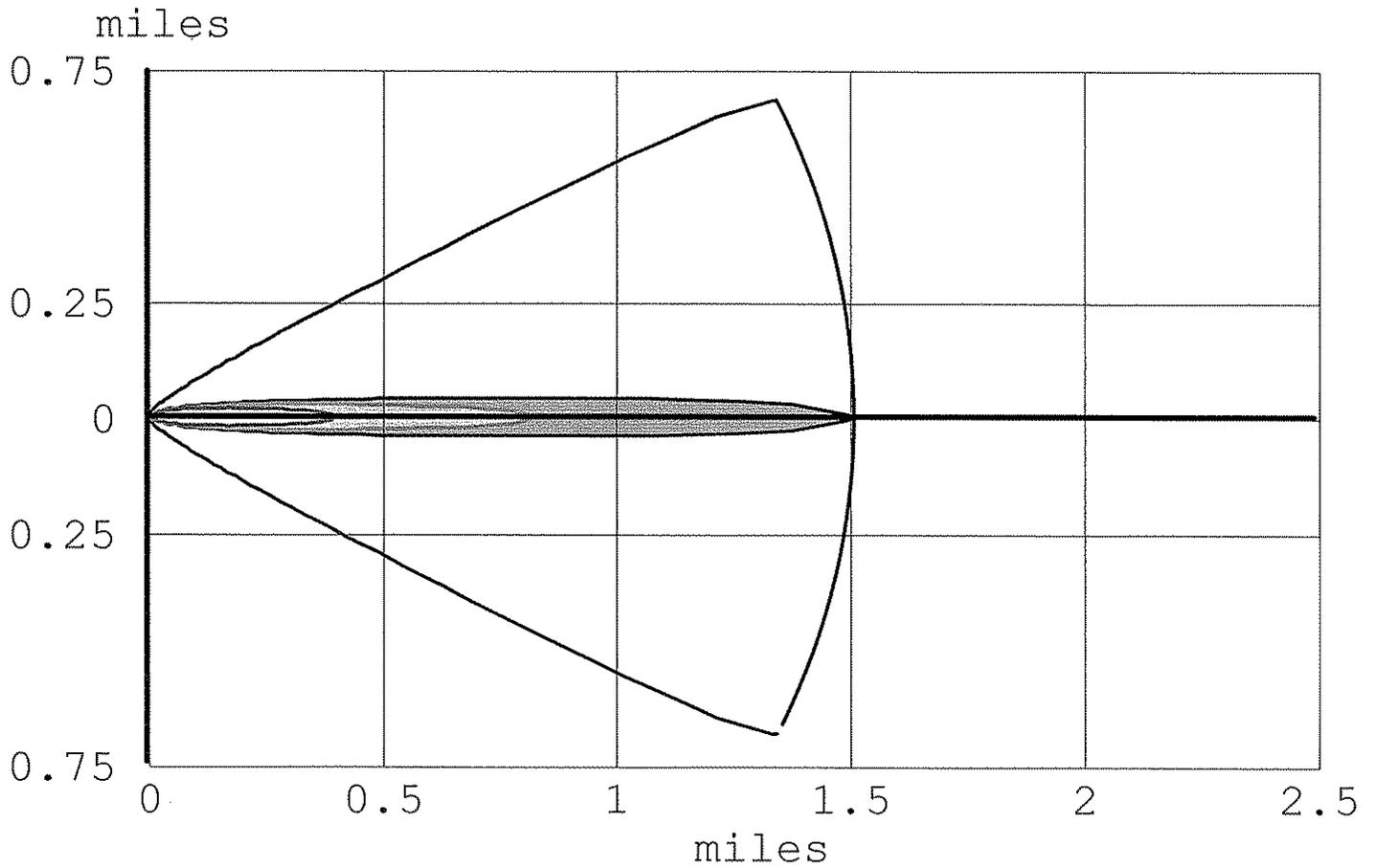
Direct Source: 10 pounds/min                                      Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 10 pounds/min  
Total Amount Released: 100.0 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

**THREAT ZONE:**

Model Run: Heavy Gas  
Red : 239 yards --- (25 ppm)  
Orange: 1182 yards --- (2.5 ppm = TEEL-3)  
Yellow: 1312 yards --- (.01 mg/liter)



Time: June 1, 2010 1119 hours PDT (user specified)  
Chemical Name: CHLORINE  
Wind: 1.5 meters/second from W at 3 meters  
THREAT ZONE:  
Model Run: Heavy Gas  
Red : 688 yards --- (10 ppm = IDLH)  
Orange: 1460 yards --- (.0087 mg/liter)  
Yellow: 1.5 miles --- (1 ppm = ERPG-1)



-   $\geq 10$  ppm = IDLH
-   $\geq .0087$  mg/liter
-   $\geq 1$  ppm = ERPG-1
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: CHLORINE Molecular Weight: 70.91 g/mol  
AEGL-1(60 min): 0.5 ppm AEGL-2(60 min): 2 ppm AEGL-3(60 min): 20 ppm  
IDLH: 10 ppm  
Ambient Boiling Point: -29.3° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 10 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 10 pounds/min  
Total Amount Released: 100.0 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 688 yards --- (10 ppm = IDLH)  
Orange: 1460 yards --- (.0087 mg/liter)  
Yellow: 1.5 miles --- (1 ppm = ERPG-1)



