

March 18, 2010

California Pilots Association
P.O.Box 6868
San Carlos, CA 94070-6868

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ENVIR. APPEALS BOARD

U.S Environmental Protection Agency
Environmental Appeals Board
C/o Clerk of the Board, Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001
Tel. (202) 233-0122
epa.gov/eab

Attention: Clerk of the Board

Re: EAB 08-01; PSD Permit No. 15487
Issued 2/3/10 by Bay Area Air Quality Management District; SF,
CA; Russell City Energy Center

Subject: California Pilots Association (CALPILOTS) Petition for Review
(Appeal)

The Bay Area Air Quality Management District (BAAQMD) has issued a Statement of Basis and permit conditions for the amended Prevention of Significant Deterioration ("PSD") Permit (application # 15487) for the Russell City Energy Center (RCEC), a natural gas-fired, combined cycle power plant with a nominal output of 600 megawatts. It is proposed by Russell City Energy Company, LLC, an affiliate of Calpine Corporation, and is to be located in Hayward, CA.

California Pilots Association (CalPilots)

The California Pilots Association mission is to promote and preserve the state's airports. As a statewide volunteer organization, we work to maintain the State's airports in the best possible condition.

We understand that comments also are being or have been submitted by Golden Gate University's Environmental Law Clinic on behalf of Citizens Against Pollution (CAP) and Chabot Las Positas Community College District. CALPILOTS also refers to and incorporates those

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comments by those organizations in addition to identifying the following issues and problems with the present P_S_D_.

The California Pilots Association requests you do not approve the P_S_D Permit for Russell City Energy Center (RCEC) and not allow this Power Plant to be built in Hayward within 1 ½ miles of Hayward Executive Airport (Appendix A). We support the California Energy Commission (CEC) Staff Assessment recommendation not to approve the Russell City Energy Center as referenced in:

<http://www.energy.ca.gov/2007publications/CEC-800-2007-003/CEC-800-2007-003-CMF.PDF>

Calpilots hereby requests that based on the above, the P_S_D Permit be remanded back to the BAAQMD for further comment by the FAA and others.

Mr. Raymond Pietrorazio made his presentation to the FAA in Washington, D.C. on February 23, 2010. Senator Chris Dodd (D-CT) and Representative Christopher Murphy, (D-CT, 5th District were in attendance. Their concerns of EPA and OSHA not addressing the effects of pilots and passengers flying in power plant exhaust plumes are shared by Calpilots.

His Power Point Presentation made to the FAA can be found at:
<http://www.ctcombustion.com/oxc/20100223-FAA-Pietrorazio-Web.htm>.

The Federal Aviation Administration (FAA) has confirmed to Mr. Pietrorazio that they are currently conducting their own plume safety study as outlined in Appendix B. This includes but not limited to a review of OSHA and EPA laws and how they apply to pilots and passengers as mobile sensitive receptors flying inside exhaust plumes and to address the adverse effects for immediate, short and long term health issues which the EPA has failed to do.

Data gathering and research would be completed in June of 2010 with a hypothesis, conclusion and recommendations be available sometime after June of 2010.

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The FAA person to contact for confirmation further comment is Mr. Melvin Banks, Manager, Operational Integration, ARC-4, Regions and Center Operations, tel 202-493-5060, FAX 202-267-5193, e-mail: mel.banks@faa.gov

The Hayward Executive Airport with a Federal Aviation Administration (FAA) staffed control tower is a vital link in the National Transportation System. It is therefore eligible for Grants from the FAA. When the City of Hayward last accepted a FAA Grant for Construction in 2002, the City Manager signed Grant Assurances on behalf of the City.

The City thereby agreed to an obligation to keep Hayward Executive Airport free of hazards, and also to maintain compatible land use zoning. These are Grant Assurances numbers 20 and 21as referenced below.

http://www.faa.gov/airports_airtraffic/airports/aip/grant_assurances/media/airport_sponsor_assurances.pdf

20. Hazard Removal and Mitigation. It (*the City, acting as the sponsor*) will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards **and by preventing the establishment or creation of future airport hazards.**

21. Compatible Land Use. It (*the City, acting as the sponsor*) will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or

permit any change in land use, within its jurisdiction, that will reduce its compatibility with respect to the airport, of the noise compatibility program measures upon which federal funds have been expended.

The airspace at Hayward Executive Airport is very complicated, perhaps the most complicated in the country. That is because Class B Airspace for San Francisco International Airport sits on top of the airspace over much of the Bay Area affecting the airspace at all other airports in the Bay Area. Class C Airspace for Oakland International Airport is another layer of airspace, which affects Hayward Executive Airport. Hayward Executive Airport (HWD) has its own Airspace, Class D, further complicating rules and regulations for flying at Hayward's Airport.

