



MILPITAS PLANNING COMMISSION
AGENDA REPORT

PUBLIC HEARING

Meeting Date: December 11, 2013

APPLICATION: Conditional Use Permit No. UP13-0014 and Minor Site Development Permit No. MS13-0039, Wing Educare Center

SUMMARY: A request to operate a 9,983 square foot daycare center which includes a preschool and afterschool care programs; install minor site and building modifications, and to allow for shared parking.

LOCATION: 451 Los Coches Street (APN 86-28-341)

APPLICANT: Wing Educare Incorporated

OWNERS: Yingyi Fang and Ying Zheng, 451 Los Coches Street, Milpitas, CA 95035

RECOMMENDATION: Adopt Resolution No.13-037 approving Conditional Use Permit No. UP-13-0014 and Minor Site Development Permit No. MS13-0039 to operate a daycare center, shared parking, and minor site modifications, subject to conditions of approval.

PROJECT DATA:
General Plan/ Town Center (TWC) / Town Center (TC)
Zoning Designation:
Overlay District: Site and Architectural Overlay (-S)

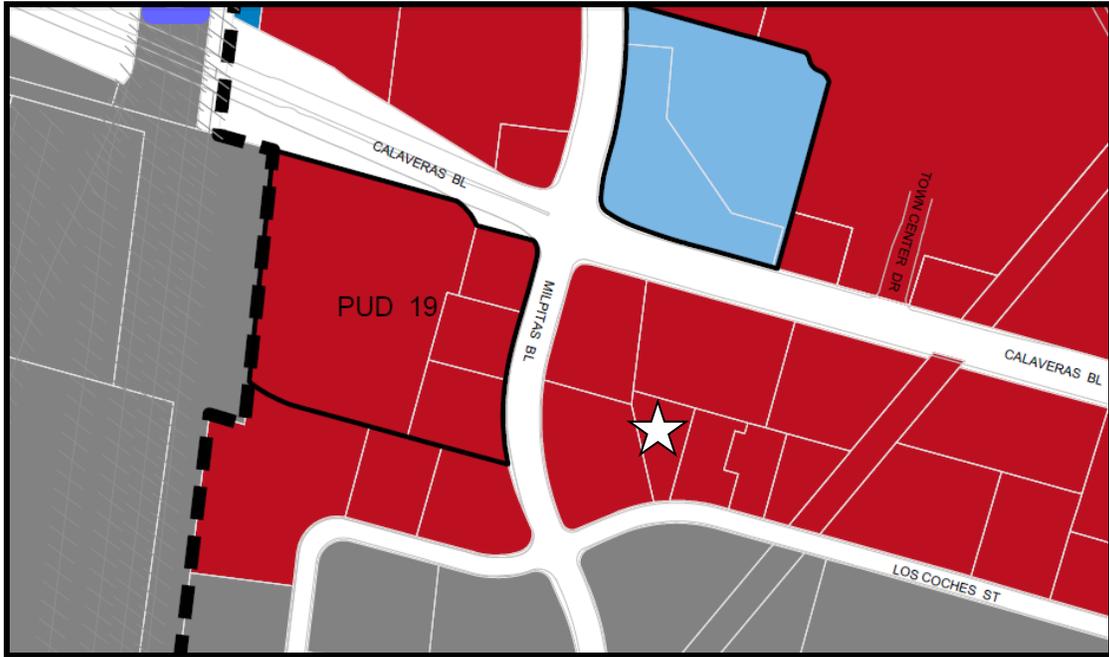
CEQA Determination: Categorically exempt from further environmental review pursuant to Class 1, Section 15301 (Existing Facilities), Class 4, Section 15304 (Minor Alterations to Land), and Class 11, Section 15311 (Accessory Structures) of the California Environmental Quality Act (CEQA).

PLANNER: Cindy Hom, Assistant Planner

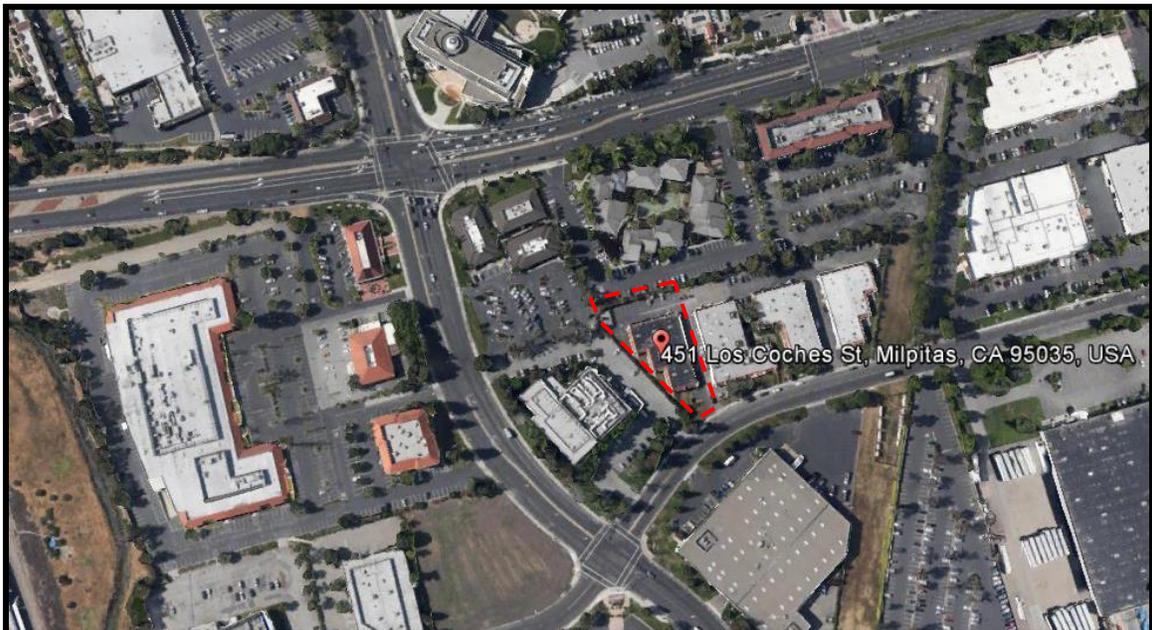
PJ: 2983

- ATTACHMENTS:**
- A. Resolution No. 13-037
 - B. Project Plans
 - C. Applicant’s Project Description Letter
 - D. Passenger Loading/Unloading Plan
 - E. Updated Risk Assessment

Map 1:
Land Use Map



Map 2:
Project Site and Vicinity Map



BACKGROUND

History

In March 1979, the Planning Commission granted site and architectural approval for the construction of an industrial complex comprised of four, single story concrete tilt-up buildings with various site improvements at the subject address. Subsequent amendments included approval for the installation of a monument sign in the 1980s and a conditional use permit for the operations of a martial arts studio in February 2005 for the subject building.

The Application

On August 7, 2013, Brenda Zheng with Wing Educare Inc. submitted an application pursuant to Section 6 and Section 57 of the Milpitas Zoning Ordinance. The following is a summary of the requests:

- *Conditional Use Permit:* For the operations of a 9,983 square foot daycare center within the Town Center Zoning District with shared parking per Section XI-10-57.04.
- *Minor Site Development Permit:* For the installation of an outdoor play area and exterior building modifications per Table XI-10-57.03-1.

PROJECT DESCRIPTION

Location and Land Use

The project site is located on a 0.72 acre site developed with a 9,982 square foot industrial building and surface parking. The subject site is bounded by the future Taipei Economic and Cultural Center to the west; medical and dental offices to the north; multiple religious facilities and the India Community Centers to the east; and Los Coches Street and various light and heavy industrial uses to the south.

The project site is zoned and designated Town Center. Surrounding land uses includes Town Center zoning to the west, north, and east and Heavy Industrial zoning to the south. The surrounding businesses within the industrial complex include two religious temples, a print shop, an acupuncture clinic, and children's occupational therapy facility. The land use and vicinity map of the project site is shown on the previous page.

Project Overview

The project proposes to convert a former martial arts studio into a 9,983 square foot bilingual (Chinese and English) daycare center that provides homework assistance, tutoring for mathematics, science, SAT preparation, and language arts as well as group instruction for martial arts, ping pong, fine arts, and music. The proposed daycare center would operate Monday through Friday between the hours of 8 AM to 6:30 PM. The proposed facility anticipates 64 children for its preschool program and 56 children for its afterschool program. The facility also proposes a Chinese language and arts school on Saturdays from the hours of 1 PM to 5 PM. The applicant proposes minor site improvements that include a 2,087 square foot outdoor play area and exterior modifications that consist of replacement of two existing metal roll up doors with new storefront windows and canvas awning above an entrance doorway.

Floor Plan

The proposed daycare center provides for a 3,365 square foot preschool classroom and a 6,006 square feet afterschool learning center that consists of six other classrooms that vary from 290 to 381 square feet in size, and two group instructional areas that provide approximately 2,855 square feet of space. Approximately 612 square foot will be used as administrative offices and lobby area.

Access and Circulation

Vehicle access and circulation to the project site is provided by two (2) shared, two-way driveways located along Los Coches Street and internal drive aisles that provide reciprocal access to the parking areas located at the rear of the lot and to adjacent lots to the east. Pedestrian access is provided via public sidewalk along Los Coches Street. The applicant proposes to add striping for pedestrian walkways to provide a safe path of travel to and from the parking lot and building entrances.

PROJECT ANALYSIS

Compliance with Municipal Code Development Standards

The project proposes replacement of two roll-up doors with storefront windows and installation of a new metal awning. The proposed building modifications do not change existing setbacks. The building modifications maintain compliance with the setback and development standards for the Town Center Zoning District as listed below in Table 1:

Table 1:
Setbacks and Development Standards

	TC Development Standards	Existing Setback
<u>Setbacks</u> (Minimum)		
Front to Primary Structure	20' or 35' when abutting Calaveras Blvd	65'
Interior Side	0 or 15' when abutting residential district	10' and 13'
Rear	0 or 15' when abutting residential district	60'
<u>Building Height</u> (Maximum)	None	18'

Parking

Currently, the project site provides a total of twenty-two (22) parking spaces. The applicant proposes a shared parking agreement for fifteen (15) parking spaces with the neighboring property located at 473 Los Coches Street, which is currently occupied by a religious temple that operates during the evenings and Sundays, thus the property has the ability to provide spaces when the facility is not in use. The applicant has an executed shared parking agreement that will be recorded assuring permission for the use of the shared parking spaces. With the shared

parking agreement, the project complies with the Milpitas Parking Ordinance requirement as identified in Table 2:

Table 2
Parking Summary

Uses	Parking Ratio	Sq. Ft/Rm/ # of children	Parking Required
Child Care Center			
<i>Classroom</i>	1/500 GFA or 1 per classroom whichever is greater	5,379 s.f.	11
<i>Group Instruction Area</i>	1 per instructional area, a minimum of 3	2 rooms	6
<i>Office and Lobby</i>	1/200 GFA	612 s.f.	3
<i>Loading and Unloading</i>	1 per 6 children; up to 5 spaces and thereafter 1 per 10 children	120 children	14
Total Number of Spaces Required			34
Total Number of On-Site Spaces			22
Total Number of Shared Parking Spaces			15
Total Number Provided			37

Loading and Unloading Operations

Based on the parking requirements for the proposed day care center, fourteen (14) parking spaces are required for loading and unloading. These spaces shall be located and designated in the rear parking lot area. The applicant submitted a passenger loading plan (Attachment D) that identifies drop-off and pick-up procedures and safe traffic and pedestrian circulation. A condition of approval is included that the following standards are incorporated in the Parents Handbook and the facility standard operating procedures:

- No vehicles shall stop or park in the driveway to prevent potential back up onto Los Coches Street. Do not allow parking in red zones or adjacent to fire hydrants.
- Respect traffic laws and parking regulations by only parking in designated parking spaces.
- Prohibit double-parked vehicles.
- Parents and staff shall be required to enter from the west driveway and exit on the east driveway as shown on the drop-off and pick-up exhibit.
- Parents shall be required to park their cars in the designated parking areas and accompany their child into the building to be checked-in by Wing Educare Staff.

Risk Assessment

Since the project would locate sensitive receptors (young children and/or the elderly), a Risk Assessment is required by the City's Fire Department to evaluate the potential impacts from an accidental spill or release of a hazardous material from neighboring industrial sites within a 1,000 foot radius of the project site. A Risk Assessment was performed in 2005 with the

conditional use permit for the martial arts facility and required safety measure to be implemented. Staff requested an updated Risk Assessment (Attachment E) to determine if the existing safety measures are still applicable and if new safe measures are warranted due to a change in the types of industrial uses or hazardous materials. Based on the findings and recommendations of the Risk Assessment, there are no significant changes. The following conditions of approval are included to ensure public health, safety, and general welfare.

1. Prior to any building permit issuance, the tenant improvement plans shall provide for 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 (Chlorine, Hydrogen bromide and Ammonia to name a few). 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 (required to be in English and in the other dominant language of the facility users), and shall direct them on emergency procedures to follow. The sensors and alarm systems shall be maintained in an operable manner at all times and tested on an annual basis. Maintenance and testing shall be performed by a qualified person and records be made available to the Fire Department for inspection upon request. As part of the monitoring system, building ventilation shall have manual and automatic shutoff capabilities with the control device located per Fire Department review and approval direction. (F, P)
2. Prior to any building permit issuance, the tenant improvement plans shall identify 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. (F, P)
3. Prior to any building permit issuance, the tenant improvement plans shall indicate the locations 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 and approval. Sign may be required in multiple languages, as appropriate for occupants of the building. (F, P)
4. Prior to any certificate of occupancy issuance, the applicant shall prepare to the satisfaction of the Fire Department and implement a parental notification process for any activities involving children. The notification shall include a description of how each parent will be notified of the nature of hazards in the area and 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. The business owner or operator shall maintain records of notification signed by each parent, stating that they understand and accept the procedures that are in place. Records shall be updated annually and readily available for review by Fire Department when requested. (F, P)
5. Prior to any certificate of occupancy issuance, the applicant shall submit an Emergency Action Plan (EAP) to the Milpitas Fire Department for review and approval, which recognizes the nature of the risks 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. (F, P)

6. Prior to any 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. (F, P)
7. Prior to any certificate of occupancy issuance, 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 conducted with the Fire Department on site. (F, P)
8. Both the Risk Assessment and Emergency Action Plan shall be reviewed, updated and submitted to the Fire Department for review and approval on an annual basis. This review shall incorporate any changing conditions within industry and chemical usage within the area. It shall also incorporate any engineering/administrative controls and technological advances available. The updated plans shall be prepared by a qualified individual approved by the Fire Department. (F, P)

Compliance with Milpitas Child Care Master Plan

The table below outlines the project’s consistency with the goals and implementation policies of the Milpitas Child Care Master Plan, dated April 2, 2002.

Table 3
Milpitas Child Care Master Plan Consistency

Policy	Consistency Finding
<i>Long Range Goal: Every child and family has access to affordable, safe, quality child care</i>	Consistent. The project proposal is a 9,983 square daycare center that accommodates 120 children that can serve the surrounding residential development employment centers.
<i>Accessibility Policy 2.2-G-I: The City of Milpitas promotes the retention of existing facilities and the development of new child care facilities within the city limits.</i>	Consistent. The project promotes business retention by relocating an existing daycare center within Milpitas.

Compliance with State Law General Licensing Requirements

State Law requires 75 square feet of outdoor play area per child for daycare facilities. Based on the proposed capacity of 120 student, 9,000 square feet of outdoor play area would be required to be provided. However, the Department of Community Care Licensing allow for a reduction of square footage provided the outdoor play times for each group or classroom are staggered. The project provides approximately 2,087 outdoor play area and accommodates spaces for 27

students at a time. Compliance with this requirement will be verified at the time of permit issuance from Department of Community Care Licensing. As such, staff recommends as a condition that prior to certificate of occupancy, the applicant shall obtain all the necessary approvals from the Community Care Licensing to operate the daycare center.

The proposed outdoor play area consists of a play equipment structure and sand lot that is fenced by a 6-foot tall metal picket fence. The play area is proposed along the left side yard. The following conditions of approval are included:

1. Prior to any building permit issuance, the owner or designee shall submit manufacture specifications, details, and elevation of proposed play equipment for City review and approval. All equipment shall be appropriate for the intended age group of the daycare center.
2. Prior to any building permit issuance, the owner or designee shall submit a landscaping and irrigation plans that denote plant name, plant type, size, and quantities for City review and approval. Proposed plant material shall be non-toxic, plant material. All landscaping and irrigation shall be installed prior to building permit final.

FINDINGS

Pursuant to Section 57 of the Zoning Code, the Planning Commission is required to make specific Findings before taking action on an entitlement request. Findings shall identify the rationale behind the decision to take a certain action. Each code-required Finding is analyzed below.

Conditional Use Permit Findings [Section XI-10-57.04 (F)]

1. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety, and general welfare.

Staff Analysis: The project site is located in the Town Center Zoning District and is a compatible land use. The proposed daycare center is surrounded by commercial offices, quasi-public uses such as churches and community centers, and residential homes that are currently under construction. Although the project is located next to a Heavy Industrial Zoning District, the applicant is required to update its Risk Assessment annually to ensure existing mitigation measures are adhered to and adequate to maintain public safety. The proposed daycare center also includes standard operating procedures for the safe and efficient drop-off and pick-up of students. With implementation of conditions for airborne chemical monitoring system with detection and response/notification capabilities as well as an emergency action plan, the proposed daycare center will not be detrimental or injurious to the property or improvements in the vicinity of the property.

2. The proposed use is consistent with the Milpitas General Plan.

Staff Analysis: The proposed daycare center is an authorized use in the Town Center with a Conditional Use Permit. The proposed daycare center would serve local residents as well as support employment centers in the nearby commercial and industrial areas by providing quality

child care. The proposed daycare center would provide employment opportunities and promote business retention in that it relocates an existing business in Milpitas. The proposed daycare center is consistent with the following General Plan policies:

- *Implementing Policy No. 2.a-I-6 -Publicize the position of Milpitas as a place to carry on compatible Industrial and Commercial activities with special emphasis directed to the advantages of the City's location to both industrial and commercial use.*
- *Implementing Policy No. 2.a-I-7 - Provide opportunities to expand employment opportunities in partnerships with local businesses to facilitate communication and promote business retention.*

3. The proposed use is consistent with the Milpitas Zoning Ordinance.

Staff Analysis: The proposed daycare center conforms to the Milpitas Zoning Ordinance in that the use is conditionally permitted in the Town Center Zoning district and complies with the development standards and parking requirements as described above. The proposed daycare center would provide for an aesthetic and harmonious development in that proposed exterior alterations match the architectural theme and style. The proposed outdoor play area for the daycare center would not detract from the adjacent development in that it will be screened with landscaping.

Site Development Permit Findings [Section XI-10-57-03(F)]

1. The layout of the site and design of the proposed buildings, structures and landscaping are compatible and aesthetically harmonious with adjacent and surrounding development.

Staff Analysis: The proposed layout of the site provides safe vehicular and pedestrian access and circulation. The building modifications match existing architectural style and materials which are aesthetic and harmonious. As conditioned, the proposed daycare center shall be required to rehabilitate existing landscaping with non-toxic plant material along the perimeter as well as enhance the landscaping treatment in the front setback area.

2. The project is consistent with the Milpitas General Plan.

Staff Analysis: The proposed daycare center is consistent with the General Plan as described above and is compatible to the surrounding land uses.

3. The project is consistent with the Milpitas Zoning Ordinance:

Staff Analysis: The proposed daycare center conforms to the Milpitas Zoning Ordinance in that the use is conditionally permitted in the Town Center Zoning District and complies with the development standards and parking requirements as described above.

ENVIRONMENTAL REVIEW

The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). Staff determined that the project is categorically exempt from further environmental review pursuant to Class 1, Section 15301 (Existing Facilities), Class 4, Section 15304 (Minor Alterations to Land), and Class 11, Section 15311 (Accessory Structures) in that the project proposes to operate a daycare center within an existing industrial building and entails minor installation of small structures in the outdoor play area and building modifications.

PUBLIC COMMENT/OUTREACH

The application was publicly noticed in accordance with City and State law. At the time of writing this staff report, Staff has not received any public comments. The table below provides a summary of the City’s public noticing for this project.

Table 4
Public Noticing Summary

Notice of Public Hearing	Agenda
<ul style="list-style-type: none"> ▪ Posted on the site (<i>14 days prior to the hearing</i>) ▪ Forty-two notices mailed to property owners and residents within 1,000 feet to the project site (<i>10 days prior to the hearing</i>) ▪ Posted on the City's official notice bulletin board (<i>10 days prior to the hearing</i>) 	<ul style="list-style-type: none"> ▪ Posted on the City's official notice bulletin board (<i>5 days prior to the hearing</i>) ▪ Posted on the City of Milpitas’s Web site (<i>one week prior to the hearing</i>)

The map below illustrates the extent of the mailed notices.

Map 3
Public Notice Radius



CONCLUSION

The proposed daycare center is consistent with the Milpitas General Plan and Zoning Ordinance and will provide a service that would benefit the existing and future residents and nearby employment centers.

RECOMMENDATION

STAFF RECOMMENDS THAT the Planning Commission conduct a public hearing and adopt Resolution No.13-037 approving Conditional Use Permit No. UP-13-0014 and Minor Site Development Permit No. MS13-0039 to operate a daycare center, shared parking, and minor site modifications, subject to conditions of approval.

Attachments:

- A. Resolution No. 13-037
- B. Project Plans
- C. Applicant's Project Description Letter
- D. Passenger Loading/Unloading Plan
- E. Updated Risk Assessment

RESOLUTION NO. 13-037

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. UP13-0014 AND MINOR SITE DEVELOPMENT PERMIT NO. MS13-0039, TO OPERATE A DAYCARE CENTER THAT INCLUDES A PRESCHOOL AND AFTERSCHOOL LEARNING LOCATED AT 451 LOS COCHES STREET

WHEREAS, on August 7, 2013, an application was submitted by Brenda Zheng on behalf of Wing Educare Center Incorporated, 3289 Ingersoll Drive, San Jose, CA 95148, to operate a new daycare center within an existing 9,983 square foot building with minor site and building modifications and shared parking. The property is located within the Town Center Zoning District (APN 086-28-034); and

WHEREAS, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and recommends that the Planning Commission determine this project exempt; and

WHEREAS, since the project would locate sensitive receptors (young children and/or the elderly), a Risk Assessment is required by the City's Fire Department to evaluate the potential impacts from an accidental spill or release of a hazardous material from neighboring industrial sites within a 1,000 foot radius of the project site. A Risk Assessment was performed in 2005 with the conditional use permit for the martial arts facility located at the subject property and required safety measure to be implemented. Staff requested an updated Risk Assessment to determine if the existing safety measures are still applicable and if new safe measures are warranted due to a change in the types of industrial uses or hazardous materials. Based on the findings and recommendations of the Risk Assessment, there are no significant changes and the same safety measures will be required for this permit; and

WHEREAS, on December 11, 2013, the Planning Commission held a duly noticed public hearing on the subject application and considered evidence presented by City staff, the owner or designee, and other interested parties;

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

Section 1: The Planning Commission has duly considered the full record before it, which may include but is not limited to such things as the City staff report, testimony by staff and the public, and other materials and evidence submitted or provided to the Commission. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

Section 2: The project is categorically exempt from further environmental review pursuant to Class 1, Section 15301 (Existing Facilities), Class 4, Section 15304 (Minor Alterations to Land), and Class 11, Section 15311 (Accessory Structures) of the California Environmental Quality Act (CEQA) Guidelines. The project includes the operations of a

daycare center within an existing industrial building and installation of minor site improvements consisting of play structures in the outdoor play area and building modifications limited to replacement of existing roll-up doors with storefront windows and installation of a new metal awning.

Section 3: Conditional Use Permit Findings (Section XI-10-57.4(F))

1. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety, and general welfare.

The project site is located in the Town Center Zoning District and is a compatible land use. The proposed daycare center is surrounded by commercial offices, quasi-public uses such as churches and community centers, and residential homes that are currently under construction. Although the project is located next to a Heavy Industrial Zoning District, the applicant is required to update its Risk Assessment annually to ensure existing mitigation measures are adhered to and adequate to maintain public safety. The proposed daycare center also includes standard operating procedures for the safe and efficient drop-off and pick-up of students. With implementation of conditions for airborne chemical monitoring system with detection and response/notification capabilities as well as an emergency action plan, the proposed daycare center will not be detrimental or injurious to the property or improvements in the vicinity of the property.

