

TCEQ AIR QUALITY PERMIT NUMBER 1360A

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APPLICATION BY	§	BEFORE THE	CHIEF CLERKS OFFICE
TXI OPERATIONS, LP	§	TEXAS COMMISSION	
RN# 100217199	§	ON	
CEMENT MANUFACTURING PLANT	§	ENVIRONMENTAL	
MIDLOTHIAN, ELLIS COUNTY	§	QUALITY	

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the new source review authorization renewal application.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comment letters from the following persons: EPA – Region 6, Rep. Dan Barrett, Rep. Lon Burnam, City of Denton, City of Fort Worth, City of Plano, Linda Koop (Chair - City of Dallas Transportation and Environment Committee), Downwinders At Risk, Bonita Bowman, Deborah Brown, Serena Simmons Connelly, Linda Hanratty, Elizabeth Hedden, Debra Markwardt, Sal and Grace Mier, George Morris, Ralph and Suzette Pope, Mark Russo, Wendy Sunshine, Irvin Uphoff, and persons listed in Groups A and B. Lists of persons in Groups A and B are attached to this response. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.tx.us.

BACKGROUND

Description of Facility

TXI Operations, LP has applied to the TCEQ for a New Source Review Authorization under Texas Clean Air Act (TCAA), § 382.0518. This will authorize the continued operation of existing facilities that may emit air contaminants.

If renewed, this permit will authorize the applicant to continue operation of an existing permitted portland cement plant. The plant is located at 245 Ward Road, Midlothian, Ellis County, Texas. Contaminants authorized under this permit include nitrogen oxides, carbon monoxide, hydrogen chloride, organic compounds, sulfur dioxide, chlorine, hydrogen fluoride, sulfuric acid, total reduced sulfur, hydrogen sulfide, particulate matter, particulate matter less than 10 microns, barium, trivalent chromium, nickel, selenium

thallium, zinc and trace metal (including, but not limited to) lead and mercury.

Procedural Background

To continue operating an existing permitted facility that may emit air contaminants, the person planning the continued operation must obtain a permit renewal from the commission. This permit application is for a permit renewal of Air Quality Permit Number 1360A.

The permit application was received by TCEQ on June 24, 2008, and declared administratively complete on July 10, 2008. The Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) for this permit application was published on August 27, 2008, in the *Midlothian Mirror* and the *Waxahachie Daily Light*. Since this application was administratively complete after September 1, 1999, this action is subject to the procedural requirements adopted in accordance with House Bill 801, 76th Legislature, 1999.

COMMENTS AND RESPONSES

COMMENT 1: Many commenters requested a contested case hearing. (Rep. Lon Burnam, Downwinders at Risk, Bonita Bowman, Deborah Brown, Serena Simmons Connelly, Linda Hanratty, Elizabeth Hedden, Debra Markwardt, George Morris, Ralph and Suzette Pope, Mark Russo, Wendy Sunshine, Irvin Uphoff, Groups A and B) Concern was expressed that all proceedings be completely open. (Rep. Dan Barrett)

RESPONSE 1: The contested case hearing requests received for this renewal application will be processed in accordance with the Texas Clean Air Act (TCAA) and applicable TCEQ rules. The TCAA provides that the commission may not hold a contested case hearing for a renewal application where there is no change in the allowable emissions rates or in the emission of any new contaminant, unless the facility is classified as a "poor performer" under the commission's compliance history rules, found in 30 TAC Chapter 60. TXI's compliance history rating does not fall in the "poor performer" category. A final determination of whether a contested case hearing will be granted will be made by the commission in an open meeting.

COMMENT 2: The TXI plant represents a complex operation and fifteen days was not sufficient time to adequately review the application. (Downwinders at Risk, Irvin Uphoff)

RESPONSE 2: TXI has provided TCEQ with documentation that it met the regulatory requirements of 30 TAC § 55.152(a)(2) by publishing notice of application in a general circulation newspaper, posting signage at the site, and making available a copy of the application in a public place. TXI initially published notice in the *Waxahachie Daily Light* on July 24, 2008, with the comment period ending 15 days later on August 8, 2008. However, TXI republished notice of this application on August 27, 2008; therefore, the comment period was extended until September 11, 2008. All comments received through

September 11, 2008 are considered in processing this renewal application. See also Response 10 regarding permit renewal limitations.

COMMENT 3: A member of Downwinders at Risk (DAR) was unable to locate the permit application at the library, and requested a 15-day extension to comment on the application. (Downwinders at Risk)

RESPONSE 3: Company representatives confirmed that the permit application was available at the A.H. Meadows library in Midlothian, Texas during the comment period. In addition, a representative of TCEQ called the company to confirm that TXI had provided a copy of the permit application to the library. See also Response 2.

COMMENT 4: The notice failed to list dioxins which were revealed in the previous test burns. (Ralph and Suzette Pope)

RESPONSE 4: The Texas Clean Air Act and TCEQ rules require public notice of air quality permit renewal applications. However, neither requires all air pollutants from the facility be identified in the notice. The public is provided opportunity to review the existing permit which includes a reference to the Maximum Available Control Technology (MACT) requirement that regulates dioxin emissions.

COMMENT 5: EPA issued a notice of violation (NOV) to TXI on June 12, 2007 for violating Title I of the Clean Air Act for failing to comply with the special condition dealing with volatile organic compounds (VOC) air pollution requirements. Specifically, shipments of hazardous waste used as kiln fuel were received without the transfer vehicle being attached to the vapor back system which is the VOC control. Commenters asked why TCEQ did not act in a similar responsible manner. (Downwinders at Risk, Irvin Uphoff)

RESPONSE 5: TXI self-reported the above referenced violation to TCEQ and EPA. Because TXI had taken corrective action and resolved the issue, the TCEQ does not consider further action necessary. As per its prerogative, EPA elected to issue a NOV after TXI had corrected the problem.