Each class of airspace has its own particular rules and regulations, which must be followed by a pilot at certain altitudes in certain areas in the Bay Area. One of the requirements for ALL aircraft flying in the Class D airspace is to have a radio for communication with the control tower at all times. During Hayward Airport Tower operating hours pilots are required to communicate with Hayward. When the Hayward Tower is not in operation, pilots are required to report to the Oakland Tower. This further complicates the Hayward Executive Airport Airspace, as do Hayward Airport's Noise Abatement Procedures.

The types of aircraft using a HWD vary greatly, from Very light fabric airplanes, to blimps, light corporate- style jet aircraft, single-engine and twin-engine Cessna and Piper Aircraft and twin-engine King Airs. All of these aircraft would be affected by turbulence created by this power plant. The type of turbulence experienced would be more serious at the lower altitude of 650 feet or 600' Above Ground Level [AGL] (which is the traffic pattern altitude for Hayward Airport), because there is less altitude at which to recover when the pilot encounters buffeting or sudden change in altitude. Helicopters fly even lower and both types of aircraft can fly lower still based on special VFR (Visual Flight Rules) conditions. It should be noted that planes overfly

the RCEC site for both VFR and IFR (Instrument Flight Rules) as per testimony of Group Petitioners and FAA Witnesses as per testimony:

http://www.energy.ca.gov/sitingcases/eastshore/documents/2007-12-18_TRANSCRIPT.PDF

Hayward Airport is classified as a Reliever Airport that relieves or saves Oakland Airport from having to accommodate the Air Traffic of smaller planes (commonly called General Aviation). This allows for a more efficient use of air space and air traffic control. By constructing a power plant within 1 1/2 miles of the airport, it will limit airspace use, which would have a dramatic deterioration affect on the Bay Area's air traffic management.

1. Request Risk Analysis for Mobile Sensitive Receptors (Pilots and Passengers)

Pilots and their passengers are mobile sensitive receptors flying in and through the power plant plume will receive the greatest impact exposure to emissions and contaminants especially through unfiltered cabin air vents as well as open cockpit aircraft. **Appendix C**. They have been omitted in this process and we hereby request that a complete study be made for short term and long term impact health analysis. Air ambulances of various types are used to transport mobile sensitive receptors (passengers) with life threatening and respiratory ailments that will be transported in and through the plume. This should also include but not be limited to what affect each of the chemical compounds as well and the total composition makeup of the plume will have on each type of mobile sensitive receptor and those receptors that will affect to maintain safe control of the aircraft. This should include no less than four data points through the plume concentration of what is emitted and through the entire span of weather conditions as well with no fewer than four weather data points for each weather condition. Weather data should be used from the weather station at the Hayward Executive Airport in Hayward, California.

This study should also include all but not limited to all phases of construction, commissioning, startups and shutdowns for each individual generator as well as maximum generator load capacity while

both generators are generating electricity at their combined load capacity. Startups and shutdowns should include but not limited to cold startups, hot startups and shutdowns through the calendar year.

Special attention should be given to the affect of the ammonia and or ammonia slip on all phases of commissioning and startups will have on mobile sensitive receptors in open cockpit and aircraft without air filtering cabin heating, ventilating and defrosting systems as shown in [Appendix C and D](#).

1. What is the amount of time for the cabin to fill with plume emissions or Hazardous material Releases that would have an affect the pilots ability to control and fly the aircraft both in VFR and IFR conditions.
2. What method of data substitution was used and how many data points were substituted for actual measured data values for AERMOD model?

The Airframe and Engines

The study should include what affect each chemical compound will have on the physical aircraft to include but not limited to the outer skin, frame, controls, internal engine and the air filters for engines as well as air filters if installed for cabin air and heat. This includes fabric-covered aircraft and composites, aluminum and material for blimps and helicopters or rotorcraft.

The oxygen content of the plume would have a significant effect on aircraft engine performance when flying in and near the plume. This would include various types of aircraft power plants that depend on the oxygen content throughout the aircraft's transition to and from the Hayward Executive Airport. Rotorcraft is required by the tower to "hold in place" in order to maintain aircraft separation for both rotorcraft and fixed wing aircraft.

1. At what distance and altitude should aircraft remain from the plume in order to maintain engine performance based on manufacturer standards?

