

June 8, 2015

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VIA HAND DELIVERY

Bridget Bohac, Office of the Chief Clerk
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building F, Room 1101
Austin, Texas 78753

Re: Docket No. 2015-0566-AIR
Applicant Navasota North Country Peakers Operating Company I LLC's Response to
Hearing Requests Received by TCEQ regarding Application for Air Quality Permit No.
121051 and PSD-TX-1418

CHIEF CLERK'S OFFICE

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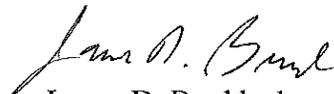
CONFIDENTIAL

Dear Ms. Bohac:

Enclosed for filing in the referenced and numbered matter is the original and seven copies of Applicant Navasota North Country Peakers Operating Company I LLC's Response to Hearing Requests Received by TCEQ regarding Application for Air Quality Permit No. 121051 And PSD-TX-1418.

A copy of this Response is being served on the persons identified at the end of the Response by the method indicated. Also enclosed is one additional copy which we request be file-stamped and returned to the courier making this delivery.

Very truly yours,


James D. Braddock

Enclosures

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APPLICATION OF
NAVASOTA NORTH COUNTRY
PEAKERS OPERATING COMPANY I LLC
FOR TCEQ AIR QUALITY
PERMIT No. 121051 and PSD-TX-1418

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BEFORE THE
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

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CHIEF CLERK'S OFFICE

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

APPLICANT NAVASOTA NORTH COUNTRY PEAKERS OPERATING
COMPANY I LLC'S RESPONSE TO HEARING REQUESTS RECEIVED BY TCEQ
REGARDING APPLICATION FOR
AIR QUALITY PERMIT NO. 121051 AND PSD-TX-1418

TO THE COMMISSIONERS OF THE TCEQ:

NAVASOTA NORTH COUNTRY PEAKERS OPERATING COMPANY I LLC ("Navasota") requests that the Texas Commission on Environmental Quality ("TCEQ") issue the referenced permit without a contested case hearing because, as discussed more fully below: (1) the application satisfies all requirements for permit issuance and the only timely filed hearing requests, most of which clearly are one or more "fill in the blanks forms," did not comply with applicable TCEQ regulations; (2) the requesters did not identify relevant and material disputed issues of fact or law raised during the public comment period; and (3) the requesters did not demonstrate that they are affected persons under TCEQ rules -- conservatively predicted emission impacts on requesters' residences are in all instances less than 1/20 of applicable ambient air quality standards and TCEQ's protective effects screening levels (ESLs). Further, the hearing requesters whom modeling predicts would receive the highest concentration of air contaminants acknowledge that the proposed plant will "meet limits"; their complaints thus appear to be with the TCEQ's standards and not with whether Navasota's application satisfies those standards.

Below Navasota provides the procedural background for this matter, summarizes its position, and then discusses it. In that discussion, Navasota describes the proposed plant and its emissions, identifies and evaluates the requests for hearing, and provides its response to those requests.

I. PROCEDURAL BACKGROUND

On June 23, 2014, Navasota filed an application with the Texas Commission on Environmental Quality ("TCEQ") for Air Quality Permit No. 121051 and PSD-TX-1418. The permit will authorize the construction of the Van Alstyne Energy Center, a natural gas-fired simple cycle peaking power generation plant located approximately 3.5 km east of Van Alstyne, Grayson County, Texas. The plant itself will be near the middle of a 52 acre tract of land on Ballard Road, approximately 1.4 miles east of the intersection of Ballard Road and South Sherman Street.

The Executive Director declared the application administratively complete on July 1, 2014. Navasota published its Notice of Receipt of Application and Intent to Obtain an Air Quality Permit on July 11, 2014 in the Van Alstyne Leader and Herald Democrat, a newspaper of general circulation in the City of Van Alstyne and Grayson County, Texas. Following completion of the Executive Director's technical review, Navasota published its Notice of Application and Preliminary Decision (to issue the permit) and Notice of Public Meeting on December 26, 2014 in the Van Alstyne Leader and Herald Democrat. The Public Meeting was held on January 13, 2015 in Sherman, Texas. The Executive Director's Response to Public Comment was filed with the Chief Clerk on April 13, 2015.

On May 27, 2015, the TCEQ Chief Clerk issued notice that the Commissioners of the TCEQ would consider the application and any timely filed hearing requests at their July 1, 2015

meeting. The Chief Clerk's May 27, 2015 notice identified the persons who the Chief Clerk determined filed hearing requests.

II. SUMMARY OF POSITION

A. Based upon the facts, none of the hearing requesters have demonstrated, nor can they demonstrate, that they have valid and approvable hearing requests.

1. The maximum predicted concentrations of emission of air contaminants from the proposed plant at all hearing requester's identified locations are less than 1/20 of applicable TCEQ regulatory standards and protective ESLs;

2. The hearing requesters whom modeling predicts would experience the highest concentrations (Brent and Virginia Kennedy, Mike and Delanna Mitchell, Chrissy Marie Koth and Brittany Nettles), as well as many other hearing requesters, acknowledge that the Navasota's emissions will meet limits;

3. All of the hearing requesters' assertions of concerns provide only a broad general complaint regarding possible adverse effects based, if anything, solely on general statements regarding what types of effects those air contaminants can have and not based upon analysis of the emission limits in the draft permit;

4. Navasota's detailed expert scientific analysis, performed in a manner consistent with commonly accepted, conservative practices, demonstrates that even the worst-case concentrations of emissions from the plant will be protective of the health and environment.

B. Navasota's application for permit satisfies all requirements for approval, as evidenced by the Executive Director's preliminary decision and response to comments, and should be approved without a hearing.

III. DISCUSSION

A. The Proposed Plant and Its Emissions

Navasota is seeking permission to construct and operate a 543 MW natural gas-fired simple cycle electric generating plant. Electricity will be generated from three combustion turbine generators. The plant is designed to be operated as a peaking power plant. Peaking power plants operate primarily during times when the electrical grid is experiencing high “peak” demand and to provide back-up generation in the event another facility trips off-line. The periods of highest electrical demand occur mostly during hot summer afternoons. As a peaking power plant, its units will be limited to 2,500 hours of operation per year. Peaking facilities such as the proposed Van Alstyne Energy Center support the continued and expanded use of clean, renewable electric generation. These units help maintain the integrity of the electrical grid by providing quick start-up capabilities and additional generation during periods of high demand. Peaking plants also complement the supply variability of renewable generation facilities such as wind and solar generation by quickly providing power when the wind generation decreases and solar generation is reduced due to a lack of sunshine. Furthermore, the addition of new highly efficient peaking units allow for the retirement of older, less efficient generating units.

As the application demonstrates and as the TCEQ’s Executive Director’s review confirms, emissions from the plant will comply with all applicable rules and regulations, including those pertaining to both emission controls and air quality impacts. The plant will meet or exceed the requirements of best available control technology (“BACT”) for all air contaminants, including use of dry-low NOx combustors, advanced burner design, good combustion practices, and clean fuels. As discussed in this Response, the dispersion modeling shows that at all of the residences of the hearing requesters the worst case potential maximum

expected concentrations of all air contaminants from the proposed plant are less than 1/20 of applicable air quality standards and protective ESLs set by the Executive Director. All standards for permit issuance, including those unique to the Prevention of Significant Deterioration (“PSD”) program, also are satisfied.

Attachment A, the affidavit of Thomas Pritcher, Navasota’s environmental consultant, includes a table and maps of the projected concentrations of air emissions from the plant at and beyond the closest properties and a detailed explanation of the methodologies and conservative assumptions he used to develop those data. Attachment B, an affidavit from Dr. Thomas Dydek, a highly experienced toxicologist, explains, based on those data, that the requesters have not demonstrated, and do not have a basis to demonstrate, that emissions from the plant will have a significant impact on their health or welfare, let alone any adverse effect.

B. THE REQUESTS FOR HEARING

There were three periods for requesting a contested case hearing on the application. The first was following publication of the Notice of Receipt of Application and Intent to Obtain Permit. The following persons submitted hearing requests (the Group 1 requests) during the first period:

Rita J. Beving (on behalf of the Dallas Sierra Club)
Pamela Boddie
Brent Kennedy
Virginia Kennedy
Chrissy Marie Koth
Bobby McKee
Martha McKee
Delanna Mitchell
Michael R. Mitchell
Christopher Scott Moreno
Brittany Nettles
Rebecca A. Rodriguez
Brad Spence

Tracy Spence
Lori Jean Williams

The second thirty day period for contested case hearing requests followed publication of the Notice of Application and Preliminary Decision. The following persons submitted hearing requests (the Group 2 requests) during the second period:

Christy Bryant
Jeffrey A. Farley
James Firtos
Emily Franklin
Donna Franus
Theresa Green
Kelly & Frank Herndon
Brent Kennedy
George & Mollie Kennemer
Delanna Mitchell
Michael R. Mitchell
Christopher Scott Moreno
Charles Netherlain
Velynda Short
Amanda Stromquist
Lori Jean Williams

The third thirty day period for contested hearing requests occurred following issuance of the Executive Director's Response to Public Comments. The following persons submitted hearing requests (the Group 3 requests) during the third period:

Brent Kennedy
Virginia Kennedy
Chrissy Marie Koth

C. STANDARDS FOR REQUESTS FOR HEARING

TCEQ Rule Section 55.20(d)¹ sets forth the requirements for the form of hearing requests that requesters must demonstrate substantial compliance with. For individuals, the request must include the name, address and daytime telephone number of the person making the request. The request must identify the person's justiciable interest affected by the application and include a specific written statement explaining the requester's location and the distance relative to the subject of the application, and how and why they believe they will be affected by the activity in a manner not common to members of the general public. For an association, the request must identify one person by name, address, daytime telephone number, and, where possible, fax number, who shall be responsible for receiving all official communications and documents for the group.

There must be a specific request for a contested case hearing and the request must include any other information specified in the public notice of the application. The public notices of the application, which Navasota published, reiterated in bold-faced type, that "a hearing request must include: (1) your name, . . . mailing address, daytime phone number, and fax number, if any; (2) applicant's name and permit number; (3) the statement "I/we request a contested case hearing"; (4) a specific description of how you would be adversely affected by the application and air emissions from the facility in a way not common to members of the general public; (5) the location and distance of your property relative to the facility; and (6) a description of how you use the property which may be impacted by the facility."

1. The Group 1 Requests

¹ All TCEQ Rules are in 30 Texas Administrative Code but will be cited in the Response simply by reference to the TCEQ Rule, Section number.

All of the Group 1 requesters failed to demonstrate that they are affected persons. None of them provided anything other than boilerplate statements that the types of contaminants that would be emitted from the proposed plant may cause harm. None of them offered any credible information to support the position that the combustion of natural gas in the proposed plant, a combustion process which routinely occurs in numerous residences and commercial structures, could have any impact on their health and safety or the use of the property. The requesters have now had over eleven months to examine the application and over five months to examine the air quality analysis and draft permit. Yet they have offered TCEQ only unsupported general conclusions. By contrast, Navasota provides expert scientific analysis by experienced professionals that demonstrates that none of the requesters, including those in Group I, will experience any adverse impacts from contaminants from the proposed plant. Below is an analysis of the merits of individual requesters' submissions.

Mike and Delanna Mitchell reside at the same address. Their property generally should experience the highest concentrations of any contaminant for longer averaging time periods compared to the other properties identified in the hearing requests. Significantly, Mike and Delanna Mitchell both acknowledged in their hearing requests that the plant will meet applicable limits: "Certainly, myself, neighbors and even Navasota realize that alone these pollutants, at most of the time, are within permit limits; however, when together [sic] will likely exceed tolerable limits elevating the above impact." (Delanna Mitchell); and "I am aware that these pollutants likely will be "within limits"; nonetheless, they alone and in combination pose threats to myself and my loved ones health." (Mike Mitchell). It is clear that their complaints and allegations go not to the issue of whether the proposed plant will meet the limits and standards for issuance of the permit but rather to the issue of whether the limits and standards are

appropriate -- an issue for legislation or rule development, not for a contested case hearing on a permit application where the only legally valid matter for consideration is whether the proposed plant will meet applicable standards and limits.