2. The proposed use is consistent with the Milpitas General Plan.

The proposed daycare center is an authorized use in the Town Center with a Conditional Use Permit. The proposed daycare center would serve local residents as well as support employment centers in the nearby commercial and industrial areas by providing quality child care. The proposed daycare center would provide employment opportunities and promote business retention in that it relocates an existing business in Milpitas. The proposed daycare center is consistent with the following General Plan policies:

- *Implementing Policy No. 2.a-I-6 -Publicize the position of Milpitas as a place to carry on compatible Industrial and Commercial activities with special emphasis directed to the advantages of the City's location to both industrial and commercial use.*
- *Implementing Policy No. 2.a-I-7 - Provide opportunities to expand employment opportunities in partnerships with local businesses to facilitate communication and promote business retention.*

3. The proposed use is consistent with the Milpitas Zoning Ordinance.

The proposed daycare center conforms to the Milpitas Zoning Ordinance in that the use is conditionally permitted in the Town Center Zoning district and complies with the development standards and parking requirements as described below. The proposed daycare center would provide for an aesthetic and harmonious development in that proposed exterior alterations match the architectural theme and style. The proposed outdoor play area for the daycare center would not detract from the adjacent development in that it will be screened with landscaping.

Setbacks and Development Standards

	TC Development Standards	Existing Setback
<u>Setbacks</u> (Minimum)		
Front to Primary Structure	20' or 35' when abutting Calaveras Blvd	65'
Interior Side	0 or 15' when abutting residential district	10' and 13'
Rear	0 or 15' when abutting residential district	60'
<u>Building Height</u> (Maximum)	None	18'

Parking

Currently, the project site provides a total of twenty-two (22) parking spaces. The applicant proposes a shared parking agreement for fifteen (15) parking spaces with the neighboring property located at 473 Los Coches Street which is currently occupied by a religious temple that operates during the evenings and Sundays, thus the property has the ability to provide spaces when the facility is not in use. The applicant has an executed shared parking agreement that will be recorded assuring permission for the use of the shared parking spaces. With the shared parking agreement, the project complies with the Milpitas Parking Ordinance requirement as identified in Table 2:

Parking Summary

Uses	Parking Ratio	Sq. Ft/Rm/ # of children	Parking Required
Child Care Center			
<i>Classroom</i>	1/500 GFA or 1 per classroom whichever is greater	5,379	11
<i>Group Instruction Area</i>	1 per instructional area, a minimum of 3	2 rooms	6
<i>Office and Lobby</i>	1/200 GFA	612	3
<i>Loading and Unloading</i>	1 per 6 children; up to 5 spaces and thereafter 1 per 10 children	120	14
Total Number of Spaces Required			34
Total Number of On-Site Spaces			22
Total Number of Shared Parking Spaces			15
Total Number Provided			37

Section 4. Site Development Permit Findings (Section XI-10-57-03(F))

1. The layout of the site and design of the proposed buildings, structures and landscaping are compatible and aesthetically harmonious with adjacent and surrounding development.

The proposed layout of the site provides safe vehicular and pedestrian access and circulation. The building modifications match existing architectural style and materials which are aesthetic and harmonious. As conditioned, the proposed daycare center shall be required to rehabilitate existing landscaping with non-toxic plant material along the perimeter as well as enhance the landscaping treatment in the front setback area.

2. The project is consistent with the Milpitas General Plan.

The proposed daycare center is consistent with the General Plan as described above and is compatible to the surrounding land uses.

3. The project is consistent with the Milpitas Zoning Ordinance:

The proposed daycare center conforms to the Milpitas Zoning Ordinance in that the use is conditionally permitted in the Town Center Zoning District and complies with the development standards and parking requirements as described above.

Section 5: Milpitas Childcare Master Plan

The project is consistent with the City's adopted Childcare Master Plan:

The proposed daycare center allows for the operations of a 9,983 daycare center that accommodates up to 120 children. The proposed facility would serve the surrounding residential development in the Town Center Zoning district as well as the neighboring employment centers.

Section 6: The Planning Commission of the City of Milpitas hereby approves Conditional Use Permit No. UP13-0014 and Minor Site Development Permit No. MS13-0039, 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 December 11, 2013.

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 December 11, 2013, and carried by the following roll call vote:

COMMISSIONER	AYES	NOES	ABSENT	ABSTAIN
Lawrence Ciardella				
John Luk				
Rajeev Madnawat				
Sudhir Mandal, Chair				
Zeya Mohsin				
Gurdev Sandhu				
Demetress Morris				
Garry Barbadillo				

CONDITIONS OF APPROVAL

**CONDITIONAL USE PERMIT NO. UP13-0014 AND MINOR SITE DEVELOPMENT
PERMIT NO. MS13-0039**

General Conditions

1. The owner or designee shall develop the approved project in conformance with the approved plans and color and materials sample boards approved by the Planning Commission on December 11, 2013, in accordance with these Conditions of Approval.

Any deviation from the approved site plan, floor plans, elevations, materials, colors, 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)

2. Conditional Use Permit No. UP13-0039 and Minor Site Development Permit No. MS13-0039 shall become null and void if the project is not commenced within two (2) years from the date of approval unless in conjunction with a tentative map, then the project life coincides with the life of the map. Pursuant to Section 64.06(B) of the Zoning Ordinance of the City of Milpitas, commencement shall be:
 - 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.
3. Pursuant to Section 64.07, the owner or designee shall have the right to request an extension of Conditional Use Permit No. UP13-0039 and Minor Site Development Permit No. MS13-0039 if said request is made, filed and approved by the Planning Commission prior to expiration dates set forth herein. (P)
4. Prior to the issuance of any building permit, 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)
5. Prior to the issuance of any building permit, the owner or designee shall pay in full the project account balance and establish a remaining balance of 25% of the initial deposit. (P)

6. Indemnification. To the fullest extent permitted by law, owner or designee shall indemnify, defend with counsel of the City's choosing, and hold harmless City, its City Council, its boards and commissions, officials, officers, employees, and agents from and against any and all claims, demands, obligations, damages, actions, causes of action, suits, losses, judgments, fines, penalties, liabilities, costs and expenses (including without limitation, attorney's fees, disbursements and court costs) of every kind and nature whatsoever which may arise from or in any manner relate (directly or indirectly) to City's approval of the project, including but not limited to, the approval of the discretionary permits, maps under the Subdivision Map Act, and/or the City's related determinations or actions under the California Environmental Quality Act. This indemnification shall include, but not be limited to, damages awarded against the City, if any, costs of suit, attorneys' fees, and other expenses incurred in connection with such claim, action, causes of action, suit or proceeding whether incurred by owner or designee, City, and/or the parties initiating or bringing such proceeding. The owner or designee shall indemnify the City for all of City's costs, attorneys' fees, and damages which City incurs in enforcing the indemnification provisions set forth in this condition. The owner or designee shall pay to the City upon demand or, as applicable, to counsel of City's choosing, any amount owed pursuant to the indemnification requirements prescribed in this condition. **(CA)**
7. Prior to any certificate of occupancy issuance, the owner or designee shall obtain all the necessary approvals from Community Care Licensing for the operations of the daycare center in accordance with State law.
8. The use shall at all times comply with all local, State, and Federal laws, rules, regulations, guidelines, requirements, and policies. **(CA/P)**
9. Prior to issuance of any building permit, the owner or designee shall revise and submit to the Planning Division, the facility's "Parents Handbook" and the facility's "Standard Operating Procedures" to incorporate the following measures:
 - No vehicles shall stop or park in the driveway to prevent potential back up onto Los Coches Street. Owner or designee shall not allow parking in red zones or adjacent to fire hydrants.
 - Respect traffic laws and parking regulations by only parking in designated parking spaces.
 - Prohibit double-parked vehicles.
 - Parents and staff shall be required to enter from the west driveway and exit on the east driveway as shown on the drop-off and pick-up exhibit.
 - Parents shall be required to park their cars in the designated parking areas and accompany their child into the building to be properly check in by Wing Educare Staff.
10. The owner or designee shall at times maintain a valid written agreement subject to City approval for fifteen (15) parking spaces otherwise assigned to the property at 473 Los Coches Street, which designated spaces shall be no more than 300 feet from the subject site's property.

- a. The agreements shall specify the applicant and its guest and invitees are entitled to use said assigned spaces during the hours of operation for the Wing Educare Center. If the applicant loses permission to use some or all said parking spaces, and is unable within thirty (30) days thereafter, to secure permission to use the same number of parking spaces within 300 feet of its property by means of a parking agreement approved by City, this Conditional Use Permit shall be subject to Section 10.63.06, Revocation, Suspension, Modification, of the Milpitas Zoning Ordinance.
11. The fully executed Shared Parking Agreement provides Wing Educare the right to use fifteen (15) spaces all year around on the weekdays between the hours of 8:00AM to 10:00AM and 4:00PM to 6:30PM for the exclusive use of its officers, directors, trustees, employees, volunteers, customers, members, visitors, and invitees. Similarly, the Shared Parking Agreement provides Vedic Education and Devotional Academy the right to use fifteen (15) spaces all year around on the weekdays between the hours 7:00PM to 10:00PM, and on weekends between the hours of 9:00AM to 10PM for the exclusive use of its officers, directors, trustees, employees, volunteers, devotees, customers, members, visitors, and invitees. The location of the shared parking spaces are incorporated as part of the Shared Parking Agreement.
12. Prior to any building permit issuance, the owner or designee shall submit manufacture specifications, details, and elevation of proposed play equipment for City review and approval. All equipment shall be appropriate for the intended age group of the daycare center.
13. Prior to any building permit issuance the owner or designee shall submit a landscaping and irrigation plans that denote plant name, plant type, size, and quantities for City review and approval. Proposed plant material shall consist of non-toxic plant material. All landscaping and irrigation shall be installed prior to building permit final.
14. The proposed playground shall conform to the playground-related standards set forth by the American Society for Testing and Materials and the playground-related guidelines set forth by the United States Consumer Product Safety Commission. **(E)**
15. Prior to final of a building permit for the playground area, the owner or designee shall have a playground safety inspector, certified by the National Playground Safety Institute, conduct an initial inspection for the purpose of aiding compliance with the playground safety requirements. **(E)**
16. Prior to any building permit issuance, it is the responsibility of the owner or designee to obtain any necessary encroachment permits from all affected agencies and private parties. Copies of approvals or permits must be submitted to the City of Milpitas Engineering Division. **(E)**
17. The owner or designee shall submit a Sewer Needs Questionnaire and/or Industrial Waste Questionnaire with the building permit application and pay the related fees prior to

Building Permit issuance. Contact the Land Development Section at (408) 586-3329 to obtain the form(s). (E)

18. Prior to any building permit issuance, the owner or designee must pay all applicable development fees, including but not limited to, plan check and inspection deposit, and 2.5% building permit automation fee. (E)
19. Per Chapter 200, Solid Waste Management, V-200-3.10, *General Requirement*, owner or designee shall not keep or accumulate, or permit to be kept or accumulated, any solid waste of any kind and is responsible for proper keeping, accumulating and delivery of solid waste. In addition, according to V-200-3.20 *Owner Responsible for Solid Waste, Recyclables, and Yard Waste*, owner or designee shall subscribe to and pay for solid waste services rendered. Prior to any occupancy permit issuance (start of operation), the owner or designee shall submit evidence to the City that a minimum level of refuse service has been secured using a Service Agreement with Allied Waste Services (formally BFI) for commercial services to maintain an adequate level of service for trash and recycling collection. After the owner or designee has started its business, the owner or designee shall contact Allied Waste Services commercial representative to review the adequacy of the solid waste level of services. If services are determined to be inadequate, the owner or designee shall increase the service to the level determined by the evaluation. For general information, contact BFI at (408) 432-1234. (E)
20. Prior to the issuance of a building permit, the owner or designee shall demonstrate that adequate utility services exist for the site. If the existing services (water, sewer and storm) are not adequately sized to serve this additional development. (E)
21. Prior to any 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 owner or designee. The sensors shall be specific for the gases identified in the Risk Assessment dated September 30, 2013 having the potential of impacting the site (Chlorine, Hydrogen Bromide and Ammonia to name a few). 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 (required to be in English and in the other dominant language of the facility users), and shall direct them on emergency procedures to follow. The sensors and alarm systems shall be maintained in an operable manner and tested on an annual basis. Maintenance and testing shall be performed by a qualified person and records be made available to the Fire Department for inspection upon request. As part of the monitoring system, building ventilation shall have manual and automatic shutoff capabilities with the control device located per Fire Department review and approval. (F, P)
22. Prior to any 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 subject to Fire Department review and approval. (F, P)

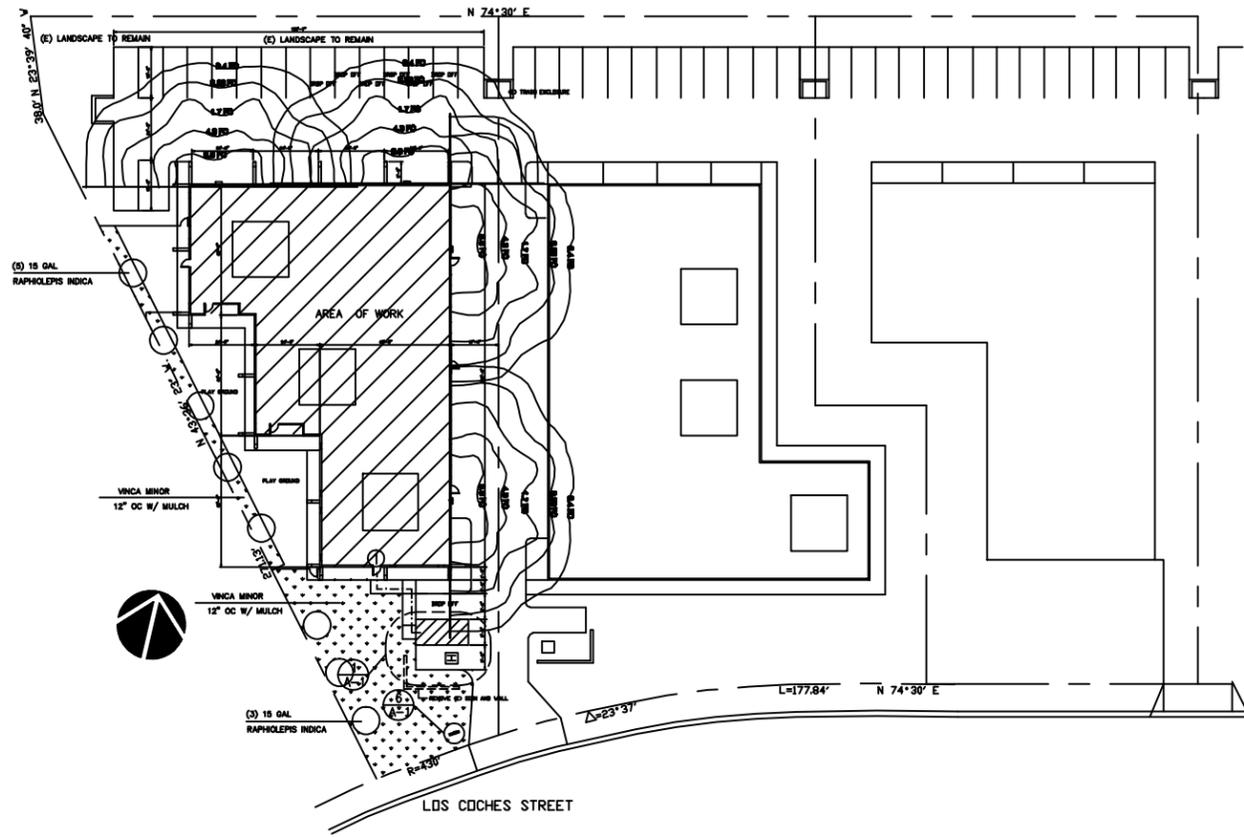
23. Prior to any building permit issuance, the tenant improvement plans shall indicate the locations of warning notification signs posted at all entrances to the building subject to Fire Department review and approval. The signs shall serve to advise building occupants of potential hazards within the surrounding industrial area. Proposed verbiage shall be submitted for Fire Department review and approval. Sign may be required in multiple languages, as appropriate for occupants of the building. (F, P)
24. Prior to any certificate of occupancy issuance, the owner or designee shall prepare to the satisfaction of the Fire Department and implement a parental notification process for any activities involving children. The notification shall include a description of how each parent will be notified of the nature of hazards in the area and 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. The owner or designee shall maintain records of notification signed by each parent, stating that they understand and accept the procedures that are in place. Records shall be updated annually and readily available for review by Fire Department when requested. (F, P)
25. Prior to any certificate of occupancy issuance, the applicant shall submit an Emergency Action Plan (EAP) to the Milpitas Fire Department for review and approval, which recognizes the nature of the risks 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. (F, P)
26. Prior to any certificate of occupancy issuance and before implementing the EAP, the owner or designee shall designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees. The owner or designee shall advise each employee of his/her responsibility under the plan. (F, P)
27. Prior to any certificate of occupancy issuance, 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 conducted with the Fire Department on site. (F, P)
28. Both the Risk Assessment and Emergency Action Plan shall be reviewed, updated and submitted to the Fire Department for review and approval on an annual basis. This review shall incorporate any changing conditions within industry and chemical usage within the area. It shall also incorporate any engineering/administrative controls and technological advances available. The Risk Assessment and Emergency Action Plan shall be updated by a qualified individual or entity as approved by the Fire Department. (F, P)
29. Cost and Approval. The completion and satisfaction of each condition set forth in this Exhibit shall be at the owner or designee's sole cost and expense and each subject to City's review and approval.

(P) = Planning

(E) = Engineering

(CA) = City Attorney

(PC) = Planning Commission



LEGEND

- (N) ADA SIGN @ ENTRY DOOR MOUNTED 60" ABOVE PAVING
- ACCESSIBLE ROUTE
- NOTES
- ALL WALKWAYS AND SIDEWALKS ALONG ACCESSIBLE ROUTE OF TRAVEL MUST:
- 1. BE CONTINUOUSLY ACCESSIBLE
- 2. HAVE MAXIMUM 1/2" CHANGES IN ELEVATION
- 3. BE MINIMUM OF 48" IN WIDTH
- 4. WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 5% SHALL HAVE RAMPS COMPLYING WITH CURRENT CBC

MASTER SITE PLAN

1"=30' 12

TRAFFIC CONTROL PLAN

NTS 9

PARKING ANALYSIS					
ROOM NAME	OCCUPANCY	ADDRESS	AREA	PARKING RATIO	PARKING REQUIRED
(E) CLASSROOM 1	E	415 LOS COCHES STREET	313 SF	1/CLASSRM	1
(E) CLASSROOM 2	E	415 LOS COCHES STREET	290 SF	1/CLASSRM	1
(E) CLASSROOM 3	E	415 LOS COCHES STREET	381 SF	1/CLASSRM	1
(E) CLASSROOM 4	E	415 LOS COCHES STREET	355 SF	1/CLASSRM	1
(E) GROUP INSTRUCTIONS	E	415 LOS COCHES STREET	1119 SF	MINIMUM 3	3
(N) PRESCHOOL CLASSROOM 1	E	415 LOS COCHES STREET	3365 SF	1/500	5
(N) CLASSROOM 2	E	415 LOS COCHES STREET	371 SF	1/CLASSRM	1
(N) CLASSROOM 3	E	415 LOS COCHES STREET	304 SF	1/CLASSRM	1
(N) GROUP INSTRUCTIONS	E	415 LOS COCHES STREET	1736 SF	MINIMUM 3	3
8 TEACHERS				1.5/TEACHERS	5
LOADING UNLOADING					14
PARKING REQUIRED					35
PARKING PROVIDED					22
ADDITIONAL PARKING		SEE AGREEMENT ENCLOSED			15
TOTAL PARKING PROVIDED					37

TENANT IMPROVEMENT FOR EDUCATION CENTER
REMOVE DOORS, WALLS, INSTALL NEW WALLS AND DOORS, BATHROOMS, SINK AND CABINETS, ELECTRICAL SWITCHES, ADJUST LIGHTS AND ADD NEW HVAC UNITS, SUPPLY AND RETURNS

SCOPE OF WORK

10

APN #:	086-39-001	
SITE AREA:	0.72 ACRES	31,342 SQ. FT.
BUILDING AREA:	9,983 SQ. FT.	(E)9,983 SQ. FT.
TOTAL		
AREA OF WORK:	9,983 SQ. FT.	
PLAY GROUND AREA:	2,087 %	
PARKING REQUIRED:	22 CARS	STANDARD STALLS
PARKING PROVIDED:	21 HANDICAP STALLS	0 COMPACT STALLS
TOTAL	22 STALLS	
PARKING RATIO:	SEE PARKING ANALYSIS	
PAVED AREA:	(E) SQ. FT.	
PAVING COVERAGE:	(E) %	
LANDSCAPE AREA:	(E) SQ. FT.	
LANDSCAPING COVERAGE:	(E) %	
TYPE OF CONSTRUCTION:	E-B	
OCCUPANCY:	INDUSTRIAL	
USE ZONE:	NONE	
FIRE SPRINKLER SYSTEM:	2010	
CBC:	2010	
CFC:	2010	
CPC:	2010	
CMC:	2010	
TITLE 24 ACCESSIBLE CODE:	2012	

- Dimensions marked ; are flexible and can change as required to fit. Dimensions not so marked shall take precedence over ; dimensions.
- Report any discrepancies in dimensions to Architect for clarifications.
- All walls not attached to roof structure shall be braced to roof structure at 8'-0" o.c. with metal studs at 45" maximum.
- Do not connect to, or suspend any items from roof stiffeners without approval from Architect and Structural Engineer.
- Exits shall be illuminated at all times when the building is foot candle at floor level.
- Exit signs and exit illuminations shall be on separate circuits, in which each shall be controlled independently

GENERAL NOTES

7

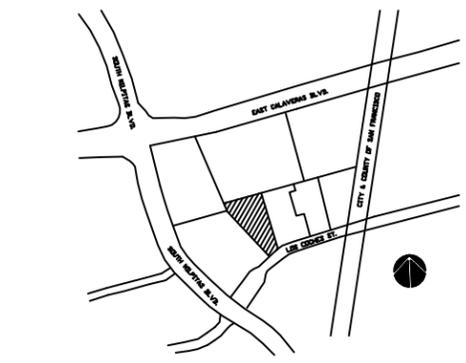


PARKING ANALYSIS, PLAY GROUND, FENCING

13

TABULATION

11

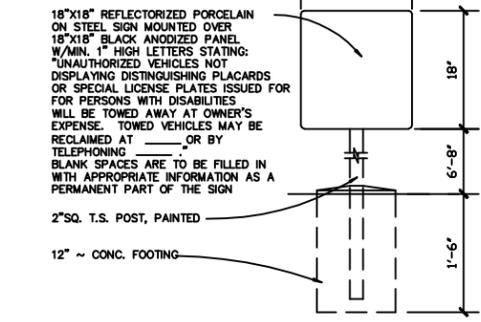


VICINITY MAP

8

DA PARKING SIGN

NTS 5

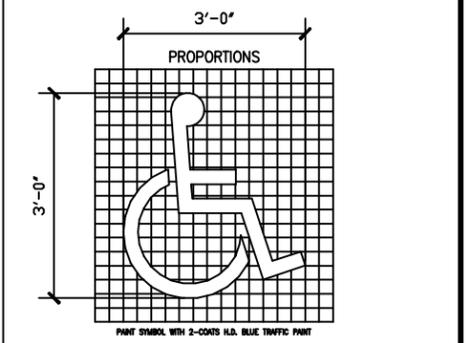


TOW AWAY SIGN

NTS 6

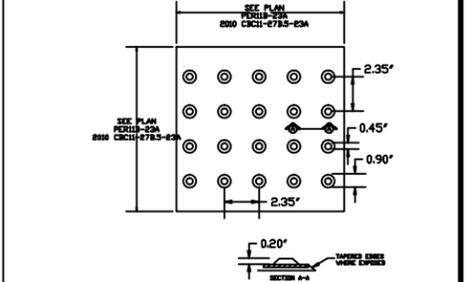
DA PARKING STANDARDS

NTS 1



PAINTED DA SIGN

NTS 2



TRUNCATED DOMES

NTS 3

- ARCHITECTURAL
- A-1 SITE PLAN, TABULATION, NOTES & DETAILS
 - A-2 NEW FLOOR PLAN
 - A-3 DEMOLITION PLAN
 - A-4 ELEVATIONS
 - A-5 TRAFFIC PLAN