Hazardous Material Releases

Hazardous material releases have been omitted as part of the air analysis during this process and should be included for the above for Russell City Energy Center (RCEC) but also the Hayward Wastewater Treatment Plant which is Adjacent to RCEC.

We would also make reference to the Blythe, CA Power Plant Hazardous Material release report, [Appendix D](#) and point out that the Highway was closed but again mobile sensitive receptors were omitted from the process. The Blythe Airport was not notified and pilots and their passengers were put at risk.

Visual Plume

The visual plume will impede and distort the view of the airport by pilots and also obscures and interferes with the hand held visual light pilot commands from the control tower during an emergency if they are required? Is a man-made vapor plume a cloud?

FAA Clear of Clouds\074608A2FA18B48A86256EEB006704EF.htm

1. At what point does the visual plume become opaque during the day, evening and nighttime airport operations?
2. What method of data substitution was used and how many data points were substituted for actual measured data values for both the VSCREEN and Calpuff models?

Thermal Plume

Thermal plumes can have an effect on aircraft as both demonstrated from California Energy Commission and FAA pilot reports as in [Appendix E](#).

1. How far should aircraft remain from the thermal part of the thermal plume and what affect would this have on the overall operation of the Hayward Executive Airport?

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Hayward Executive Airport Economic

CalPilots requests that the FAA make a complete economic impact study on the Hayward Executive Airport over the entire estimated 30-40 year life of RCEC. This should include but not limited to impacts on Oakland international Airport, San Francisco International Airport air space and flight procedures as well the financial and economic affects on the City of Hayward.

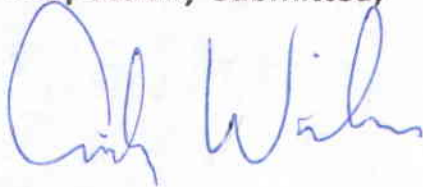
40CFR Part 52.21 (12)

Our comments are based on but not limited to 40CFR Part 52.21 (12)

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div8&view=text&node=40:3.0.1.1.1.1.19&idno=40>

(12) *Best available control technology* means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Respectfully submitted,



Andy Wilson
CALPILOTS Director-at-Large
andy_psi@sbcgloal.net
(510) 303-9027

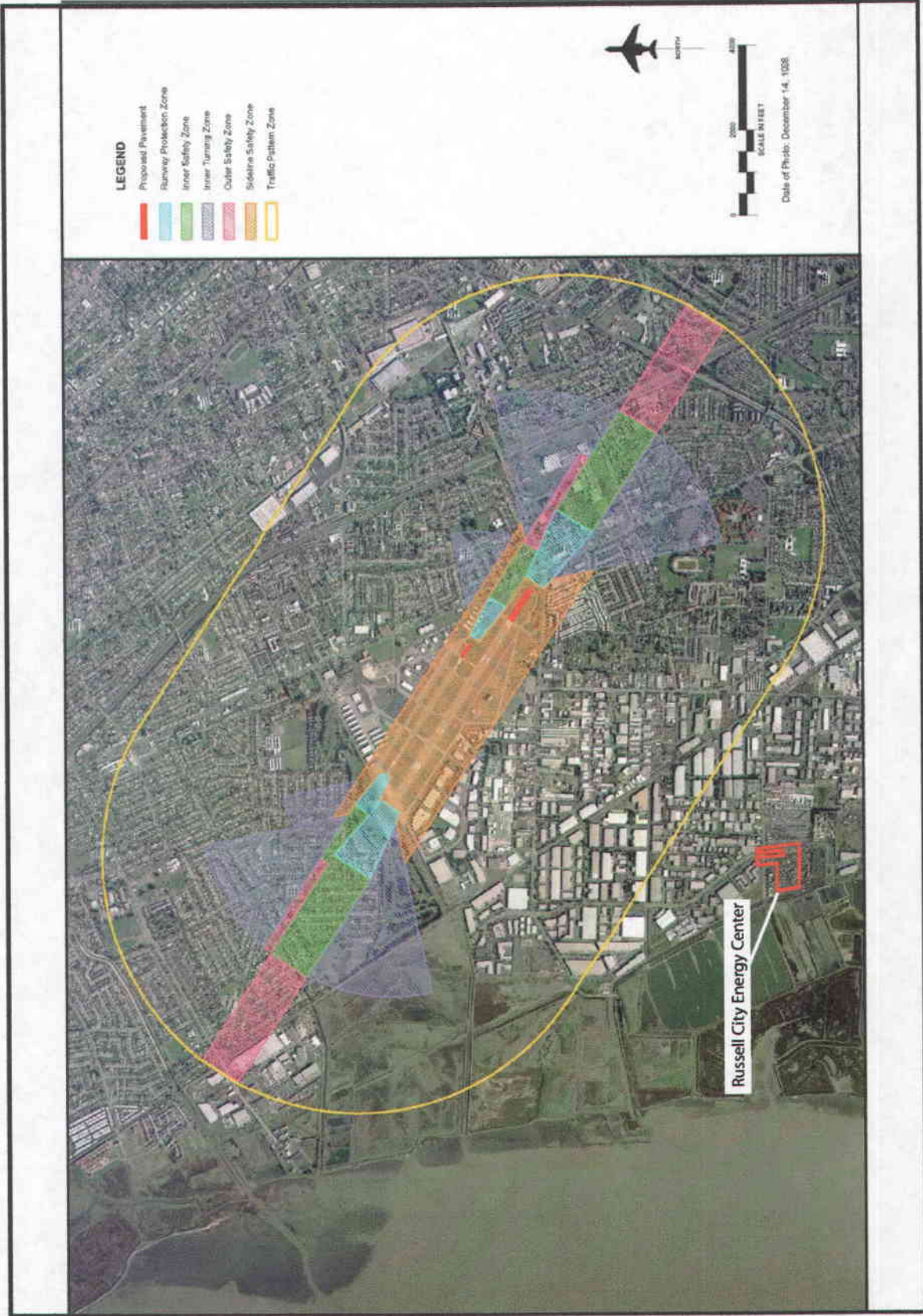
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Ed Rosiak
Calpilots President
Erosiak@comcast.net
(408) 255-1333