The request filed by Rita Beving on behalf of the Dallas Sierra Club requests a public hearing, not a contested case hearing and, therefore, need not be considered. Moreover, most of the comments in the request are regarding non-Dallas Sierra Club residents in the area and there is no indication that those unnamed residents are members of, or authorized, the Dallas Sierra Club to represent their interests. Nor did Ms. Beving provide any documentation of her authority to represent Dallas Sierra Club. With regard to the Dallas Sierra Club itself, the request provides no information to demonstrate that they meet any of the criteria in TCEQ rules for evaluating associational standing. Pursuant to TCEQ Rule Section 55.205(b), Navasota requests that the Dallas Sierra Club explain how it meets the requirements of TCEQ Rule Section 55.205(a) and document how Ms. Beving was authorized by the Dallas Sierra Club to request a hearing at the time the request was filed.

The other Group 1 hearing requests also have deficiencies. Rebecca Rodriguez's hearing request does not identify the location of the property and complains that emissions will affect a future use of the property that apparently has not progressed beyond "planning" in over two years. Lori Jean Williams's hearing request states that she does not live in the area and her only personal interest is that she and her family visit her brother and family who do live in the area. Brent and Virginia Kennedy share the same address and submitted substantially similar requests. Like Mike and Delanna Mitchell, their requests use language indicating that their concern is with the adequacy of the TCEQ limits and standards and not with whether the application satisfies those standards: "Though all of these pollutants are at various limits within the permit, the health

risks they pose to my health is unacceptable.” Brittany Nettles hearing request acknowledges but does not take issue with Navasota’s statements that “emissions will be within the permit allowances by the TCEQ and the EPA.” Modeling demonstrates that Ms. Nettles and the Kennedys generally should experience the highest concentrations of any contaminant for the shorter averaging time periods. Like the Mitchells and the Kennedys, Ms. Nettles’s complaint is with the standards for permit issuance and not with whether the Navasota application meets those standards.

Christopher Scott Moreno expresses concerns about the impact of emissions on his family and pets, citing generally available information about some of the contaminants to be emitted, but he does not identify or assert that the contaminants will adversely affect his family or pets. Chrissy Marie Koth’s hearing request expresses concerns about her health and property, but uses the exact same language (and uses the same address) as Brent and Virginia Kennedy do; her concern too is with the standards and not whether the application meets the standards: “Though all of these pollutants are at various limits within the permit, the health risks they pose to my health is unacceptable.” Bobby and Martha McKee have the same address and identified similar concerns without providing any support other than general statements about what harm these types of contaminants can do, but not providing any information on how the levels to be emitted from the Navasota plant could result in adverse effects. And, like so many of the other requesters, Bobby and Martha McKee make clear in their requests that they are complaining about the permit standards, not about whether Navasota will meet those standards: “I understand the emissions may be within the various limits permitted, the health risks to my health, my grandchildren's health, my pets, and crops are unacceptable.” (Martha McKee); and “Even though all of these pollutants are at various limits within the permit, the health risks they pose to

myself and family's health is totally unacceptable." (Bobby McKee).

Brad and Tracy Spence sent in identical hearing requests. Their requests primarily reference concerns about their immediate family and relatives, reference general information about the contaminants to be emitted, and make a general and unsubstantiated statement that the plant would be a definite hazard. Pamela Boddie's hearing request stated only that she wanted a hearing, not a contested case hearing as specified in the public notice and TCEQ rules. She cites a number of concerns that are not within TCEQ's jurisdiction (noise, light) and the only adverse health effects she alleges are to her "grandchilds [sic] asthma" (no statement whether the grandchild resides at her residence) and to her "disabled spouse due to . . . air."

2. The Group 2 Requests

Many of the persons in Group 1 are also in Group 2. They include Brent Kennedy whose second request references concerns regarding the modeling and the lack of "long term studies on the effects on Air Quality" of other gas-fired power plants. He also expressed concerns about the impact the emissions will have on his livestock and his health and that of his mother who lives with him. Mike and Delanna Mitchell filed identical hearing requests that provide no information regarding their concerns and did not mention air pollution; the only substantive statement in the requests was: "Due to the close proximity to the planned site." Christopher Scott Moreno's second hearing request simply provided that he lives one mile from the proposed plant site and that he believes the "toxic" emissions will affect the quality of life. Lori Jean Williams submitted a second hearing request that addressed none of the requirements for a valid hearing request other than requesting a contested case hearing.

There are persons in Group 2 who filed hearing requests for the first time. Those requests also are deficient. Emily Franklin's request stated that she and her husband requested a

contested case hearing, that they live in Anna, Texas, within 4 miles of the proposed site, and that their family's health would be in "imminent danger" from fine particulate matter. Donna Franus stated she lives within three miles of the plant and provides the same claim as Emily Franklin regarding "imminent danger" from fine particulate matter. Theresa Green stated that she lives two miles from the proposed plant site and provided the same comments as Emily Franklin and Donna Franus. James Firtos also provided the same comments except he did not identify his distance from the proposed plant.

Kelly and Frank Herndon filed a hearing request stating that they live within five miles of the proposed plant site; the remainder of their request is substantively the same as the Franklin, Franus and Firtos requests. George and Mollie Kennemer filed a hearing request that is substantially the same, noting that they live within five miles of the proposed plant site. Charles Nertherlain's hearing request is also the same and states that his family lives within two miles of the proposed plant site. Amanda Stromquist filed a substantially similar hearing request stating that she lives within three miles of the proposed plant site.

Christy Bryant identified her address as Anna Texas and asserted only that she was affected because she lived "close" and will be affected by the air emissions. Jeff Farley's request did not address any of the standards for hearing requests other than to state that he requested a contested case hearing. Finally, Velynda Short apparently filed the same hearing request twice. The second, filed January 30, 2015, is untimely and should not be considered. The first request is timely and states that she lives three and a half miles south of the site. It asserts her concerns that particulates and "toxins" will adversely affect her health, the health of her farm animals, and vegetation on her property, but provides no basis or support for her opinion that those alleged adverse effects could actually occur.

3. The Group 3 Requests

There were no new persons requesting a hearing in the Group 3 requests. Chrissy Marie Koth filed two hearing requests identifying her location, identifying concerns about effects on her health and livestock, and providing an unsupported assertion that the federal government has determined that Navasota's stated emissions would not be safe. Virginia and Brent Kennedy each filed a hearing request with the same assertions as Chrissy Marie Koth.

Since none of the hearing requests meet the Rule 55.201(d) standards for requesting a contested case hearing, there is no basis for calling a hearing. The permit should be issued.

D. RESPONSE TO THE HEARING REQUESTS

Although, for the reasons stated above, we believe that there are no valid requests for a contested case hearing, we have set forth below a response to those requests identified by the Chief Clerk. This response demonstrates that even if those letters are considered to be valid requests for a hearing, they fail to meet the TCEQ standards for the granting of a hearing. Among other things, requesters offer no scientific evidence in support of any their general assertions that emissions from the plant will adversely affect them. They offer only broad generalizations that the air contaminants are "bad," even though the air contaminants at issue are being generated by the combustion of natural gas, a process which occurs in residences and commercial establishments in addition to industrial processes such as a power plant. The supporting documentation in the administrative record and included with this brief clearly demonstrates that emissions from the plant will not adversely affect human health and the environment.² Further, scientific analysis, consistent with TCEQ rules and practices, leads to the

² Consistent with SB709 (Act of , May 13, 2015 84th Leg. R.S. S.B. 709) which has passed the

conclusion that none of the hearing requestors have demonstrated, nor can they demonstrate that they are affected persons. For all these reasons, all hearing requests should be denied, the Executive Director's response to comments should be adopted, and the requested permit should be issued.

1. Standards for Valid Contested Case Hearing Request

TCEQ Rules, Chapter 55, Subchapter F, provide the standards for contested case hearing requests. Those rules direct that the hearing request substantially comply with the following: give the name, address, daytime telephone number, and, where possible, fax number of the person who files the request; identify the requester's personal justiciable interest affected by the application showing why the requester is an "affected person" who may be adversely affected by the proposed facility or activity in a manner not common to members of the general public; request a contested case hearing; list all relevant and material disputed issues of fact that were raised during the comment period that are the basis of the hearing request; and provide any other information specified in the public notice of application.³

An "affected person" is "one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application."⁴ An interest common to the general public is not a personal justiciable interest.⁵ The relevant factors in determining whether a person is affected include:⁶

Legislature and been signed by the Governor, but is not yet in effect, the administrative record further demonstrates, and there has been no controverting evidence presented, that a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.

3 30 TAC §55.201(d).

4 30 TAC §55.203(a).

5 *Id.*

6 30 TAC §55.203(c).

- (1) whether the interest claimed is one protected by the law under which the application will be considered;
- (2) distance restriction or other limitations imposed by law on the affected interest;
- (3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
- (4) likely impact of the regulated activity on the health, safety, and use of property of the person;
- (5) likely impact of the regulated activity on use of the impacted natural resource by the person; and
- (6) for governmental entities; their statutory authority over or interest in the issues relevant to the application.

For an association, TCEQ rules specify additional standing requirements:⁷

- (1) one or more members of the group or association would otherwise have standing to request a hearing in their own right;
- (2) the interests the group or association seeks to protect are germane to the organization's purpose; and
- (3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

Under the pertinent rules, the Commission is to grant an affected person's timely filed hearing request if: (1) the request is made pursuant to a right to hearing authorized by law; and (2) the request raises disputed issues of fact that were raised during the comment period and that are relevant and material to the commission's decision on the application.⁸ Recent case law has construed the TCEQ's authority and responsibility in determining whether a requester is an affected person. The relevant holdings from that case law support Navasota's position.

In *Sierra Club v. Texas Commission on Environmental Quality and Waste Control Specialists (Sierra Club)*,⁹ the court reviewed a TCEQ determination of affected person under the

7 30 TAC 55.205(a).

8 30 TAC § 55.211(c) (2).

9. *Sierra Club v. Texas Commission on Environmental Quality and Waste Control Specialists* 455 S.W.3d 214 (Tex. App. 2014) *pet. filed*.

wording of TCEQ Rule, Section 55.256, which applies to certain other TCEQ permitting programs, but is substantively identical to the wording in TCEQ Rule, Section 55.203, which applies to the Commissioner's consideration of this permit application. In its opinion, the court confirmed that the TCEQ:

enjoys the discretion to weigh and resolve matters that may go to the merits of the underlying application, including the likely impact the regulated activity . . . will have on the health, safety, and use of property by the hearing requester . . . See 30 Tex. Admin. Code 55.256(c); *City of Waco* S.W. 3d at 420-21 (describing these evidentiary items as relevant to inquiry and holding that there was evidence in record to support TCEQ's determination).¹⁰

The *Sierra Club* court also identified the types of information the TCEQ may consider in making its determination of whether a person is an "affected person": "TCEQ's inquiry . . . may include reference to the permit application, attached expert reports, the analysis and opinions of professionals on its staff and any reports, opinions, and data it has before it."¹¹ In *Sierra Club*, TCEQ relied upon modeling and the court specifically referenced that modeling as a basis for upholding the TCEQ's decision not to grant the hearing requests. The *Sierra Club* opinion clearly provides that contested case hearing requests should be subject to "deeper inquiry, especially into any matters that go to the underlying merit of the license."¹² Further, TCEQ may evaluate and resolve factual disputes regarding issues associated with the contested case hearing request and rely upon expert reports and opinions and data in that evaluation.

In *TCEQ v. City of Waco*¹³ (the case cited in the *Sierra Club* quotes above), the Texas Supreme Court, in evaluating a decision by the TCEQ regarding whether a person was an

¹⁰ *Id* at 223-24.

¹¹ *Id* at 224.

¹² *Id* at 221.

¹³ *TCEQ v. City of Waco* 413 S.W.3d 409 (Tex. 2013).

“affected person,” acknowledged the Court of Appeals’ reasoning in that case that the constitutional principles regarding standing in litigation apply to the TCEQ’s determination of “affected person.” Applying those constitutional principles, to have standing, a person must: “establish a concrete and particularized injury in fact, not common to the general public, that is: (1) actual or imminent; (2) fairly traceable to the issuance of the permit as proposed; and (3) likely to be redressed by a favorable decision on its complaint.”¹⁴

2. Standards for Responses to Hearing Requests

TCEQ Rule, Section 55.209(e), directs that responses to hearing requests address:

- (1) whether the requester is an affected person;
- (2) which issues raised in the hearing request are disputed;
- (3) whether the dispute involves questions of fact or law;
- (4) whether the issues were raised during the public comment period;
- (5) whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director’s response to Comment;
- (6) whether the issues are relevant and material to the decision on the application; and
- (7) a maximum expected duration for the contested case hearing.