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: SILANE

Warning: SILANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

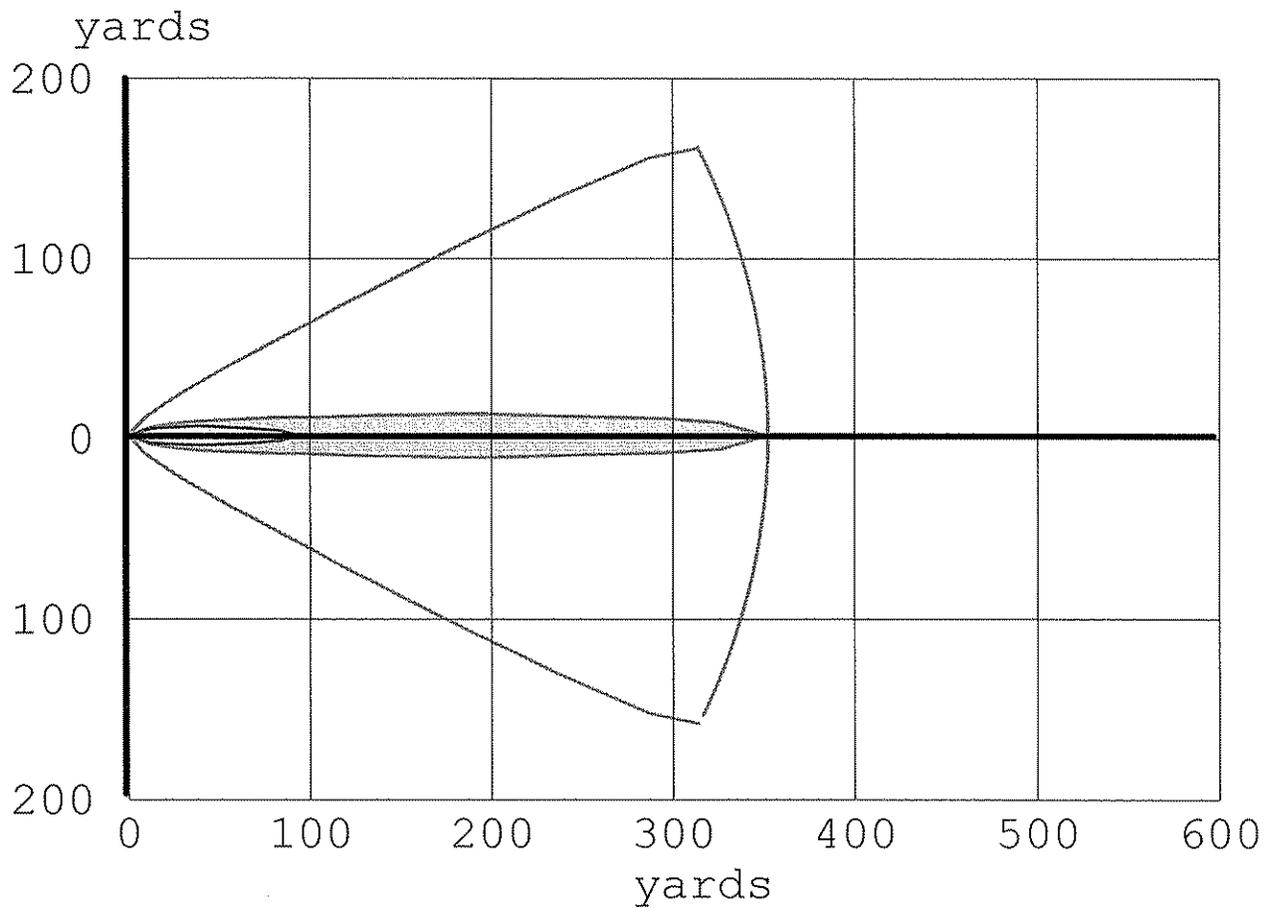
Wind: 1.5 meters/second from w at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 92 yards --- (270 ppm = TEEL-3)

Orange: 353 yards --- (27 ppm)



-   $\geq 270$  ppm = TEEL-3
-   $\geq 27$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: May 25, 2010 1200 hours PDT (user specified)

## CHEMICAL DATA:

Warning: SILANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: SILANE Molecular Weight: 32.12 g/mol  
TEEL-1: 100 ppm TEEL-2: 130 ppm TEEL-3: 270 ppm  
Ambient Boiling Point: -169.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from w at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

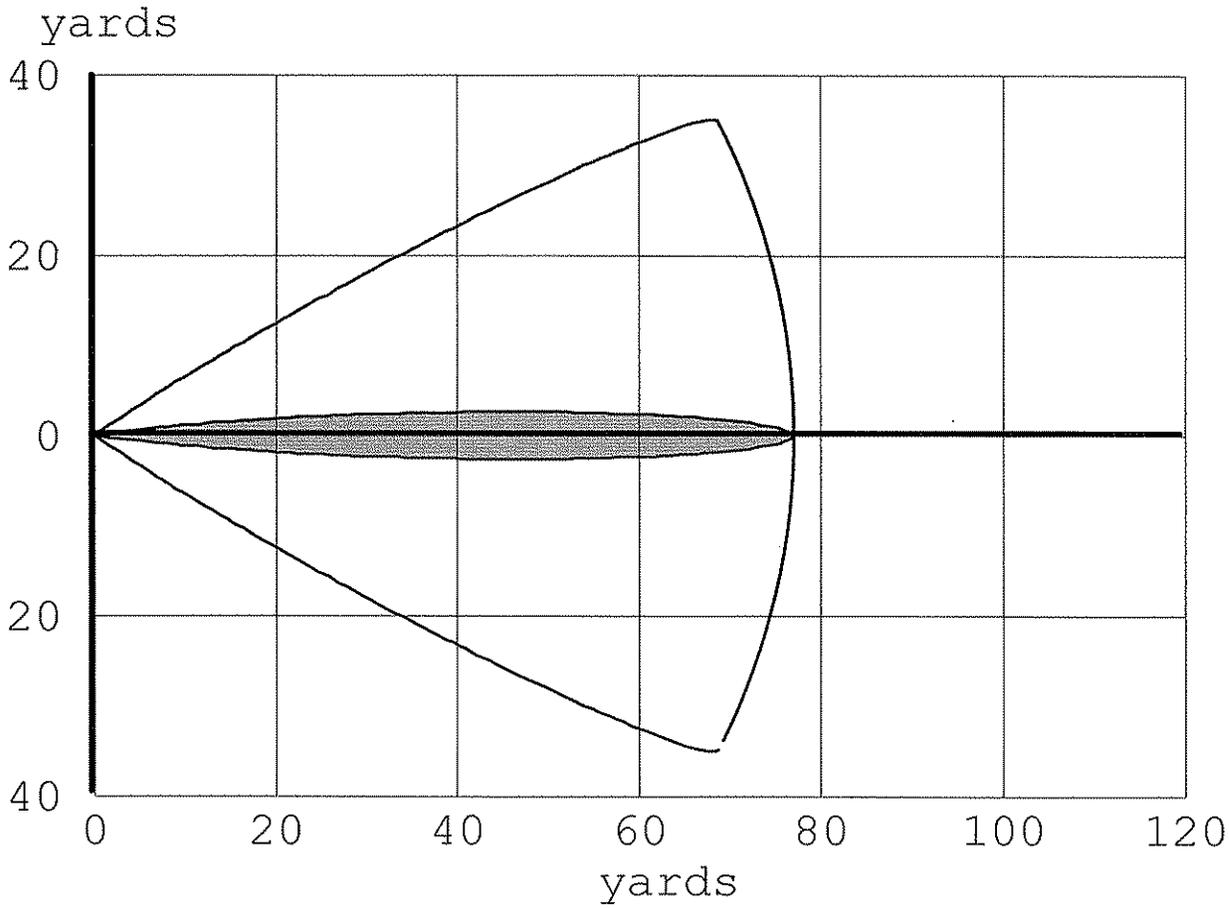
Direct Source: 2.6 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 2.6 pounds/min  
Total Amount Released: 26.0 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 92 yards --- (270 ppm = TEEL-3)  
Orange: 353 yards --- (27 ppm)