Appendix A

FIGURE 4 - TRAFFIC AND TRANSPORTATION
SOURCE: Exhibit 28, Attachment 5



Appendix B

AOSC Exhaust Plumes Initiative

From: AOSC

To: Mr. Pietrorazio

Date: February 23, 2010



Background

- **September 2008 – Aviation Safety (AVS-1) asked to have this issue assigned to the Airport Obstruction Standards Committee (AOSC) to be evaluated.**
- **Initiated action to have a thorough evaluation of the science around exhaust plumes as it relates to aviation safety with a performance time of up to 18-months**
- **Incremental data to be provided as research is conducted over performance period**
- **Expect results from evaluation to be completed by Fall 2010 and submitted to the AOSC for review.**



AOSC Specific Tasks Requested

MERGING
PLUMES

1. Determine the impact of plume induced turbulence in different atmospheric conditions and winds.
2. Identify and review analysis of plume issues (e.g. EPA, OSHA,...)
3. Examine the potential impact to both aircraft and aircrew of repeated exposure of flying through plume effluent.
 - Evaluate the chemical content of a smoke plume effluents allowed by the EPA and OSHA regulation
 - Evaluate the aircrew risk level consistent with the EPA and OSHA norms for allowed repeated exposures to chemical contaminants.
 - Evaluate the potential effect on an airframe and engine performance consistent with aircraft manufacture's specifications.
4. Examine the obscuration effect of plume-induced clouds.
 - Ash and soot particles in exhaust plumes may act as obscuration or may induce condensation.
5. Draft a report of the impact of vertical plumes and exhaust effluent on aviation safety.



Possible Next Steps

- AOSC conduct an initial review of findings provided and suggest next steps.
- AOSC to coordinate finding with appropriate FAA Organizations and stakeholders as appropriate.
- AOSC to assess if additional studies are necessary
- Mitigations (if appropriate) will be determined by the results of the study