3. Analysis of the Hearing Requests

a. The Hearing Requesters are Not Affected Persons

All of the individual requesters and the Dallas Sierra Club failed to satisfy the requirements of TCEQ rules, restated in the public notices which prompted their requests, to provide a specific, written statement on “how and why the requester believes he or she will be adversely affected by the proposed facility in a manner not common to members of the general public.”

¹⁴ *Id* at 420-421.

The personal justiciable interest standard is part of the definition of “affected person” and the burden is on requesters to demonstrate that they are an affected person. To have a personal justiciable interest, the requesters also must demonstrate that their interest is not common to the members of the general public, that a reasonable relationship exists between the interests claimed and the activity regulated, the likely impact of the regulated activity on their health and safety, and the likely impact of the regulated activity on use of the impacted natural resource.

The information in Attachment A, Mr. Pritcher’s affidavit, identifies the distance from combustion turbines to the residences of the requesters (including how the location of the hearing requesters was determined). Since the Dallas Sierra Club did not provide any information on the members it stated lived in Grayson County, there can be no distances provided for the Dallas Sierra Club.

Based upon the information provided, there are six hearing requester residences located within one mile of the turbines. TCEQ has considered a one mile distance as a factor in past evaluations of contested case hearing requests, but it is a guide and does not override a site specific review that focuses on the required determination - - whether the person’s exposure to the air contaminants is sufficient to make them an affected person. A power plant, such as that proposed by Navasota, combusts fuel at high temperatures and the hot exhaust gases exit via stacks at an extremely hot temperature and rapid air flow rate. These factors result in better dispersion of the air contaminants, compared to other types of plants that do not have significant combustion processes. Accordingly, downwind concentrations, even within one mile of the emission point, can be very low, particularly when good controls, including clean fuel such as natural gas, is used. And, in this case, Navasota has analyzed the possible impacts of air contaminants from the plant at the properties identified in the hearing requests. This analysis

demonstrates that there would be no adverse effects to health or property and that, in fact, predicted concentrations of all contaminants would be less than 1/20 of applicable standards and protective ESLs.

In Attachment A, Mr. Pritcher describes how he analyzed the results of computer dispersion modeling, using commonly accepted scientific techniques, to predict, based upon the emission rates in the draft permit, the worst case maximum concentrations of air contaminants that would occur at any point beyond the Navasota property boundaries and, specifically, at the location of the hearing requesters. The attachment also contains the results of modeling of air contaminants -- both NAAQS and significant toxic air contaminants that are addressed by TCEQ-established ESLs. As noted, the results of the modeling show that the maximum predicted concentrations are at least 20 times below the applicable regulatory standards and ESLs. As the Commissioners are aware, concentrations below an ESL should not have any adverse effect on human health or property, or other interests protected under the Texas Clean Air Act; concentrations above an ESLs would not necessarily have an adverse effect, but may be looked at more closely by the TCEQ to determine whether the permit may be approved. The concentrations here are a small fraction of applicable standards and ESLs and would not have an adverse effect or any other impact on the health or safety of the requesters or the uses of their properties, including animals and vegetation.

b. There are No Material or Relevant Issues Raised In The Hearing Requests

The requesters have failed to demonstrate that there is any disputed factual issue. They raised no disputes with the emissions in the draft permit, the modeling and predicted concentrations of those emissions, and Navasota and the Executive Director's conclusions that the emissions would comply with the Texas Clean Air Act requirements and all applicable air

quality rules. The Act and the air quality rules require that emissions of air contaminants must not be injurious to or adversely affect human health or welfare, animal life, vegetation or property or interfere with the normal use and enjoyment of animal life, vegetation or property. Both the Executive Director and Navasota have concluded, following detailed and exhaustive scientific review, that those standards will be achieved. Although several requesters asserted that their health, property, animal life, and welfare could be negatively impacted, they did not provide any basis, let alone a scientific basis, for their assertions and did not dispute any of the information that Navasota provided, and that the Executive Director reviewed and approved, that directly contradicts their assertions. In fact, the requesters whom modeling demonstrates would receive the highest concentrations of the air contaminants acknowledge that Navasota's emissions would "meet limits." Accordingly, from the administrative record as a whole, none of the requesters' concerns rise to the level of a disputed issue of fact.

c. The Disputed Issues If a Hearing Is Called

The requesters have not identified or even asserted that Navasota has failed to demonstrate that all of the standards for permit issuance will be met. To the contrary, many of them, including the persons who modeling predicts will experience the highest concentrations of air contaminants, acknowledge that the plant will meet TCEQ limits; they simply do not like the TCEQ's standards and limits. They have not disputed the conclusions that the proposed control technology meets TCEQ requirements, that the draft permit accurately represents the emissions that would come from the plant, and that those emissions would comply with all applicable rules and regulations. Accordingly, none of those issues are appropriate for referral for a contested case hearing. Although Navasota disagrees that a contested case hearing should be granted, should TCEQ refer the application for hearing, the only possible relevant and material factual

issue would be, for those requesters whom the Commissioners determine have valid and approvable hearing requests, whether the projected concentrations of those air contaminants identified in their hearing requests would be injurious to or adversely affect health or welfare, animal life, vegetation or property or interfere with the normal use and enjoyment of animal life, vegetation or property at the properties identified in those requests.

Given that any possible relevant and material issue of fact that could be referred for hearing is limited in scope, Navasota believes that the duration of the hearing should be no more than four months from the date the request for hearing is sent to the State Office of Administrative Hearings (“SOAH”).

IV. CONCLUSION

TCEQ Rule, Section 55.209(e), identifies the elements that should be addressed in a response to a hearing request. For the reasons set forth in this response, there are no valid hearing requests in this matter. Assuming, however, for the sake of argument, that there are valid hearing requests, the hearing requests should be denied. In summary and responsive to the subsections of TCEQ Rule, Section 55.209(e) that set forth the requirements for responses to hearing requests:

- (1) None of the requesters are affected persons;
- (2) The requesters have not raised any disputed issue. Navasota’s application generally demonstrates that emissions of all air contaminants would be in full compliance with all requirements of the Texas Clean Air Act, including the intent of that Act, and the applicable requirements of the TCEQ. Navasota’s application and the documentation in this brief specifically demonstrates that none of the requesters will be adversely affected by emissions from the plant because even predicted worst case maximum concentrations at requester’s

residences are less than 1/20 of applicable standards and protective ESLs. The requesters did not dispute, and provided no facts or basis for disputing, the conclusions of both the application and the Executive Director regarding the standards for permit issuance. Many of the requesters acknowledged that the permit would “meet limits.” Therefore, there are no disputed issues;

(3) Navasota agrees that all but one of the requesters’ comments were raised during the public comment periods, but disagrees that those comments constitute “issues;”

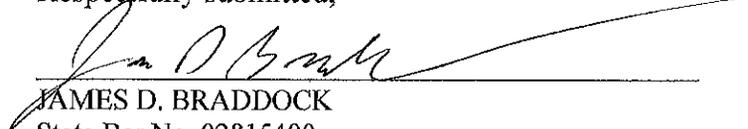
(4) There have been no comments withdrawn by the commenter in writing;

(5) To the extent that any requesters’ comments rise to the level of issues, the only issue that is relevant and material is whether the projected maximum concentrations of those air contaminants as contained in the air quality analysis submitted by Navasota and in the Executive Director’s preliminary decision, cited by those requesters whose hearing requests are granted, would adversely affect the health and welfare of people or animals on the subject property or any normal use and enjoyment of the property that was identified by its requester ; and

(6) If any of the requesters’ comments are determined to comprise an issue, as set forth in item (5) above, is an extremely limited issue.

Accordingly, although Navasota respectfully maintains that a contested case hearing is not warranted, should a hearing be called, the duration should be no longer than four months from the date of referral to SOAH.

Respectfully submitted,



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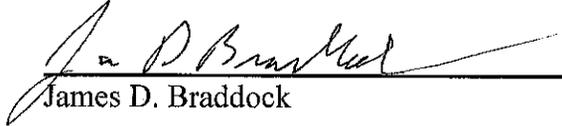
Telecopier: (512) 867-8691

**ATTORNEYS FOR APPLICANT NAVASOTA NORTH
COUNTRY PEAKERS OPERATING COMPANY LLC**

15191988_7

CERTIFICATE OF SERVICE

By my signature below, I certify that a copy of this response was served on the following individuals by the method indicated below, on June 8, 2015


James D. Braddock

FOR THE APPLICANT

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403 Corporate Woods
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Tel.: (281) 252-5202
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Via hand-delivery

Bridget C. Bohac
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Office of Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087
Tel.: (512) 239-3300
Fax: (512) 239-3311

REQUESTERS: (Via First Class Mail)

See attached list.

Rita J. Beving
Dallas Sierra Club
13214 Glad Acres Dr.
Farmers Branch, TX 75234-5201

Pamela Boddie
P.O. Box 250
Van Alstyne, TX 75495-0250

Christy Bryant
243 Lamont Rd.
Anna, TX 75409-5877

Jeffrey A. Farley
21 Stone Marshall Rd.
Van Alstyne, TX 75495-5114

James Firtos
60 Brad Ct.
Van Alstyne, TX 75495-3492

Emily Franklin
332 Carlyle St.
Anna, TX 75409-5899

Donna Franus
3969 FM 3133
Van Alstyne, TX 75495-8229

Theresa Green
60 Brad Ct.
Van Alstyne, TX 75495-3492

Kelly & Frank Herndon
239 Belford Street South
Anna, TX 75409-5892

Brent Kennedy
921 Willy Vester Rd.
Van Alstyne, TX 75495-2711

Virginia Kennedy
921 Willy Vester Rd.
Van Alstyne, TX 75495-2711

George & Mollie Kennemer
240 Belford St. S.
Anna, TX 75409

Chrissy Marie Koth
921 Willy Vester Rd.
Van Alstyne, TX 75495-2711

Bobby McKee
660 Willy Vester Rd.
Van Alstyne, TX 75495-2806

Martha McKee
660 Willy Vester Rd.
Van Alstyne, TX 75495-2806

Delanna Mitchell
P.O. Box 1241
Howe, TX 75459-1241

Michael R. Mitchell
P.O. Box 1241
Howe, TX 75459-1241

Christopher Scott Moreno
690 Ballard Rd.
Van Alstyne, TX 75495-5060

Brittany Nettles
890 Willy Vester Rd.
Van Alstyne, TX 75495-2708

Rebecca A. Rodriguez
798 Ballard Rd.
Van Alstyne, TX 75495-2743

Velynda Short
2960 Winding Oaks Trl.
Anna, TX 75409-6023

Brad Spence
1591 Ballard Rd.
Van Alstyne, TX 75495-2752

Charles Netherlain
114 Edwards Rd.
Van Alstyne, TX 75495-5060

Tracy Spence
1631 Ballard Rd.
Van Alstyne, TX 75495-2753

Amanda Stromquist
1813 Walnut Way
Anna, TX 75409-4546

Lori Jean Williams
5068 Theresa Dr.
Denison, TX 75020-2931

Attachment A

STATE OF NORTH CAROLINA §

COUNTY OF WILSON §

AFFIDAVIT OF THOMAS O. PRITCHER, P.E.

BEFORE ME, the undersigned, a Notary Public in and for said county and state, on this day personally appeared Thomas O. Pritcher, who, being by me duly sworn, upon his oath deposed and stated as follows:

My name is Thomas O. Pritcher. I am more than twenty-one (21) years of age, have never been convicted of a felony, and have personal knowledge of all facts stated in this Affidavit, which are true and correct.

I am a Senior Engineer III with Environmental Consulting & Technology, Inc. ("ECT"), a national environmental consulting firm. I am located in ECT's Raleigh, North Carolina office. I hold a Bachelor of Science (Agricultural Engineering) degree from Clemson University. I am a registered professional engineer in the State of North Carolina, the State of South Carolina and the State of Mississippi.

I have spent 22 years in the field of environmental consulting with an emphasis on air quality issues related to electrical generating facilities. My responsibilities have included preparing and supervising the preparation of air quality permit applications including calculation of emissions, determination of appropriate control technologies, dispersion modeling of emissions and determinations of compliance with air quality regulations.