DRAWING INDEX

4

REVISIONS

WING EDUCATION CENTER
T.I.
451 LOS COCHES STREET
MILPITAS, CA 95035

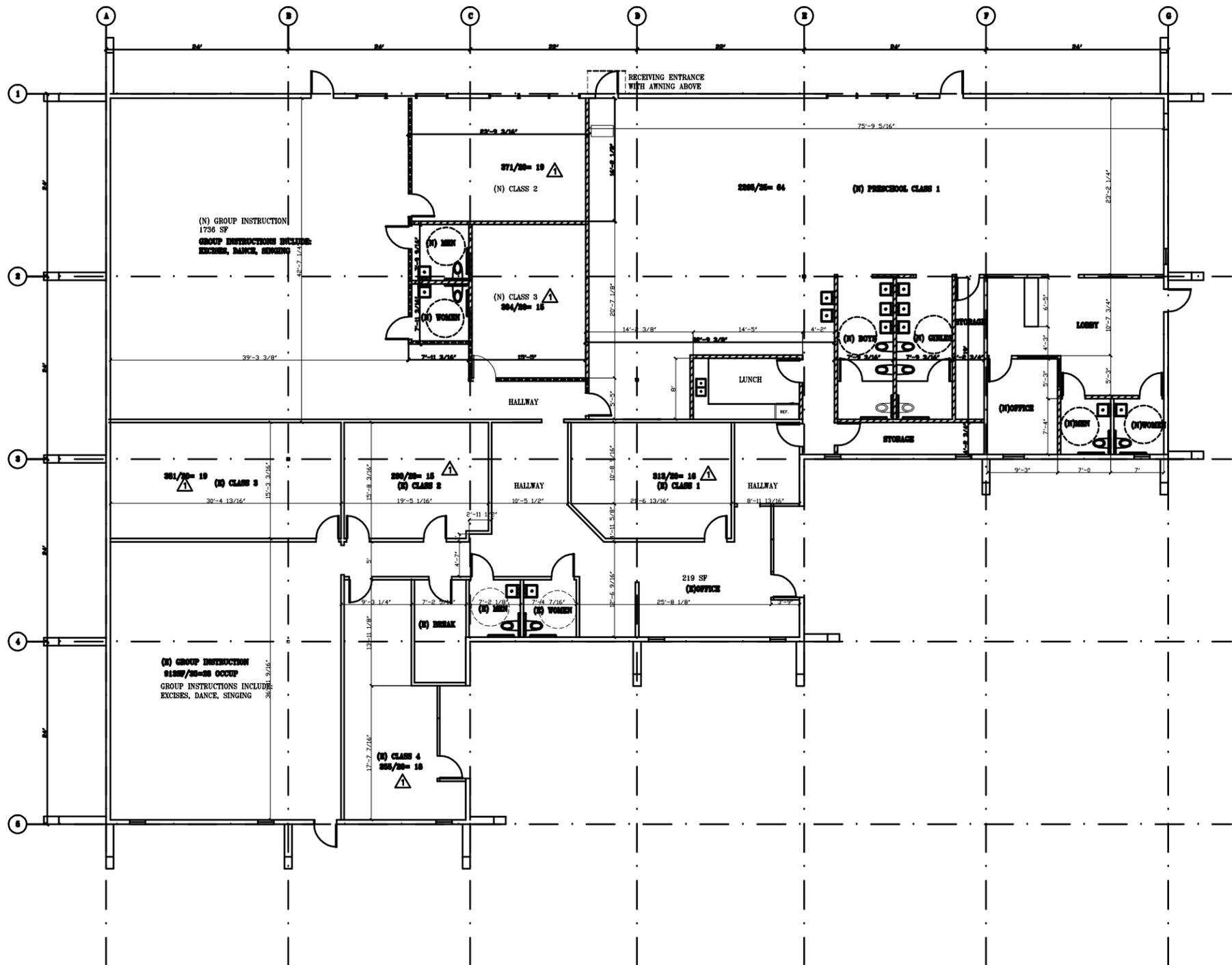


LRS ASSOCIATES
ARCHITECTURE AND PLANNING
 102 PERMAN DRIVE SUITE 201 SUNNYVALE
 CALIFORNIA 94088 (408) 745-0391
 FAX (408) 745-0398

ARCHITECT
 DATE 11-12-2013 PROJECT NO. 36.2961
 SCALE AS SHOWN DRAWN MW
 SHEET

A-1

OF SHEETS



LEGEND :

- CEILING HT. WALL : 3-5/8"X25GA ST'L STUDS @24" O.C. W/5/8" TYPE X GYP. BD. ON BOTH SIDES
- FULL HT. WALL : 6"X20 GA ST'L STUDS @24" O.C. W/5/8" TYPE X GYP. BD. ON BOTH SIDES
- EXISTING WALLS TO BE REMOVED
- EXISTING WALLS TO REMAIN
- E** EXISTING
- N** NEW

FINISH SCHEDULE

FLOOR	WALL
11. EXISTING TO REMAIN REPAIR AS REQUIRED	31. EXISTING TO REMAIN REFINISH & PAINT
12. CARPET	32. GYP. BD. TAPE, TEXTURE & PAINT FLAT LATEX
13. VCT	35. ITEMS 31 AND 32

BASE	CEILING
21. EXISTING TO REMAIN REPLACE AS REQUIRED	41. 2'-0"X4'-0" SUSPENDED ACOUSTIC CEILING
22. 4" RUBBER TOPSET BASE	42. GYP. BD. CEILING

DOOR SCHEDULE

- A. 3'-0"X7'-0"X1-3/4" SOLID CORE WOOD DOOR W/ PREFINISHED OAK VENEER SET IN ALUMINUM FRAME W/ 2'-0" SIDELIGHT
- B. 3'-0"X7'-0"X1-3/4" SOLID CORE WOOD DOOR W/ PREFINISHED OAK VENEER SET IN ALUMINUM FRAME (20MIN RATED)

HARDWARE SCHEDULE

GROUP 1		
1 1/2 PAIR BUTTS	FB 179X4-1/2X4-1/2	STA
1 LOCKSET (LEVER TYPE)	D50PD RHODES	SCH
1 STOP	W302TB X 10B	QA

GROUP 2 (20 MIN RATED)		
1 1/2 PAIR BUTTS	FB 179X4-1/2X4-1/2	STA
1 LOCKSET (LEVER TYPE)	D50PD RHODES	SCH
1 STOP	W302TB X 10B	QA
1 CLOSER	P7500 X STAT XSMB	NOR
HEAD & JAMB GASKET	INTEGRAL WITH FRAME	

FLOOR PLAN



REVISIONS	
	OCCUPANT LOAD 11-1-2013

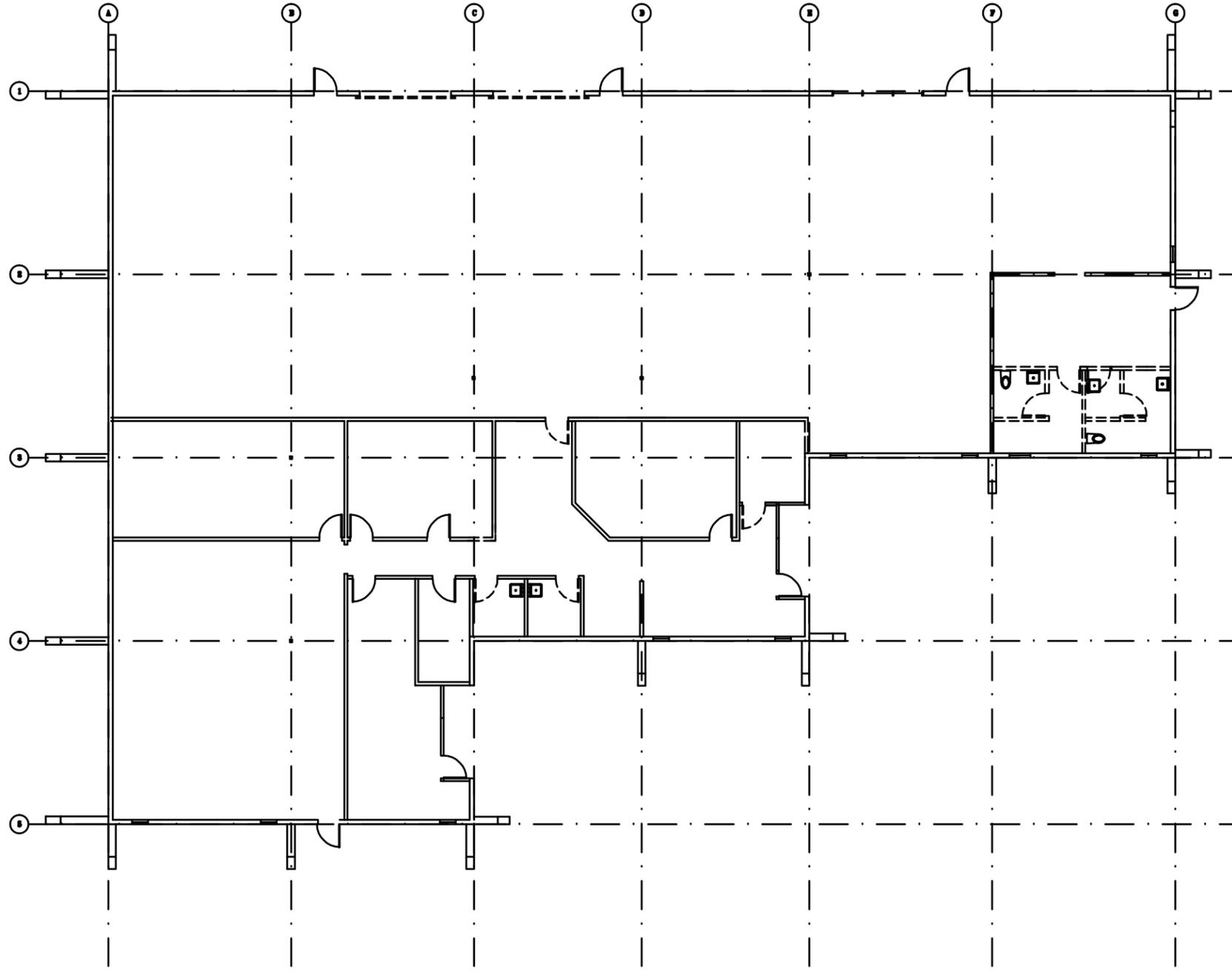


WING EDUCATION CENTER
T-1
451 LOS COCHES STREET
MILPITAS, CA 95035



LRS ASSOCIATES
 ARCHITECTURE AND PLANNING
 202 FERRIS CREEK SUITE 201 GARDENVALE
 CALIFORNIA 94009 (408) 745-0001
 FAX (408) 745-0000

ARCHITECT	
DATE	PROJECT NO.
11-12-2013	36.2961
SCALE	DRAWN
1/8" = 1'-0"	MW
SHEET	
A-2	
OF SHEETS	



LEGEND :

- CEILING HT. WALL : 3-5/8"X25GA ST'L STUDS @24" O.C. W/5/8" TYPE X GYP. BD. ON BOTH SIDES
- FULL HT. WALL : 6"X20 GA ST'L STUDS @24" O.C. W/5/8" TYPE X GYP. BD. ON BOTH SIDES
- EXISTING WALLS TO BE REMOVED
- EXISTING WALLS TO REMAIN
- E EXISTING
- N NEW

FINISH SCHEDULE

FLOOR	WALL
11. EXISTING TO REMAIN REPAIR AS REQUIRED	31. EXISTING TO REMAIN REFINISH & PAINT
12. CARPET	32. GYP. BD. TAPE, TEXTURE & PAINT FLAT LATEX
13. VCT	33. ITEMS 31 AND 32
BASE	CEILING
21. EXISTING TO REMAIN REPLACE AS REQUIRED	41. 2'-0"X4'-0" SUSPENDED ACOUSTIC CEILING
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DOOR SCHEDULE

- A. 3'-0"x7'-0"x1-3/4" SOLID CORE WOOD DOOR W/ PREFINISHED OAK VENEER SET IN ALUMINUM FRAME W/ 2'-0" SIDELIGHT
- B. 3'-0"x7'-0"x1-3/4" SOLID CORE WOOD DOOR W/ PREFINISHED OAK VENEER SET IN ALUMINUM FRAME (20MIN RATED)

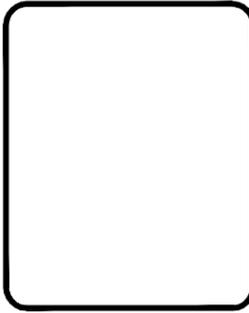
HARDWARE SCHEDULE

GROUP 1		
1 1/2 PWR BUTTS	FB 179X4-1/2X4-1/2	STA
1 LOCKSET (LEVER TYPE)	D50PD RHODES	SCH
1 STOP	W302TB X 10B	QA
GROUP 2 (20 MIN RATED)		
1 1/2 PWR BUTTS	FB 179X4-1/2X4-1/2	STA
1 LOCKSET (LEVER TYPE)	D50PD RHODES	SCH
1 STOP	W302TB X 10B	QA
1 CLOSER	P7500 X STAT XSMB	NOR
HEAD & JAMB GASKET	INTEGRAL WITH FRAME	

DEMOLITION PLAN



REVISIONS



**WING EDUCATION CENTER
T.I.**

**451 LOS COCHES STREET
MILPITAS, CA 95035**



LRS ASSOCIATES
ARCHITECTURE AND PLANNING

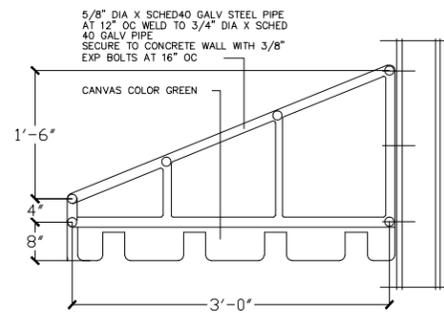
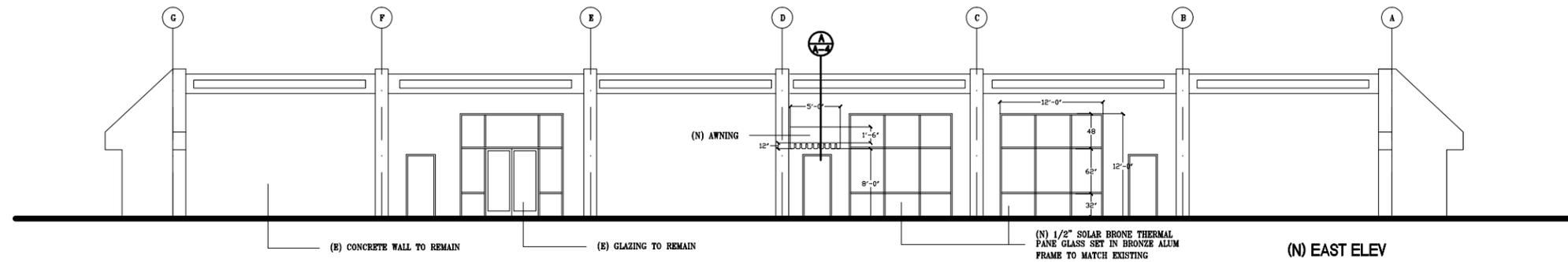
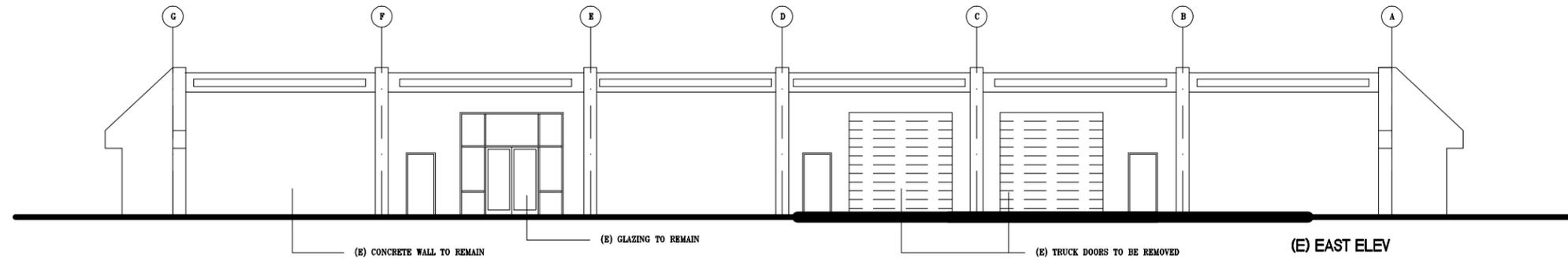
102 PENNSAN DRIVE SUITE 201 SAN JOAQUIN, CALIFORNIA 94088 (408) 748-0081
FAX (408) 748-0080

ARCHITECT

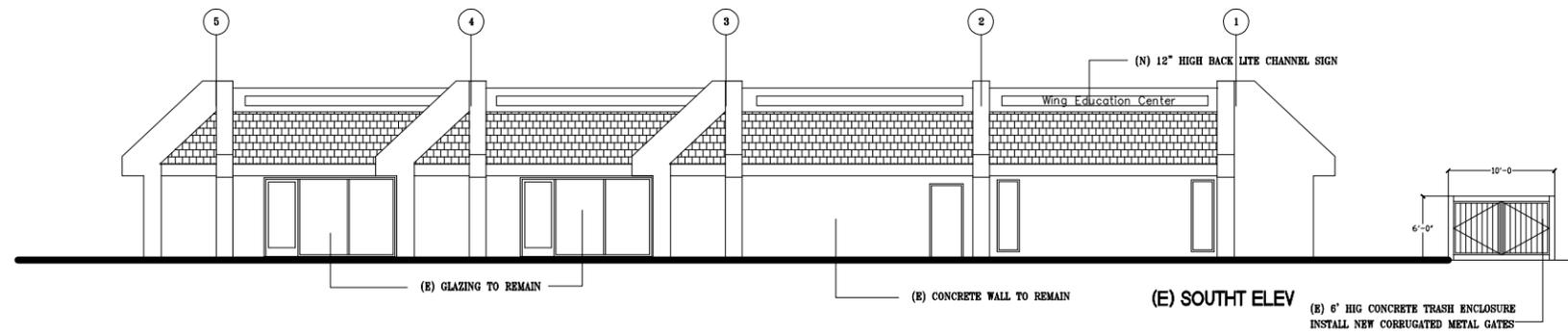
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DATE	

A-3

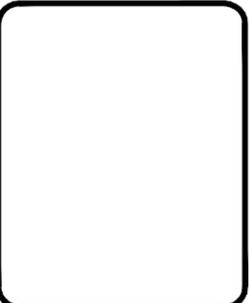
OF SHEETS



(A) AWNING DETAIL



REVISIONS
Δ CITY COMMENTS 12-3-2013

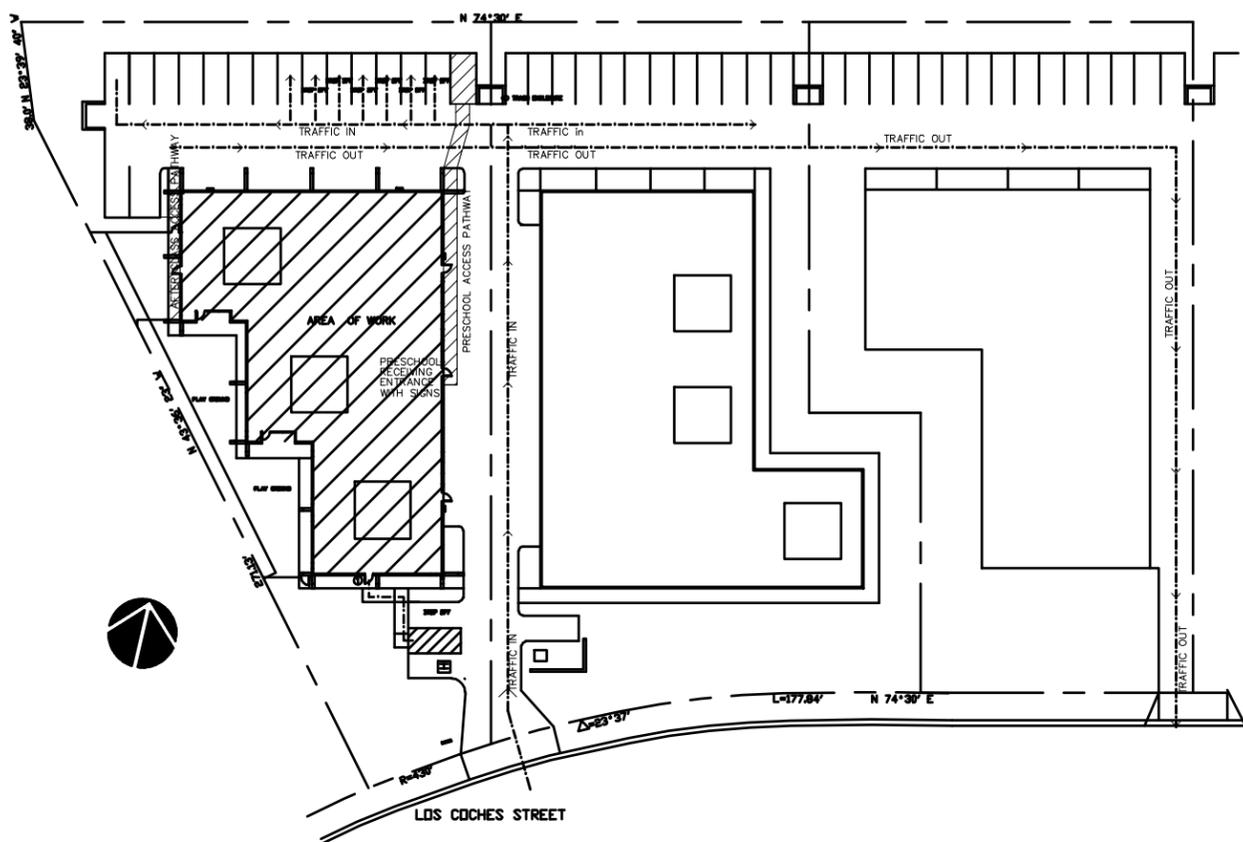


WING EDUCATION CENTER
T.I.
451 LOS COCHES STREET
MILPITAS, CA 95036

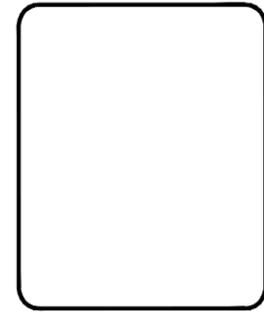


LRS ASSOCIATES
ARCHITECTURE AND PLANNING
 122 FERRAN DRIVE SUITE 204 SAN JOSE, CALIFORNIA 95128
 (408) 745-0000 FAX (408) 745-0000

ARCHITECT	
DATE	PROJECT NO.
11-12-2013	36.2961
SCALE	DRAWN
1/8" = 1'-0"	MW
SHEET	
A-4	
OF SHEETS	



REVISIONS



WING EDUCATION CENTER
T.I.

451 LOS COCHES STREET
MILPITAS, CA 95035



LRS ASSOCIATES
ARCHITECTURE AND PLANNING

102 PERSIAN DRIVE SUITE 201 SUNNYVALE,
CALIFORNIA 94089 (408) 745-0391
FAX (408) 745-0398

ARCHITECT	
DATE	PROJECT NO.
11-12-2013	36.2961
SCALE	DRAWN
AS SHOWN	MW
SHEET	
A-5	
OF SHEETS	

WING EDUCARE, INC.
451 Los Coches St, Milpitas, CA 95035

Introduction

Wing Education Center (Bilingual Afterschool learning center for kids K-12) and Wing Bilingual Pre-School (Bilingual pre-school for kids 2 years old – K) are proudly owned and managed by Wing Educare, Inc., a company registered in California State and operated by experienced education professionals to provide high quality comprehensive pre-school and afterschool services for Milpitas community families, in the safe, beautiful and spacious facilities in 451 Los Coches St, Milpitas.

Core Value

At Wing Educare, Inc., we truly care about every child as an individual. We promise, not only to keep every child safe and engaged in our program activities, but we also promise to learn every child's interests and personality in order to provide a meaningful learning experience. Our staffs are caring, responsible, positive role models who are trained in youth development principles. We truly enjoy getting to know every child and building a positive relationship, while helping them to learn the skills needed to be successful in school and in life.

History of Wing Education Center

Wing Education Center (afterschool for K-12) has been successfully and safely operated for 5 years in 1128 Jacklin Rd, Milpitas as an afterschool learning center since 2008. We expand to 451 Los Coches St facility due to higher parents demand and our capacity limit. The new facility will allow us to serve wider community and provide better richer programs to satisfy all parents' need.