Appendix C

SECTION 7
AIRPLANE & SYSTEMS DESCRIPTIONS

CESSNA
MODEL 172RG

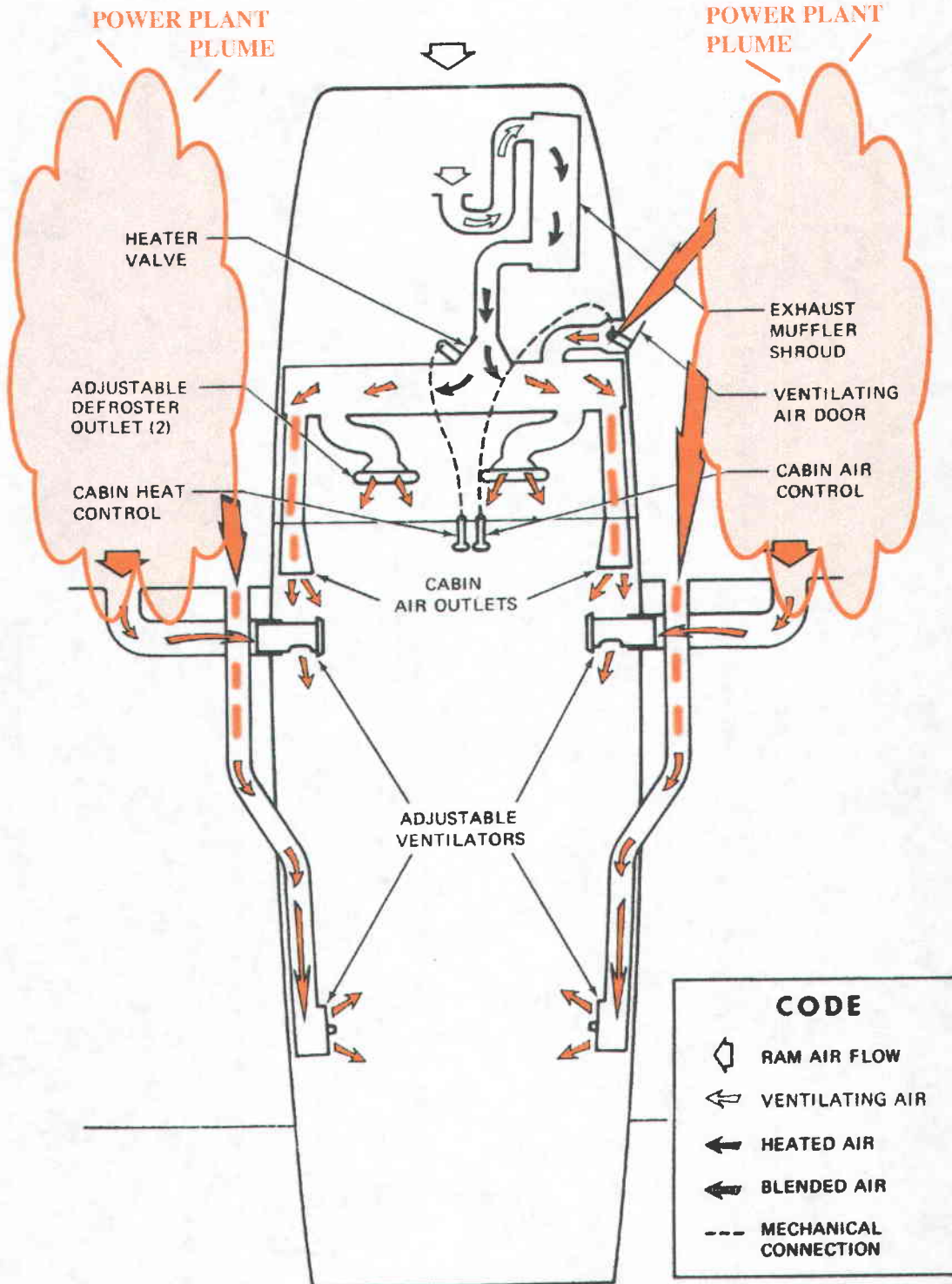


Figure 7-9. Cabin Heating, Ventilating, and Defrosting System

Appendix D



RIVERSIDE, CA 92501 148,391,390-0011 JUL 10 2001 04:20PM P002/000
COUNTY OF RIVERSIDE HEALTH SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS MANAGEMENT DIVISION
EMERGENCY RESPONSE, COMPLAINT, INVESTIGATION REPORT

OFFICE RECEIVING ERCE	INITIAL REPORT TAKEN BY	DATE REPORTED	TIME REPORTED (USE MILITARY TIME)	SPECIALIST ASSIGNED	CODE NUMBER	CONTROL NUMBER
Indio	ECC	9-25-04	0400	Bobby Riggs	5520	20950
LOCATION OF INCIDENT		THOMAS BROS. MAP	TYPE OF PLACE	DATE OCCURRED (USE MILITARY TIME)	TIME OCCURRED (USE MILITARY TIME)	
15560 W. Hobsonway Blythe		392B-10	Power Plant	9-25-04	0400	
NATURE OF COMPLAINT OR INCIDENT: Anhydrous ammonia release.						