Time: June 1, 2010 1119 hours PDT (user specified)  
 Chemical Name: CARBON MONOXIDE  
 Wind: 1.5 meters/second from W at 3 meters  
 THREAT ZONE:  
 Model Run: Gaussian  
 Red : 24 yards --- (1200 ppm = IDLH)  
 Note: Threat zone was not drawn because effects of near-field patchiness  
 make dispersion predictions less reliable for short distances.  
 Yellow: 77 yards --- (120 ppm)



-   $\geq 1200$  ppm = IDLH (not drawn)
-   $\geq 120$  ppm
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: CARBON MONOXIDE                      Molecular Weight: 28.01 g/mol  
ERPG-1: 200 ppm            ERPG-2: 350 ppm            ERPG-3: 500 ppm  
IDLH: 1200 ppm            LEL: 125000 ppm            UEL: 740000 ppm  
Ambient Boiling Point: -312.6° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest            Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                              Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 18 cubic feet/min            Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 1.29 pounds/min  
Total Amount Released: 12.9 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 24 yards --- (1200 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Yellow: 77 yards --- (120 ppm)



Time: May 25, 2010 1200 hours PDT (user specified)

Chemical Name: NITROGEN TRIFLUORIDE

Wind: 1.5 meters/second from w at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 13 yards --- (1000 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.

Orange: 42 yards --- (100 ppm)

Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.

Model Run: Heavy Gas

Red : 13 yards --- (1000 ppm = IDLH)

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh

Orange: 42 yards --- (100 ppm)

Note: Threat zone was not drawn because effects of  
make dispersion predictions less reliable for sh



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: May 25, 2010 1200 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: NITROGEN TRIFLUORIDE      Molecular Weight: 71.00 g/mol  
ERPG-2: 400 ppm      ERPG-3: 800 ppm  
IDLH: 1000 ppm  
Ambient Boiling Point: -200.3° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from w at 3 meters  
Ground Roughness: urban or forest      Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height      Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 4.8 cubic feet/min      Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.873 pounds/min  
Total Amount Released: 8.73 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 13 yards --- (1000 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 42 yards --- (100 ppm)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: DIBORANE

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

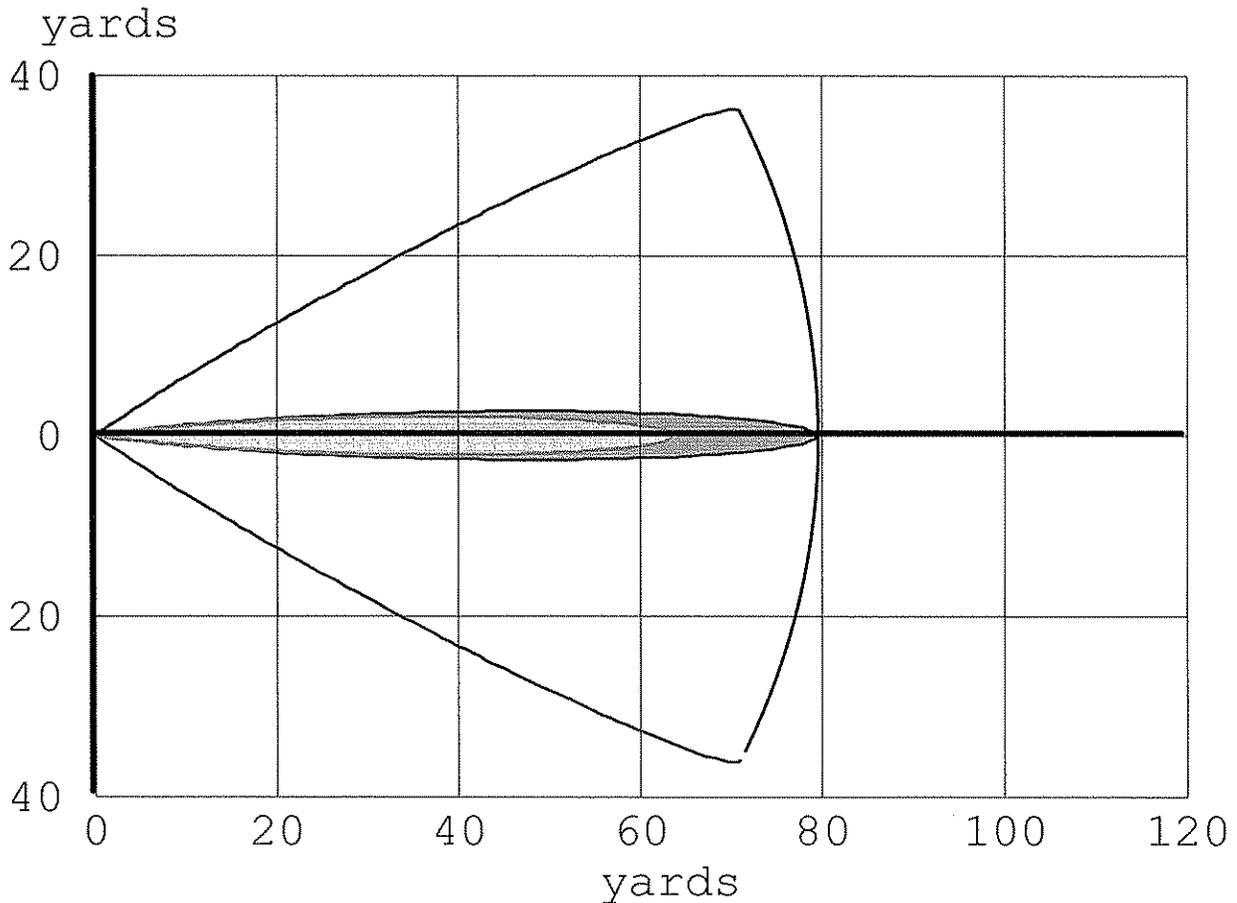
Model Run: Gaussian

Red : 20 yards --- (15 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 64 yards --- (1.5 ppm)