COMMENT 6: Historically, TXI's concern is making a profit with little regard for compliance with permit conditions, health, safety and welfare of public citizens residing in close proximity to the facility. (Downwinders at Risk, Irvin Uphoff) Commenter presented data obtained from the TCEQ Regional Office regarding numerous complaints and violations as evidence of years of non-compliance and disregard for the citizens of Midlothian and the surrounding areas and expressed concern about the applicant's poor compliance history. The data further illustrates TCEQ's failure to take any enforcement action. For many years, TCEQ has ignored offenses and violations and neglected enforcement procedures provided by law. (Downwinders at Risk, Irvin Uphoff) Commenter requests a response as to why legitimately issued violations and non-conformance have not resulted in prosecution and/or assessment of fines or civil/criminal action as provided under Texas law. (Irvin Uphoff) The past history of permit violations

and non-compliance has resulted in excess emission releases that have proven injurious to health. (Bonita Bowman, Linda Hanratty, Wendy Sunshine, Groups A and B).

RESPONSE 6: A compliance history review is conducted for the company and the site during the technical review. The compliance history is reviewed for the five year period prior to the date the permit application was received. The compliance history includes enforcement orders, court judgments, criminal convictions, chronic excessive emission events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance. It was determined that the company has an acceptable compliance history.

All complaints are investigated either by an on-site visit and/or a review of the data. Violations are usually addressed through a notice of violation (NOV) letter that allows the operator a specified period of time within which to correct the problem. The violation is considered resolved upon timely corrective action. A formal enforcement referral will be made if the cited problem is not corrected in the time allowed, if the violation is repeated, or if a violation is causing substantial impact to the environment or neighbors. In most cases, formal enforcement results in an agreed enforcement order including penalties and technical requirements for corrective action. Penalties are based up the severity and duration of the violation(s). Violations are maintained on file and are included in the calculation of a facility and a person's compliance history.

COMMENT 7: Prior to permit renewal, the TCEQ is specifically requested to do the following:

- (1) Immediately conduct an investigation and a fact finding missions to evaluate the nature of emissions released from the stacks.
- (2) Personally verify that the daily operation of all kilns is in accordance with the permit and to assure emissions are not exceeding MAERT limits.
- (3) Require TXI provide adequate performance testing and analysis by an independent firm to verify operating emissions are within permit limits.
- (4) Evaluate and determine the exact nature and cause of frequent sulfur based releases that plague the neighboring residents and develop adequate methods for abatement.
- (5) Review the maintenance and operational procedures and verify these are adequate to eliminate the high frequency of particulate releases from all areas of the plant.
- (6) Require TXI to perform the necessary repairs, changes and revisions to eliminate future odor and particulate releases. (Irvin Uphoff)

RESPONSE 7: The requirements for renewal of an air quality permit do not include all of the activities included in this comment. TXI's requirement to comply with certain state and federal rules, as well as its permit, results in ongoing testing, evaluations and verification, which are reviewed by the TCEQ. See also Response 6 regarding compliance history, and Response 10 regarding permit renewal limitations.

COMMENT 8: Unethical lobbying is currently being used to overturn Dallas' "Green Cement" policy and TXI is acting in bad faith to stigmatize its cleaner competitors and muddy the issue. These dirty policies reveal a pattern of behavior that TXI will likely continue to follow in meeting its clean air obligations if this permit is approved. (George Morris, Mark Russo)

RESPONSE 8: Compliance with Dallas' "Green Cement" policy is beyond the jurisdiction of the TCEQ and therefore is not considered in the review of this permit application.

COMMENT 9: The current NO_x emission rates of 2.726 lb/ton of clinker (dry kiln) and 500 lb/hr (per wet kiln) in TXI's application should reflect the proposed NO_x emission rates in the Dallas-Fort Worth (DFW) State Implementation Plan (SIP) for the Control of Emissions of NO_x from Cement Kilns, which states that dry preheater-precalciner kilns should achieve an emission rate of 1.7 lb NO_x/ton of clinker and long wet kilns should achieve an emission rate of 3.4 lb NO_x/ton of clinker no later than March 1, 2009 during the DFW ozone season. 30 TAC § 117.3123(b). (EPA, Linda Koop, Chair - City of Dallas Transportation and Environment Committee)

RESPONSE 9: Emission limitations in permits are developed to meet certain emission control technology requirements, and TXI has unit-specific emission limits in its permit as noted by EPA in its comment. However, the rule cited in the comment, with which TXI must comply, is for a site-wide cap and is not written on a unit-specific basis. The site-wide cap must be complied with during the ozone season but does not prescribe unit-specific limits; see the cement kiln rules in 30 TAC Chapter 117, Subchapter E, Division 2. There is no requirement that each kiln have permit limits that are identical to the limits in the SIP. Further, the emission limits for the kilns are not revised in the permit renewal process simply because they are located in a nonattainment area. TXI's requirement to comply with TCEQ's rules regarding emissions from cement kilns for the Dallas-Fort Worth nonattainment area, which are more stringent than those in the permit, were considered in TCEQ's most recent attainment demonstration plan submitted to EPA in May 2007. EPA has proposed to approve the attainment demonstration which includes the cement kiln rules adopted by the commission. Final approval, without additional emission reduction requirements from cement kilns in the DFW area, is expected in 2009. See also Response 10 regarding to permit renewal limitations.

COMMENT 10: In March 2008, EPA decreased the 8-hour National Ambient Air Quality Standard (NAAQS) for ozone to 75 parts per billion, and this creates a pressing need for the Dallas/Fort Worth non-attainment area to enact ozone reduction strategies. Instead of renewing this permit for obsolete and polluting wet kilns, TXI should be required to either retrofit the wet kilns to meet modern standards or replace them with another dry kiln to meet cement production needs. (Downwinders at Risk, Bonita Bowman, Deborah Brown, Linda Hanratty, Elizabeth Hedden, Wendy Sunshine, Group A) Strong consideration should be given to retrofitting TXI's wet kilns so they meet emission standards that are more similar to dry kilns and more in keeping with modern air quality regulations. (Linda Koop, Chair - City of Dallas Transportation and

Environment Committee, Bonita Bowman, Linda Hanratty, Wendy Sunshine, Group A) All economically reasonable and technically practicable air pollution control technologies should be reviewed by TCEQ and imposed on TXI as a condition for permit renewal. (Linda Koop, Chair, -City of Dallas Transportation and Environment Committee, City of Denton, City of Fort Worth). The City of Dallas supports TXI's announcement of its plans to idle its four wet kilns, and supports permanent closure of them, which would ensure compliance with the source cap limits established in the DFW SIP. (Linda Koop, Chair - City of Dallas Transportation and Environment Committee)