Features of Programs

- (1) 2 years old - K bilingual pre-school program:

Wing Bilingual Pre-School is preschool for kids 2-K. Pre-school age kids. And it is led by director and teachers with over many years' of experience in pre-school education. We provide a warm, loving environment that fosters a love of learning and builds self-esteem for every child. We teach to every aspect of the child's growth: social, intellectual, emotional and physical. We guide the children to academic excellence with the advanced approach to teaching math, language, phonics, practical life, science,

geography and sensorial. Wing Bilingual Pre-School is a place where children will enjoy learning and growing.

Operation Time: Monday – Friday 7:00am-5:30pm

Students: 64

Teachers: 5

(2) K-6th grade afterschool language and cultural program:

Wing Education Center is afterschool language and cultural learning center designed to encourage students to do the best and be the best they can. We offer a well-rounded program that includes: small group and individualized homework assistance, Chinese language and cultural classes and physical cultural and sports activities, such as Ping-pong, Kungfu and Basketball. Our program also offers hands-on group and individual talent cultural projects, such as: art, craft, guitar, piano, clay, chess, GO, science, computer, community service, and leadership.

Operation Time: Monday – Friday 2:30pm-7:00pm

Students: 56

Teachers: 3

Passenger Loading and Unloading Plan

Wing Education Center

BACKGROUND

It is proposed that Wing Education Center Bilingual Preschool and Afterschool be located at 451 Los Coches Street, Milpitas, CA. The VEDA (473-479 Los Coches St) is located to the east in a separate building. The driveway is accessed to Los Coches Street. An aerial view of the existing site is shown in **Figure 1**. A proposed site pickup/drop-off parking plan is attached.

Student drop off and pick up is proposed to occur on the rear side of the building (**Exhibit 1**). Ultimate enrollment at the preschool is anticipated to be 64 students, and the after school is anticipated to be 56 students, but initial student levels will likely be lower at startup.

This operation plan contains an assessment of the anticipated trip generation for the center.

Figure 1 – Existing Site Layout



TRIP GENERATION

The traffic generation potential of the Wing Education Center Preschool and After School with maximum enrollment is typically estimated for a period between the hours of 7:00-9:00 AM for parents drop off, and 4:00-5:30 PM for preschool parents pick up as well as 5:30-7:00 PM for after school parents pick up. The Preschool is closed at 6PM so that normally preschool children are picked up at early PM. The After School is closed until 7PM and after school children have to do homework and take various enrichment programs so that they will be picked up at late PM

A summary of the raw traffic data during the AM hours and PM hours are included in Table 1. The trip generation is typically calculated based on rates contained in *Traffic Generators* published by the San Diego Association of Governments (SANDAG). *Traffic Generators* is a standard reference used by many jurisdictions throughout the country for the estimation of trip generation potential of proposed developments.

A trip is defined as a single or one-directional vehicle movement with either the origin or destination at the site. In other words, a trip can be either “to” or “from” the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site).

The proposed Wing Education Center Preschool and After School are most appropriately classified as Day Care by SANDAG.

Table 1 summarizes the expected trip generation of the Wing Education Center

Table 1- Project Trip Generation

Land Use	Quantity	Units	Daily Total	AM Peak (7:00 - 9:00 AM)			Early PM Peak (4:00 - 5:30 PM)			Late PM Peak (5:30 - 7:00 PM)		
				In	Out	Total	In	Out	Total	In	Out	Total
Preschool	64	Children	320	27	27	54	29	28	57	0	0	0
After School	56	Children	280	0	0	0	0	0	0	24	23	47
Total	120	Children	600	27	27	54	29	28	57	24	23	47

Trip Generation Rates

Daily = 5 trips/child

AM Peak = 17% Daily

PM Peak = 18% Daily

As noted in the table, it is projected that the peak hour of vehicular volumes occurred as below:

1. During AM period (7:00AM to 9:00AM), it is a time for preschool parents to drop off their preschool kids and anticipated to generate 54 peak trips. Roughly half of the trips will be entering the site and the others will be exiting.
2. During early PM period (4:00PM to 5:30PM), it is a time for preschool parents to pick up their preschool kids and anticipated to generate 57 peak trips. Roughly half of the trips will be entering the site and the others will be exiting.
3. During late PM period (5:30PM to 7:00PM), it is a time for after school parents to pick up their after school kids and anticipated to generate 47 peak trips. Roughly half of the trips will be entering the site and the others will be exiting.
4. After school students are picked up by only 5 school buses from Milpitas and North San Jose schools between the hour period of 2:00-3:30PM. Trip generation during that period and other periods of the day is expected to be significantly less

PROJECT TRIP DISTRIBUTION

Because of the nature of the preschool and after school business, most parents and children to the Wing Education Center are expected to travel from nearby locations throughout Milpitas, as well as in northern San Jose.

Based on the assumed trip distribution, new vehicle trips generated by the Wing Education Center are assigned to the driveways and the nearby intersection of Milpitas Boulevard / Los Coches Street.

PARKING SPACE

As illustrated in Figure 1, Wing Education Center contains 22 parking spaces for parking. In addition, as presented in Appendix, Wing Education Center and its east neighbor property, Vedic Education and Devotional Academy, VEDA, at 473-479 LOS COCHES STREET, signed the Shared Parking Agreement, which will add 15 extra parking spaces during the peak time. So totally there are 37 parking spaces for parents and visitors.

City of Milpitas Zoning Code requires that daycare centers provide 1 space per 6 students up to 5; then, 1 per 10 thereafter for "loading/unloading" children. With a projected maximum 120 (64 for preschool and 56 for after school) student enrollment the number of space is 14.

So Fourteen (14) – standard spaces dedicated as “loading/unloading” spaces for preschool and after school students drop off and pick up.

Given that the Wing Education Center has sufficient available parking spaces.

CONCLUSIONS

In summary, access, and parking at Wing Education Center are expected to operate without significant effect to established traffic on Los Coches Street or nearby intersections.

To enhance safety of children and motorists and improve the traffic circulation, the following will be conducted by Wing Education Center:

- At Wing Education Center Parents Handbook, parents are required to park in designated parking stalls when dropping off and picking up children and then use the Back Entrance gate to enter into the building.
- Parents are absolutely not allowed to stop in front of the building at drop off and pick up peak time. Wing Education Center faculty/staff is positioned at front and back of the center during the peak time to monitor students’ drop off and pick up and to direct parents or visitors vehicles to enter and exit the site.
- Wing Education Center will prepare and distribute to each parent instructions on drop off and pick up procedures.

Conditional Use Permit - Risk Assessment

Update to Previous Risk Assessments

**Wing Education Center
451 Los Coshes St.
Milpitas, CA 95035**

**Project Number: PR-000285
Document Number: 285-1 Rev A**

Date Prepared: September 30, 2013

Prepared by:



OTIS INSTITUTE

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Mitigation Measures

The following mitigation measures are recommended based on the above conclusions and minimum City of Milpitas requirements:

1. Implement an Emergency Action Plan (EAP) with Evacuation and Shelter in Place procedures. The EAP shall include training of employees and drills to verify the 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 directing them regarding 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. HVAC units for the building
5. Install an airborne chemical monitoring system for the following gases:
 - a. Boron Trichloride
 - b. Chlorine
 - c. Ammonia

The chemical monitoring system shall automatically shut down the ventilation system upon gas detection per #4.

6. Implement a parental notification process including a description of how each parent will be notified of the nature of hazards in the area. This shall include at minimum:
 - a. A notification that includes the emergency procedures in place to protect their children, and what procedures the parents need to follow in the event of each type of anticipated emergency.
 - b. Notification records 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 20 years of chemical release risk assessment experience. They are knowledgeable about industrial manufacturing processes, including the types of hazardous materials used in the processes that were evaluated in this assessment. This report has been prepared based on information provided by the City of Milpitas, Wing Education Center, and physical observations of conditions at the facility and surroundings during Otis Institute's site visit on September 19, 2013.

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 451 Los Coshes St. are made or discovered, the information contained in this Risk Assessment Report may not be valid. This evaluation is valid for one year.

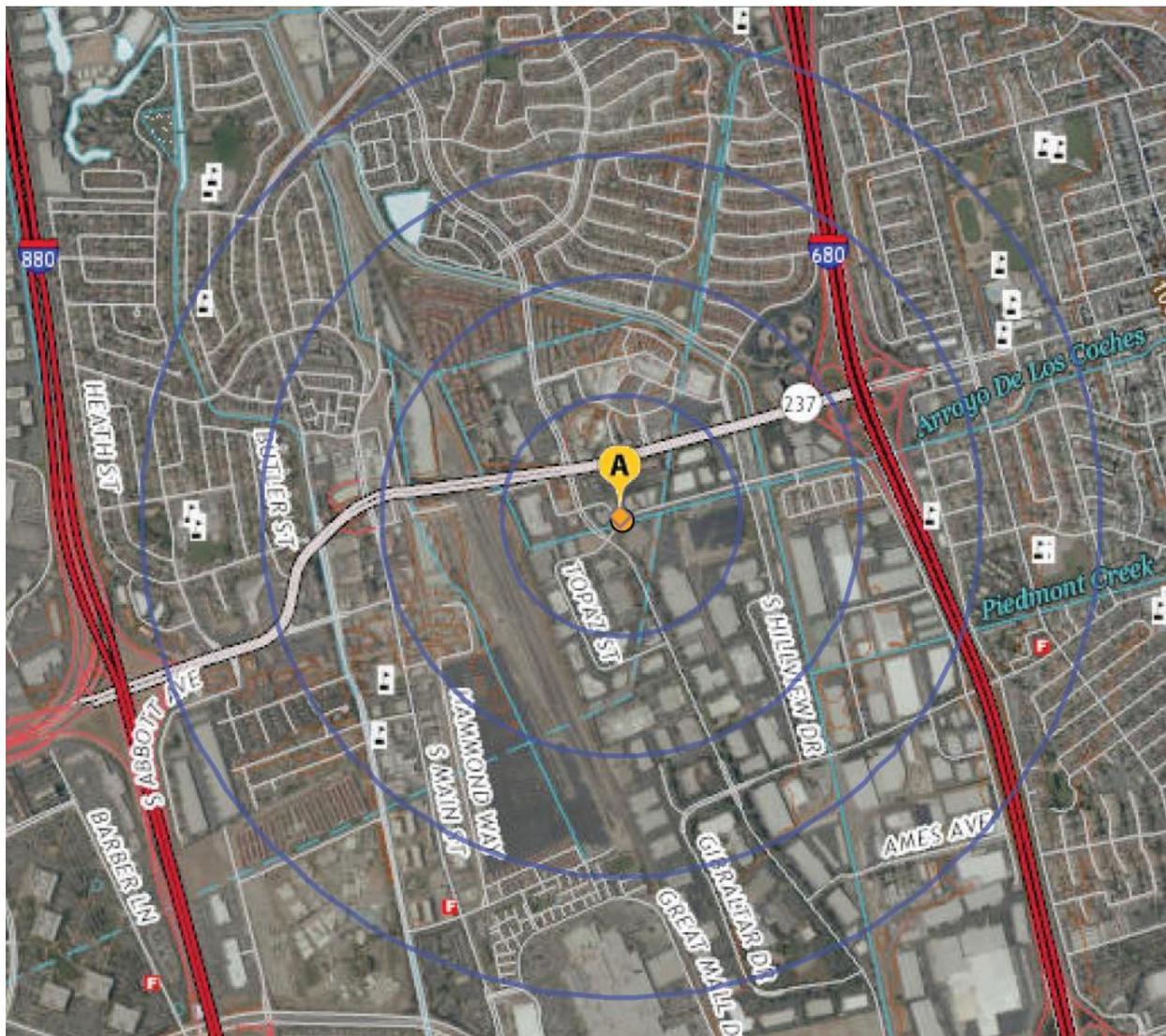
Section Two

Overview

Wing Education Center is located at 451 Los Coshes Street in Milpitas, CA. The current zone for this facility is Town Center (TC). The facility is being used for tutoring, martial arts training, fitness space, classrooms, and offices. The existing building is approximately 10,000 square feet and the lot is approximately 29,000 square feet.

Hours of operation are typically between 8:00 am – 7:00 pm, Monday through Friday and between 8:00 am – 4:00 pm on Saturday and Sunday. The number of employees will vary according to the scheduled activities and will range from one to eight at any time. The number of customer's onsite will range from 0-100 children and 0-15 elderly.

Figure 1: Wing Educational Center - Circles at 0.25 Miles



Section Three

Primary Land Use in Area

The Otis Institute investigated businesses in the area of the 451 Los Coshes St. location, to determine a list of companies in the area who might use toxic and corrosive gases. Otis drove local streets, reviewing Google map search by category, and by viewing maps for names of companies, and verified the proposed list of companies with the Hazardous Materials and Environmental Services Unit (HMES). Each company listed was then reviewed on the City of Milpitas's online services, public access documents, and fire facility pre-plans, to assess hazardous material inventory statements for toxic and corrosive chemicals. This evaluation determined that the following organizations had chemicals that may environmentally impact the 451 Los Coshes St. site:

1. Headway Technologies - 463 S. Milpitas Blvd.
2. Linear Technology Corporation - 275 South Hillview Dr.
3. Magic Technologies - 463 S. Milpitas Blvd.
4. NanoGram - 165 Topaz St.
5. SSA (formerly McCabe's) - 1029 Montague Expy.

Attachment One contains a spreadsheet documenting the results of the HMIS review, chemicals of concern, the distance to the 451 Los Coshes St. 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 Four

Review of Historical Hazmat Incidents

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

- US Chemical Safety Board (CSB)
- San Jose Mercury Archives
- Google Search
- City of Milpitas Website

Reviews went back to 2001-2013, depending on the source searched, and no incidents had been documented in any of the City of Milpitas public records available from these sources.

It should be noted that incidents have been recorded in nearby communities for many of the chemicals of concern listed in Attachment two. These incidents have resulted in employees and local residents to be hospitalized, including 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

Wing Education Center - Conditional Use Permit - Risk Assessment

Project Number: PR-000285

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.

May 14, 2009 - Workers at California AT&T building injured by chemical spill - AT&T evacuates hundreds after chemical spill injures 28 (JusticeNewsFlash.com - Employment Law, Justice News Flash)

San Jose, CA(JusticeNewsFlash.com)—On Tuesday, some 325 people were evacuated from the AT&T building located at 3475 N. First St., by the San Jose Fire Department around noon. As reported by the San Francisco Chronicle, an employee mixed two chemical compounds while cleaning a refrigerator filled with rotting food. The chemical mixtures released harmful, toxic fumes sickening 28 employees in the building and forcing the evacuation of 325 workers.

San Jose area emergency medical services personnel (EMS) and fire rescue crews responded to the hazardous materials call and treated 28 people for vomiting and nausea and various other respiratory symptoms at the scene. Seven employees required treatment at area hospitals for their injuries.

According workplace injury accident investigators, the woman cleaning the rotten food ridden fridge was suffering from a sinus problem and could not smell the chemicals. Hazardous materials experts assert workers, employees, and consumers should never mix chemicals.

When at work, always consult the Materials Safety Data Sheets (MSDS), a chemical safety binder required by federal law to be available at work. The U.S. Occupational Safety Health Administration (OSHA) www.osha.gov is charged with workplace safety and regulating employment environments by enforcing federal and state safety standards. Employers are required by law to provide education, training, and protective equipment to employees working around and handling chemicals.

Section Five

Evaluation of Risk

The largest container of each chemical of concern was evaluated to determine the possible off-site consequence during a catastrophic release, and if the release could have a potential negative environmental impact at the 451 Los Coshes St. site. Each release was evaluated as to whether a release would produce concentrations of the chemical at the project site at 1/10th of the established 'Immediately Dangerous to Life and Health' (IDLH) level, with no engineering controls in place.

This off-site consequence determination was modeled using a software program: ALOHA (Areal Locations of Hazardous Atmospheres) Version 5.4.4, to determine potential worst case release scenarios and distances. ALOHA is a modeling program provided by the USEPA, which 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).

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 parameters 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>70 degrees F</i>
<i>Topography (Surface Roughness)</i>	<i>Urban</i>

The Aloha results of catastrophic releases are documented in the table in Attachment One and Aloha printouts in Attachment Two.

Explanation of Results

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

1. Chemicals that did not have a NIOSH Immediately Dangerous to Life or Health (IDLH), the LC50 value was 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".

Attachment One

Sites with Chemicals of Concern & Off-Site Consequence Analysis

Company	Location	Distance in Miles	Chemical Name	Maximum Amount on Site	Amount of Toxic Chemical-Mixture in Largest Container	Percentage of Toxic Gas	Amount of Toxic Chemical in Largest Container	Unit	Conversion Factor (Unit to LBS)	Amount of Toxic Chemical in Largest Container - (lbs)	Release Rate (units /min)	Release Rate (lbs/min)	IDLH (PPM)	1/10 IDLH (PPM)	Distance to IDLH - ALOHA (miles)	Distance to 1/10 IDLH - ALOHA (miles)	Comments
Magic Technologies	463 S. Milpitas Blvd	0.35	1% Fluorine in NE/Kr	500	250	1%	2.5	CU. FT.	0.099	0.248	0.250	0.02475	3	0.3	0.02	0.06	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	50% Silane and 50% Phosphine	194	195	100%	195	CU. FT.	0.09	17.550	19.500	1.755	73	7.3	0.09	0.38	IDLH take as 50% of Phosphine and 50% of Silane - Calculation completed as 100% Phosphine base on chemical parameters
Magic Technologies	463 S. Milpitas Blvd	0.35	Ammonia	100	50	100%	50	CU. FT.	0.045	2.250	5.000	0.225	300	30	0.01	0.05	
SSA (formerly McCabe's)	1029 Montague Expressway	1.11	Ammonia	8500	8500	100%	8500	LB	1	8500.000	1200.000	850	300	30	1.50	4.30	
Magic Technologies	463 S. Milpitas Blvd	0.35	Boron Trichloride	100	100	100%	100	LB	1	100.000	10.000	10	25	2.5	0.14	0.67	25 PPM from UNIDOCS document UN-015 (C50 Rate x 0.001)
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Boron Trifluoride	0.9	0.3	100%	0.3	LB	1	0.300	0.030	0.03	25	2.5	0.01	0.04	
Magic Technologies	463 S. Milpitas Blvd	0.35	Carbon Monoxide	360	180	100%	180	CU. FT.	0.073	13.140	18.000	1.314	25	2.5	0.01	0.04	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Chlorine	1,530	1,530	100%	1530	CU. FT.	0.189	289.170	153.000	28.917	10	1	0.63	2.30	
Magic Technologies	463 S. Milpitas Blvd	0.35	Chlorine	200	100	100%	100	LB	1	100.000	10.000	10	10	1	0.39	1.50	
NanoGram	165 Topaz St	0.17	diborane 1% in argon	32	32	1%	0.32	CU. FT.	0.073	0.023	0.032	0.002336	15	1.5	0.01	0.04	LFL 0.9% - spontaneously combustible and should ignite upon release
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Diborane 5% in Nitrogen	158	158	5%	7.9	CU. FT.	0.073	0.577	0.790	0.05767	15	1.5	0.03	0.12	LFL 0.9% - spontaneously combustible and should ignite upon release
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Diborane 87 PPMv in Nitrogen	316	158	0.0087%	0.013746	CU. FT.	0.073	0.001	0.001	0.00010035	15	1.5	0.01	0.01	Lower than 0.9% LFL
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Dichlorosilane	90	90	100%	90	CU. FT.	0.097	8.730	9.000	0.873	50	5	0.04	0.24	
Magic Technologies	463 S. Milpitas Blvd	0.35	Hexachlorobutadiene	146	73	100%	73	CU. FT.	0.425	31.025	7.300	3.1025	26.67	2.667	0.06	0.20	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.
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Hydrogen Bromide	86	86	100%	86	CU. FT.	0.21	18.100	8.600	1.81	30	3	0.07	0.35	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Hydrogen Chloride	8,918	8,918	100%	8918	CU. FT.	0.09	845.000	891.800	84.5	50	5	0.70	2.70	
Linear Technology Corporation	275 South Hillview Drive, Milpitas, CA	0.24	Nitrogen Trifluoride	216	216	100%	216	CU. FT.	0.18	39.800	21.600	3.98	50	5	0.23	0.05	
Magic Technologies	463 S. Milpitas Blvd	0.35	Nitrogen Trifluoride	96	48	100%	48	CU. FT.	0.18	8.844	4.800	0.88444444	50	5	0.01	0.02	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Phosphine	0.6	0.2	100%	0.2	LB	1	0.200	0.020	0.02	50	5	0.01	0.02	Phosphine is pyrophoric and should ignite upon release
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Phosphine (1%) & Hydrogen	194	195	1%	1.95	CU. FT.	0.09	0.176	0.195	0.01755	50	5	0.01	0.02	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Phosphine (15%) & Nitrogen	187	187	15%	28.05	CU. FT.	0.09	2.525	2.805	0.25245	50	5	0.04	0.14	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Phosphine (5%) & Nitrogen	567	189	5%	9.45	CU. FT.	0.09	0.851	0.945	0.08505	50	5	0.02	0.08	
NanoGram	165 Topaz St	0.17	Phosphine <=9.7% in inert gas	300	300	9.7%	29.1	CU. FT.	0.09	2.619	2.910	0.2619	50	5	0.04	0.17	
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Silane	294	294	100%	294	CU. FT.	0.08	24.500	29.400	2.45	96	9.6	0.10	0.41	LC50 9600 therefore IDLH assumed to be 96

Company	Location	Distance in Miles	Chemical Name	Maximum Amount on Site	Amount of Toxic Chemical-Mixture in Largest Container	Percentage of Toxic Gas	Amount of Toxic Chemical in Largest Container	Unit	Conversion Factor (Unit to LBS)	Amount of Toxic Chemical in Largest Container - (lbs)	Release Rate (units /min)	Release Rate (lbs/min)	IDLH (PPM)	1/10 IDLH (PPM)	Distance to IDLH - ALOHA (miles)	Distance to 1/10 IDLH - ALOHA (miles)	Comments
Linear Technology Corporation	275 S. Hillview Drive, Milpitas, CA	0.24	Trichlorosilane	100	100	100%	100	CU. FT.	0.38	38.462	10.000	3.84615385	10.68	1.068	0.13	0.48	LC50 1068 PPM therefore IDLH assumed to be 10.68

Attachment Two

ALOHA Printouts

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: TRICHLOROSILANE

Warning: TRICHLOROSILANE 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.