Yellow: 80 yards --- (.0011 mg/liter)



-   $\geq 15$  ppm = IDLH (not drawn)
-   $\geq 1.5$  ppm
-   $\geq .0011$  mg/liter
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: DIBORANE can spontaneously ignite when exposed to air and can react with water and/or water vapor. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Chemical Name: DIBORANE                      Molecular Weight: 27.67 g/mol  
AEGL-2(60 min): 1 ppm    AEGL-3(60 min): 3.7 ppm  
IDLH: 15 ppm              LEL: 9000 ppm              UEL: 980000 ppm  
Ambient Boiling Point: -134.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest              Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height                              Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: .154 cubic feet/min              Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.011 pounds/min  
Total Amount Released: 0.11 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 20 yards --- (15 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness  
make dispersion predictions less reliable for short distances.  
Orange: 64 yards --- (1.5 ppm)  
Yellow: 80 yards --- (.0011 mg/liter)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: PHOSPHINE

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

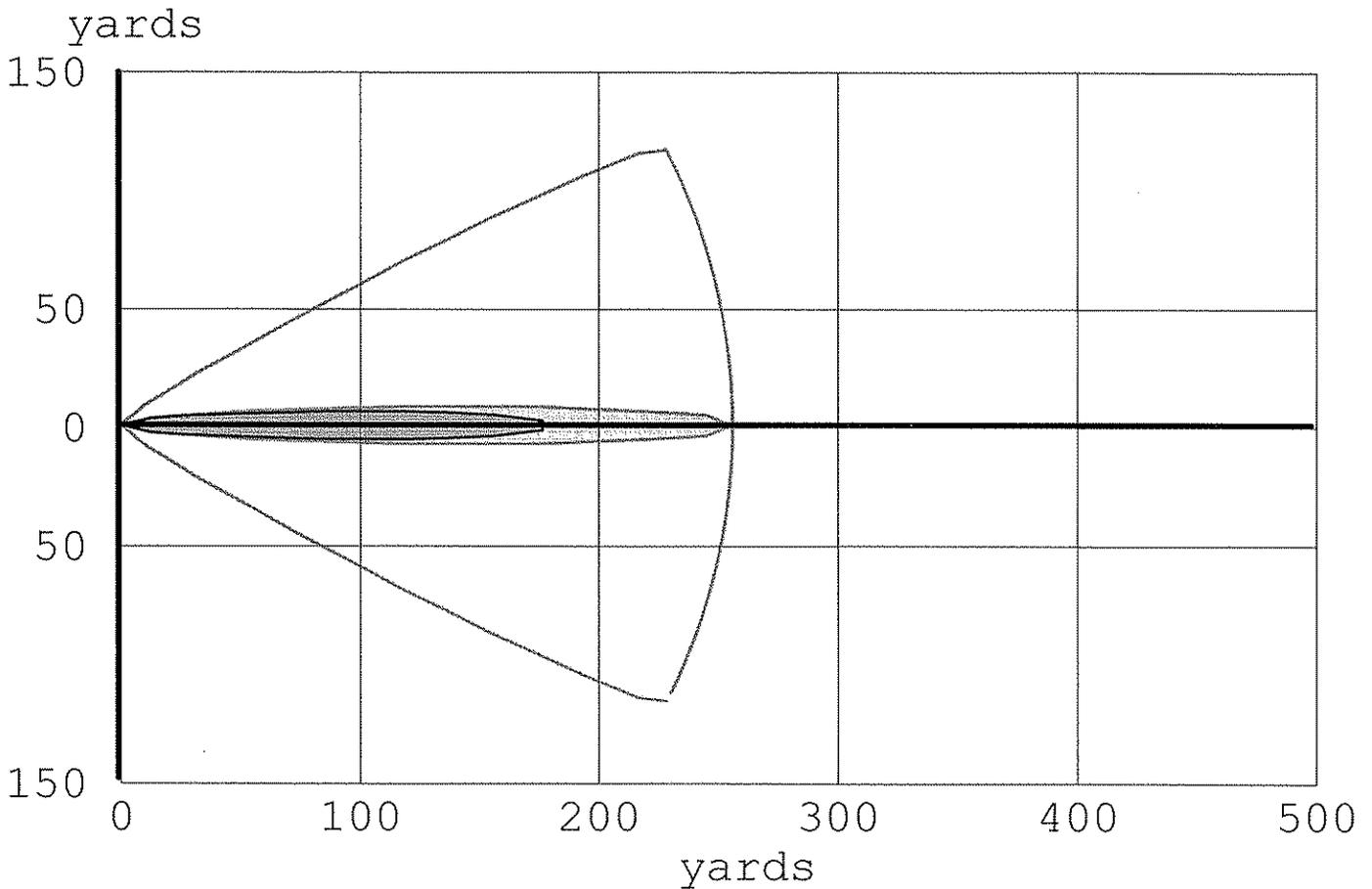
Model Run: Heavy Gas

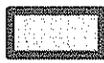
Red : 52 yards --- (50 ppm = IDLH)

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 256 yards --- (.0035 mg/liter)

Yellow: 177 yards --- (5 ppm = ERPG-3)



-   $\geq 50$  ppm = IDLH (not drawn)
-   $\geq .0035$  mg/liter
-   $\geq 5$  ppm = ERPG-3
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Warning: PHOSPHINE can spontaneously ignite when exposed to air. ALOHA cannot accurately predict the air hazard if a reaction occurs.  
Chemical Name: PHOSPHINE Molecular Weight: 34.00 g/mol  
AEGL-2(60 min): 2 ppm AEGL-3(60 min): 3.6 ppm  
IDLH: 50 ppm LEL: 10000 ppm  
Ambient Boiling Point: -125.9° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 1.4938 cubic feet/min  
Source Height: 0  
Source State: Gas  
Source Temperature: equal to ambient  
Source Pressure: equal to ambient  
Release Duration: 10 minutes  
Release Rate: 0.13 pounds/min  
Total Amount Released: 1.30 pounds  
Note: This chemical may flash boil and/or result in two phase flow.