RESPONSE 10: The Texas Clean Air Act limits imposing conditions for renewal of a permit to only those requirements the commission determines to be economically reasonable and technically practicable considering the age of the facility and the effect of its emissions on the surrounding area. The commission may not impose requirements more stringent than those of the existing permit unless the commission determines that the requirements are necessary to avoid a condition of air pollution or to ensure compliance with otherwise applicable federal or state air quality control requirements. See Tex. Health & Safety Code § 382.055. The review of this application has not resulted in such determinations and therefore no requirement for retrofitting the wet kilns is included in the draft renewal permit. In addition, TXI's application does not indicate any plans to retrofit the wet kilns, and therefore this request is beyond the scope of the TCEQ's review of this renewal application. See also Responses 9 and 11 with regard to cement kiln emissions in SIP planning. Finally, TXI's announcement to idle its four wet kilns is not considered in the permit renewal application.

COMMENT 11: The permit's current emission rates have the potential to hinder our ability to meet current and future air standards and therefore requests that the permit term limit be limited to five years instead of the normal permit term limits of 10 years, to coincide with the SIP review and the possible amendments over the next two to three years. Alternatively, commenters request the commission add a special condition preventing the emission rates in this permit from receiving "grandfather" status during development and implementation of the SIP. (Linda Koop, Chair - City of Dallas Transportation and Environment Committee, City of Denton, City of Fort Worth, City of Plano)

RESPONSE 11: The TCEQ has found no basis for renewing this permit for less than another ten year term. The permitted emissions from the plant, together with TXI's requirement to comply with TCEQ's rules regarding emissions from cement kilns for the Dallas-Fort Worth nonattainment area, were considered in TCEQ's most recent attainment demonstration plan submitted to EPA in May 2007. EPA has proposed to approve the attainment demonstration, and final approval, without additional emission reduction requirements from cement kilns in the DFW area, is expected. Emissions from TXI and other cement kilns, as well as other sources, will be considered in any necessary future SIP planning for the revised 8-hour NAAQS for ozone, and may be subject to further emission reduction requirements if necessary to attain and maintain the NAAQS for ozone.

COMMENT 12: A hearing should be granted to determine whether wet kilns are in fact meeting Best Available Control Technology (BACT). (Downwinders at Risk, Deborah Brown, Group A) These kilns do not meet BACT. (George Morris, Mark Russo) DAR made the case in the hearing regarding TXI's hazardous waste permit for adding cost-effective technologically feasible scrubbers to the kilns to control sulfur problems. TXI is not operating with BACT since other wet kilns in the United States are operating with scrubbers. TXI has never received the kind of formal and comprehensive BACT review the law demands. (Downwinders at Risk).

RESPONSE 12: TCEQ reviews the renewal application to ensure that the facility is being operated in accordance with all the requirements and conditions of the existing permit, and meets state air quality rules. A re-evaluation of BACT does not fall within the scope a renewal application review. The TCEQ does not agree that TXI has never received the kind of formal and comprehensive BACT review the law demands. See also Responses 1, 13 and 16 regarding consideration of hearing requests, and Response 10 regarding the scope of review of renewal applications.

COMMENT 13: A hearing should be granted to establish optimum operating conditions, fuel sources and storage safety issues, how present pollution controls must be operated, and what controls for the future to be installed to best protect the public health of the downwind communities, and to address permit deficiencies. (Ralph and Suzette Pope)

RESPONSE 13: As discussed in Responses 1 and 16, the commission will determine whether a hearing will be granted and, if so, what issues will be a part of the hearing, and Response 10 regarding the scope of review of renewal applications.

COMMENT 14: There is no mention of maintenance, start-up and shutdown (MSS) emissions in this permit application. TCEQ is required to follow EPA policy for addressing MSS when preparing the draft permit. (EPA)

RESPONSE 14: MSS emissions are not considered in the renewal process; see Response 10 regarding the commission's limitations for processing renewal applications.

COMMENT 15: Although it is not a requirement of the permit, TXI is operating the regenerative thermal oxidizer (RTO) during the ozone season (which is March through October for the DFW area) to reduce VOC emissions. EPA encourages this commitment be reinforced by incorporating emission rates that reflect the use of the RTO to ensure that emission controls are utilized effectively, as well as making the permit more practically enforceable. (EPA)

RESPONSE 15: In a previous permit action, TXI requested to remove the RTO; however, this request was not granted. Special Condition 14 D (1) in the existing permit (as well as the draft permit prepared for the renewal) requires that TXI operate the RTO whenever Kiln 5 is in operation.

COMMENT 16: Commenters referred to a recently released report by the Agency for Toxic Substances and Disease Registry (ATSDR) on the air quality of the Midlothian Region, with emphasis on volatile organic compounds (VOCs) and metals. The report concluded that it could not confirm that the emissions were safe. This inconclusiveness over the health risks to those living near or downwind of TXI is reason enough to grant a contested case hearing. (Rep. Lon Burnam, Groups A and B)

RESPONSE 16: A report titled "Midlothian Area Air Quality Part 1: Volatile Organic Compounds and Metals" was released in December 2007 in which Midlothian was classified as an indeterminate public health hazard. TCEQ is continuing to address the health concern issues of the Midlothian area and has contracted with an independent entity to collect and analyze ambient air samples for the purpose of addressing citizen concerns about the air quality of their city. The commission will review this Response when determining whether to grant a contested case hearing. As discussed in Responses 1 and 13, the commission will determine whether a hearing will be granted and, if so, what issues will be a part of the hearing.