I am familiar with and served as a lead for the project team that prepared Navasota North Country Peakers Operating Company I LLC's (Navasota's) Van Alstyne Energy Center (VAEC) application for Texas Commission on Environmental Quality (TCEQ) air quality permit Number 121051 and PSD-TX-1418. This application is for a natural gas fired peaking power plant to be located near Van Alstyne, Texas. The proposed plant's primary emission sources are three (3) natural gas-fired, simple-cycle combustion turbines.

Our project team's work on the VAEC application has included calculating expected emission rates and performing air dispersion modeling of emissions from the plant. An air dispersion model is used to estimate the ground level concentrations of air contaminants at varying distances from a source or sources of air contaminants. Information regarding the emission rates and location and parameters of the emission points, along with meteorological data, are inputs into the model, which then predicts the expected worst case concentrations of the air contaminants that might occur at specified receptors for specified time periods.

The modeling we performed on behalf of Navasota utilized the AERMOD model. This dispersion model is routinely used by the TCEQ and other regulatory agencies to provide a worst case prediction of off property concentrations of air emissions from a plant. The AERMOD model is inherently conservative (i.e., tends to over-predict impacts when compared to actual

monitored impacts) based on EPA design and has been proven to be conservative in model performance evaluations. One other area of conservatism relates to the assumption that a given emission unit is in operation at its maximum capacity during every hour of its authorized annual operating schedule. This assumption may be appropriate for certain types of facilities like manufacturing facilities that can operate at full capacity most of the time. However, in most cases, emissions are variable due to required load and, in the case of combustion turbines, changes in ambient temperature will create changes in emission rates. Thus, assuming a constant maximum emission value for each hour is overly conservative for facilities such as power plants that are not in operation all the time and that exhibit higher emission rates during very short periods of time (e.g., startup and shutdown). I, along with other ECT project team members, have extensive experience in using the AERMOD dispersion model.

The results of the dispersion modeling were submitted to the TCEQ in support of the VAEC application. The modeling report was reviewed and approved by the TCEQ modeling staff. Our project team's conclusions, agreed to by TCEQ's Executive Director, are the proposed project will not violate a National Air Quality Standard (NAAQS), cause an exceedance of the Prevention Significant Deterioration (PSD) increment, or have any adverse impacts on soils, vegetation, or Class I Areas. In addition, the modeling predicted maximum ground level concentrations of other contaminants will be substantially below the levels set in TCEQ rules or the applicable Effects Screening Level ("ESL"). Concentrations below an ESL should not result in adverse health or welfare effects; concentrations above an ESL do not mean that adverse health or welfare effects would necessarily occur. Please note that our modeling is based upon the assumption that all three turbines would be emitting at their maximum levels at the same time, for all 2,500 hours per turbine of annual operation. It would be highly unlikely that this would occur.

I have supervised the preparation of a graphical depiction of the predicted concentration of certain air contaminants emitted from the plant at eighteen (18) different residences/properties near the site. Our project team specifically modeled impacts at a geographic coordinate for the address requestors listed in their correspondence with the TCEQ regarding this application and relied upon aerial photography for the placement of the modeling receptor near the house associated with the property, or the center of the property if there were no known houses associated with it. The depiction is attached as Appendix A. The depiction demonstrates and further confirms information submitted to TCEQ in support of the application document that predicted maximum concentrations at the residences/properties of the requestors are well below the NAAQS or applicable ESL.

Based upon the analyses of receptors at the residences/properties, the predicted worst case concentrations requestors would be exposed to would be 1/20 or less of pertinent air quality standards and ESL; requestors would not be exposed to concentrations of air contaminants that could adversely affect them or their property.. The conservatism inherent in the AERMOD dispersion modeling analysis, as previously discussed, provides even greater support for these conclusions.

FURTHER AFFIANT SAYETH NOT.

Thomas O. Pritcher

Thomas O. Pritcher, P.E.

SUBSCRIBED AND SWORN TO BEFORE ME on June 6, 2015.

ELIZABETH W. CLAPSADL
NOTARY PUBLIC
NASH COUNTY, NC

Elizabeth W. Clapsadl

Notary Public Signature

(PERSONALIZED SEAL)

Appendix A

Modeled Impacts at 18 Residences/Properties near the Site

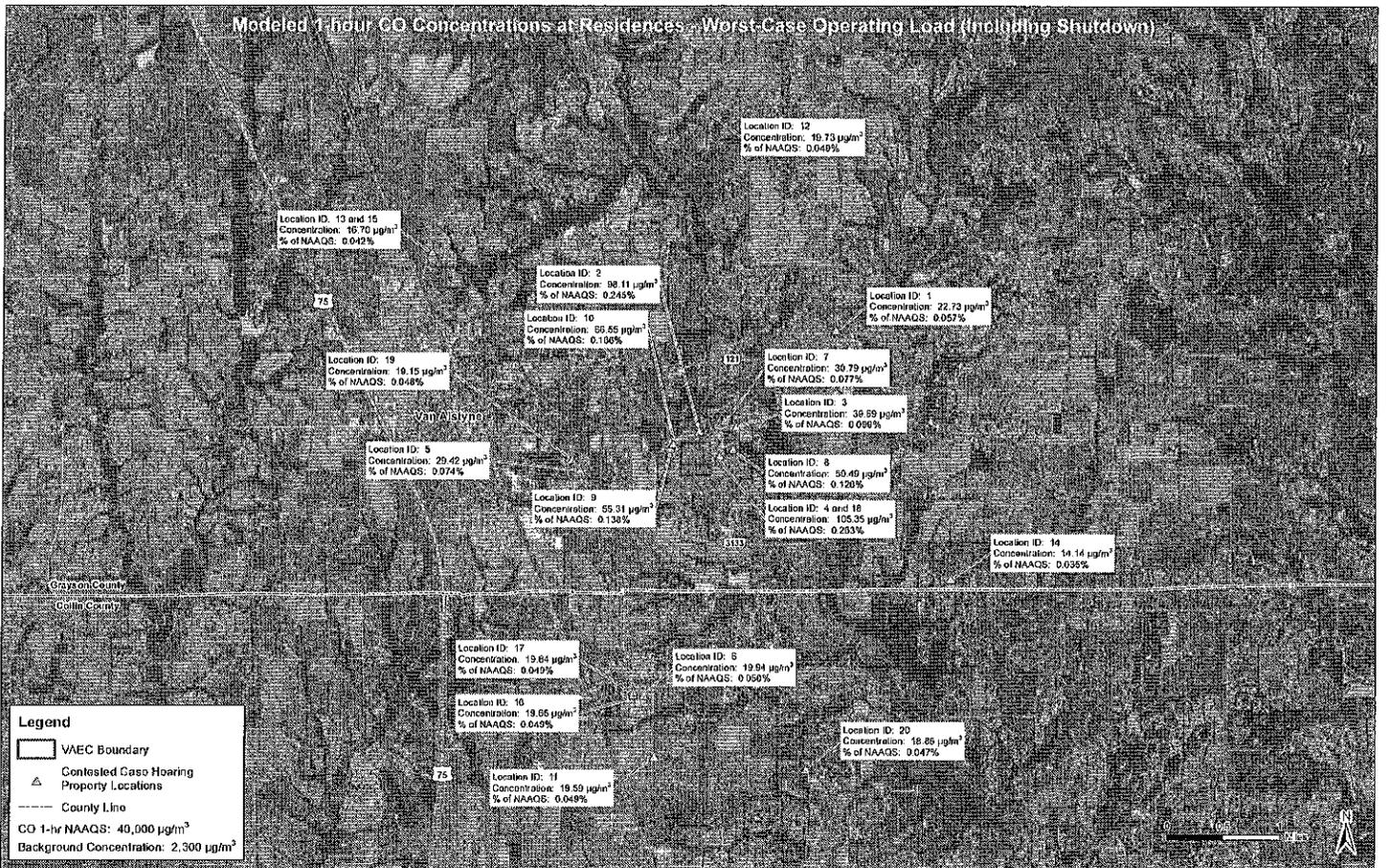
Requesters Distance to Facility

Map ID	Requesters Name	Address	Distance to Facility (miles)
1	Charles Netherlain	114 Edwards Rd, Van Alstyne, TX 75495	1.66
2	Michael and Delanna Mitchell	1879 Ballard Rd, Van Alstyne, TX 75495	0.29
3	Bobby and Martha McKee	660 Willy Vester Rd, Van Alstyne, TX 75495	0.44
4	Brent and Virginia Kennedy	921 Willy Vester Rd, Van Alstyne, TX 75495	0.17
5	Rebecca Rodriguez	798 Ballard Rd, Van Alstyne, TX 75495	1.09
6	Emily Franklin	332 N Carlyle Cir, Anna TX 75409	2.09
7	Pamela Boddie	614 Willy Vester Rd, Van Alstyne, TX 75495	0.43
8	Brittany Nettles	890 Willy Vester Rd, Van Alstyne, TX 75495	0.30
9	Brad Spence	1591 Ballard Rd, Van Alstyne, TX 75495	0.32
10	Tracy Spence	1631 Ballard Rd, Van Alstyne, TX 75495	0.32
11	Christy Bryant	243 Lamont Rd, Anna, TX 75409	2.60
12	Jeffrey Farley	21 Stone Marshall Rd, Van Alstyne, TX 75495	3.13
13	James Firtos	60 Brad Ct, Van Alstyne, TX 75495	3.04
14	Donna Franus	3969 FM 3133, Van Alstyne, TX 75495	2.40
15	Theresa Green	60 Brad Ct, Van Alstyne, TX 75495	3.04
16	Kelly and Frank Herndon	239 Belford Street S., Anna, TX 75409	2.11
17	George & Mollie Kennemer	240 Belford Street N., Anna, TX 7506	2.09
18	Chrissy Marie Koth	921 Willy Vester Rd, Van Alstyne, TX 75495	0.17
19	Christopher Scott Moreno	690 Ballard Rd, Van Alstyne, TX 75495	1.16
20	Velynda Short	2960 Winding Oaks Trl, Anna, TX 75409	2.83
NA	Amanda Stromquist	1813 Walnut Way, Anna, TX 75409	5.94*
NA	Lori Jean Williams	5068 Theresa Dr, Denison, TX 75020	20.25*
NA	Dallas Sierra Club	**	**