## THREAT ZONE:

Model Run: Heavy Gas  
Red : 52 yards --- (50 ppm = IDLH)  
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.  
Orange: 256 yards --- (.0035 mg/liter)  
Yellow: 177 yards --- (5 ppm = ERPG-3)



Time: June 1, 2010 1119 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 meters/second from W at 3 meters

THREAT ZONE:

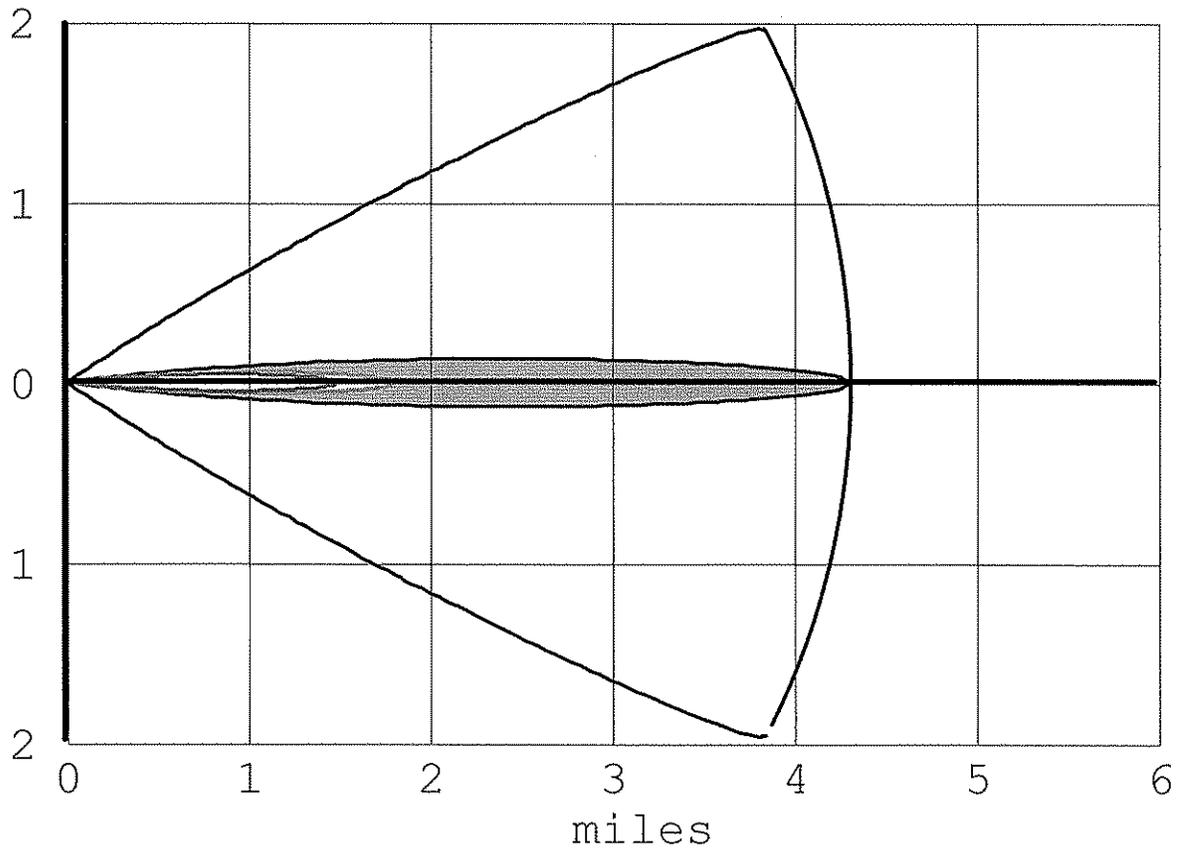
Model Run: Gaussian

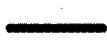
Red : 1.5 miles --- (300 ppm = IDLH)

Orange: 1.8 miles --- (0.14 mg/liter)

Yellow: 4.3 miles --- (30 ppm = AEGL-1(60 min))

miles



-  >= 300 ppm = IDLH
-  >= 0.14 mg/liter
-  >= 30 ppm = AEGL-1(60 min)
-  Confidence Lines



## SITE DATA:

Location: MILPITAS, CALIFORNIA  
Building Air Exchanges Per Hour: 0.31 (sheltered single storied)  
Time: June 1, 2010 1119 hours PDT (user specified)

## CHEMICAL DATA:

Chemical Name: AMMONIA Molecular Weight: 17.03 g/mol  
AEGL-1(60 min): 30 ppm AEGL-2(60 min): 160 ppm AEGL-3(60 min): 1100 ppm  
IDLH: 300 ppm LEL: 160000 ppm UEL: 250000 ppm  
Ambient Boiling Point: -28.2° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

## ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/second from W at 3 meters  
Ground Roughness: urban or forest Cloud Cover: 5 tenths  
Air Temperature: 77° F  
Stability Class: F (user override)  
No Inversion Height Relative Humidity: 50%

## SOURCE STRENGTH:

Direct Source: 1200 pounds/min Source Height: 0  
Release Duration: 10 minutes  
Release Rate: 1,200 pounds/min  
Total Amount Released: 12,000 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

## THREAT ZONE:

Model Run: Gaussian  
Red : 1.5 miles --- (300 ppm = IDLH)  
Orange: 1.8 miles --- (0.14 mg/liter)  
Yellow: 4.3 miles --- (30 ppm = AEGL-1(60 min))

**Appendix G**

**ENVIRONMENTAL CHECKLIST FORM**

**1. Project title:** Conditional Use Permit No. UP10-0006 and Environmental Assessment No. EA10-0002, Bintang Badminton Facility

**2. Lead agency name and address:** City of Milpitas, 455 E. Calaveras Blvd. Milpitas, CA 95035

**3. Contact person and phone number:** Cindy Hom, (408) 586-3284

**4. Project location:** 746 S. Milpitas Blvd. Milpitas, CA 95035 (APN 86-30-063)

**5. Project sponsor's name and address:** Phu Khuu, Bintang Badminton Academy, 1375 Geneva Drive, Sunnyvale, CA 94089

**6. General plan designation:** Manufacturing and Warehousing.

**7. Zoning:** Heavy Industrial with Site and Architectural Overlay (M2-S).

**8. Description of project:** The project proposes to convert an existing vacant 35,930 square foot industrial warehouse space into an indoor badminton facility that consist of 23 badminton courts and approximately 2,838 square feet of ancillary space and support areas (lobby/waiting areas, storage, men's and women's locker facilities). The facility would operate seven days a week between the hours of 9:00AM to 11:00PM. The project also proposes minor site modifications consisting only of parking restriping to add 28 additional parking stalls.

**9. Surrounding land uses and setting:** The City of Milpitas is situated on the eastern shore of the San Francisco Bay, in Santa Clara County, just south of Alameda County. Milpitas encompasses about 13.64 square miles of land, and borders Fremont on the north, San Jose on the south and west, and unincorporated county to the east.