COMMENT 17: TXI has requested and been granted changes and modifications to process through permits by rule (PBRs) and the process under SB 1126, none of which are not subject to public notice. This requires no proof by testing to verify the new emissions do not exceed the permit limits. In some cases, TXI has justified (or offset) these increases by requesting interplant trading between two sources. The continued juggling of numbers causes confusion, making it difficult to determine what the actual emissions are. For example, under an SB 1126 modification filed in 2005, the coal feed crusher was relocated to serve both wet and dry kilns. This modification resulted in increases in particulate matter (PM₁₀). TXI justified or offset the increase with inter-plant trading between the coal feed crusher and the finish mill no. 5 (PBR No. 75198). Commenter questioned how interplant trading is verified. In addition, TCEQ is requested to open an investigation to review all changes of this nature and assure the MAERT is current and accurate since 1999. (Downwinders at Risk, Sal and Grace Mier, Irvin Uphoff)

RESPONSE 17: The commenters are correct in stating that PBRs and SB 1126 changes, which are claimed for a variety of facilities, processes and production sites, are not subject to public notice. PBRs, Standard Permits, and SB 1126 are permit authorizations that have been enacted by the Legislature to make the Air Quality Permitting process operate more efficiently. Standard Permits and PBRs standardize requirements and SB 1126 allows for limited review of small changes in emissions. These processes not only defend industry's ability to compete by allowing them to construct clean facilities or make small changes to existing facilities quickly, they free up the TCEQ staff's time to focus on more consequential air emissions. The SB 1126 rule (30 TAC § 116.116(e)) provides the procedure for verifying intraplant trading. The permit holder is required to register the claim in writing with the Air Permits Division of the TCEQ. The emission changes must be identified. The SB 1126 authorization registration remains in effect until the next amendment or renewal of the facility's air permit, at which time the SB 1126 authorization is incorporated into the air

permit. PBRs are incorporated into permits when next amended or renewed. There are two ways PBRs are incorporated: (1) consolidation by incorporation, which reauthorizes the facility (and the PBR is no longer the authorizing mechanism), and (2) consolidation by reference, which administratively consolidates the PBRs into the permit document. With regard to the case listed above, due to the intra-plant trade, PBR No. 75198 and SB 1126 Project No. 118979 (issued 12/13/05) will be consolidated by incorporation and will appear on the Maximum Allowable Emission Rate Table (MAERT). In addition, other PBRs identified in Special Condition No. 23 are consolidated by reference.

COMMENT 18: In 2008, TXI requested, via an SB 1126 notification, to vent part of the exhaust gases from the clinker cooler through a heat exchanger, into a new baghouse, and then to the kiln 5 exhaust stack downstream of the RTO, thereby by-passing the RTO. TXI stated that this change does not decrease emissions and may actually result in an increase in downstream actual emissions from kiln 5 due to improved operation and increase efficiency. Commenters have been unable to confirm the status of this change because the documents in the permit file indicate that construction is scheduled for early 2009. The change will be a violation of the 2005 agreement between TXI and Downwinders at Risk / Blue Skies Alliance (DAR/BSA) (SOAH Docket No. 582-05-5189). Further, this act by TXI demands that TCEQ immediately direct this matter to SOAH for a contested case hearing, or take other legal action, to resolve this matter. TCEQ has become a party to this violation by approving a non-conforming, non-complying change to an existing facility and violating a SOAH action. (Downwinders at Risk, Sal & Grace Mier, Irvin Uphoff)

RESPONSE 18: TXI submitted to TCEQ a pre-change notification under 30 TAC § 116.117 for a modification to Kiln No. 5 and provided TCEQ emission data based upon actual to projected-actual emission rates for evaluation of the possible emission increase that could result from the improvement in the efficiency of Kiln 5. The modification was allowed under 30 TAC § 116.116 which states that a qualified facility may make a physical change provided that the change does not result in an increase in allowable emissions or a change in the character of emissions. To show that a Prevention of Significant Deterioration (PSD) review is not triggered TXI will verify through monitoring and recordkeeping that they have no significant increases in actual emissions due to the improved operation and increased efficiency of the kiln processes. The clinker cooler exhaust gases are composed of ambient air that has been heated by passing over the hot clinker and PM that is not bound to the clinker and becomes entrained in this hot air. There are no combustion gases in this stream. The modification was approved in February 2008.

TCEQ cannot respond to whether this violates an agreement between TXI and third parties. When the application at issue (regarding the operation of the RTO) was settled by TXI and DAR/BSA in 2005, the permit was remanded by SOAH to the executive director for issuance. The Executive Director was not a party in the contested case hearing, nor a party to the settlement agreement. Neither the Executive Director nor the commission is bound by it, nor do either have any duty to enforce it. However, when the permit was remanded, the Executive Director revised the draft permit to incorporate

certain changes based on the settlement. At the commission's direction, the Executive Director presented the revised draft permit to the commission, who, in an open meeting, considered the revisions and issued the permit. SOAH does not have jurisdiction over an agreement between TXI and DAR/BSA.

COMMENT 19: The air monitors are placed mostly in areas not likely to capture emissions from the local industries. TCEQ has not provided evidence that the Midlothian air-monitoring system, with emphasis on placement, was scientifically established based upon dispersion modeling, meteorology and other analyses that would indicate likely impact. (Sal and Grace Mier)

RESPONSE 19: TCEQ takes into consideration a variety of factors when determining where to place air monitors. The placement of monitors is a complex process based on a variety of considerations, science and engineering (such as wind pattern, dispersion, likely impact), physical location (near a road but not too close, obstructions), property access (must be able to reach it by vehicle, owner permission), electricity, security of the site, and funding. The existing monitor located in Midlothian, Texas (CAMS 52) is located predominately downwind of TXI.

TCEQ has recently funded a project for some short-term monitoring to assist in answering questions raised by the Texas Department of State Health Services in its health consultation. When conducting ambient air monitoring, TCEQ initially determines what questions need to be answered. The questions influence the placement of the air monitors. In this case, some of the questions are: how the industries in Midlothian affecting air quality; is the TCEQ every 6th day monitoring site an accurate representation of daily air concentrations; what percentage of total chromium does chromium VI represent in Midlothian; and, what is the air quality near schools and parks. TCEQ's contractor has been working with the City of Midlothian to obtain access agreements to place the monitors on public property and to get utilities. As part of this process, the City created a focus group to assist in the monitor location and sampling decision making. TCEQ expects the air monitors to be sited sometime in November 2008. TCEQ will make the findings of the study available to the public.

COMMENT 20: A check of the monitors in the area show there were/are high levels of SO₂, PM₁₀ and PM_{2.5}. As the high readings are averaged out with the low readings for the day, the average is within permit limits. (Debra Markwardt)

RESPONSE 20: The standards and averaging times are mandated by EPA. They are health based and EPA has determined that the standards are protective of human health and welfare.