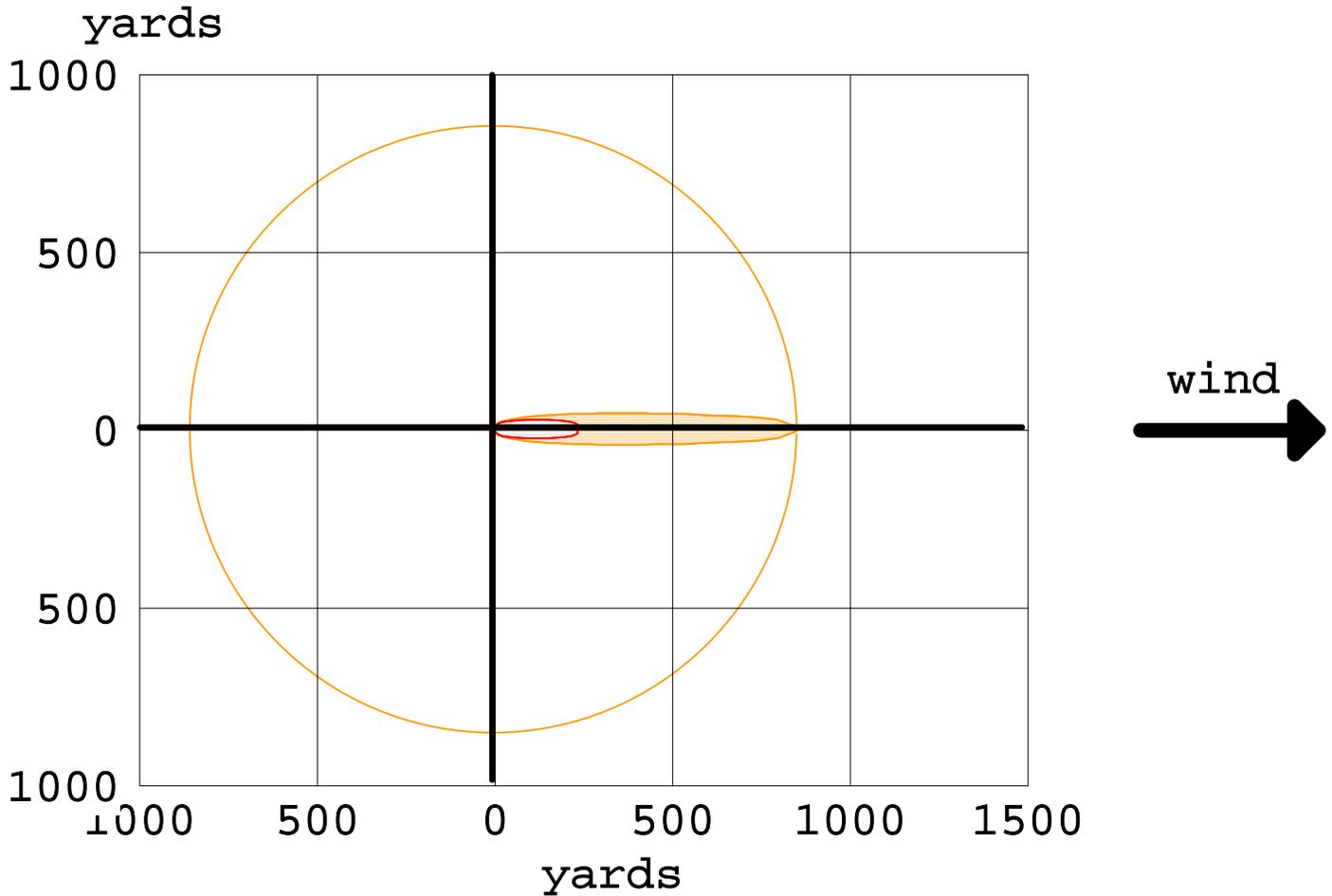
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 237 yards --- (10.68 ppm = IDLH)

Orange: 852 yards --- (1.68 ppm)



-  greater than 10.68 ppm (IDLH)
-  greater than 1.68 ppm
-  wind direction confidence lines

SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Warning: TRICHLOROSILANE 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: TRICHLOROSILANE Molecular Weight: 135.45 g/mol
AEGL-1 (60 min): 0.6 ppm AEGL-2 (60 min): 7.3 ppm AEGL-3 (60 min): 33 ppm
IDLH: 10.68 ppm LEL: 70000 ppm UEL: 830000 ppm
Ambient Boiling Point: 89.3° F
Vapor Pressure at Ambient Temperature: 0.68 atm
Ambient Saturation Concentration: 675,928 ppm or 67.6%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 10 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: 3.62 pounds/min
Total Amount Released: 36.2 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 237 yards --- (10.68 ppm = IDLH)
Orange: 852 yards --- (1.68 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: 1,1,1,2-TETRAFLUOROETHANE

Wind: 1.5 miles/hour from S at 3 meters

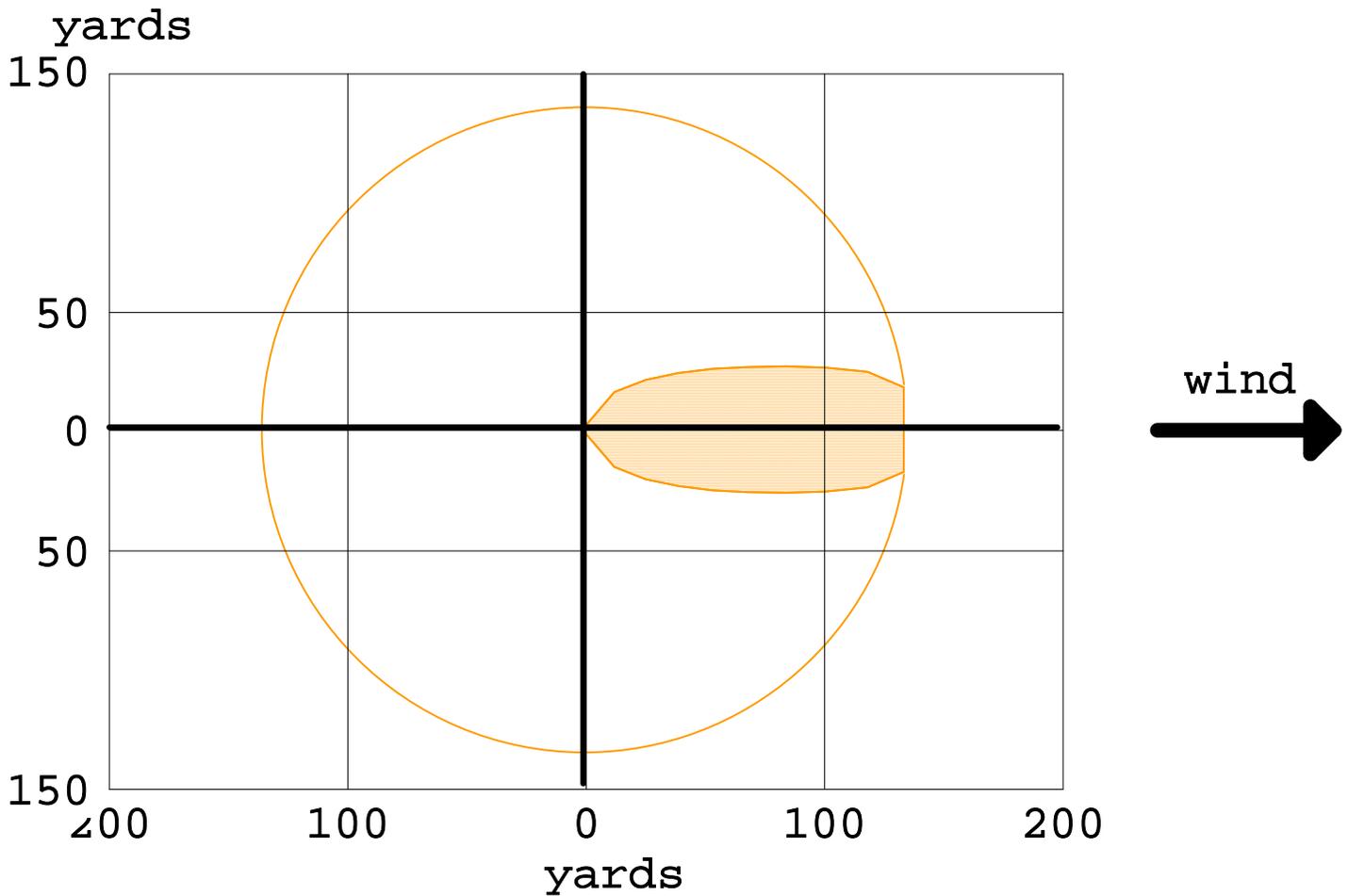
THREAT ZONE:

Model Run: Heavy Gas

Red : 34 yards --- (600 ppm = IDLH)

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

Orange: 134 yards --- (60 ppm)



-  greater than 600 ppm (IDLH) (not drawn)
-  greater than 60 ppm
-  wind direction confidence lines

Text Summary



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: 1,1,1,2-TETRAFLUOROETHANE
Molecular Weight: 102.03 g/mol
AEGL-1 (60 min): 8000 ppm AEGL-2 (60 min): 13000 ppm AEGL-3 (60 min):
27000 ppm
IDLH: 600 ppm
Ambient Boiling Point: -14.9° 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 28.7 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: 7.7 pounds/min
Total Amount Released: 77.0 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 34 yards --- (600 ppm = IDLH)
Note: Threat zone was not drawn because effects of near-field patchiness
make dispersion predictions less reliable for short distances.
Orange: 134 yards --- (60 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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.

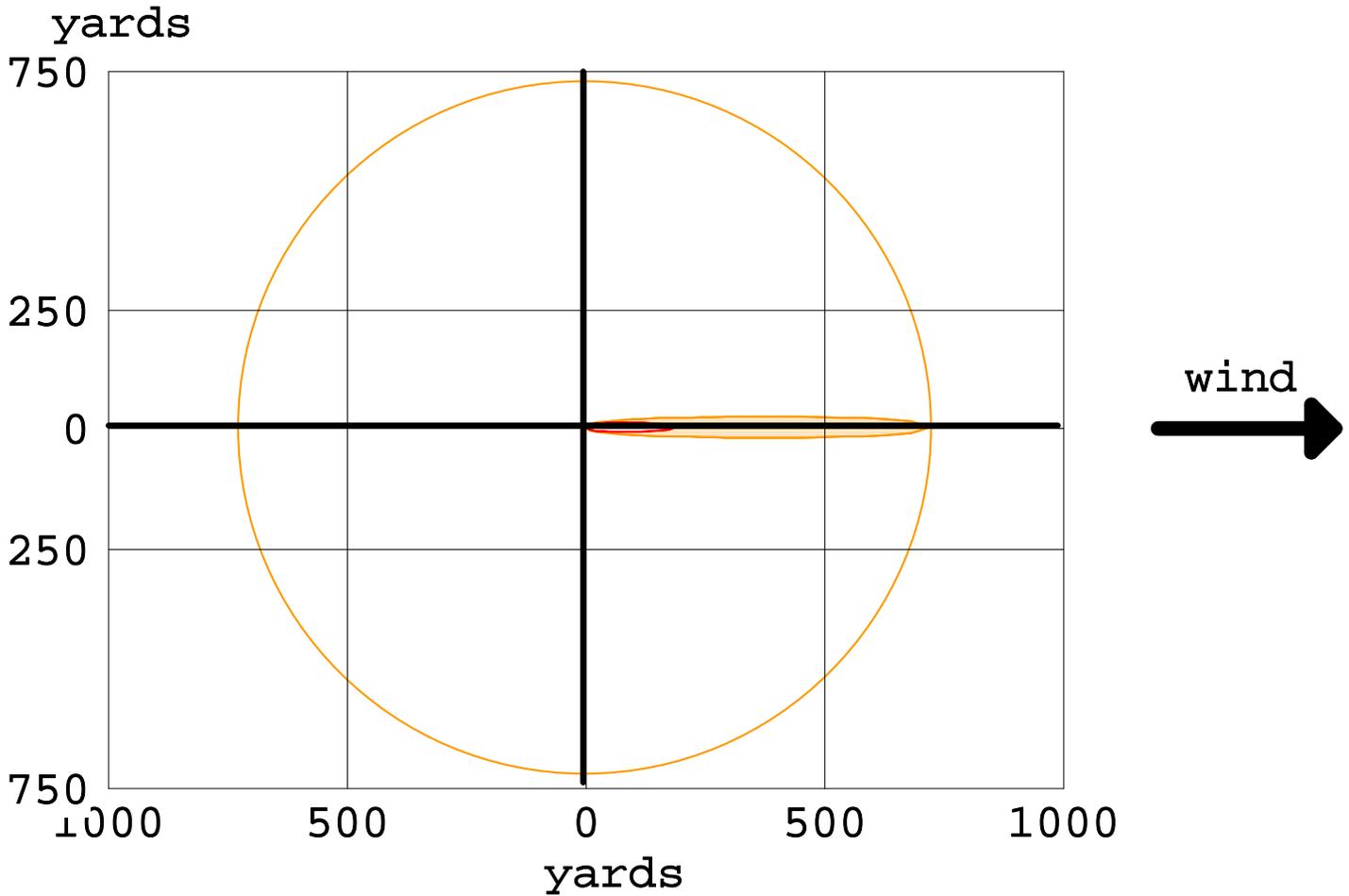
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 186 yards --- (96 ppm = IDLH)

Orange: 726 yards --- (9.6 ppm)



-  greater than 96 ppm (IDLH)
-  greater than 9.6 ppm
-  wind direction confidence lines

SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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
AEGL-1 (60 min): 100 ppm AEGL-2 (60 min): 130 ppm AEGL-3 (60 min): 270 ppm
IDLH: 96 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 29.4 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: 2.45 pounds/min
Total Amount Released: 24.5 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 186 yards --- (96 ppm = IDLH)
Orange: 726 yards --- (9.6 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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.

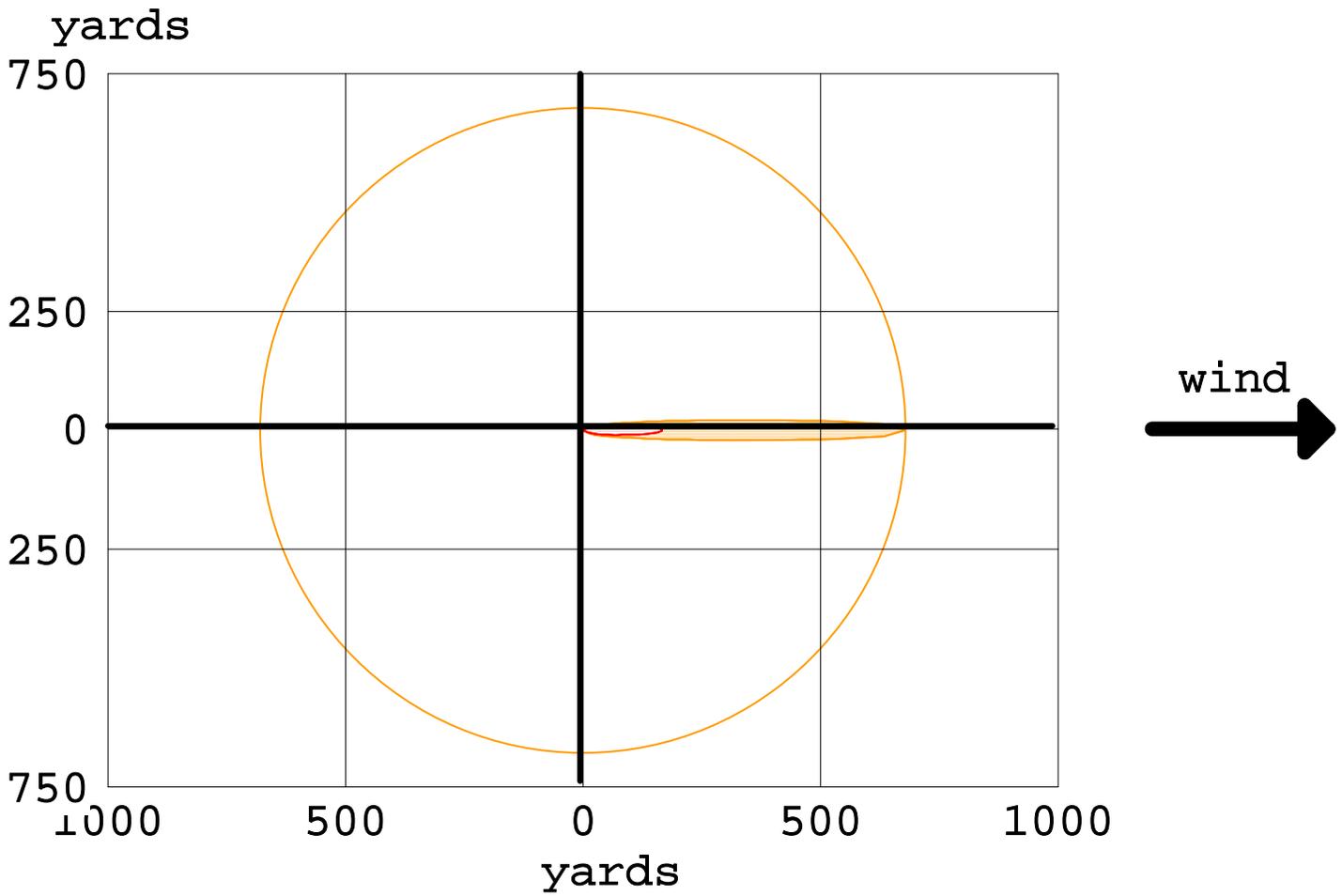
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 168 yards --- (73 ppm)

Orange: 679 yards --- (7.3 ppm)



-  greater than 73 ppm
-  greater than 7.3 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 2 ppm AEGL-3 (60 min): 3.6 ppm
IDLH: 50 ppm LEL: 16000 ppm UEL: 980000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 19.5 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: 1.73 pounds/min
Total Amount Released: 17.3 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 168 yards --- (73 ppm)
Orange: 679 yards --- (7.3 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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.

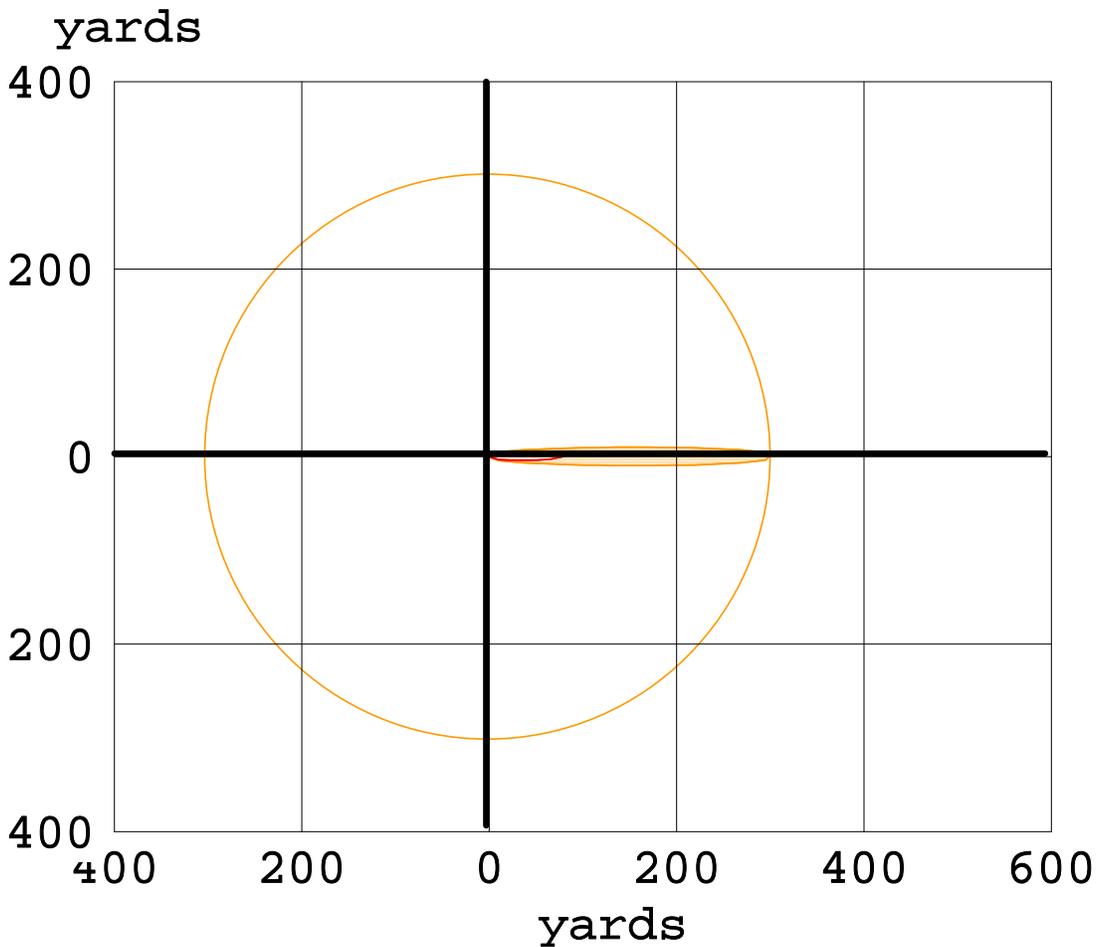
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 83 yards --- (50 ppm = IDLH)

Orange: 303 yards --- (5 ppm)



-  greater than 50 ppm (IDLH)
-  greater than 5 ppm
-  wind direction confidence lines

SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 2 ppm AEGL-3 (60 min): 3.6 ppm
IDLH: 50 ppm LEL: 16000 ppm UEL: 980000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 0.252 pounds/min Source Height: 0
Release Duration: 10 minutes
Release Rate: 0.252 pounds/min
Total Amount Released: 2.52 pounds
Note: This chemical may flash boil and/or result in two phase flow.

THREAT ZONE:

Model Run: Heavy Gas
Red : 83 yards --- (50 ppm = IDLH)
Orange: 303 yards --- (5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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.

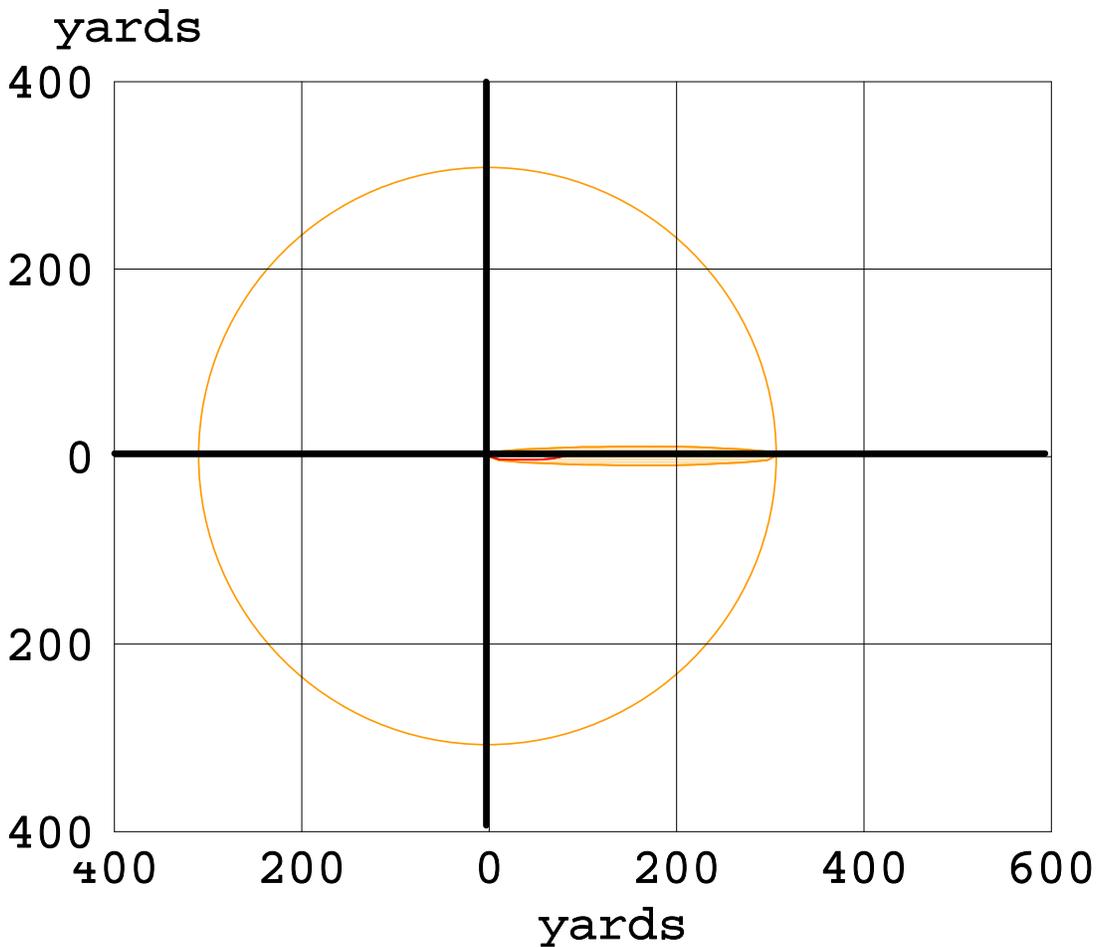
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 84 yards --- (50 ppm = IDLH)

Orange: 308 yards --- (5 ppm)



-  greater than 50 ppm (IDLH)
-  greater than 5 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 2 ppm AEGL-3 (60 min): 3.6 ppm
IDLH: 50 ppm LEL: 16000 ppm UEL: 980000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: .26 pounds/min Source Height: 0
Release Duration: 10 minutes
Release Rate: 0.26 pounds/min
Total Amount Released: 2.60 pounds
Note: This chemical may flash boil and/or result in two phase flow.