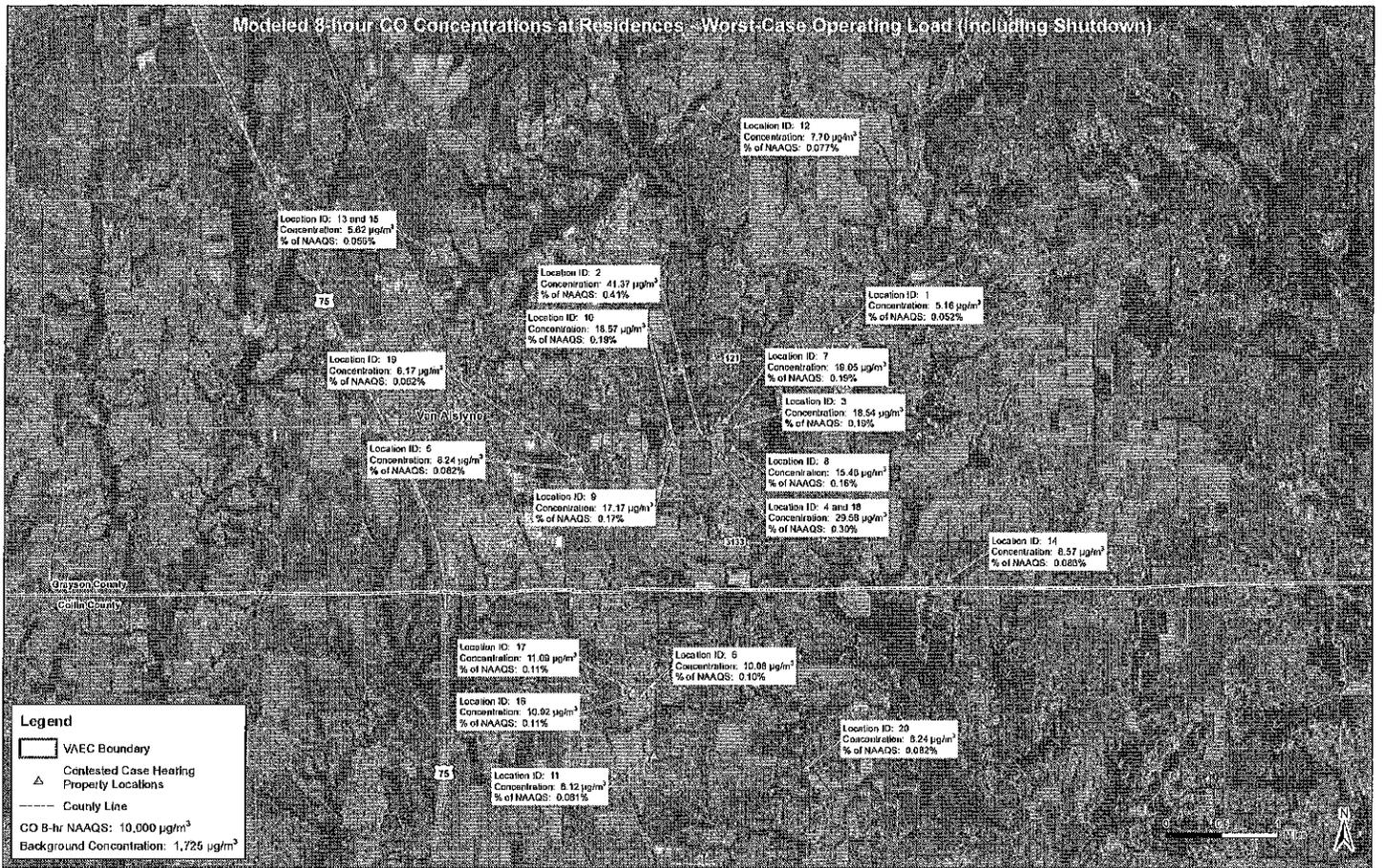
* Greater than 5 miles from facility, modeling was not performed

** No information available

Modeled 1-hour CO Concentrations at Residences - Worst-Case Operating Load (Including Shutdown)

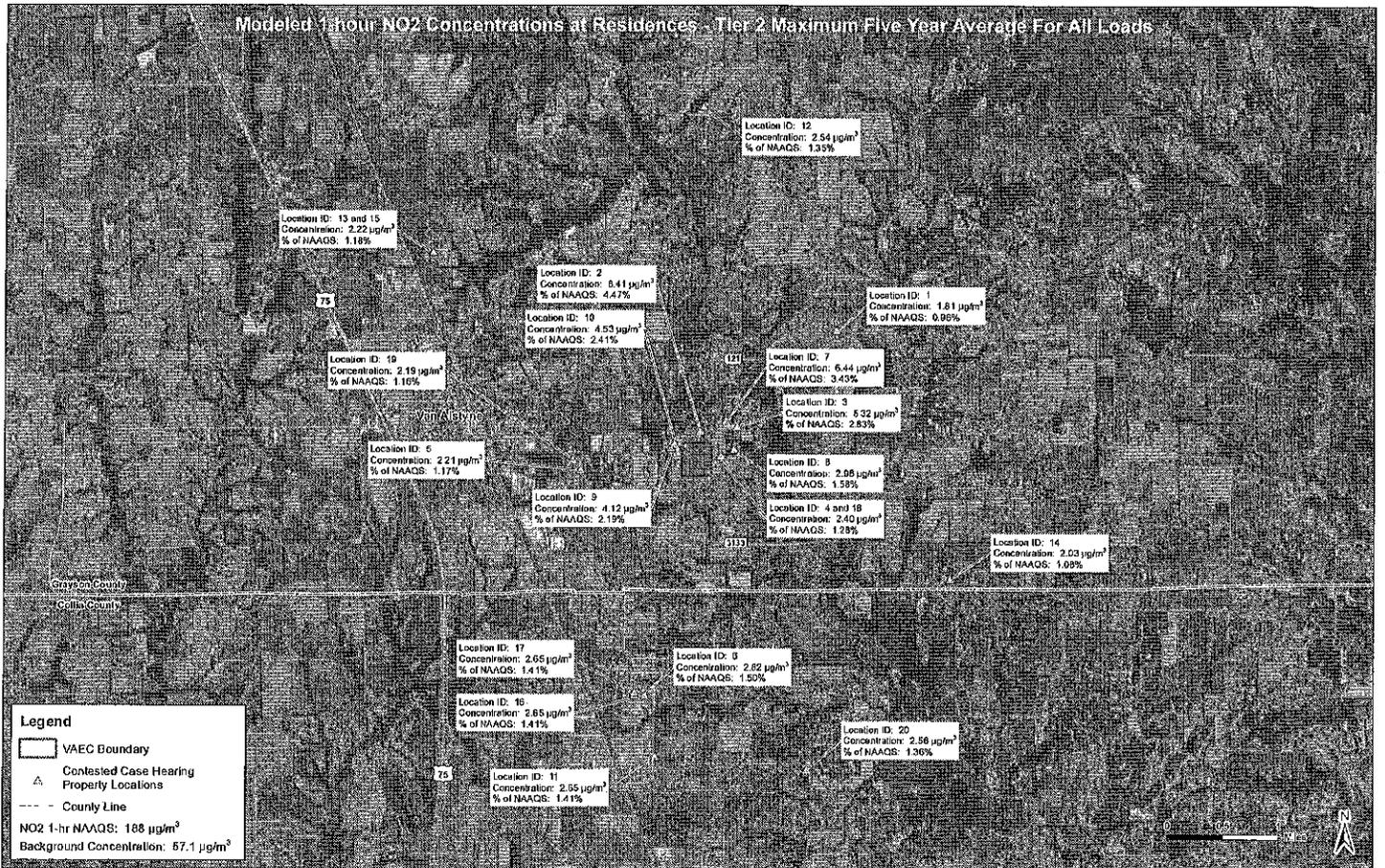


Modeled 8-hour CO Concentrations at Residences - Worst-Case Operating Load (Including Shutdown)



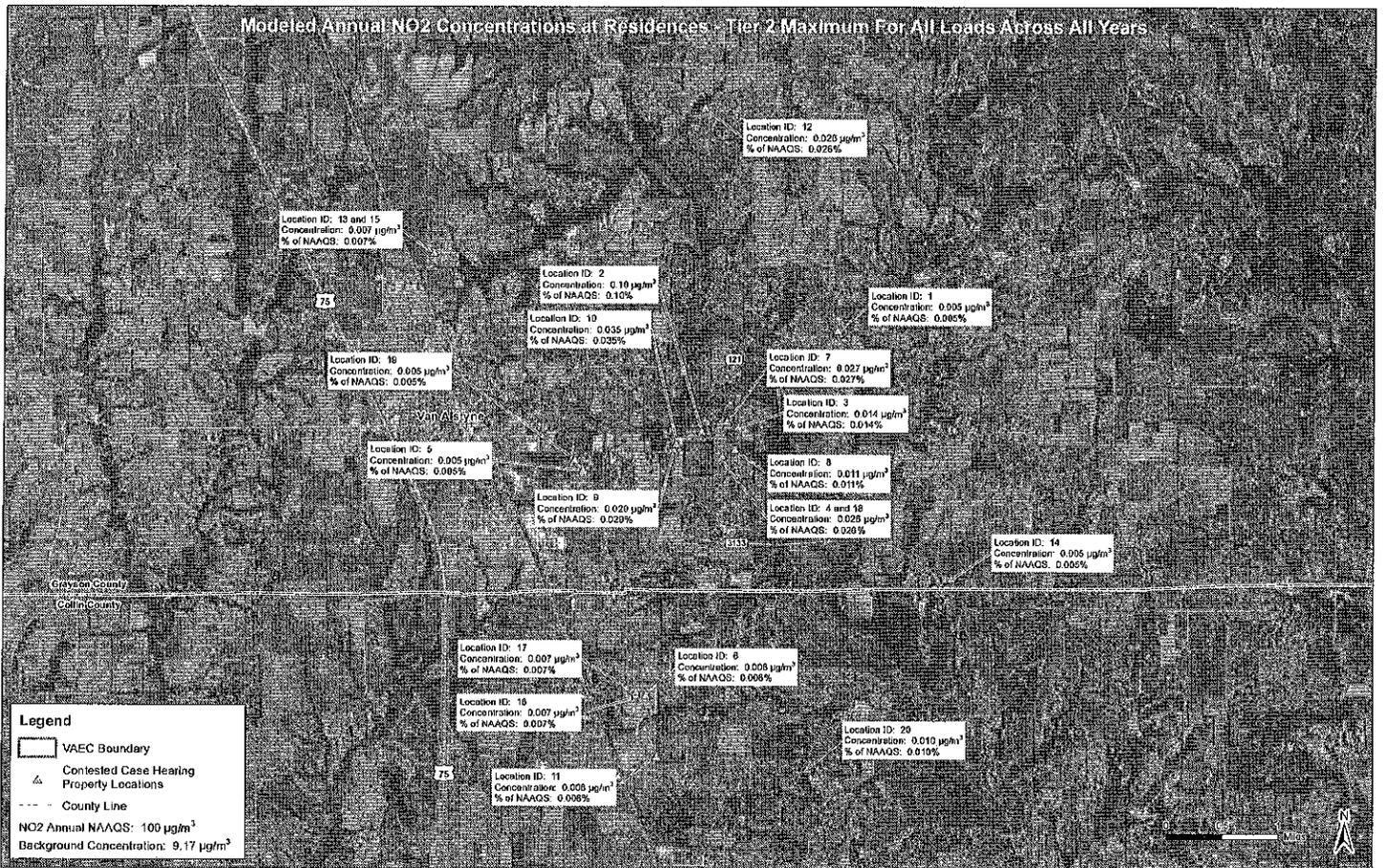
Confidential Attorney Client Privilege; Attorney Work Product

Modeled 1-hour NO₂ Concentrations at Residences - Tier 2 Maximum Five Year Average For All Loads