COMMENT 21: TXI's permit authorizes the emission of nitrogen oxides, carbon monoxide, hydrogen chloride, organic compounds, sulfur dioxide, chlorine, hydrogen fluoride, sulfuric acid, total reduced sulfur, hydrogen sulfide, particulate matter, barium, trivalent chromium, selenium, thallium, zinc and trace metal including (not limited to) lead and mercury. However, there is no monitoring or monitors that read many of the

emission authorized in this permit. The injection of aqueous ammonia solution will start soon. Commenter asks what kind of new compound mixtures will be created. TCEQ relies on TXI to self report in the Toxic Release Inventory (TRI). For example, all of the industry in Midlothian reported 62 lbs of mercury emissions but the input was 196 lbs. What happened to the other 134 lbs? (Debra Markwardt)

RESPONSE 21: Currently there are two long-term fixed monitoring sites (TCEQ CAMS 52 and EPA 48-139-0016) as well as a number of temporary monitoring sites. The following pollutants are monitored at these sites: approximately 100 volatile organic compounds, sulfur dioxide, hydrogen sulfide, nitric oxide, nitrogen dioxide, oxides of nitrogen, ozone, PM2.5 and meteorological data.

TXI received authorization to perform tests utilizing selective non-catalytic reduction (SNCR) to investigate the appropriate ammonia injection rate to achieve 10-30% reduction in NOx emissions. There will be no new compound mixtures created with the usage of SNCR. Currently, TXI does not have the authorization to utilize SNCR on a continuous basis; this would require a future permit action.

The TRI reporting program is a federal program based on federal law, rules and guidance. The TCEQ collects TRI data and forwards it to EPA, but doesn't exercise control over its contents. The objective of the TRI program is for companies to self-report their toxic waste releases to the ground, water, and air. It does not require a mass balance analysis of inputs and outputs, nor the quantity of mercury captured in the cement product, so the TCEQ is unable to verify the commenters' mercury numbers. The 2006 TRI report from TXI indicated total mercury waste releases of 29.5 pounds.

COMMENT 22: Commenter expressed concern that new chemical/mixtures have been added to the overall picture since TXI received authorization to burn tires. (Debra Markwardt)

RESPONSE 22: The burning of tires was authorized to control the emission of NOx and is not expected to result in the emission of any new air contaminants or an increase in existing emissions.

COMMENT 23: Cement kiln dust (CKD) is still an unaddressed issue. CKD and Chromium VI have all ready proven to be a problem at TXI's Riverside Facility and there is no indication that the citizens of Midlothian will not encounter the same problems. (Sal and Grace Mier)

RESPONSE 23: Disposal of CKD at TXI Midlothian has been addressed in Special Condition No. 7 (A) which requires that CKD collected by air pollution abatement equipment, which is not returned to the process, is to be disposed of in the on-site landfill (quarry) in a manner that minimizes any emissions in transit and prevents any emissions after disposal. TXI utilizes a water sprinkler system or water truck to control dust emissions from the conveyed CKD. The quarry is underlain by low-permeability shale which restricts hydraulic communication between the landfill and the aquifer in the area.

Measured concentrations of total chromium have not exceeded levels of concern in air and groundwater monitoring at TXI. TXI voluntarily continues to monitor the ground water to ensure no leachate contaminates the groundwater.

COMMENT 24: Commenter expressed concern that TCEQ utilizes outdated and questionable risk assessment to determine the level of toxic emission impacts, which do not take into consideration current scientific assessments of what levels of toxins are considered safe, especially lead and mercury. In the case of lead and mercury, science has found that there are no safe levels. EPA proposes to revise the NAAQS for lead and mercury to lower levels. Currently there is not adequate monitoring to determine lead emissions and no way to determine if TXI can meet these new standards. (Sal & Grace Mier)

RESPONSE 24: Historically, risk assessments were performed in 1995 (Screening Risk Analysis for the Texas Industries (TXI) Facility in Midlothian, Texas November 2, 1995; TNRCC AS-72) and 1996 (Midlothian Cumulative Risk Assessment; January 31, 1996; EPA-906-R-96-001) to identify risks associated with the burning of hazardous waste in the TXI wet kilns. When TXI built its dry kiln in 2001, the application went through the regular permitting process which the TCEQ has in place. Therefore, the dry kiln meets all TCEQ guidelines and rules, and if the kiln is operating according to the approved permit the TCEQ believes it is safe.

USEPA promulgated a new lead NAAQS effective January 12, 2009. This is a federal standard which must be followed, no exceptions. NAAQS are also retroactive, so industries cannot be grandfathered into using the old NAAQS. When EPA promulgated the new lead NAAQS, it was accompanied with new monitoring requirements for lead which also must be met. Therefore, the TCEQ will meet the new Federal requirements for monitoring lead under the new lead NAAQS. Detailed information on monitoring improvements, implementation, and compliance requirements can be found at following EPA's website www.epa.gov/air/lead/actions.html.

Mercury emitted from combustion sources, like cement kilns, does not typically present an inhalation hazard for humans. When mercury is released from combustion it enters a global cycle of mercury where it can remain for about one year. In the global cycle, mercury vapor first must be converted to divalent mercury by oxidative processes in the atmosphere. The divalent mercury compounds are returned to earth's surface through rainwater. Mercury compounds which have found their way to water systems through this path can then be converted to methylmercury in aquatic sediments, depending upon conditions such as pH, oxygen concentration, and the presence of microbes. Methylmercury can then enter the food chain by bioaccumulation in fish tissues and eventually the human diet. It is through this pathway that mercury emissions from combustion sources present a potential concern. The TCEQ addresses mercury in water bodies through a different regulatory process in which water bodies are listed as impaired when levels of mercury in fish tissue are of concern. Currently, the TCEQ has not listed any water bodies as impaired due to mercury in fish in Midlothian, Texas.