THREAT ZONE:

Model Run: Heavy Gas
Red : 84 yards --- (50 ppm = IDLH)
Orange: 308 yards --- (5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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 miles/hour from S at 3 meters

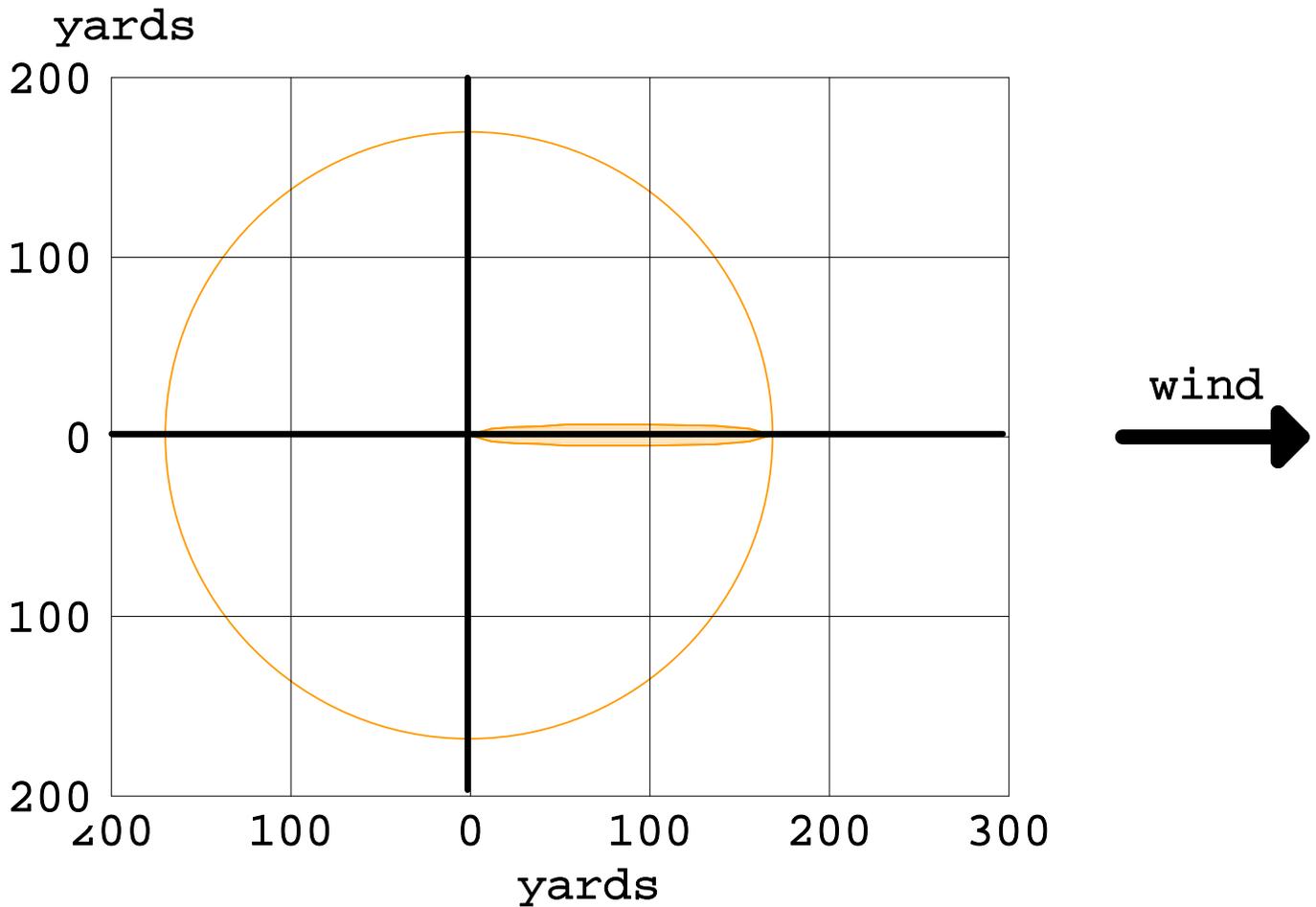
THREAT ZONE:

Model Run: Heavy Gas

Red : 48 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: 169 yards --- (5 ppm)



-  greater than 50 ppm (IDLH) (not drawn)
-  greater than 5 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 2 ppm AEGL-3 (60 min): 3.6 ppm
IDLH: 50 ppm LEL: 16000 ppm UEL: 980000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 0.085 pounds/min Source Height: 0
Release Duration: 10 minutes
Release Rate: 0.085 pounds/min
Total Amount Released: 0.85 pounds
Note: This chemical may flash boil and/or result in two phase flow.

THREAT ZONE:

Model Run: Heavy Gas
Red : 48 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: 169 yards --- (5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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 miles/hour from S at 3 meters

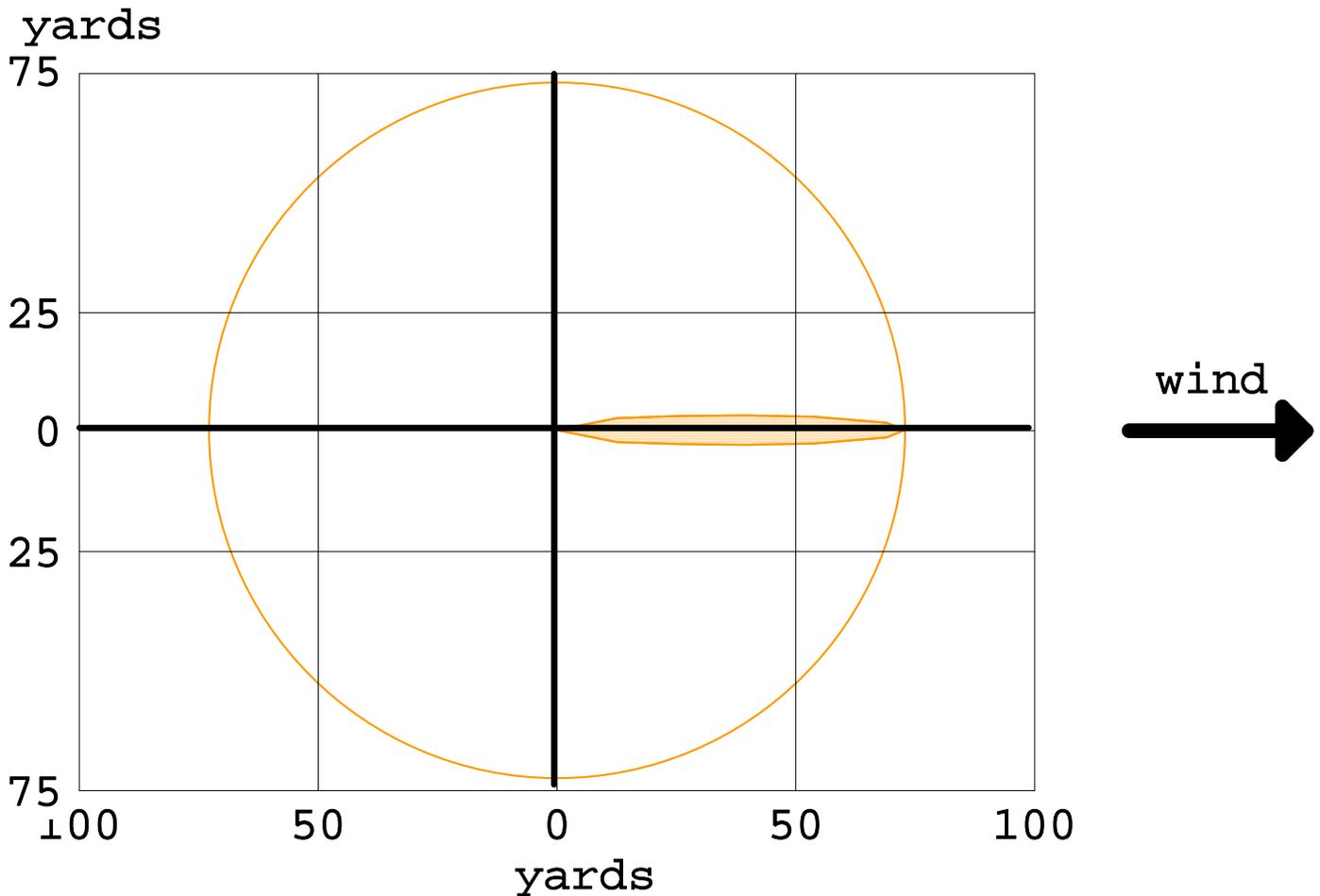
THREAT ZONE:

Model Run: Heavy Gas

Red : 21 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: 73 yards --- (5 ppm)



-  greater than 50 ppm (IDLH) (not drawn)
-  greater than 5 ppm
-  wind direction confidence lines

SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 2 ppm AEGL-3 (60 min): 3.6 ppm
IDLH: 50 ppm LEL: 16000 ppm UEL: 980000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 0.01755 pounds/min Source Height: 0
Release Duration: 10 minutes
Release Rate: 0.0176 pounds/min
Total Amount Released: 0.18 pounds
Note: This chemical may flash boil and/or result in two phase flow.

THREAT ZONE:

Model Run: Heavy Gas
Red : 21 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: 73 yards --- (5 ppm)

Toxic Threat Zone

ALOHA® 5.4.4



Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: NITROGEN TRIFLUORIDE

Wind: 1.5 miles/hour from S 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: 44 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 near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 44 yards --- (100 ppm)

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

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: NITROGEN TRIFLUORIDE Molecular Weight: 71.00 g/mol
AEGL-1 (60 min): 200 ppm AEGL-2 (60 min): 530 ppm AEGL-3 (60 min): 860 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° 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: 0.884 pounds/min
Total Amount Released: 8.84 pounds

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: 44 yards --- (100 ppm)
Note: Threat zone was not drawn because effects of near-field patchiness
make dispersion predictions less reliable for short distances.

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: NITROGEN TRIFLUORIDE

Wind: 1.5 miles/hour from S at 3 meters

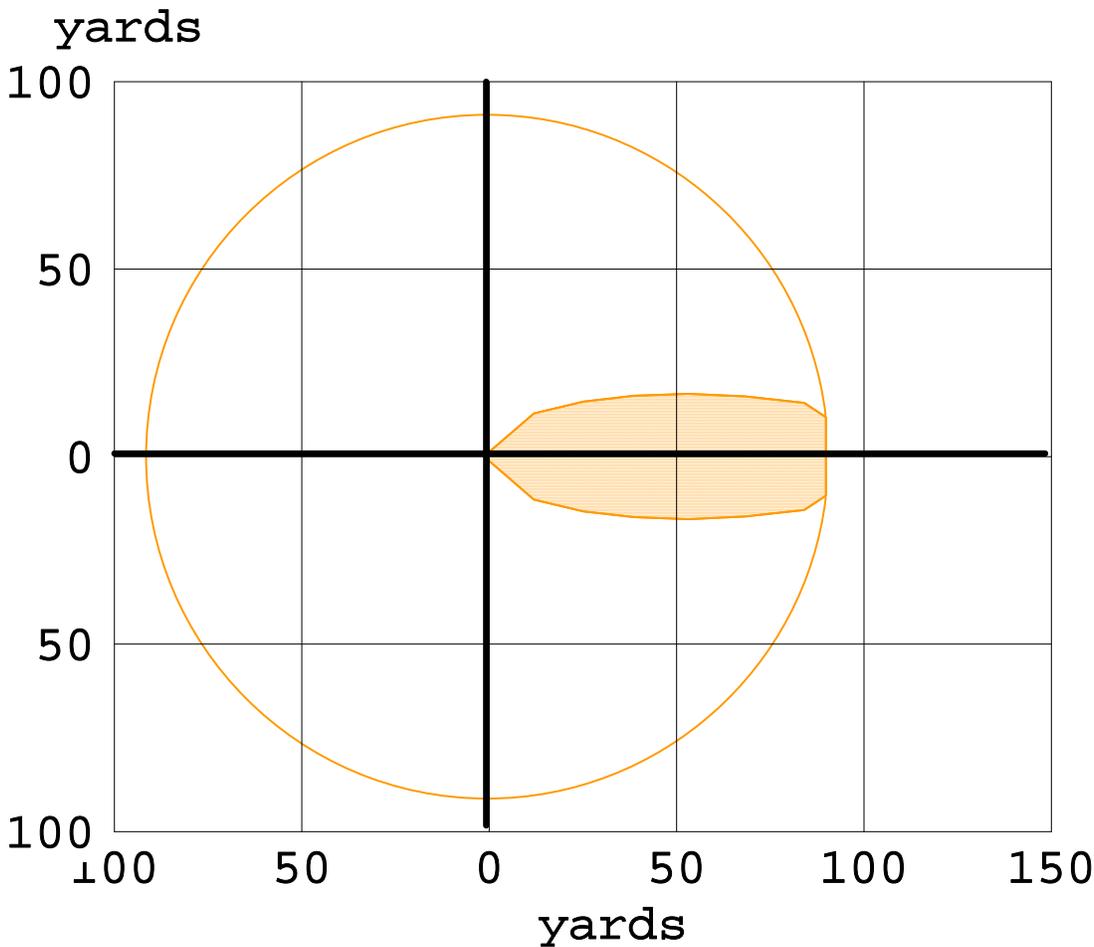
THREAT ZONE:

Model Run: Heavy Gas

Red : 23 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: 91 yards --- (100 ppm)



-  greater than 1000 ppm (IDLH) (not drawn)
-  greater than 100 ppm
-  wind direction confidence lines

Text Summary

ALOHA® 5.4.4



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: NITROGEN TRIFLUORIDE Molecular Weight: 71.00 g/mol
AEGL-1 (60 min): 200 ppm AEGL-2 (60 min): 530 ppm AEGL-3 (60 min): 860 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 21.6 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: 3.98 pounds/min
Total Amount Released: 39.8 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 23 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: 91 yards --- (100 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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 miles/hour from S at 3 meters

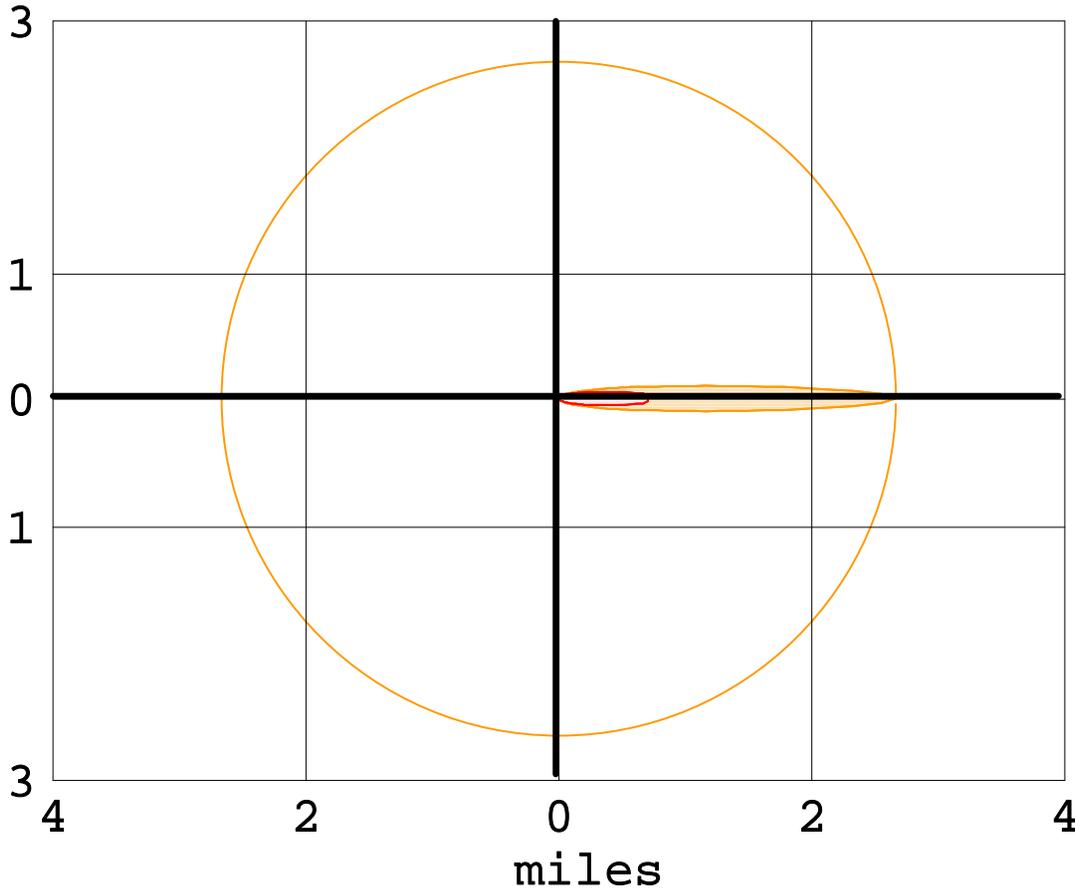
THREAT ZONE:

Model Run: Heavy Gas

Red : 1247 yards --- (50 ppm = IDLH)

Orange: 2.7 miles --- (5 ppm)

miles



-  greater than 50 ppm (IDLH)
-  greater than 5 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

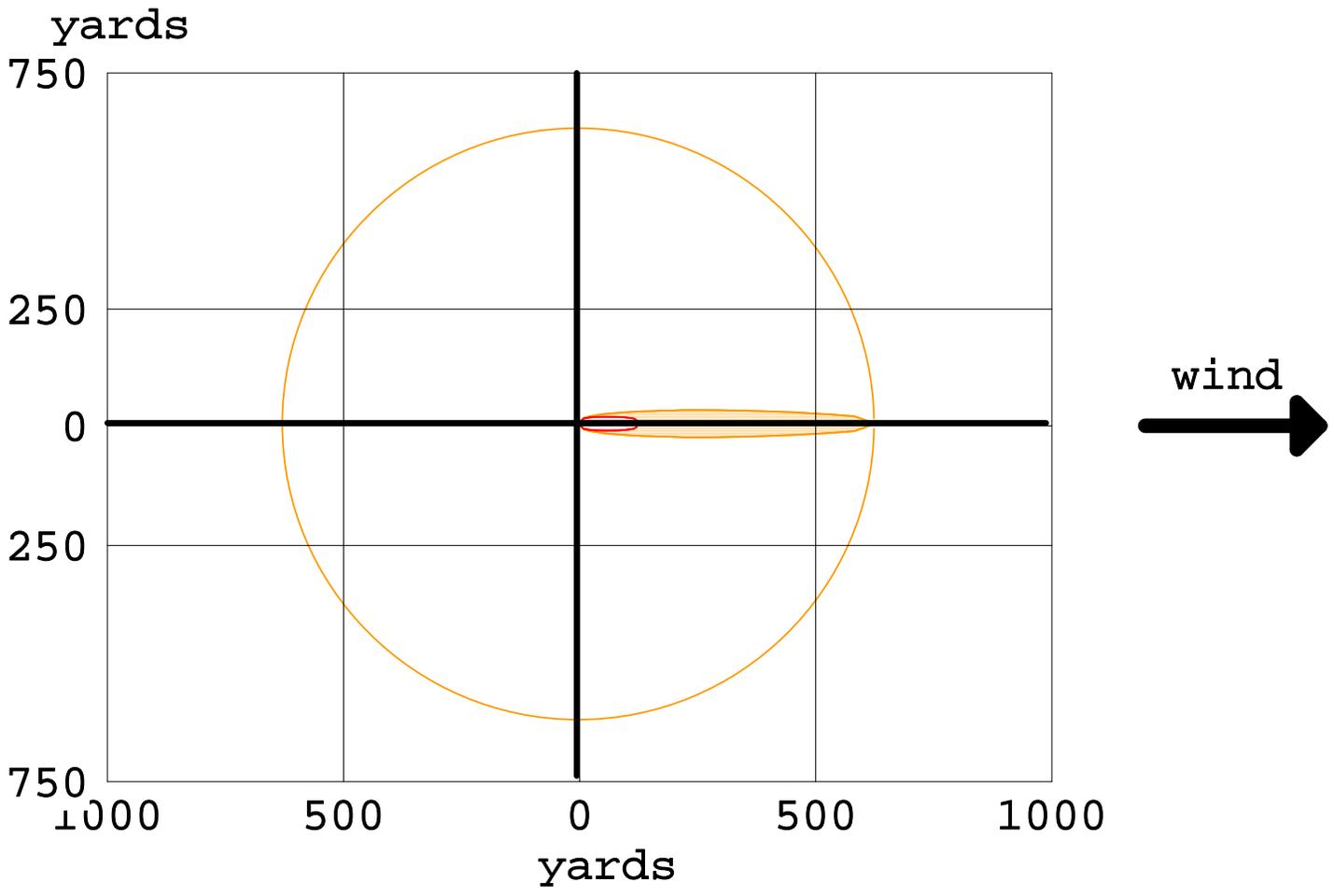
Direct Source: 891.8 cubic feet/min Source Height: 0
Source State: Gas
Source Temperature: equal to ambient
Source Pressure: equal to ambient
Release Duration: 10 minutes
Release Rate: 84.5 pounds/min
Total Amount Released: 845 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 1247 yards --- (50 ppm = IDLH)
Orange: 2.7 miles --- (5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)
Chemical Name: HYDROGEN BROMIDE
Wind: 1.5 miles/hour from S at 3 meters
THREAT ZONE:
Model Run: Heavy Gas
Red : 124 yards --- (30 ppm = IDLH)
Orange: 627 yards --- (3 ppm)



-  greater than 30 ppm (IDLH)
-  greater than 3 ppm
-  wind direction confidence lines

Text Summary

ALOHA® 5.4.4



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: HYDROGEN BROMIDE Molecular Weight: 80.91 g/mol
AEGL-1 (60 min): 1 ppm AEGL-2 (60 min): 25 ppm AEGL-3 (60 min): 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

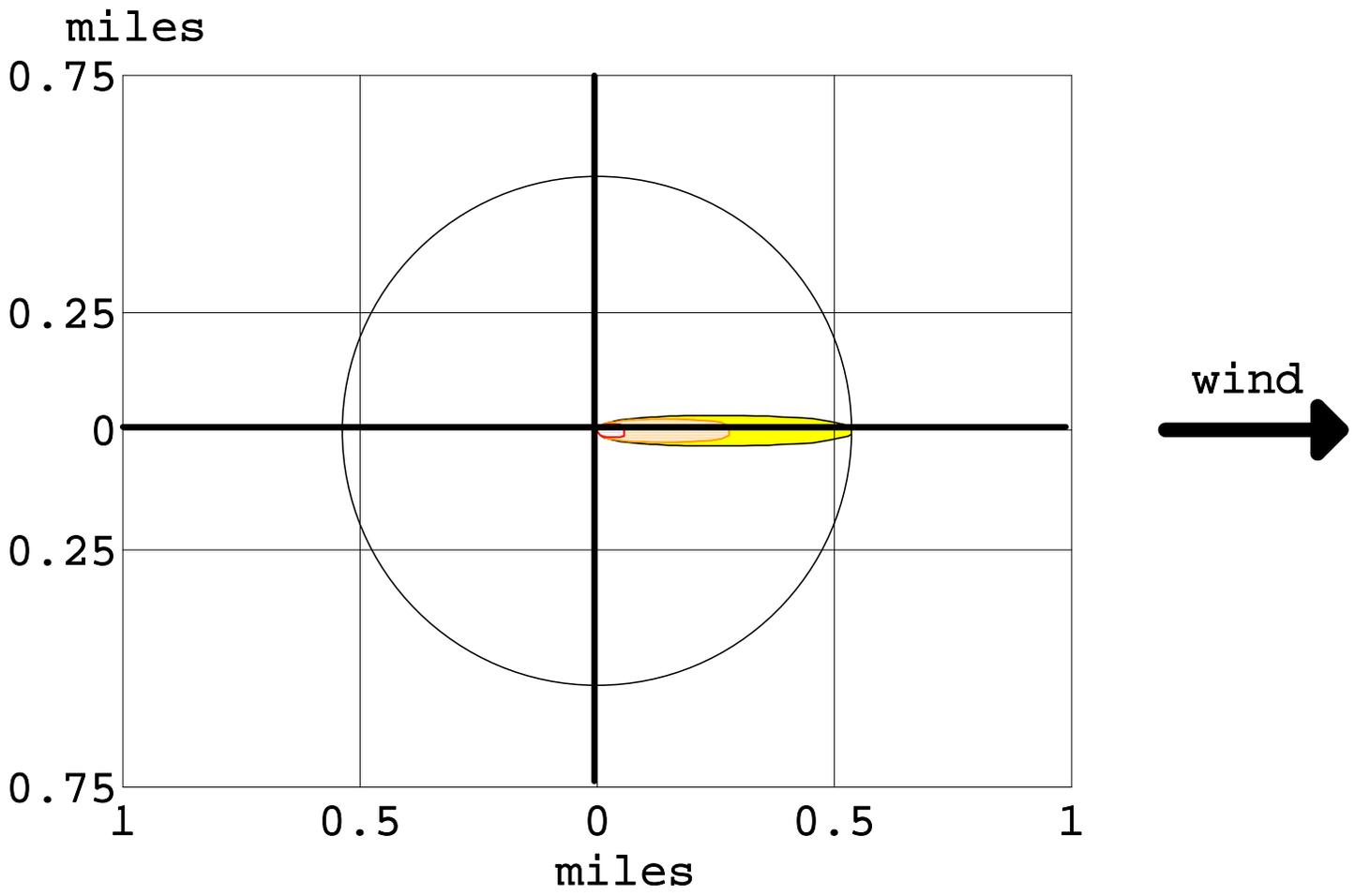
Direct Source: 8.6 cubic feet/min Source Height: 0
Source State: Gas
Source Temperature: equal to ambient
Source Pressure: equal to ambient
Release Duration: 10 minutes
Release Rate: 1.81 pounds/min
Total Amount Released: 18.1 pounds