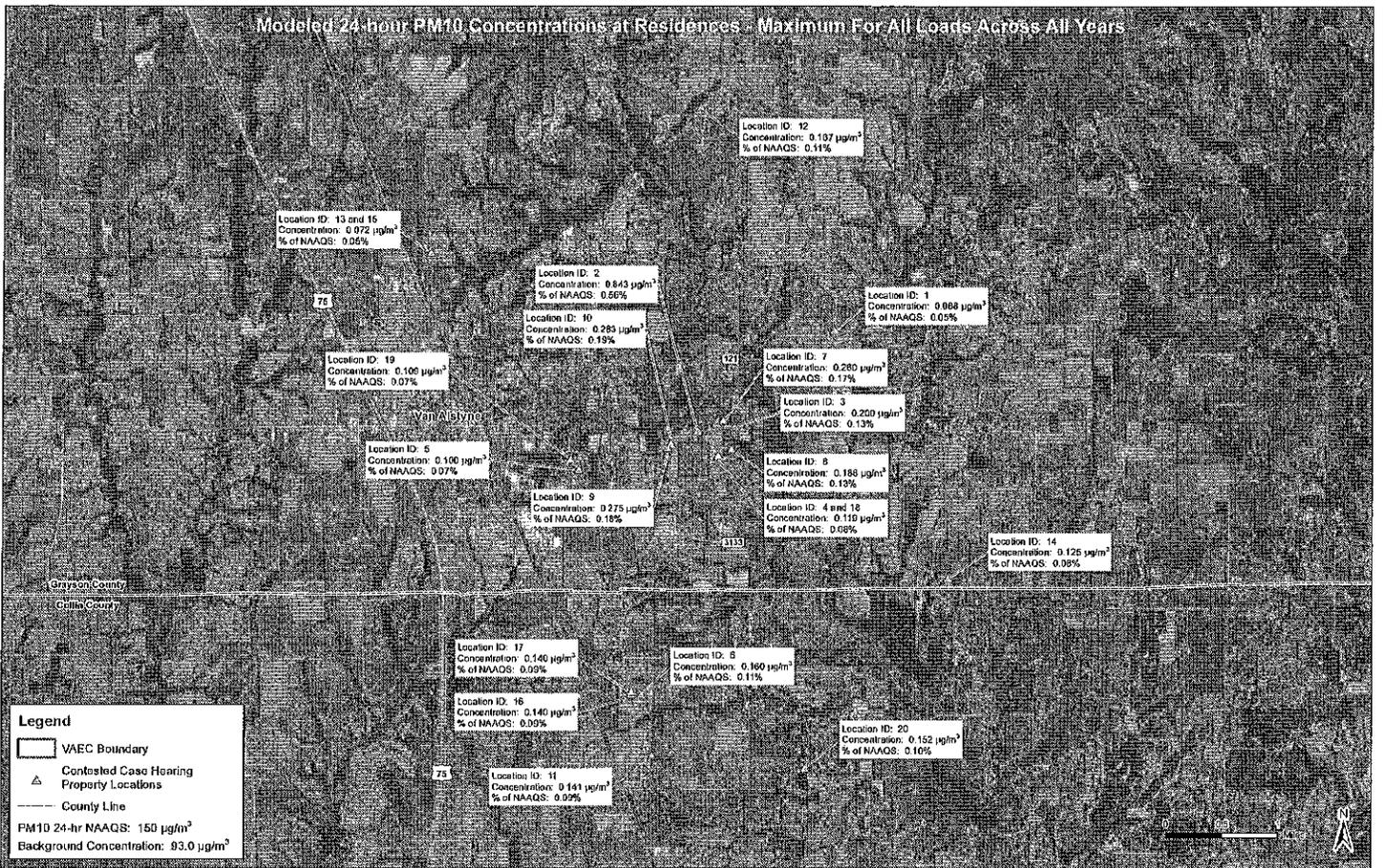


Confidential Attorney Client Privilege; Attorney Work Product

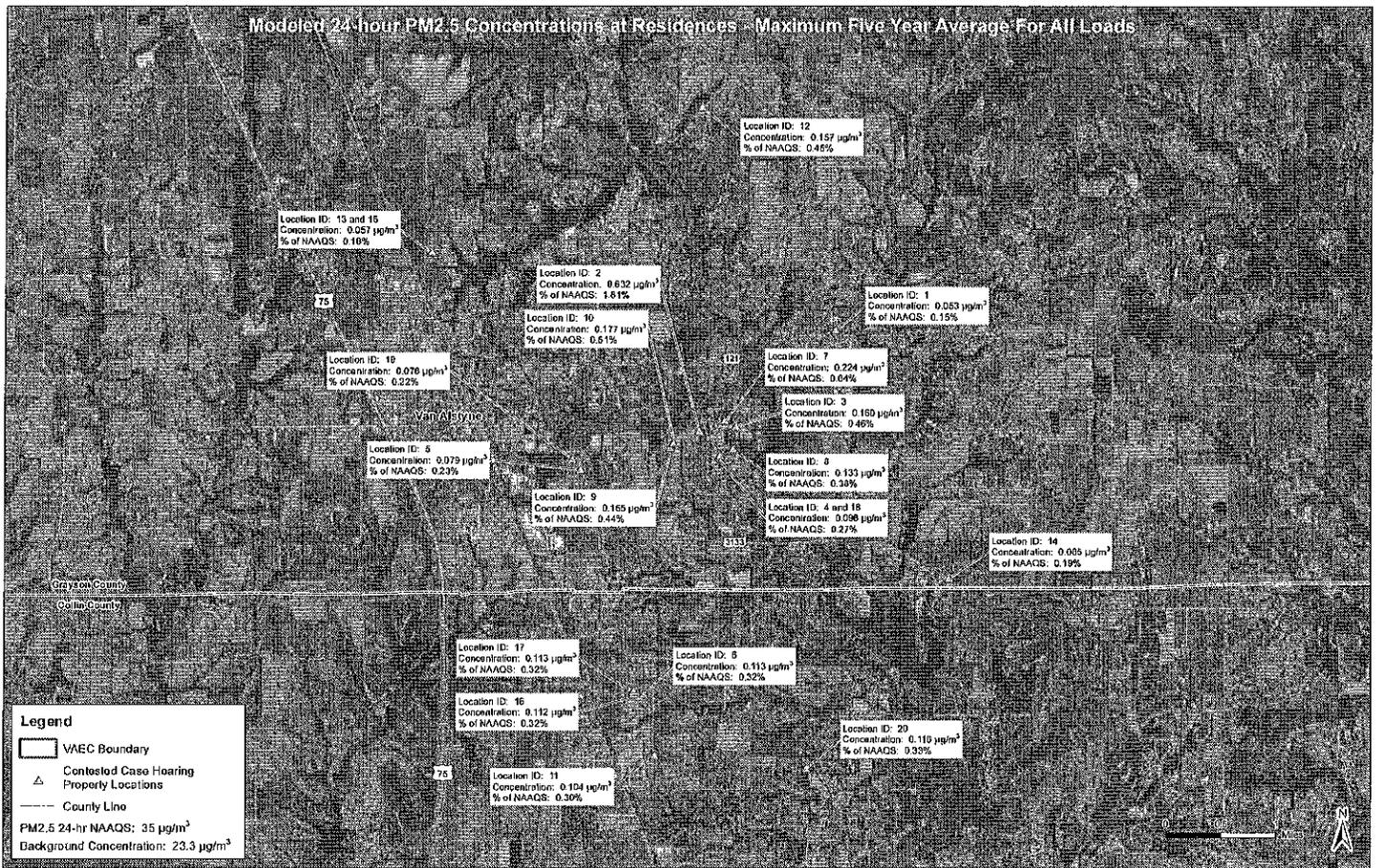
Modeled Annual NO2 Concentrations at Residences - Tier 2 Maximum For All Loads Across All Years



Modeled 24-hour PM10 Concentrations at Residences - Maximum For All Loads Across All Years



Modeled 24-hour PM2.5 Concentrations at Residences - Maximum Five Year Average For All Loads

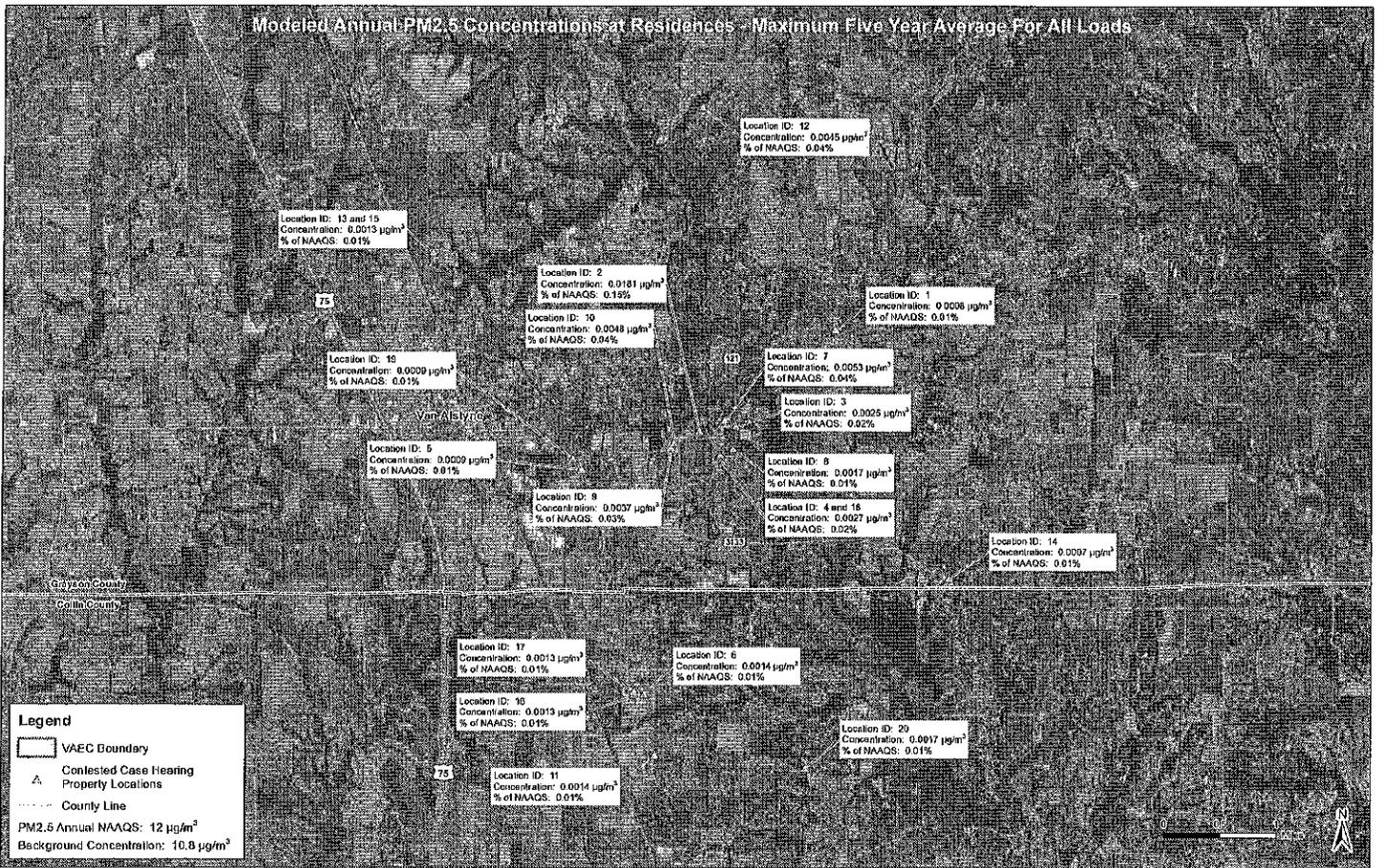


Legend

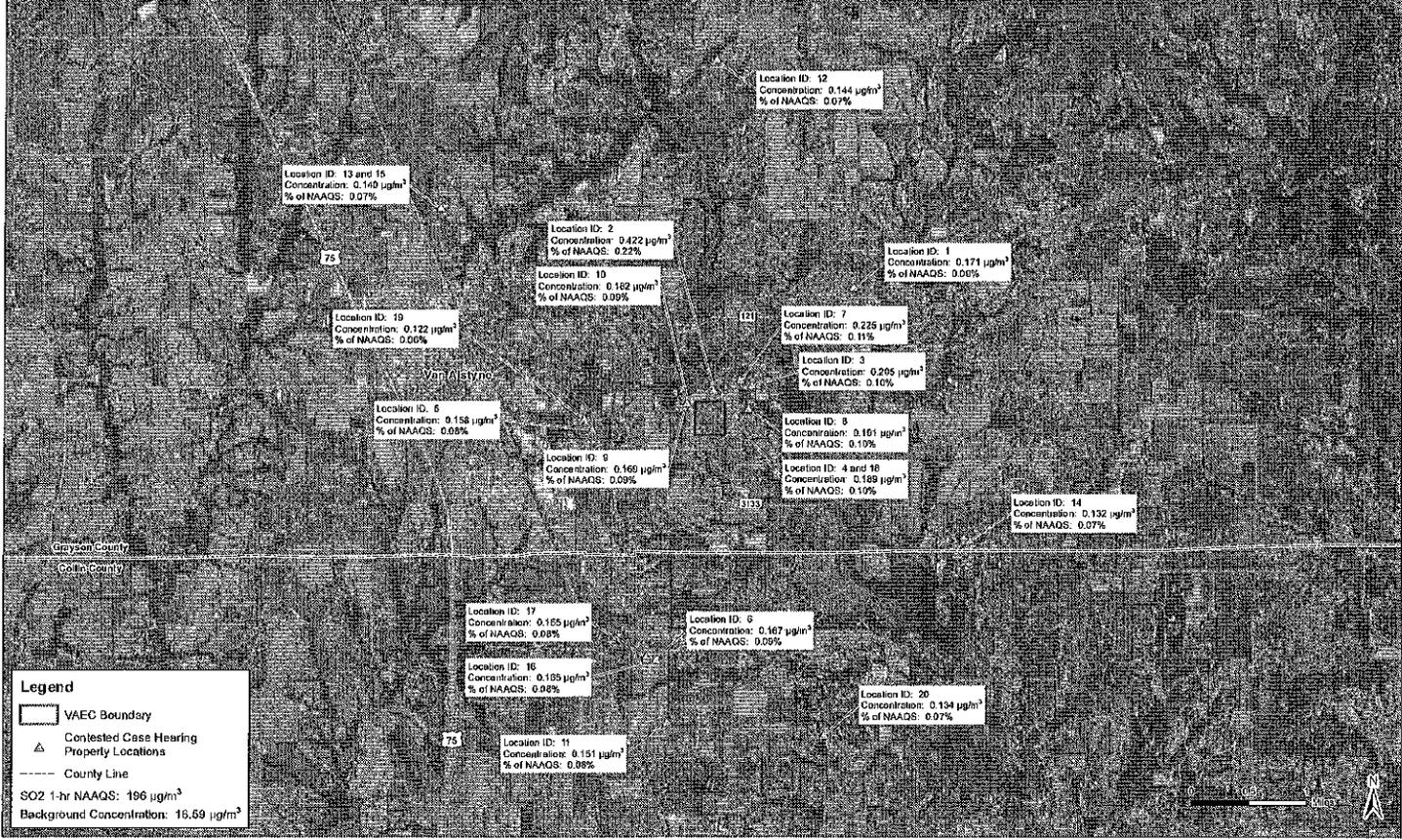
- VAEC Boundary
- △ Contested Case Hearing Properly Locations
- County Line