OFFICE USE ONLY					
HAZMAT FILE	HAZMAT INVOICE	CDF INVOICE	MPDES INVOICE	FORM 33 COMPLETED	INVESTIGATIONS SECTION

CODES: RP=RESPONSIBLE PARTY C=COMPLAINANT V=VICTIM W=WITNESS O=OTHER

CODE:	NAME (FIRST, MIDDLE, LAST)	DOB:	RACE:	SEX:
RP	Blythe Energy			
ADDRESS (HOME)	PHONE (H)	HT:	WT:	HAIR COLOR:
				EYES:
ADDRESS (WORK)	PHONE (W)	IDENTIFICATION NUMBER (CDL)		
15560 W. Hobsonway Blythe	760-922-9950			

CODES: RP=RESPONSIBLE PARTY C=COMPLAINANT V=VICTIM W=WITNESS O=OTHER

CODE:	NAME (FIRST, MIDDLE, LAST)	DOB:	RACE:	SEX:
ADDRESS (HOME)	PHONE (H)	HT:	WT:	HAIR COLOR:
				EYES:
ADDRESS (WORK)	PHONE (W)	IDENTIFICATION NUMBER (CDL)		

FURTHER ACTION / FOLLOWUP REQUIRED?	IS IT POSSIBLE TO LOCATE OR IDENTIFY A RESPONSIBLE PARTY FOR THE INCIDENT?	IS A PROHIBITION 55 REPORT TO BE COMPLETED?
YES NO x	YES x NO	YES x NO

DISPOSITION OR ACTION:

0400 Hours 9-25-04 I received a tone from the ECC to respond to an anhydrous ammonia release at Blythe Energy, 15560 W. Hobsonway in Blythe.

0600 Hours I arrived on scene at the Quik Chek West gas station at 14021 W. Hobsonway, the command center. I met with the following: CDF Battalion Chief Bill Zimmerman, CHP Officer Michael King, CDF Hazmat Capt. Reeves and Operations Manager Gary McIntire. CHP Officer King and CDF Battalion Chief Zimmerman made the decision to close the freeway at Desert Center to Blythe. Capt. Reeves reported that there was a release of anhydrous ammonia in the chiller room while employees were changing a filter, the scrubber had come on when the ammonia alarm came on. Capt. Reeves stated we would need to make entry to see what would need to be done to shut off the release. I informed Capt. Reeves I was familiar with the facility because I had recently done an inspected the facility.

I went to Gary McIntire and asked what had happened and what it would take to stop the release. Gary reported that two employees were changing a filter on one of the compressors, they had gone thru the safety procedures paper work and had performed the lock out procedure and had bled the filter of ammonia into a water can before starting the work. One of the employee's took five to six bolts off of the flange and caused the ammonia release. All three employees working in the compressor room evacuated the area. The ammonia alarm went off and the scrubber automatically came on. To stop the leak a valve would need to be closed and the flange bolts replaced. I asked if they had personnel trained to make an entry, Gary stated that they all had the training to make entry. Capt. Reeves and I made the decision to stage on the northwest side of the chiller room to don suits so we could have visual contact with the entry team. Hazmat personnel gave Rick Deabenderfer, plant employee, a lesson on the hazmat unit SCBA to make entry. At approximately 0700

W

Jan 041220

Hours the wind changed and we moved to the southwest corner of the chiller room and entry would be made from the south doors. Hazmat personnel and plant personnel suited out in modified level "B" with two hazmat personnel suited out in modified "B" as back up. The entry team entered the chiller room and closed the valve to the filter and put the bolts back in the flange. They opened all the doors to help vent the chiller room. When the entry team exited the building they reported that the wrong flange had been opened and the line was hot. We used an ammonia meter from the power plant and made another entry fifteen minutes later. The monitor read 90 PPM of ammonia. We waited another fifteen minutes and took another reading of 15 PPM of ammonia. At 0915 I called CHP Officer Michael King to reopen the freeway. Plant personnel will monitor the ammonia and wear proper equipment to pick up the oil on the floor for proper disposal. We rehydrated the hazmat team and packed up all the equipment, hazmat team off scene at 1115 hours. I gathered information for my report and made sure that plant employees were monitoring the area properly while absorbing the spilled oil. 1215 Hours I left the scene arriving home at 1430 Hours.

1330 Hours 9-27-04 I met with the City of Blythe and Blythe Energy to discuss the incident. Chris Allen, Blythe Energy Plant General Manager, informed the group that 405 pounds of ammonia was released from the system and that the scrubber had caught 400 pounds of ammonia back into the system, losing five pounds of ammonia into the air, they had also lost 70 to 100 gallons of oil onto the floor. The chiller system holds 55,000 pounds of anhydrous ammonia. The City of Blythe, Blythe Energy and Riverside County Hazmat will have meetings in the future to coordinate emergency plans.