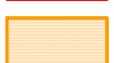
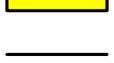
THREAT ZONE:

Model Run: Heavy Gas
Red : 124 yards --- (30 ppm = IDLH)
Orange: 627 yards --- (3 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)
Chemical Name: HEXACHLOROBUTADIENE
Carcinogenic risk - see CAMEO Chemicals
Wind: 1.5 miles/hour from S at 3 meters
THREAT ZONE:
Model Run: Heavy Gas
Red : 102 yards --- (26.67 ppm)
Orange: 489 yards --- (2.67 ppm)
Yellow: 944 yards --- (1 ppm = ERPG-1)



-  greater than 26.67 ppm
-  greater than 2.67 ppm
-  greater than 1 ppm (ERPG-1)
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: HEXACHLOROBUTADIENE Molecular Weight: 260.76 g/mol
ERPG-1: 1 ppm ERPG-2: 3 ppm ERPG-3: 10 ppm
LEL: 29000 ppm UEL: 157000 ppm
Carcinogenic risk - see CAMEO Chemicals
Ambient Boiling Point: 415.4° F
Vapor Pressure at Ambient Temperature: 2.24e-004 atm
Ambient Saturation Concentration: 224 ppm or 0.022%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 1.5 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° 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: 5.91 pounds/min
Total Amount Released: 59.1 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 102 yards --- (26.67 ppm)
Orange: 489 yards --- (2.67 ppm)
Yellow: 944 yards --- (1 ppm = ERPG-1)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: FLUORINE

Wind: 1.5 miles/hour from S at 3 meters

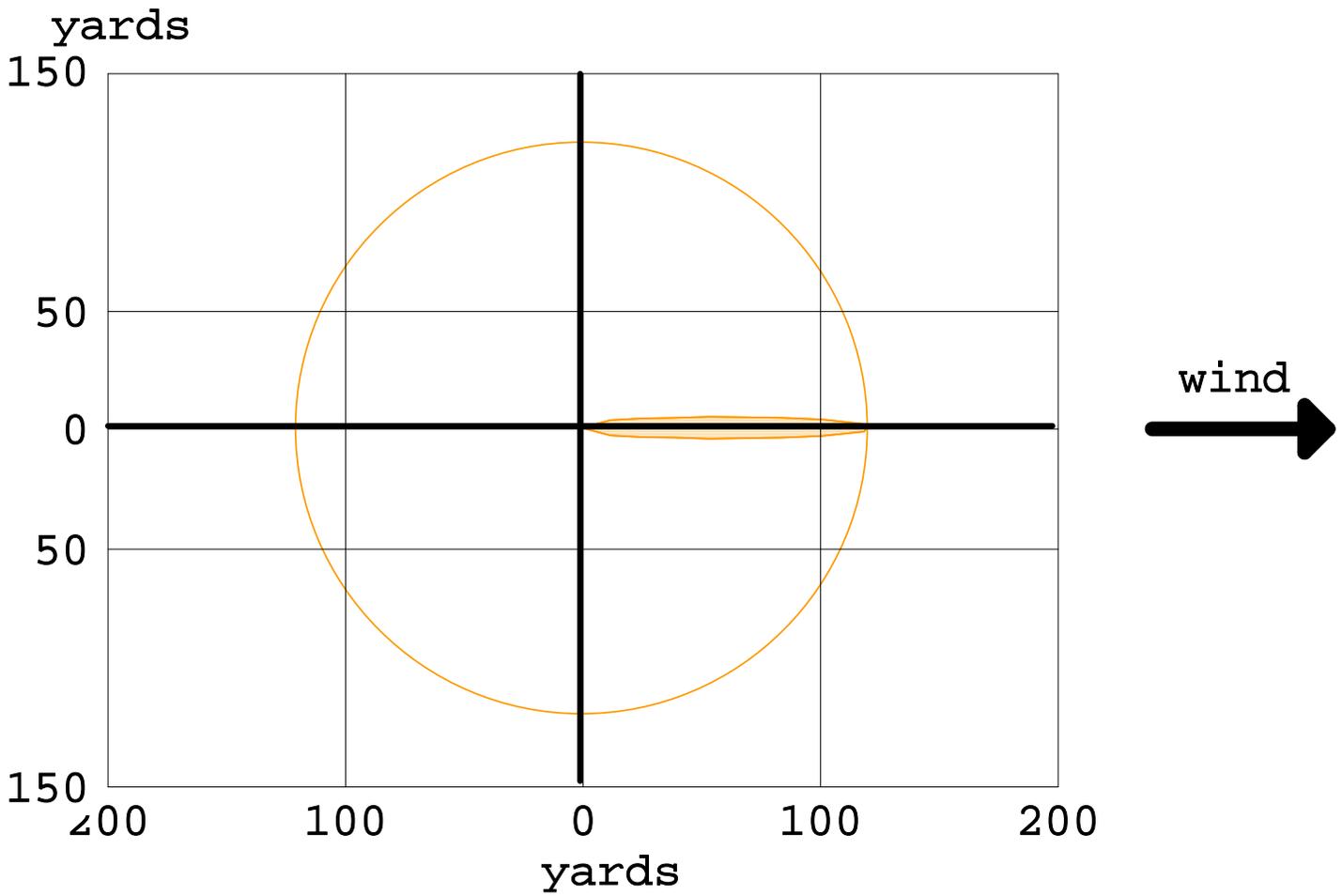
THREAT ZONE:

Model Run: Heavy Gas

Red : 34 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: 120 yards --- (2.5 ppm)



-  greater than 25 ppm (IDLH) (not drawn)
-  greater than 2.5 ppm
-  wind direction confidence lines

Toxic Threat Zone

Time: September 30, 2013 1146 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.

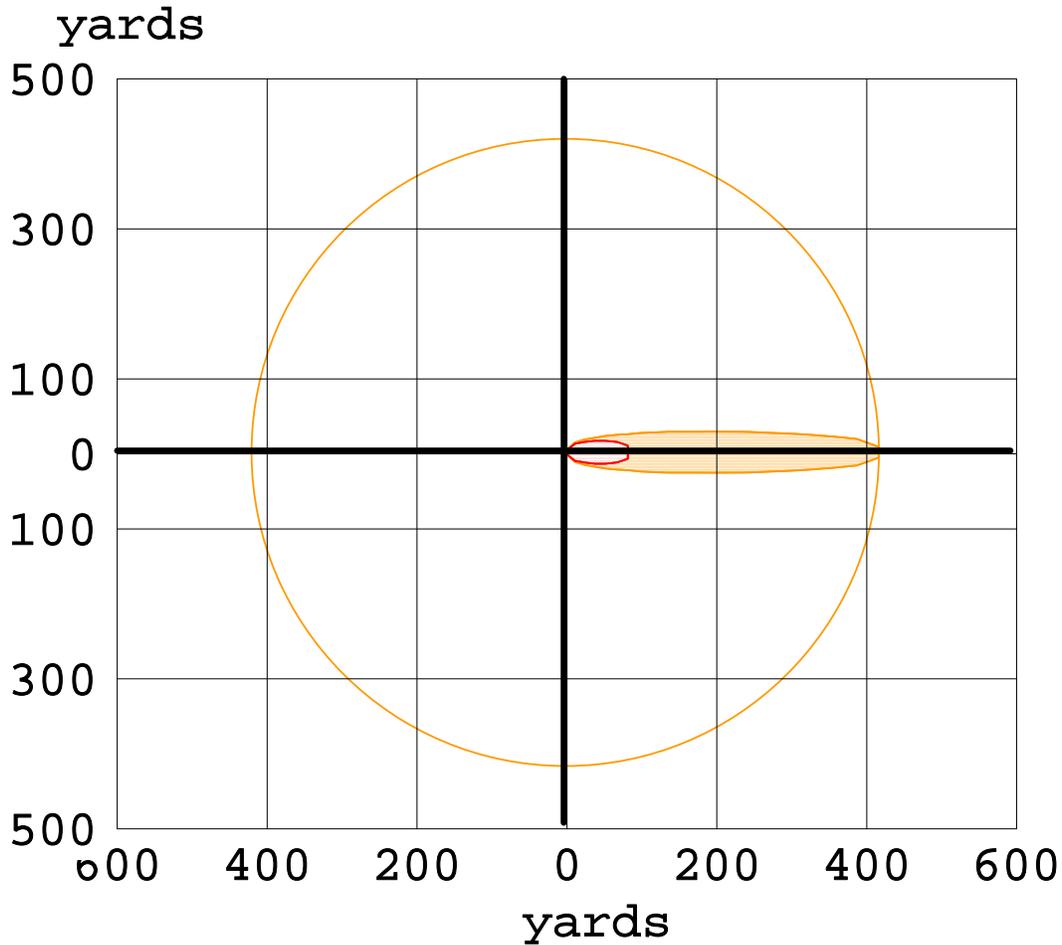
Wind: 1.5 miles/hour from S at 3 meters

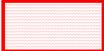
THREAT ZONE:

Model Run: Heavy Gas

Red : 84 yards --- (50 ppm)

Orange: 419 yards --- (5 ppm)



-  greater than 50 ppm
-  greater than 5 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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
AEGL-1 (60 min): 0.9 ppm AEGL-2 (60 min): 11 ppm AEGL-3 (60 min): 50 ppm
LEL: 47000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 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: 2.41 pounds/min
Total Amount Released: 24.1 pounds

THREAT ZONE:

Model Run: Heavy Gas
Red : 84 yards --- (50 ppm)
Orange: 419 yards --- (5 ppm)

Time: September 30, 2013 1146 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 miles/hour from S 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) --- (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 near-field patchiness make dispersion predictions less reliable for short distances.

Orange: 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.

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 1 ppm AEGL-3 (60 min): 3.7 ppm
IDLH: 15 ppm LEL: 8000 ppm UEL: 880000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 0.0001 pounds/min Source Height: 0
Release Duration: 10 minutes
Release Rate: 1e-04 pounds/min
Total Amount Released: 0.0010 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) --- (1.5 ppm)
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

Toxic Threat Zone

Time: September 30, 2013 1146 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.

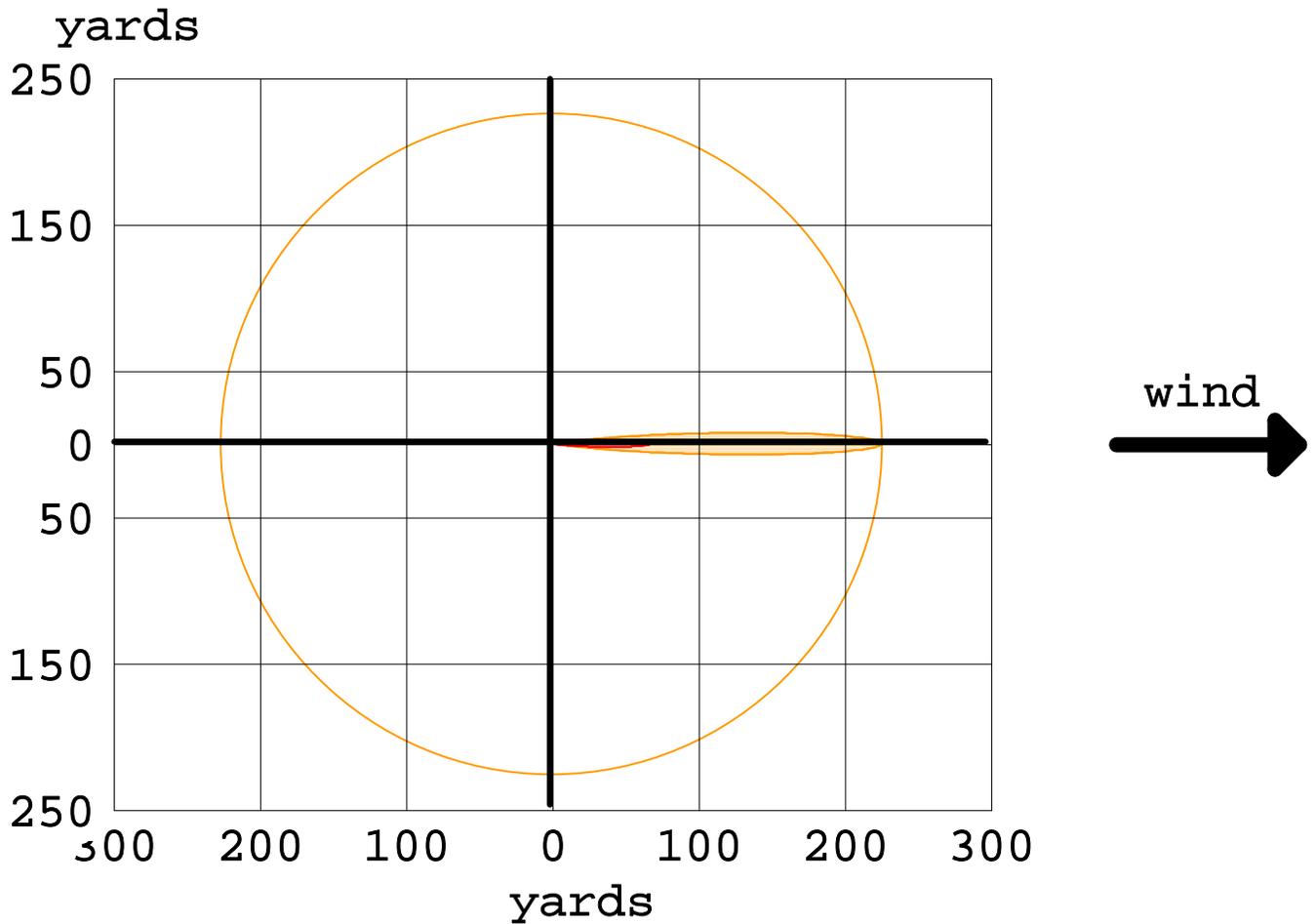
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Gaussian

Red : 68 yards --- (15 ppm = IDLH)

Orange: 227 yards --- (1.5 ppm)



-  greater than 15 ppm (IDLH)
-  greater than 1.5 ppm
-  wind direction confidence lines

SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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-1 (60 min): N/A AEGL-2 (60 min): 1 ppm AEGL-3 (60 min): 3.7 ppm
IDLH: 15 ppm LEL: 8000 ppm UEL: 880000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: .79 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: 0.057 pounds/min
Total Amount Released: 0.57 pounds

THREAT ZONE:

Model Run: Gaussian
Red : 68 yards --- (15 ppm = IDLH)
Orange: 227 yards --- (1.5 ppm)



Time: September 30, 2013 1146 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 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Gaussian

Red : 14 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: 43 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 : 14 yards --- (15 ppm = IDLH)

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

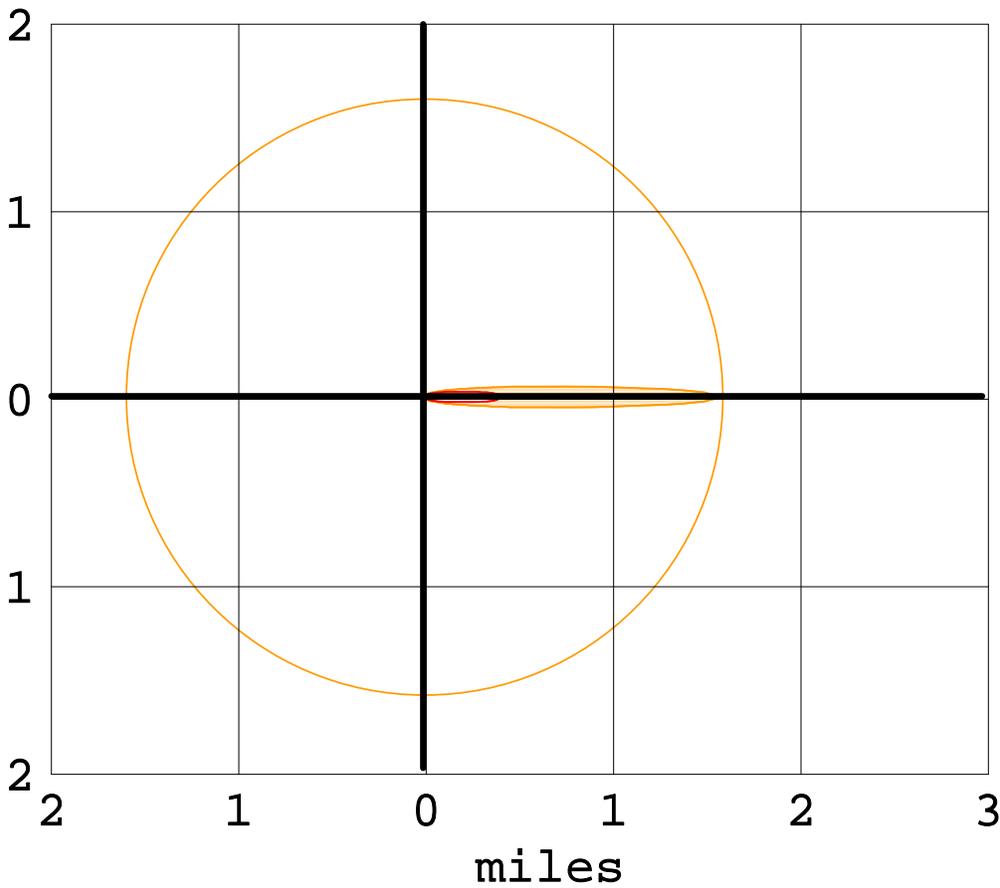
Orange: 43 yards --- (1.5 ppm)

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

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)
Chemical Name: CHLORINE
Wind: 1.5 miles/hour from S at 3 meters
THREAT ZONE:
Model Run: Heavy Gas
Red : 689 yards --- (10 ppm = IDLH)
Orange: 1.6 miles --- (1 ppm)

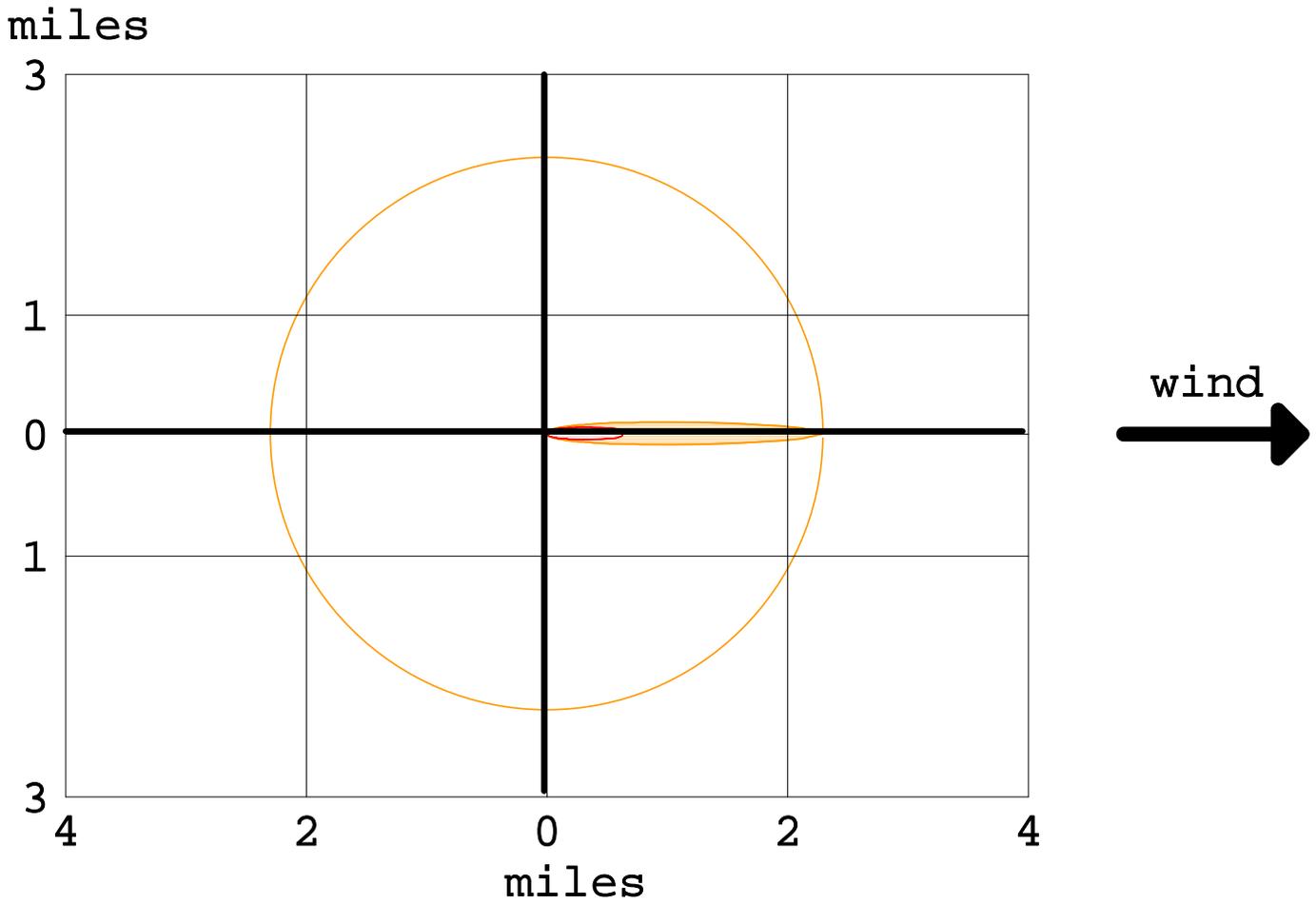
miles



-  greater than 10 ppm (IDLH)
-  greater than 1 ppm
-  wind direction confidence lines

Toxic Threat Zone

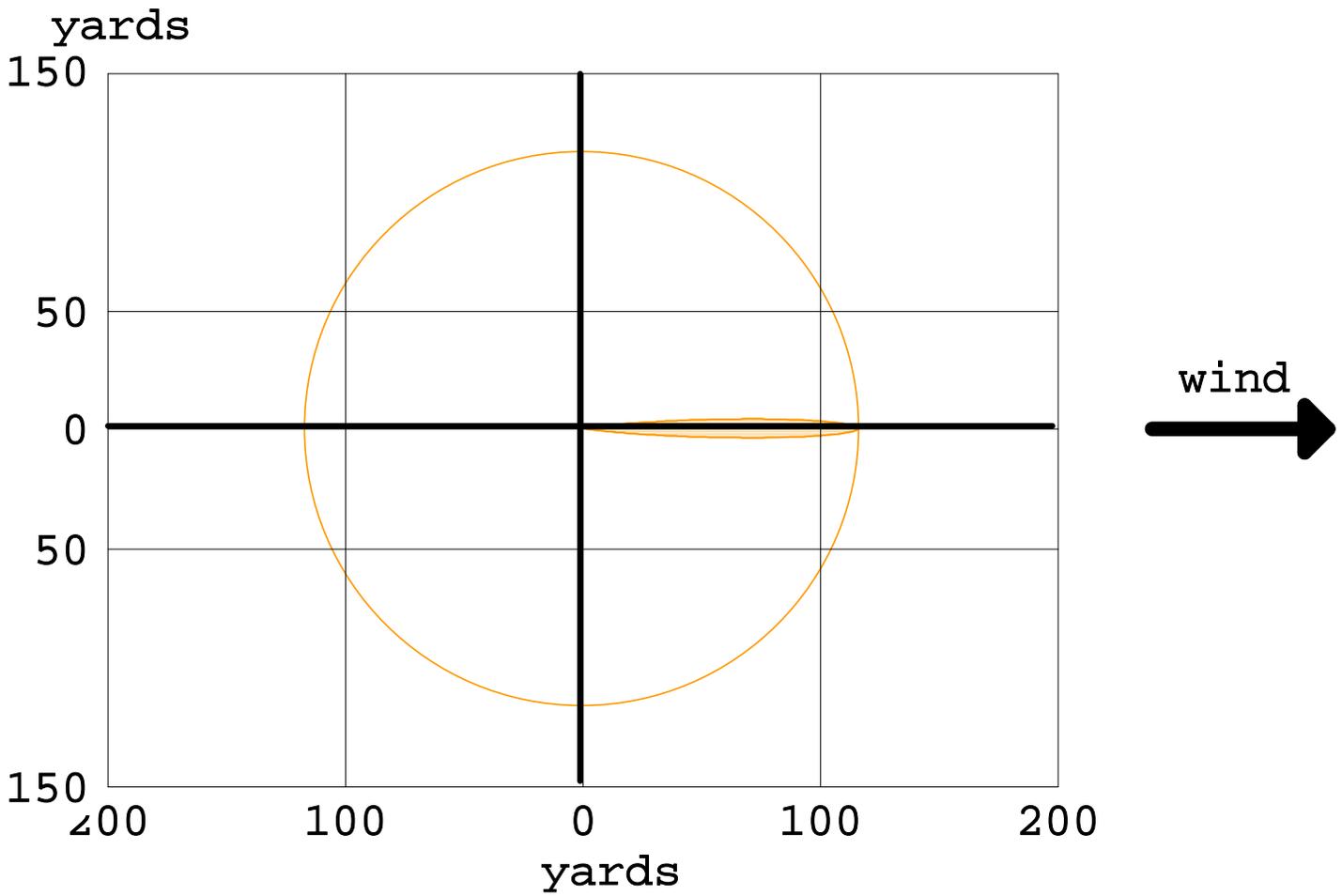
Time: September 30, 2013 1146 hours PDT (user specified)
Chemical Name: CHLORINE
Wind: 1.5 miles/hour from S at 3 meters
THREAT ZONE:
Model Run: Heavy Gas
Red : 1109 yards --- (10 ppm = IDLH)
Orange: 2.3 miles --- (1 ppm)