PM2.5 24-hr NAAQS: 35 µg/m³
 Background Concentration: 23.3 µg/m³

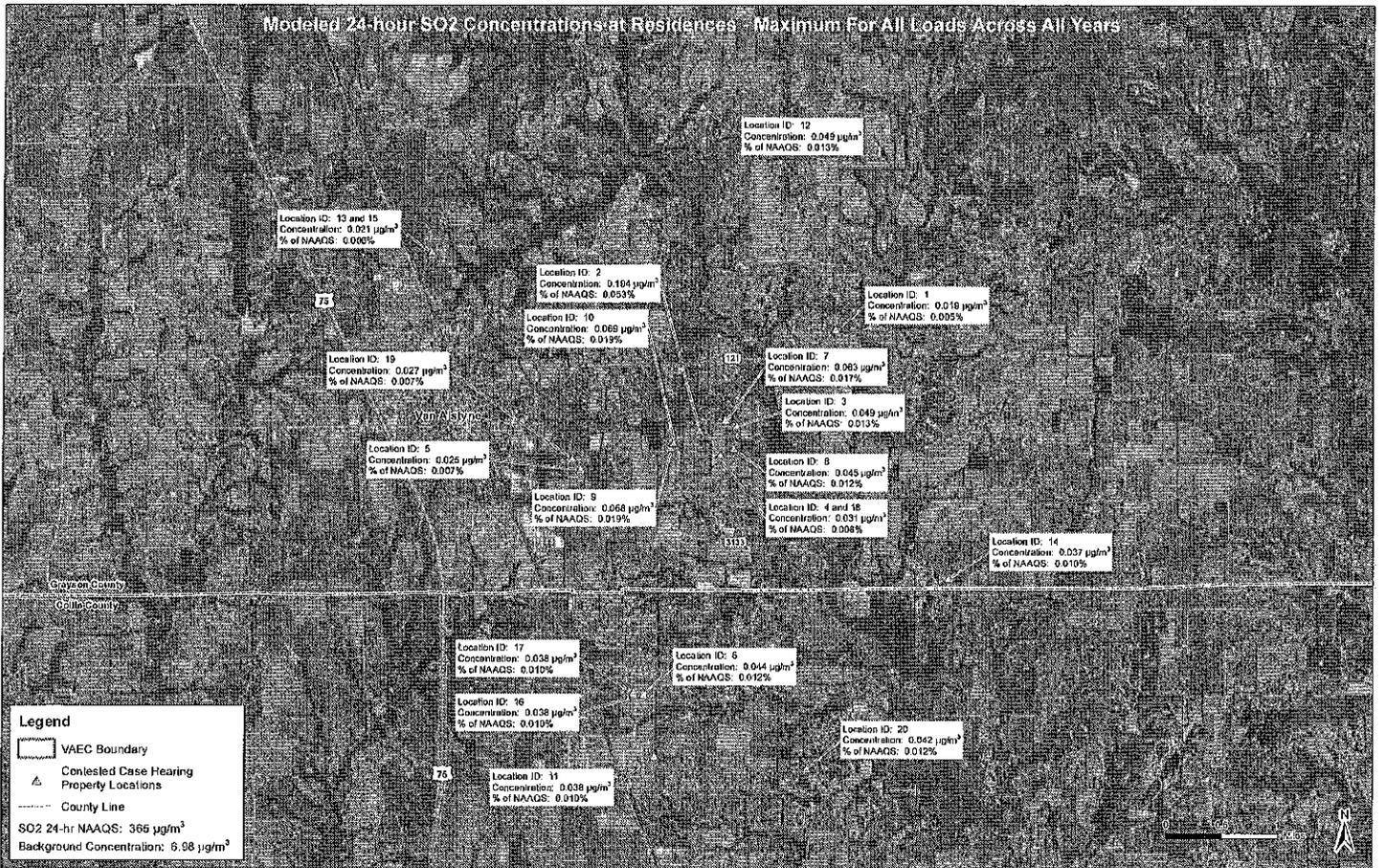
Modeled Annual PM2.5 Concentrations at Residences - Maximum Five Year Average For All Loads



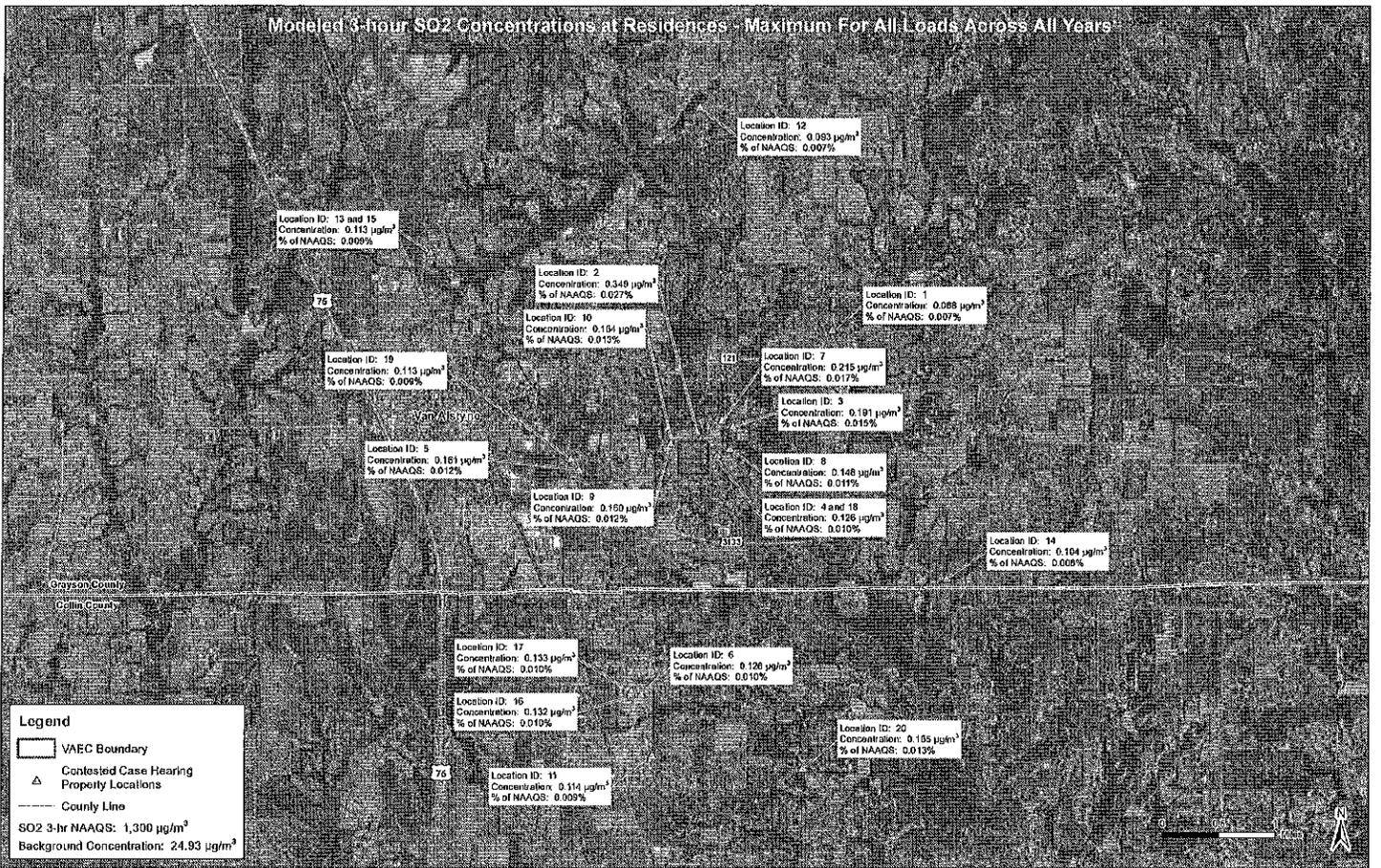
Modeled 1-hour SO₂ Concentrations at Residences - Maximum Five Year Average For All Loads



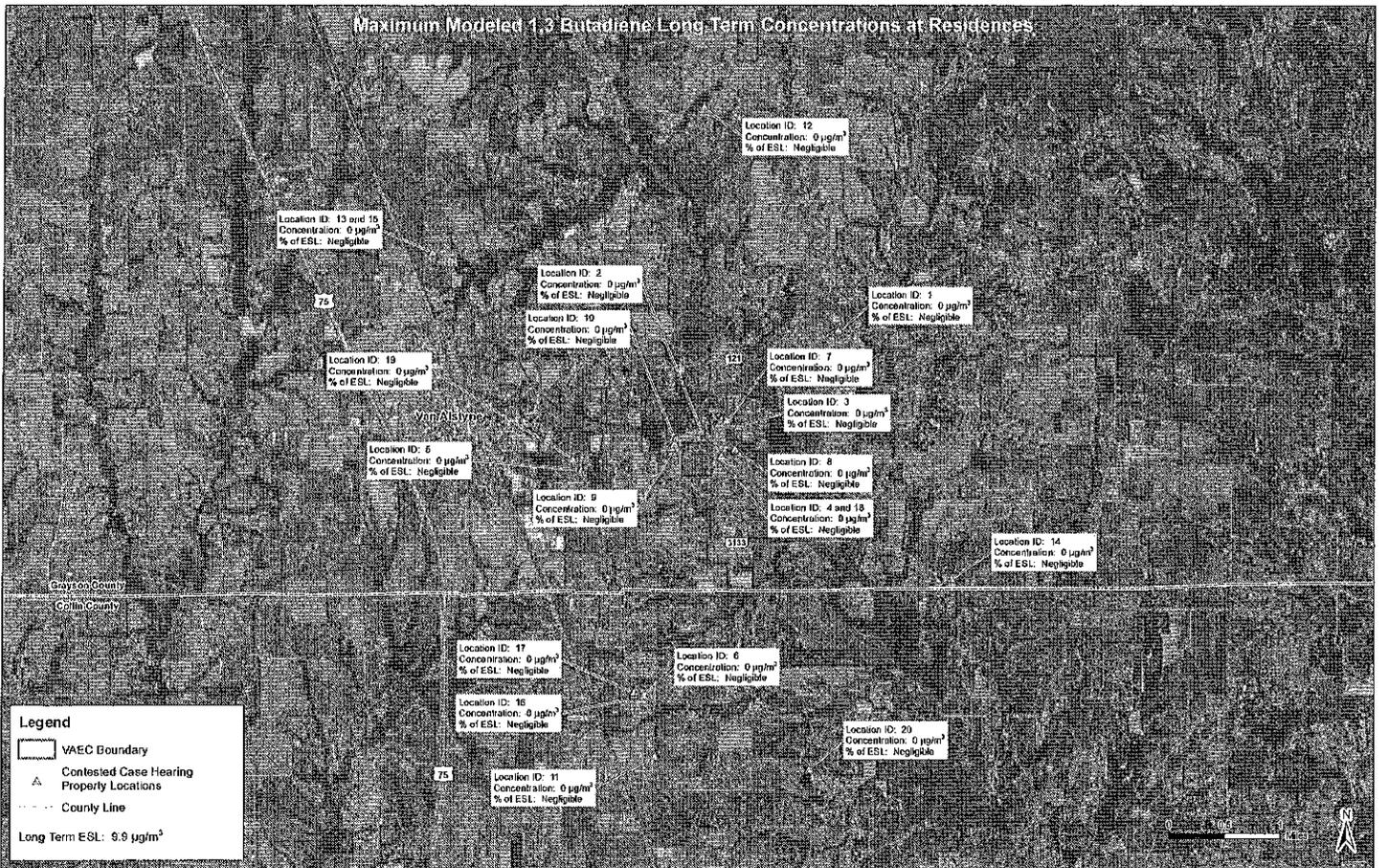
Modeled 24-hour SO₂ Concentrations at Residences - Maximum For All Loads Across All Years