COMMENT 25: One commenter states that her property, her pets and she are contaminated by metals, and that this has had an adverse impact on the health of herself and her animals, as well as the value of her property. (Debra Markwardt)

RESPONSE 25: The TCEQ has extensively tested air, water, and soil for metals in Midlothian, Texas in the past and has not found any levels of concern (Screening Risk Analysis for the Texas Industries (TXI) Facility in Midlothian, TX; November 2, 1995; TNRCC AS-72). Currently, the TCEQ continues to monitor for metals in Midlothian, Texas, at our CAMS 52 ambient air monitor located at 2725 Old Fort Worth Rd. This monitor measures speciated metals from 24-hour particulate matter less than or equal to 2.5 microns (PM_{2.5}) filter samples collected every sixth day. The TCEQ CAMS 52 monitor has not detected levels of concern for metals.

COMMENT 26: Affected by the emissions and odors. (Ralph and Suzette Pope, Group B) Odor events (including, but not limited to, sulfur, chlorine, and pesticide odors) are the number one complaint associated with the TXI plant. The sulfur odors occur daily, mostly at night when a TCEQ investigator is not available, and the chlorine, bleach and pesticides occur once a week. (Downwinders at Risk, Irvin Uphoff, Debra Markwardt, Rep. Lon Burnam) Sulfur based odors are predominantly from the wet kilns, since they do not have a wet scrubber or RTO which the dry kiln has. (Irvin Uphoff) TXI violates permit condition 1-E (regarding prohibition of creating a nuisance) on almost a daily basis. Commenter asks why TCEQ has refrained from adequate enforcement and penalties for these violations. (Irvin Uphoff)

RESPONSE 26: Ideally, TCEQ investigators could be at the complainant's location during an odor event, but this is not always possible. In an effort to duplicate the conditions under which the odor event occurs TCEQ has conducted numerous "focus investigations," which include visiting the plant at various times during the day, and a review of the monitoring data, for odors from TXI kilns. On occasion, the TCEQ investigators have detected a "burnt match" odor downwind of the TXI facility, most likely from the wet kilns. However, detection of an odor is not sufficient cause to find that a nuisance condition exists. The findings are based upon on the TCEQ Odor Compliant Investigation Procedures (dated 09/18/07) for odor evaluation, which require that frequency, intensity, duration and offensiveness of the odor must also be considered.

COMMENT 27: Although TXI has a sulfur content limit on coal from suppliers, there is no evidence TXI or TCEQ has actually verified the content. (Downwinders at Risk, Irvin Uphoff)

RESPONSE 27: Records required by Permit 1360A documenting sulfur content of the coal are reviewed during TCEQ Site Permit Compliance Investigations (SPCI). Percent sulfur of coal was not documented in SPCI reports because permit limits were not exceeded and the approved report writing protocol used by the investigator is an "Exceptions Report" which only details compliance issues. The commenters are asking for proof of compliance. The Exceptions Report Protocol only requires documentation of noncompliance.

COMMENT 28: Although a 1995 Agreed Order has been interpreted as adequately addressing nuisance odors from the plant, it appears that is not the case. (Downwinders at Risk, Debra Markwardt, Irvin Uphoff). Recently, investigators responding to odor complaints have been reviewing stack monitoring data at time of odor incident, and it appears that the 0.75% oxygen is not adequate to abate the odor and this value may have to be increased. It is unconscionable for the TCEQ to allow this issue of injustice imposed upon the resident to continue one more day when a solution is available. (Irvin Uphoff).

RESPONSE 28: Recent review of the oxygen data corresponding to times that TCEQ investigators detected odors did not show any particular correlation between oxygen and odor, suggesting that the 1995 Order provided an appropriate balance between competing interests. Raising exhaust oxygen increases the amount of kiln fuel required, raising production costs, and results in greater emissions of some pollutants, such as NO_x. Although very low oxygen levels were found to exacerbate odor levels, the oxygen level alone is probably not sufficient to completely eliminate all odors. Many factors contribute to the creation of odors, including ambient temperature, wind speed, and wind direction.

COMMENT 29: Commenter states that particulate matter is the second most predominant complaint against the TXI plant. TXI does not give proper attention to the repair and maintenance of bags, conveyor malfunctions, stoppages and breakages to ducts. TXI has been sited for not performing visible emission checks and has allowed dust to pour out of the baghouses for days before correcting the problem. (Downwinders at Risk, Irvin Uphoff) TCEQ must initiate action to demand TXI control events such as broken bags which are permit violations. TXI should install broken bag detectors on all baghouses in all cases of emission releases, the equipment must immediately be secured and repaired. (Irvin Uphoff). The dust and grime in home is worst than any other place which I have lived. (Floyd Hopkins, Janet Gray-Hopkins)

RESPONSE 29: A review of the compliance history, complaint investigations, and site inspections, and discussions with a TCEQ regional office inspector of TXI's Midlothian plant do not support the commenters' claim that the company does not give proper attention to repair and maintenance of particulate control systems, or that it has allowed dust to pour out of baghouses for days without taking corrective action. One event that resulted in excess visible emissions was a malfunction of the closing mechanism on a door to the clinker storage barn. TXI installed a temporary curtain over the door until the door could be repaired and the matter is considered resolved. In addition to Special Conditions 5.B, 5.C, 6.B, 7.B., and 9.B setting opacity limits on the various baghouses, clinker coolers, mills, crushers, and other material handling and storage facilities, Special Condition 7.C. of the permit specifies that no visible emissions may leave the plant site and that additional controls must be installed or implemented if this condition is violated. The TCEQ's investigations for compliance with these Special Conditions have not identified violations that would justify additional particulate controls or work practices. The TCEQ will continue to diligently follow up on any complaints and conduct thorough

inspections of the Midlothian facilities.