-  greater than 10 ppm (IDLH)
-  greater than 1 ppm
-  wind direction confidence lines

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)
Chemical Name: CARBON MONOXIDE
Wind: 1.5 miles/hour from S at 3 meters
THREAT ZONE:
Model Run: Gaussian
Red : 36 yards --- (1200 ppm = IDLH)
Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.
Orange: 116 yards --- (120 ppm)



-  greater than 1200 ppm (IDLH) (not drawn)
-  greater than 120 ppm
-  wind direction confidence lines

**SITE DATA:**

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol
AEGL-1 (60 min): N/A AEGL-2 (60 min): 83 ppm AEGL-3 (60 min): 330 ppm
IDLH: 1200 ppm LEL: 125000 ppm UEL: 742000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° 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: 1.3 pounds/min
Total Amount Released: 13.0 pounds

THREAT ZONE:

Model Run: Gaussian
Red : 36 yards --- (1200 ppm = IDLH)
Note: Threat zone was not drawn because effects of near-field patchiness
make dispersion predictions less reliable for short distances.
Orange: 116 yards --- (120 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: BORON TRIFLUORIDE

Wind: 1.5 miles/hour from S at 3 meters

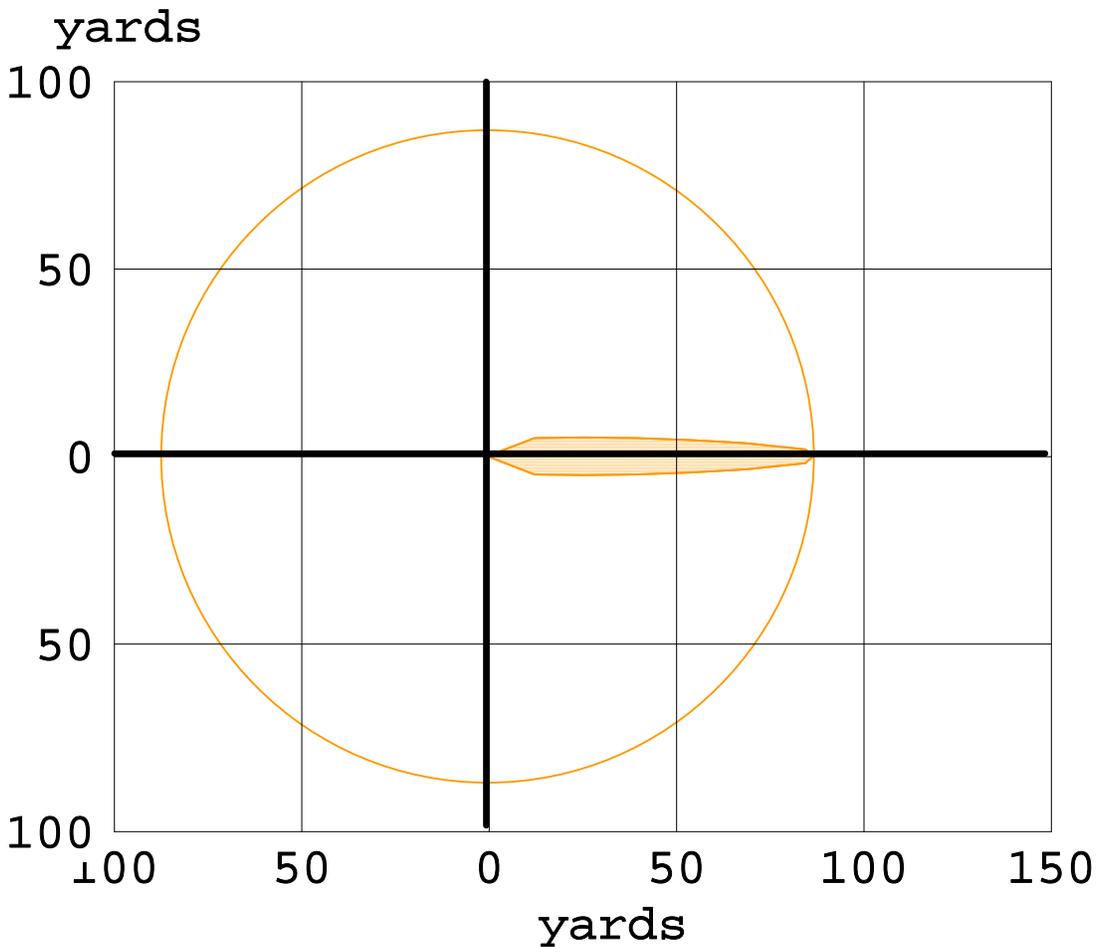
THREAT ZONE:

Model Run: Heavy Gas

Red : 17 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: 87 yards --- (2.5 ppm)



-  greater than 25 ppm (IDLH) (not drawn)
-  greater than 2.5 ppm
-  wind direction confidence lines

Text Summary

ALOHA® 5.4.4



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 hours PDT (user specified)

CHEMICAL DATA:

Chemical Name: BORON TRIFLUORIDE Molecular Weight: 67.81 g/mol
AEGL-1 (60 min): 2.5 mg/(cu m) AEGL-2 (60 min): 29 mg/(cu m) AEGL-3 (60 min): 88 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° F
Stability Class: F (user override)
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Direct Source: 0.03 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 : 17 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: 87 yards --- (2.5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 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.

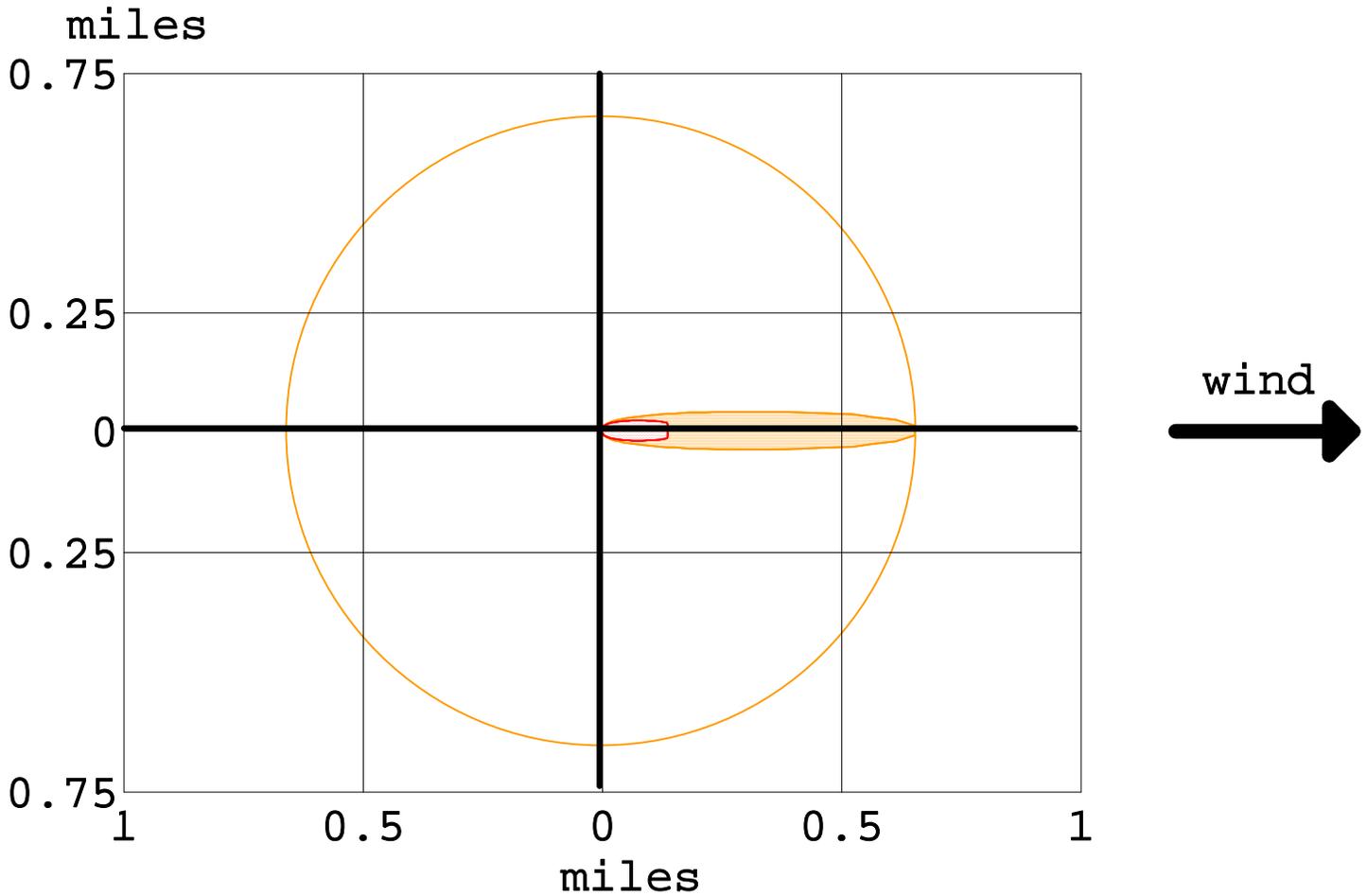
Wind: 1.5 miles/hour from S at 3 meters

THREAT ZONE:

Model Run: Heavy Gas

Red : 247 yards --- (25 ppm)

Orange: 1160 yards --- (2.5 ppm)



-  greater than 25 ppm
-  greater than 2.5 ppm
-  wind direction confidence lines

Text Summary

ALOHA® 5.4.4



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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
PAC-1: 0.19 ppm PAC-2: 2.1 ppm PAC-3: 2.1 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° 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 : 247 yards --- (25 ppm)
Orange: 1160 yards --- (2.5 ppm)

Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 miles/hour from S at 3 meters

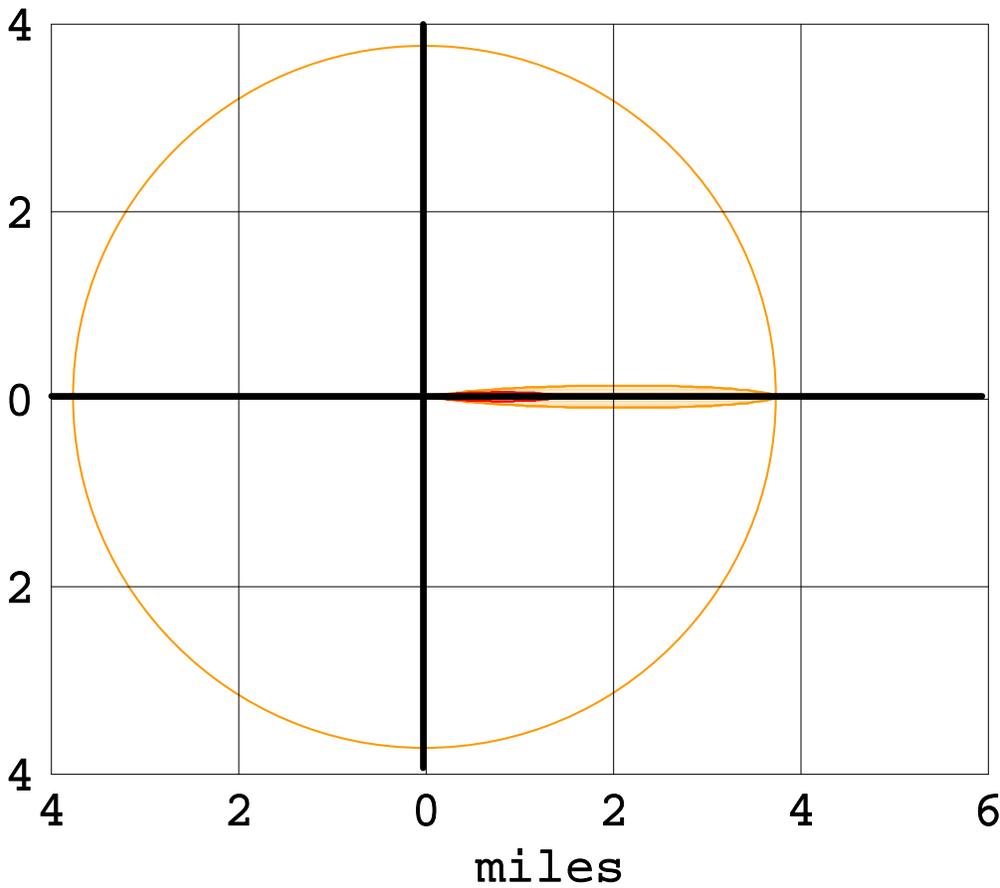
THREAT ZONE:

Model Run: Gaussian

Red : 1.4 miles --- (300 ppm = IDLH)

Orange: 3.7 miles --- (30 ppm)

miles



-  greater than 300 ppm (IDLH)
-  greater than 30 ppm
-  wind direction confidence lines

Source Strength (Release Rate)

ALOHA® 5.4.4



Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: AMMONIA

SOURCE STRENGTH:

Direct Source: 850 pounds/min Source Height: 0

Release Duration: 10 minutes

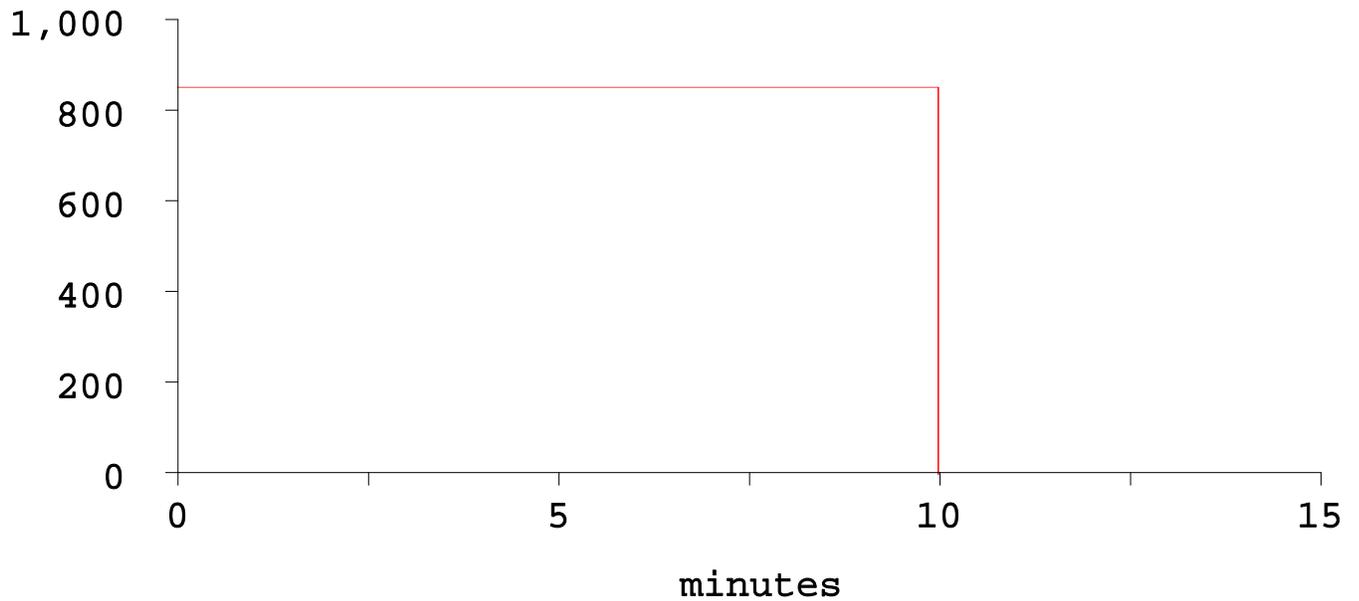
Release Rate: 850 pounds/min

Total Amount Released: 8,500 pounds

Note: This chemical may flash boil and/or result in two phase flow.

Use both dispersion modules to investigate its potential behavior.

pounds/minute



Toxic Threat Zone

Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: AMMONIA

Wind: 1.5 miles/hour from S at 3 meters

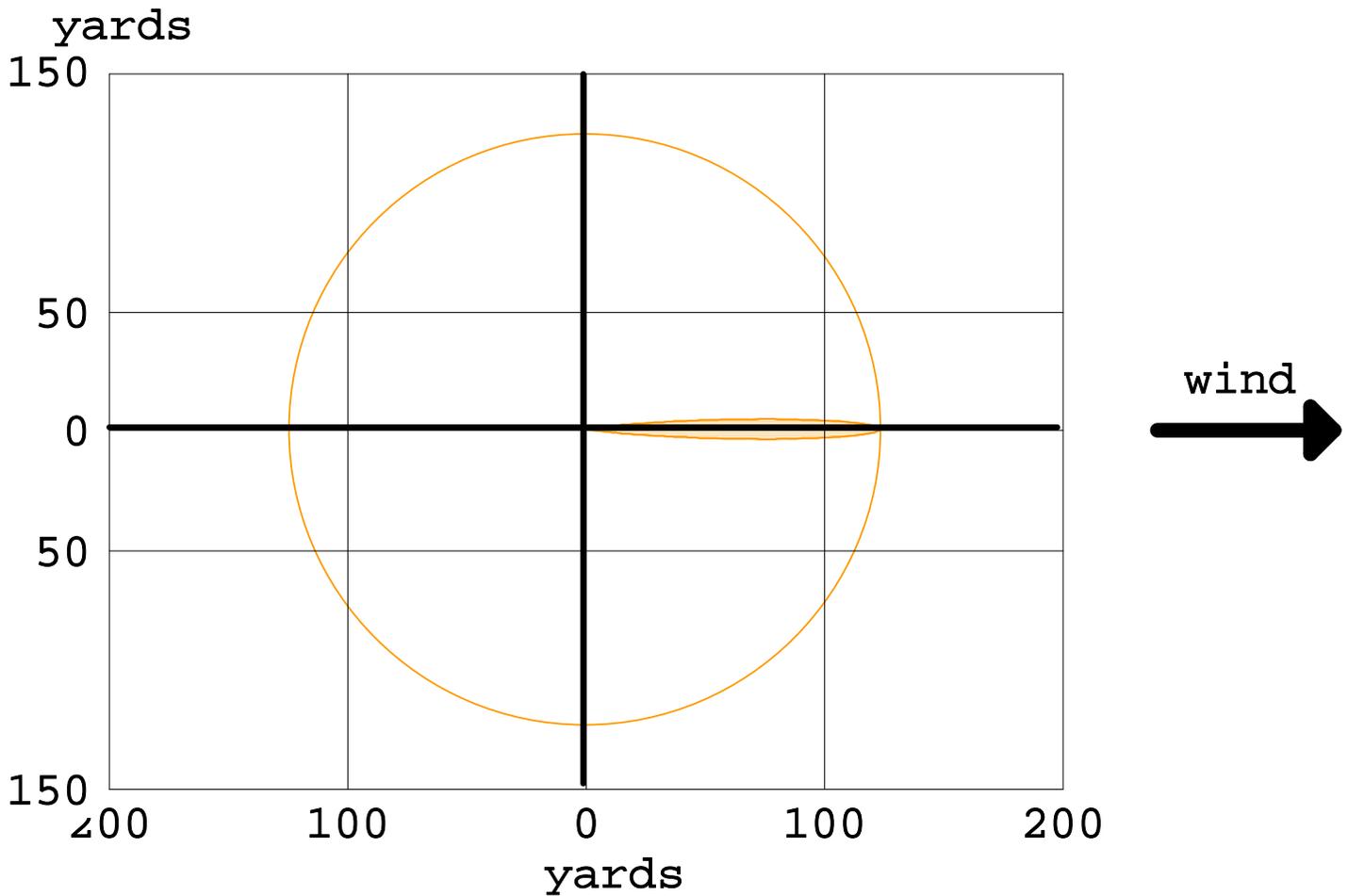
THREAT ZONE:

Model Run: Gaussian

Red : 38 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: 124 yards --- (30 ppm)



-  greater than 300 ppm (IDLH) (not drawn)
-  greater than 30 ppm
-  wind direction confidence lines

Source Strength (Release Rate)

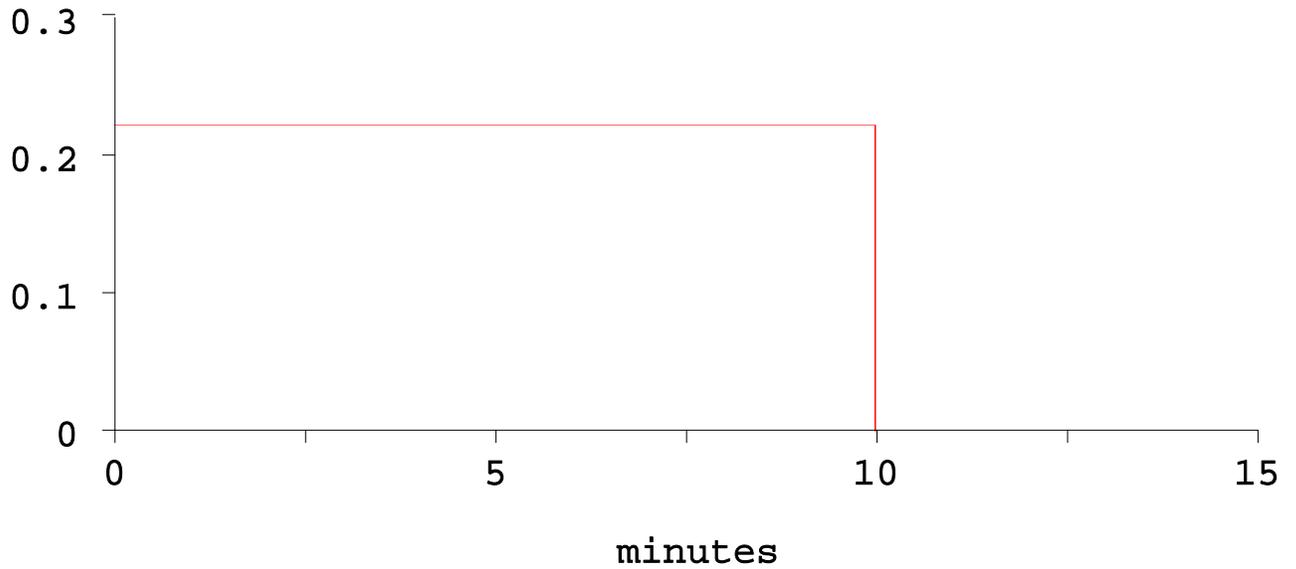
Time: September 30, 2013 1146 hours PDT (user specified)

Chemical Name: AMMONIA

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: 0.222 pounds/min
Total Amount Released: 2.22 pounds

pounds/minute



Text Summary

ALOHA® 5.4.4



SITE DATA:

Location: MILPITAS, CALIFORNIA
Building Air Exchanges Per Hour: 0.15 (sheltered single storied)
Time: September 30, 2013 1146 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: 150000 ppm UEL: 280000 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 miles/hour from S at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 70° 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: 0.222 pounds/min
Total Amount Released: 2.22 pounds

THREAT ZONE:

Model Run: Gaussian
Red : 38 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: 124 yards --- (30 ppm)