DRUG LAB NOTIFICATION DATE:			
OTHER AGENCIES NOTIFIED:	None	ADDITIONAL HAZMAT SPECIALISTS:	TOTAL INCIDENT TIME (ALL STAFF):
	None		10.5 hours
SPECIALIST PREPARING REPORT:		DATE:	REVIEWED / APPROVED BY:
Bobby Riggs	12-3-04		
DEH-HER-001 (REV 1/2000)			12/6/04

Appendix E

**Energy Facilities Siting and
Environmental Protection
Division**

FILE:

PROJECT TITLE: **Blythe Power Plant**

<input checked="" type="checkbox"/> Telephone	316-946-2416	<input type="checkbox"/> Meeting Location:	
NAME: Eric Nordberg	DATE: 8/2/04	TIME: 9 AM	
WITH:			
SUBJECT: Blythe turbulence			

COMMENTS:

I talked to Mr. Nordberg about his experience with turbulence from the Blythe power plant cooling towers. He and a co-pilot were flying a Lear jet (1800 lb. airplane) on an Instrument Landing System approach to Blythe airport's Runway 26 early (6:30 - 7) morning on May 4, 2004. They did not see any plumes and were about 550 feet above ground level with an airspeed of 124 knots (142 mph) when they passed over the plant. The wind was calm with good visibility. They experienced moderate to severe turbulence which caused the plane to veer from side to side with considerable shaking. They were surprised but able to regain control of the plane. It was not an emergency situation but it was an uncomfortable experience.

I advised him that we had reports from several other pilots who have experienced the same thing and we were investigating the situation. I faxed him Terry O' Brien's letter of April 5, 2004 and asked him to review the mitigation discussed within. He said he would check his flight charts for that May 4th flight and send me an e-mail with any other pertinent information or suggestions.

cc:	Signed:
	Name: James S. Adams 8/3/04

**Energy Facilities Siting and
Environmental Protection
Division**

FILE:

PROJECT TITLE: Blythe Power Plant

<input checked="" type="checkbox"/> Telephone	928-681-8318	<input type="checkbox"/> Meeting Location:	
NAME:	Joe Sheble	DATE:	2/19/04
		TIME:	10:45 AM
WITH:	Sheble's Flight Service		
SUBJECT:	Blythe turbulence		

COMMENTS:

As a pilot who performs check rides for the FAA on student and commercial pilots on Instrument Landing System (ILS) approaches to various airports, he has experienced turbulence three times when flying over the Blythe plant while utilizing the ILS approach. He was flying either a Cessna 172 or a Beachcraft Traveler. He was about 300 feet above ground level (AGL) when flying over the plant. Some pilots fly 200 feet AGL over the plant, and Mr. Sheble believes the turbulence is enough to cause pilot trainees to do something "stupid". A couple of pilots have told him that they have experienced turbulence as well. He believes that two thirds of the flights to Blythe Airport are done using visual flight rules (VFR) and many pilots do not see the power plant. He has also experienced even greater turbulence when flying downwind over a coal-fired power plant located about one mile from the Loflin Bullhead Airport in Arizona. The plant has one stack which is over 200 feet tall. His elevation when passing over the facility was 800 to 1000 feet AGL. There is an airport advisory about this power plant.

In response to a question about the visibility of the power plant and why pilots would fly over it, he said a lot of pilots flying VFR are from out of the area and aren't paying attention to what is on the ground (his remarks were considerably more derogatory and off-color). Instead, they are focused on the runway. The warning about the power plant in a Notice to Airmen is probably ignored by most pilots. He believes that once the plant is running at full capacity, there is a possibility that aircraft will be blown around or tipped over by heated plumes and somebody is going to get killed. I, James Adams, don't believe his characterizations about pilots are necessarily accurate but he does use the airport frequently.

Mr. Sheble told us that the ILS at Blythe Airport has been in operation for 30 years. The ILS was brought to Blythe by the former Pacific Southwest Airlines, who acquired it from Lindberg Airfield in San Diego. They used it train their pilots. Blythe Airport later acquired it and uses it for training purposes. The reason that the ILS has not been certified by the FAA relates to the absence of a technical service order, which is now required prior to certification. This order would cost millions of dollars and require a considerable amount of time and effort. He doesn't think it will ever happen.

cc:	Signed:
	Name: James S. Adams 2/20/04 Ken Peterson

**Energy Facilities Siting and
Environmental Protection
Division**

FILE:

PROJECT TITLE: **Blythe Power Plant**

<input checked="" type="checkbox"/> Telephone	702-263-4314	<input type="checkbox"/> Meeting Location: E-mail on June 21, 2004	
NAME:	Luis Magana	DATE: 6/9/04	TIME: 3:30PM
WITH:	Sheble Aviation		
SUBJECT:	Blythe turbulence		