COMMENT 30: The emissions from the plant will have an adverse affect on commenters' enjoyment of their property and their health and safety. (Downwinders at Risk, Bonita Bowman, Linda Hanratty, Debra Markwardt, George Morris, Mark Russo, Wendy Sunshine, Groups A and B) Concerned about air quality because there is visible smog, and many people suffer from severe allergies. (Serena Simmons Connelly) Many noted the proximity of their homes to the applicant's plant and related the emissions from the TXI plant to various health conditions, including cancer, congestive heart failure, severe obstructive pulmonary disease, COPD, multiple sclerosis, liver and kidney failure, primary immune deficiency, respiratory illness, asthma and allergies, especially among the elderly and children. (Lou Ann Ligon, Sarah Moore, Ralph and Suzette Pope, Marta Tingdale) Animals are very sick due to contamination from the plant, and commenter has also developed health problems. (Debra Markwardt)

RESPONSE 30: The specific health-based standards or guidance levels employed in evaluating the potential emissions include the National Ambient Air Quality Standards (NAAQS); TCEQ standards contained in 30 Texas Administrative Code (30 TAC) Chapter 111, specifically 30 TAC § 111.155 and 30 TAC § 112.3; and TCEQ Effect Screening Levels (ESLs).^{1,2}

NAAQS are created by the United States Environmental Protection Agency (EPA) and are set to protect sensitive members of the population such as children, the elderly, and individuals with existing respiratory conditions. The NAAQS, as defined in the federal regulations (40 C.F.R. § 50.2), include both primary and secondary standards. The primary standards are those which the Administrator of the EPA determines are necessary, with an adequate margin of safety, to protect the public health, including sensitive members of the population such as children, the elderly, and individuals with existing lung or cardiovascular conditions. Secondary NAAQS are those which the Administrator determines are necessary to protect the public welfare and the environment, including animals, crops, vegetation, and buildings, from any known or anticipated adverse affects associated with the presence of an air contaminant in the ambient air. The standards are set for criteria pollutants: ozone, lead, carbon monoxide, sulfur dioxide, nitrogen dioxide, and respirable particulate matter (PM). "Criteria pollutants" are those pollutants for which a NAAQS has been established.

In addition to complying with the federal and state standards and guidelines mentioned above, applicants must also comply with 30 TAC § 101.4, which prohibits nuisance conditions. Specifically the rule states, "No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration

¹ To view the ESL list or obtain more information on ESLs, visit the TCEQ website at http://www.tceq.state.tx.us/implementation/tox/esl/list_main.html.

² Documents referenced in this response that are available on the TCEQ website are also available in printed form at a small cost from the TCEQ Publications office at 512-239-0028.

and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.” As long as the facility is operated in compliance with the terms of the permit, nuisance conditions or conditions of air pollution are not expected.

In summary, based on the potential concentrations reviewed by the Executive Director’s staff, it is not expected that existing health conditions will worsen, or that there will be adverse health effects in the general public, sensitive subgroups, or animal life as a result of exposure to the expected levels of PM, PM₁₀, SO₂, NO_x, CO, or volatile organic compounds.

Individuals are encouraged to report any concerns about nuisance issues or suspected noncompliance with terms of any permit or other environmental regulation by contacting the TCEQ Regional Office at 817/588-5800, or by calling the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186. If the facility is found to be out of compliance with the terms and conditions of the permit, it will be subject to possible enforcement action. Citizen-collected evidence may be used in such an action. See 30 TAC § 70.4, Enforcement Action Using Information Provided by Private Individual, for details on gathering and reporting such evidence. The TCEQ has long had procedures in place for accepting environmental complaints from the general public but now has a new tool for bringing potential environmental problems to light. Under the citizen-collected evidence program, individuals can provide information on possible violations of environmental law and the information can be used by the TCEQ to pursue enforcement. In this program, citizens can become involved and may eventually testify at a hearing or trial concerning the violation. For additional information, see the TCEQ publication, “Do You Want to Report an Environmental Problem? Do You Have Information or Evidence?” This booklet is available in English and Spanish from the TCEQ Publications office at 512-239-0028, and may be downloaded from the agency website at www.tceq.state.tx.us (under Publications, search for document no. 278).

COMMENT 31: To improve issues relating to emission release events and to improve air quality in the area, the permit should be revised by changing the 12-month rolling average to a 30-day rolling average for all emissions. A 12-month rolling average allows TXI to be law in operation in results in excessive emission releases in quantities which are dangerous to the public. (Irvin Uphoff)

RESPONSE 31: The rolling 12-month average is the standard by which compliance is demonstrated for the annual ton per year emission rate; however, there are performance and regulatory emission rates that may be more stringent. For example, NO_x is calculated on a 30- day and SO₂ on a 3-hour rolling average. If one emission rate limitation is more stringent than another emission rate limitation, then the more stringent limitation shall govern and be the standard by which compliance will be demonstrated. Owners and operators of permitted facilities must comply with all of the emission requirements of their permits to be considered in compliance. The scope of a renewal application is limited by law, as discussed in Response 10 above.

COMMENT 32: To improve issues relating to emission release events and to improve air quality in the area, the permit should be revised by changing condition 22.C(8) from 15 days to five days for repairing leaks in pumpable (waste-derived) fuel and/or clinker quench wastewater piping/storage systems. Allowing any size leaks to continue for 15 days is absolutely absurd and allows TXI to continue to abuse the environment while reducing operating costs. (Irvin Uphoff)

RESPONSE 32: The fugitive monitoring condition in Special Condition 22.C.(8) addresses repair of piping connections, pumps, and other components used to convey the liquid hazardous waste fuel from the point it is unloaded to injection into the kiln. Up to 15 days are allowed to repair a component because there may be a need to order replacement parts. This does not mean that the leak may continue for 15 days. If a visible leak of waste-derived fuel occurs, Special Condition 22.C.(11) requires that within an hour, the leaking component must be isolated (flow through it stopped), and any leaked fluid must be collected and disposed of in a manner that prevents further emissions to the atmosphere. The scope of a renewal application is limited by law, as discussed in Response 10 above.

COMMENT 33: Commenter submitted a copy of a petition from a lawsuit she filed against TXI and others on March 12, 2008 which included causes of action regarding trespass, temporary nuisance, negligence and gross negligence, seeking an unspecified amount of damages. (Debra Markwardt)

RESPONSE 33: The TCEQ acknowledges receipt of this comment, but does not have a position regarding litigation between third parties.

CHANGES MADE IN RESPONSE TO COMMENT

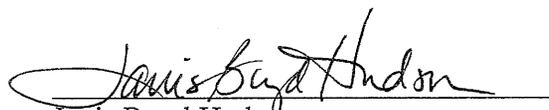
No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Mark R. Vickery, P.G.
Executive Director

Robert Martinez, Director
Environmental Law Division

A handwritten signature in cursive script, reading "Janis Boyd Hudson", is written over a horizontal line.