The project is sited within the valley floor on a 6.25 acre parcel improved with an existing 143,812 square foot multi-tenant industrial building, mature landscaping, and surface parking. The project site is located on the southeast corner of the intersection at S. Milpitas Boulevard and Yosemite Drive. The site is bounded by Yosemite Drive to the north, S. Milpitas Boulevard to the west, Union Pacific railway on the east, and industrial buildings to the south. The site is zoned Heavy Industrial and surrounded by industrial uses.

**10. Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.) None.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology /Soils                     |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning      | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing     | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities / Service Systems        | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION:** (To be completed by the Lead Agency)

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 revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Cindy Thom  
Signature

8/2/10  
Date

CINDY THOM  
Printed Name

CITY OF MILPITAS  
For

MAPS

Figure 1: Regional Map

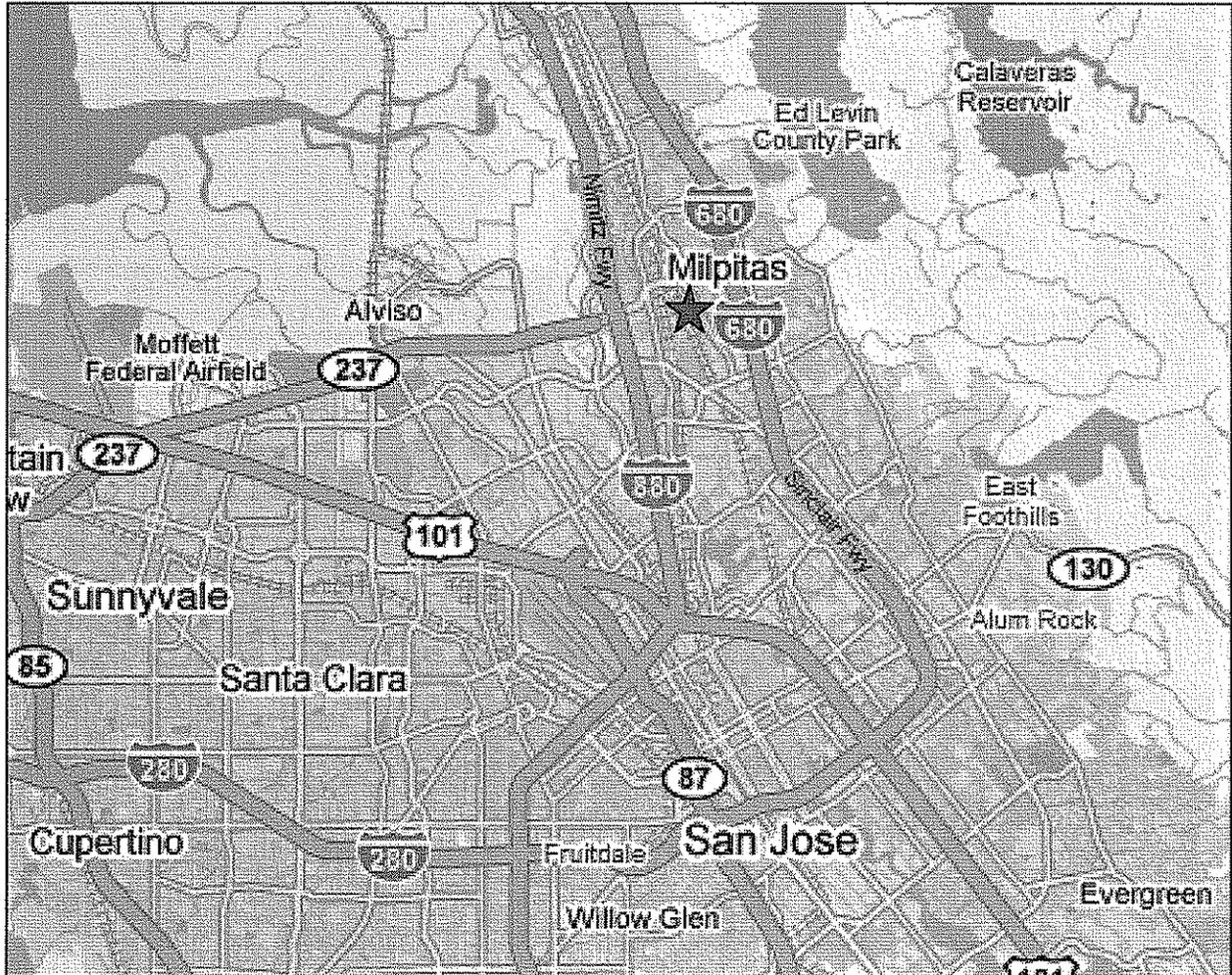


Figure 2: Vicinity Map



## EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. the mitigation measure identified, if any, to reduce the impact to less than significance

**ISSUES**

<b>I. AESTHETICS</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4

**Comment:**

The project will not substantially impact any scenic vistas, damage scenic resources, degrade the existing visual quality or create a new source of substantial light or glare because the project site is located on the valley floor and is not on or near any designated scenic corridors, scenic resources, and/or scenic highways. The project does not propose any exterior building or site modifications that would affect the visual character of the building, damage existing landscaping, or add new lighting. **[No Impact]**

<b>II. AGRICULTURAL AND FOREST RESOURCES</b>					
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					

<b>II. AGRICULTURAL AND FOREST RESOURCES</b>					
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 9, 12
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 9, 12
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 9, 12
4) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 9, 12
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 9, 12

**Comment:** The project site is located in an urbanized industrial area. The project site is not currently used for agricultural purposes and is not zoned or designated as farmland of any type or would conflict with a Williamson Act Contract. **[No Impact]**

<b>III. AIR QUALITY</b>					
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 10
4) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 10
5) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10

**Comment:**

The proposed project is for the operation of an indoor badminton facility that includes 23-badminton courts, office/lobby area, lounge area, and storage areas. The proposed operations of the commercial athletic facility will not conflict with any applicable air quality plan, violate any air quality standards, expose sensitive receptors to substantial air pollutant concentrations or create objectionable odors.