COMMENTS:

Mr. Magana is a pilot and flying instructor who has been using Blythe Airport for several years. On the morning of May 4, 2004, he was aboard a two-engine Beechcraft airplane piloted by a student. They were on final approach to Runway 26 and saw the Blythe power plant in front of them. No plume was visible. Their elevation was approximately 550 feet above ground level and the airspeed was 110 miles per hour. As they flew over the cooling towers, they encountered significant turbulence which knocked the plane on its side or about 50 to 60 degrees off center. The student pilot was startled but was able to level the plane and proceed with the approach. After they landed, Luis discussed the incident with the student pilot and he considers it a good example of being prepared for the unexpected.

He is very worried about new and inexperienced pilots in smaller planes such as a single engine Cessna 150 or 172 encountering similar turbulence. The smaller plane could be inverted and sent into a downward spiral, possibly crashing into or near the power plant. He also told me that a high percentage of the pilots that use the Blythe Airport are student pilots. I asked his opinion about potential mitigation measures such as moving the ILS to Runway 17, and creating a new NOTAM that advises pilots to avoid flying over the power plant by turning base and final within one mile of the landing threshold of the Runway 26. He thought these measures would probably remove the existing hazard. He sent me an e-mail describing the turbulence encounter and his concern about aviation safety.

cc:	Signed:
	Name: James S. Adams 6/25/04

**Energy Facilities Siting and
Environmental Protection
Division**

FILE:

PROJECT TITLE: **Blythe 1**

<input checked="" type="checkbox"/> Telephone	760-921-2869	<input type="checkbox"/> Meeting Location:			
NAME:	Rory Watkins	DATE:	8/6/03	TIME:	9:45 AM
WITH:	Blythe resident and pilot				
SUBJECT:	Blythe HRSG plumes				

COMMENTS: I (James Adams) called Mr. Watkins in response to a suggestion by Butch Hull who is the Assistant City Manager for the City of Blythe, and is also the Blythe Airport Manager. Mr. Watkins told me that he is a relatively new pilot and he flew over the power plant while on final approach to Runway 26 sometime in December 2002, although he is probably mistaken about the date of the incident since the power plant did not start up for testing until early 2003. His elevation when passing over the plant's HRSGs was approximately 1000 feet, and his airspeed was about 75 knots. The invisible plume pushed his plane up between 300 to 500 feet and scared him to the point that he broke off his approach. He has not flown over the plant since and has advised other pilots to refrain as well. In his opinion, the power plant should not have been sited in its current location.

cc:	Signed:
	Name: James S. Adams 3/4/04

COLGAN AIR



December 18, 2008

Attention: Ms. Johnson

Aviation Safety Hotline Program Office

Reference: MGW ILS Rwy 18/Severe Turbulence

Dear Ms. Johnson,

On 18 December 2008, United Express flight 6922 operated by Colgan Air from CKB-MGW-IAD experienced severe turbulence during approach into MGW. The flight was on the ILS approach to runway 18, inside the Final Approach Fix, when the flight entered severe turbulence. The flight immediately executed a missed approach and diverted to the final destination, IAD, landing without any further incidence. The airplane was grounded for a severe turbulence inspection. During the approach the airplane was in IMC conditions winds calm 100' overcast temperature 1 Celsius and surface visibility 2 miles.

This was the second identical incident within the last two months. After reviewing the ILS 18 Rwy MGW approach plate we focused on the obstacle between the FAF and the runway. The obstacle stands at 1577' MSL. We called the MGW control tower to investigate the obstacle and we were told it is the smokestack from a power plant. We were also told by the tower that when the temperature is just right and the surface winds are calm the smoke creates turbulence during the final approach in to MGW. The tower also told us that FAA check flight "was not happy" during the checking events for the approach.

According to my information this condition is not being reported to the flight crews. Our crews in this event reported uncontrolled flight, left engine ignition lights were activated, engine oil pressure lights illuminated, and all 3 axis trim circuit breakers tripped.

We would like to suggest that the FAA takes immediate action on the following:

1. A thorough investigation on the meteorological and atmospheric conditions that create turbulence over the smokestack.
2. A NOTAM should be issued to all flights operating over and in the MGW airport, about the possible severe turbulence during the ILS approach to Rwy 18.
3. Notes should be added in the airport diagram, about the possible conditions during the ILS approach to Rwy 18.

Please contact me if you have any questions or if you'd like to discuss our recommendations further.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Bandavanis", is written over a light blue horizontal line.

Dean Bandavanis
Director Operations