Janis Boyd Hudson
Environmental Law Division
State Bar Number 10157400
P. O. Box 13087, MC 173
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512/239-0466
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Group A

1. Leon & Janean Baker
2. Rick & Mary Beaty
3. Elizabeth Anne Booth, MD
4. Karl Bradford
5. Suellen & Sam Brasfield
6. Sandra Breakfield
7. Rick Breckenridge
8. Annette Briggs
9. Drew Brown
10. Mahesh Brown
11. Kara Browne
12. Joan M Burnard
13. William M Burnard
14. Janine Byard
15. Parks & Christie Campbell
16. Ken Chambers
17. Kay Christlieb
18. Kenneth & Kathy Chruscielski
19. Rita Wells Clarke
20. Melanie Clifton
21. Amanda & Bryan Coley
22. Kim Collie
23. Paulette Cooper
24. Kim Davis
25. Dawn Davison
26. Anna Deselle
27. Julie A. Dill
28. Connie Domingue
29. James Domingue
30. Barbara A. Downey
31. Richard Durham
32. Randie Ellis
33. H. D. Ellison
34. Billie Kay Fields
35. Becky & Dan Folwer
36. Patricia & Ronald Gant
37. Jennifer Garcia
38. Tama & Brian Garrison
39. Lois & Stanley Colman
40. Elaina Gross
41. Marilyn M Guenther
42. Nidiam Haas
43. Regina B. Hall
44. Wayne & Candy Halliburton
45. Maralyn Hamaker
46. Bonnie Harllee
47. Sara Harllee
48. Walt Harrison
49. Hastings
50. Michaelynn Hawkins
51. Phillip G. Hennen & Myra Z. Waldrop
52. George T Hill
53. Susan Catherine Hilton
54. Bonnie Hoffman
55. Brian Hoffman
56. Stephanie Hoffman
57. Cynthia Hollins
58. Elisa Hopewell

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|-----|------------------------|------|----------------------------|
| 59. | Floyd T Hopkins | 90. | Howard S. Mims III |
| 60. | Janet Gray Hopkins | 91. | Jorge Misium |
| 61. | Carole Ann Hoppenstein | 92. | Diane Mitschke |
| 62. | John Huffman | 93. | Chris & Eileen Moore |
| 63. | Charlotte Hyams Ph.D | 94. | Sarah Moore |
| 64. | Linda Walsh Jenkins | 95. | Ethel Nelms |
| 65. | Jess Jessen | 96. | Sheri Nelson |
| 66. | Robert Johnson | 97. | Chris & Angela Nichols |
| 67. | Taylor Jones | 98. | Lylyan Nobles |
| 68. | Paul G. Kalich | 99. | Paula & Willem Noteboom |
| 69. | Kerrie Kimberling | 100. | Marsha Paisley |
| 70. | Daniel Kocurek | 101. | Anita Patterson |
| 71. | Leslie C. Kuhn | 102. | Lorie Peniche |
| 72. | Marilyn Kuss | 103. | Amelia S. Perez |
| 73. | Kelly Lane | 104. | John L. Peroyea |
| 74. | Lewis Lee | 105. | Carolyn Beyer Pickle |
| 75. | Deborah Lemoine | 106. | Donna Piercy |
| 76. | Katherine Liddle | 107. | Harriet Plaskoff |
| 77. | Lou Ann Ligon | 108. | Suzanne Pope |
| 78. | Cindy Little | 109. | Janet Kay Powerll |
| 79. | Eva Lloyd | 110. | Annabel Qualls |
| 80. | Jody Luckie | 111. | James & Joann Ranton |
| 81. | Samantha Luckie | 112. | Harriet Raskin |
| 82. | Rebecca Marin | 113. | Gina Raybourn |
| 83. | Kassi & Toby Marks | 114. | William Redding |
| 84. | Raymond Massey | 115. | Mary Anne Mayer Redmond |
| 85. | Cathy Mathia | 116. | Allen Reed |
| 86. | Hallie Mathia | 117. | Jacinto Reyes |
| 87. | Joseph Mathia | 118. | John Reyes and Kathy Reyes |
| 88. | Ann McFadyen | 119. | Patricia Reyes |
| 89. | Louanne D. McGhee | 120. | Sam Rodgers |

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|------|--------------------------|------|---------------------------|
| 121. | Elizabeth Rodzinsky | 141. | Marilyn Tonkon |
| 122. | Sharon L. Ross | 142. | Judith M. Townes |
| 123. | Ken Sambell | 143. | Gary Treider |
| 124. | Jan Sanders | 144. | Ann Trenton |
| 125. | Felix & Mary Saucedo | 145. | Giovanni Ulibarri |
| 126. | Richard & Sharon Schoech | 146. | Sandy Ward |
| 127. | Robert & Tyda Shields | 147. | Charles & Susan Waskey |
| 128. | Tami Slater | 148. | Mark & Linda P. Wassenich |
| 129. | Alisha Smith | 149. | Richard L. Wasserman |
| 130. | Edward & Carol A. Soph | 150. | Thomas Watts |
| 131. | Dora R. & Edgar R. Stahl | 151. | Lee Ann White |
| 132. | Patricia Stella | 152. | Judith Wood |
| 133. | Mary Stevenson | 153. | Jonna Woodburn |
| 134. | Carl J. Stone | 154. | Robert Woodburn |
| 135. | Joan Susman | 155. | Brad & Laurie Young |
| 136. | Darrel Susmon | 156. | Debora Young |
| 137. | Steven Sverdlik | 157. | Don Young |
| 138. | Dean Thomas | 158. | Cathy Zelzer |
| 139. | Mr. & Mrs. R. Thomas | 159. | George Zimmerman |
| 140. | Marta Tingdale | | |

Group B

1. Alice Alvarado
2. Linda Bostic
3. Don & Peggy Campbell
4. Stan Campbell
5. Albert R. Cullins
6. Ronnie & Patricia Dunklin
7. Veronica Estrada
8. Cynthia & Mike Griffith
9. Barbara Holley
10. Rhonda Laudermilk
11. Carolyn & Bobby D. Lee
12. Alicia Melo
13. Ned & Norma Newsom
14. Robin D. O'Byrne
15. Jose & Jennifer Ochoa
16. Sandra D. Sanford
17. Ann K. Sears
18. Jack E. Snider