The Bay Area Air Quality Management District (BAAQMD) has adopted a threshold of 54lbs/day for the air pollutants that include: carbon monoxide (CO), nitrogen oxides (NOx), and reactive organic gas (ROG) as the threshold for projects that would substantial contribute to air quality violations. According the BAAQMD, projects that do not exceed 2,000 vehicle trips would not exceed this threshold. The project is anticipated to add 488 new daily trips but would only add 35 new AM peak hour trips and 76 PM peak hour trips which would not result in a cumulatively considerable net increase for any criteria pollutants. **[Less than Significant Impact]**

IV. BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect, either directly or through habitat modifications, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4

**Comment:**

The project proposes minor interior improvements to allow for operations of an indoor badminton facility within an existing industrial building and therefore will not result in any substantial effects on sensitive or protected species, is not located near any riparian habitat, sensitive natural community, or federally protected wetlands, nor would the project interfere with the movement of any native resident or migratory fish or wildlife species, or conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance since no trees are to proposed for removal. The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **[No Impact]**

<b>V. CULTURAL RESOURCES</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					1, 4
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
4) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4

**Comment:**

The project does not involve any demolition or excavation activities or contain any significant cultural or historical resources. Therefore, the project is not unlikely to result in any significant effects on cultural or historic resources given that this is an existing development and the site does not any exterior or site improvements. **[No impact]**

VI. GEOLOGY AND SOILS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					1, 5, 13
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
c) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
d) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 13
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 5, 13

**Comment:**

The project area is located on the Valley Floor, in a mapped liquefaction hazard zone with soils that have a moderate potential for expansion. The project site is not located within a fault rupture zone or landslide hazard zone. The project area is located in a seismically active region and could experience strong seismic ground shaking and related effects in the event of an earthquake on one of the identified active or potentially active faults in the region. However, the proposed project entail the operation of a badminton facility within an existing industrial building and would not result in any geological, geotechnical, or

seismicity impacts that cannot be avoided through standard engineering and construction techniques.

**[No Impact]**

<b>VII. GREENHOUSE GAS EMISSIONS</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10
2) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10

**Comment:**

The proposed project would not make a cumulatively considerable contribution to global climate change beyond existing conditions. The site is currently used for offices, industrial, and commercial uses. The project location is within an established urban area served by existing infrastructure would not impede the state's ability to reach the emission reduction limits/standards set forth by the State of California by Executive Order S-3-05 and AB 32.

<b>VIII. HAZARDS AND HAZARDOUS MATERIALS</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16

VIII. HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 16

**Comment:**

The project includes a conditional use permit to allow for the operations of an indoor badminton facility and does not involve the transport, storage, use, or generate toxic or hazardous materials. The project is not located within an airport land use plan, public airport, private airstrip or wildlands.

**HAZ Impact 1-**The project site is located within the Heavy Industrial zoning district which include various businesses that transport, store and utilize various hazardous materials. The proposed project will introduce a sensitive population (young children and elderly adults) to potential exposure of hazardous materials upon an accidental exposure event. Based on the Risk Assessment dated June 7, 2010 prepared by Enviro Safetech for this project, the assessment

identified the following chemicals of concern that can be accidentally released in event of a catastrophe:

- Boron Trichloride
- Chlorine
- Ammonia
- Dichlorosilane
- Hydrogen Bromide
- Hydrogen Chloride
- Phosphine
- Arsine
- Diborane

The Risk Assessment determined potential impacts from these off-site risks can be reduced to a less than significant level by installation and maintenance of a airborne chemical monitoring, detection and response system and implementation of an Emergency Action Plan (EAP) as described further in the below mitigation measures:

- HAZ MM1 - Prior to building permit issuance, the tenant improvement plans shall indicate an airborne chemical monitoring system (sensors), with detection and response/notification capabilities that shall be designed and installed by the applicant. The sensors shall be specific for the gases identified in the Risk Assessment as having the potential of impacting the site (Boron Trichloride, Chlorine, Ammonia, Dichlorosilane, Hydrogen Bromide, and Hydrogen Chloride). Notification shall alert Fire dispatch of an alarm and also provide in-place communication, both inside and outside of the building, to alert occupants of an emergency, via pre-recorded message, and shall direct them on emergency procedures to follow. As part of the monitoring system, building ventilation shall have manual and automatic shutoff capabilities with the control device located per Fire Department direction.
- HAZ MM2 - Prior to building permit issuance, the tenant improvement plans shall indicate the location of a windsock or other approved wind/weather-monitoring device on site to aid in determining wind direction in the event of a nearby hazardous material release.
- HAZ MM3 - Prior to building permit issuance, the tenant improvement plans shall indicate the location of warning notification signs posted at all entrances to the building. The signs shall serve to advise building occupants of potential hazards within the surrounding industrial area. Proposed verbiage shall be submitted for Fire Department review. Signs may be required in multiple languages, as appropriate for occupants of the building.
- HAZ MM4 - Prior to certificate of occupancy issuance, the applicant shall submit an Emergency Action Plan (EAP) to the Milpitas Fire Department for approval, which recognizes the nature of the risk at the project site in the surrounding industrial area. The EAP shall include identification of key personnel in the implementation of the plan, training documentation, written evacuation plan showing evacuation routes, shelter in-place and assembly areas, and location of emergency equipment.
- HAZ MM5 - Prior to certificate of occupancy issuance and before implementing the EAP, the employer shall designate and train a sufficient number of persons to assist

in the safe and orderly emergency evacuation of employees. The employer shall advise each employee of his/her responsibility under the plan. Furthermore, drills with EAP designated staff and the Fire Department shall be conducted on site to test and document implementation of the EAP. An additional drill including building occupants shall occur immediately following occupancy. Drills shall be conducted and documented monthly and on an annual basis with the Fire Department on site.

- HAZ MM6 – The applicant shall provide a disclosure and acknowledgement form to all guests which discloses potential hazards and includes a description of emergency procedures. Recordkeeping of the notification are to be maintained at all times.

IX. HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14

IX. HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
6) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14
10) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 14

**Comment:**

The proposed project does not propose any physical alterations to existing conditions of the site. Therefore, there are no hydrology or water quality impacts resulting from this proposed project. **[No Impact]**

X. LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2

X. LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2

**Comment:**

The project does not propose any changes to the land use designations to the property. With the approval of the Conditional Use Permit, the use will be consistent with the General Plan and Milpitas Zoning Ordinance. The proposed project would not result in significant, adverse land use impacts. **[No Impact]**

XI. MINERAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4

**Comment:**

The project entails a conditional use permit to allow for the operations of an indoor badminton facility and does not involve or result in the loss of availability of a known mineral resource or located near mineral resource zone or excavation sites. Therefore, the project would not result in impacts to mineral resources. **[No Impact]**

<b>XII. NOISE</b>
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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 6

**Comment:**

The project will not result in any additional substantial noise impacts beyond the existing conditions. The project continues to be used for commercial use and is regulated by the Milpitas General Plan Noise Standards. **[No Impact]**

<b>XIII. POPULATION AND HOUSING</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					

Bintang Badminton Facility

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

**Comment:**

The project is not anticipated to generate any additional substantial urban growth impacts. The project entails interior modifications to allow for the operations of an indoor badminton facility. The project will not result in new growth given the surrounding is fully developed and therefore will not displace existing homes or necessitate new housing elsewhere. **[No Impact]**

XIV. PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental 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:					1, 2
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2

**Comment:**

The project will not have an impact on public services considering it is an existing development in an urbanized area within the City of Milpitas. The project site is served by:

**Fire:** Fire protection is provided by the City of Milpitas Fire Department, which provides structural fire suppression, rescue, hazardous materials control and public education services. There are four Fire stations located within the city at the various locations below:

- Fire Station # 1:** 777 South Main St.
- Fire Station # 2:** 1263 Yosemite Dr.
- Fire Station # 3:** 45 Midwick Dr.
- Fire Station # 4:** 775 Barber Ln.

**Police Protection:** The City of Milpitas Police Department provides police protection.

**Schools:** Educational facilities are provided by the Milpitas Unified School District that operates kindergarten through high school services within the community. Schools that would serve the project include Milpitas High School (grades 9-12), two middle schools (grades 7-8) and nine elementary schools (grades K-6).

**Maintenance:** The City of Milpitas Public Works Department provides public works maintenance of public utilities for water, sewer, and stormwater.

**Parks:** The City of Milpitas has approximately 190 acres of city owned parks and recreational facilities.

<b>XV. RECREATION</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

**Comment:**

The project does not propose any new housing and therefore will not increase the use of existing or physical deterioration of existing recreational facilities nor require the construction of new facilities. **[No Impact]**

<b>XVI. TRANSPORTATION/TRAFFIC</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					

<b>XVI. TRANSPORTATION/TRAFFIC</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,15
2) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,15
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
5) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Comment:

The project proposes to convert an empty 35,930 square foot office and warehouse space into a 30-court indoor badminton facility. Based on the proposed use, the project will generate approximately 488 new daily trips and add only add 35 new AM peak hour trips and 76 PM peak hour trips as demonstrated in the below trip generation analysis:

Trip Generation Analysis

USE	INTENSITY	TRIP RATE	DAILY TRIPS	AM			PM		
				%	IN	OUT	%	IN	OUT
<b>Existing Use</b>									
Office	1,400 KSF	20/KSF	28	14%	3	1	13%	1	2
Warehousing	34,888 KSF	5/KSF	174	13%	16	2		10	16
<b>Total Existing Use</b>	36,288 KSF		202		19	3		11	18
<b>Proposed Use</b>									
Commercial Athletic Facility	2,406 KSF	30/KSF	690	5%	17	18	11%	38	38
<b>Total Proposed Use</b>	35,930 KSF		690		17	18		38	38
<b>Net</b>			<b>+488</b>		<b>-2</b>	<b>+15</b>		<b>+27</b>	<b>+20</b>

The City of Milpitas General Plan identifies level of service (LOS) E in the peak hours as the operational threshold for local intersection and recognizes regional facilities may operate at worse than LOS E. The City of Milpitas considers uses with a new increase of 100 PM peak hour trips as requiring traffic studies to review if there are potential substantial changes in surrounding facility conditions. This practice is consistent with the Santa Clara County CMP program. Since the project will generate less than a 100 new peak trips, it does not require a traffic analysis.

Currently, South Milpitas Boulevard carries an average of 1,706 trips per day during the AM peak period and operates at LOS E between Yosemite and Montague and 1,889 trips during the PM peak period and operates at LOS F. Montague Expressway currently has 4,349 AM peak trips and 2,834 PM peak trips per day and operates at LOS F. The additional 76 PM peak hour trips would not result in a substantial change to the existing LOS and would have less than a significant effect on transportation facility operations under project conditions.

The project will not conflict with any applicable congestion management program standards or to adopted policies, plans, or programs supporting alternative transportation. The project will not involve any modifications to the existing access and circulation and therefore, will not create any traffic hazards or result in inadequate emergency access. **[Less than significant]**

<b>XVII. UTILITIES AND SERVICE SYSTEMS</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
7) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4

**Comment:**

The project entails a conditional use permit to allow for the operations of an indoor badminton facility within an existing multi-tenant industrial building. The site is already served by utilities and will not increase existing levels of service or require additional capacity for water, sewer, or solid waste. **[No Impact]**

<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 15, 16
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 15, 16
3) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 15, 16
4) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 4, 15, 16

**Comment:**

The project is located within an urbanized area and will not have the potential to degrade the environment, reduce wildlife habitat, threatened endangered plant or animal species, or impact historical or cultural resources. Furthermore, no exterior improvements are proposed.

The proposed project may have potential impacts related to the hazardous materials in that sensitive receptors (very young and elderly population) may be expose to accidental release or airborne chemicals. Mitigation measures have been included in the project to reduce identified project impacts on the natural and human environment to a less than significant level.

## SOURCES

### General Sources:

1. CEQA Guidelines - Environmental Thresholds (Professional judgment and expertise and review of project plans).
2. City of Milpitas General Plan (Land Use Chapter)
3. City of Milpitas General Plan (Circulation Chapter)
4. City of Milpitas General Plan (Open Space & Environmental Conservation Chapter)
5. City of Milpitas General Plan (Seismic and Safety Chapter)
6. City of Milpitas General Plan (Noise Chapter)
7. City of Milpitas General Plan (Housing Chapter)
8. City of Milpitas Zoning (Title XI)
9. California Department of Conservation, *Santa Clara County Important Farmland 2006*, Map. June 2005.
10. Bay Area Air Quality Management District, CEQA Guidelines, June 2010.
11. County of Santa Clara Department of Public Works, *Soil Map Sheet 19*, 1964.
12. United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968.
13. California Department of Conservation, *Geologic Map of the San Francisco-San José Quadrangle*, 1990.
14. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085CIND0A, 06085C0058H, 06085C0059H, 06085C0066H, 06085C0067H, 06085C0068H, 06085C0069H, 06085C0080H, 06085C0086H, and 06085C0087H*.
15. Milpitas Midtown Improvement Plans TIA, May 2008.
16. Risk Assessment, Environ Safetech, June 2010.

### Project Related Sources:

- A. Project application and plans.

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080, 21083.05, 21095, Pub. Resources Code; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