Modeled 3-hour SO₂ Concentrations at Residences - Maximum For All Loads Across All Years

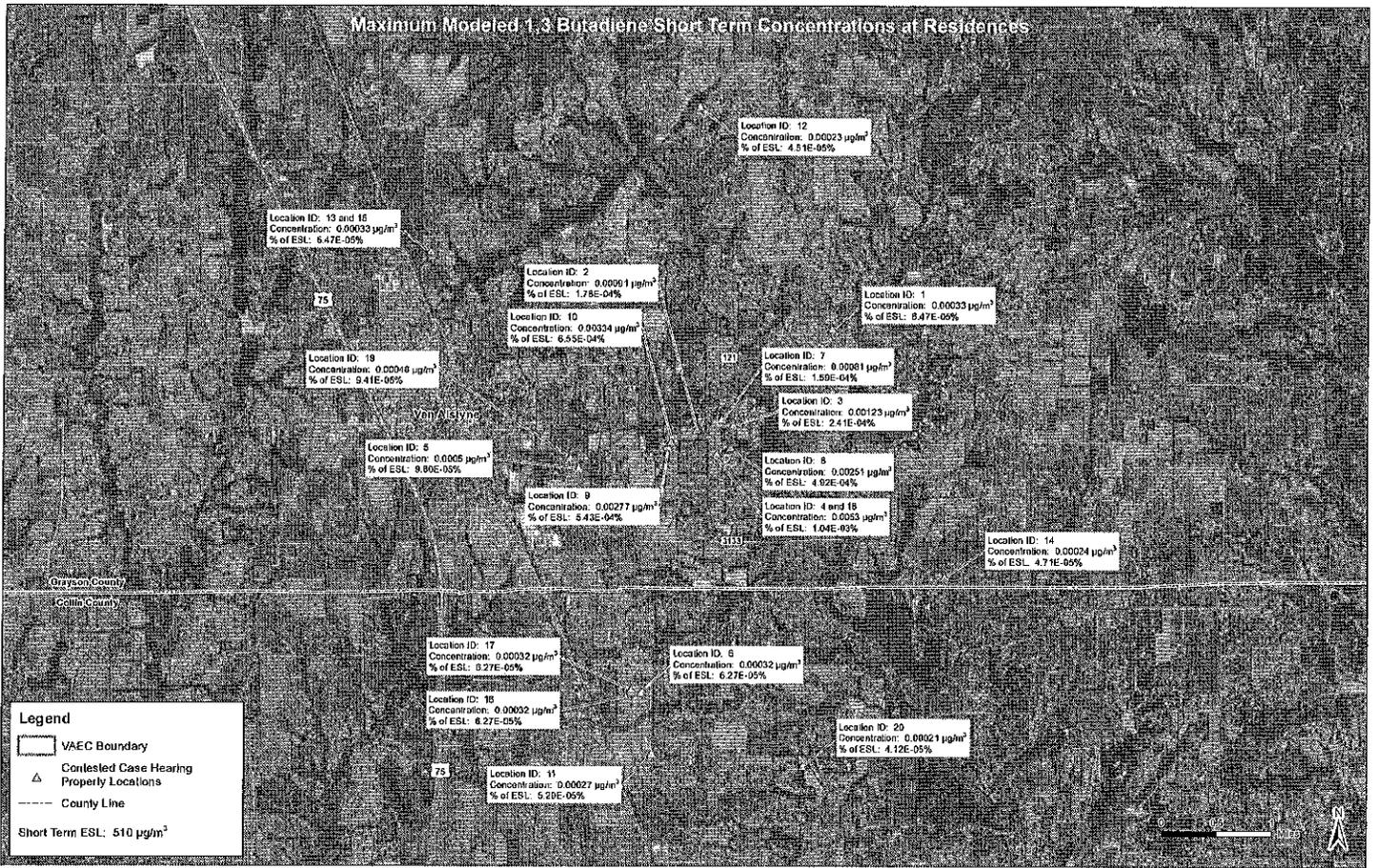


Maximum Modeled 1,3 Butadiene Long Term Concentrations at Residences

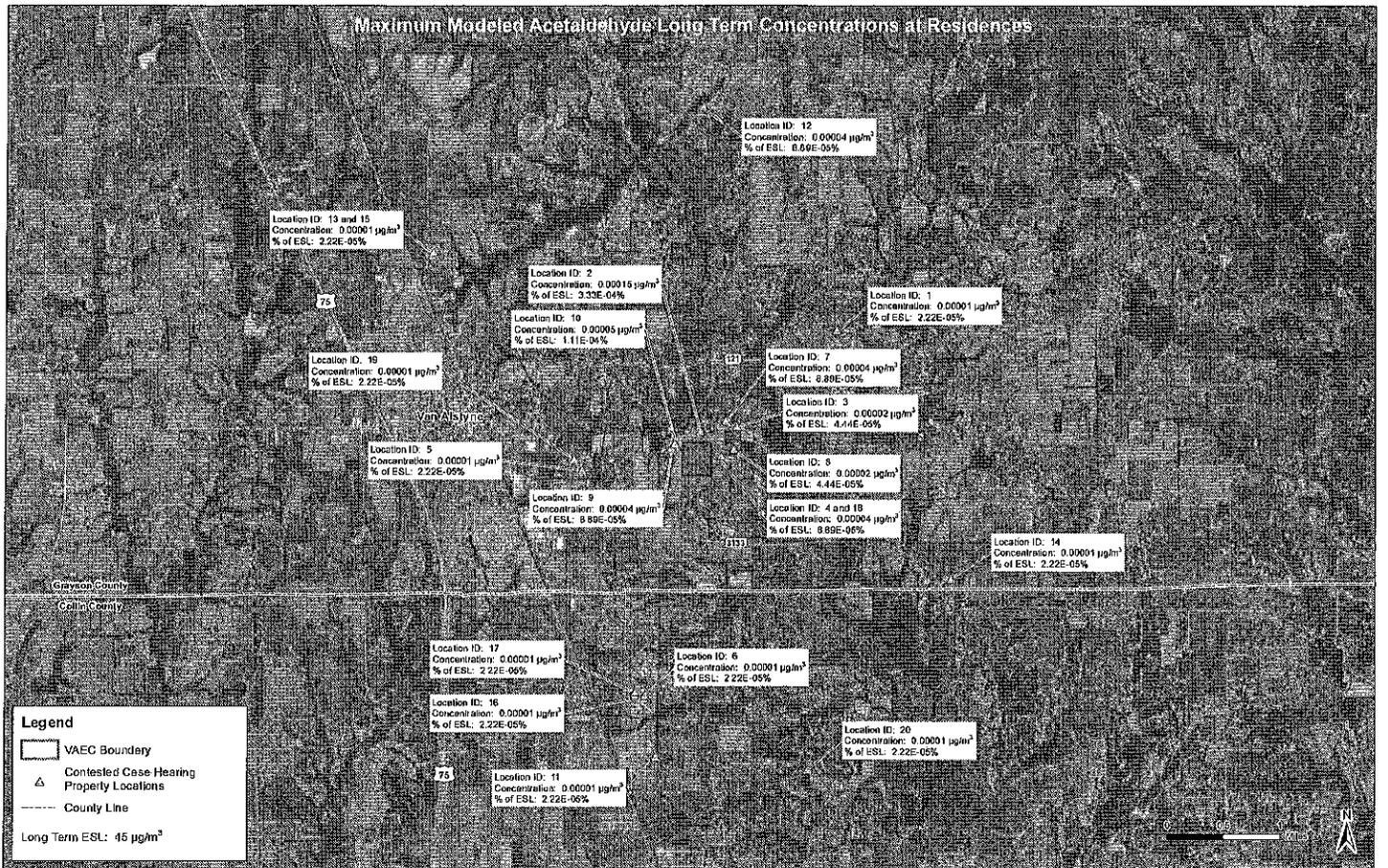


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Maximum Modeled 1,3-Butadiene Short Term Concentrations at Residences

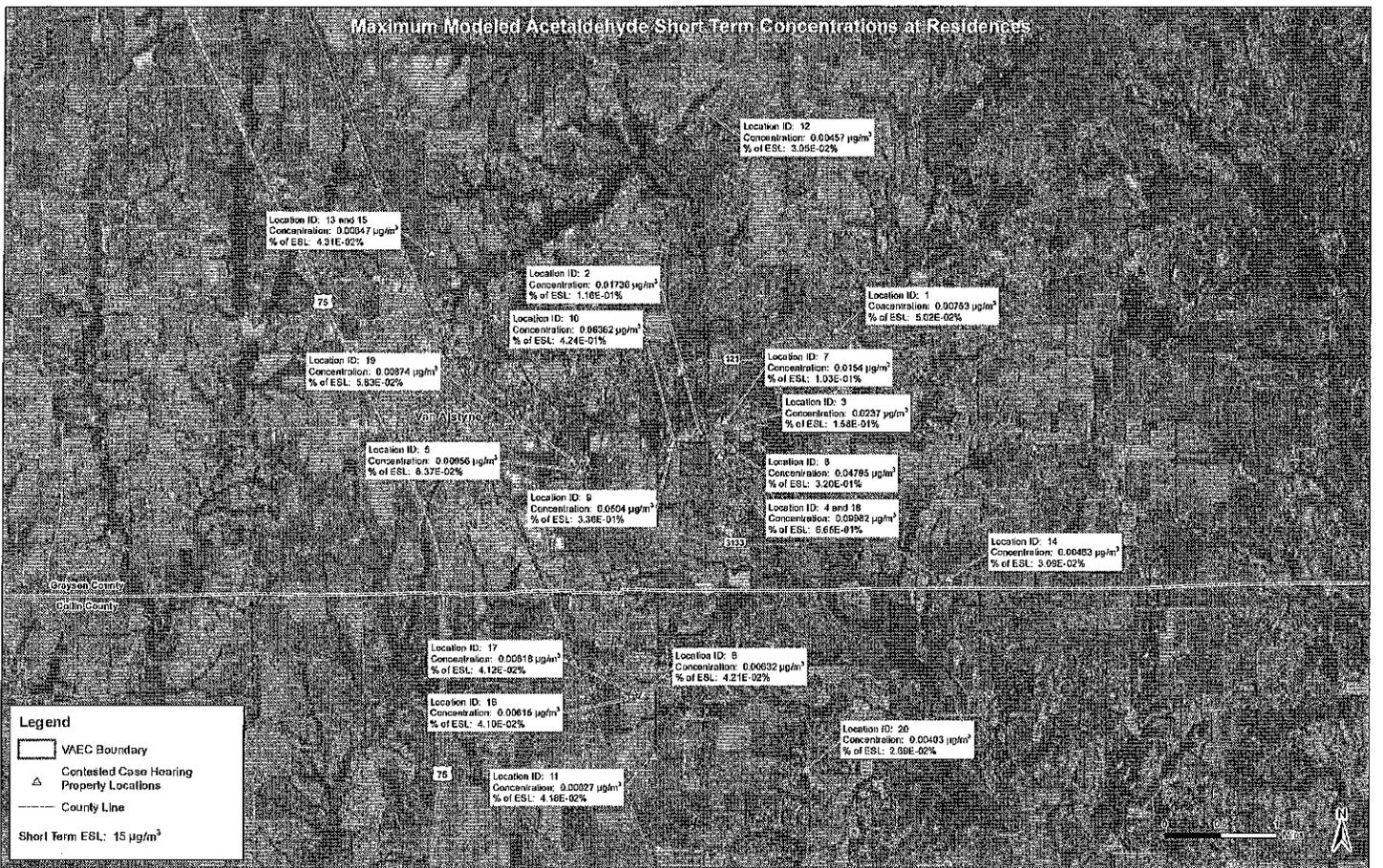


Maximum Modeled Acetaldehyde Long Term Concentrations at Residences

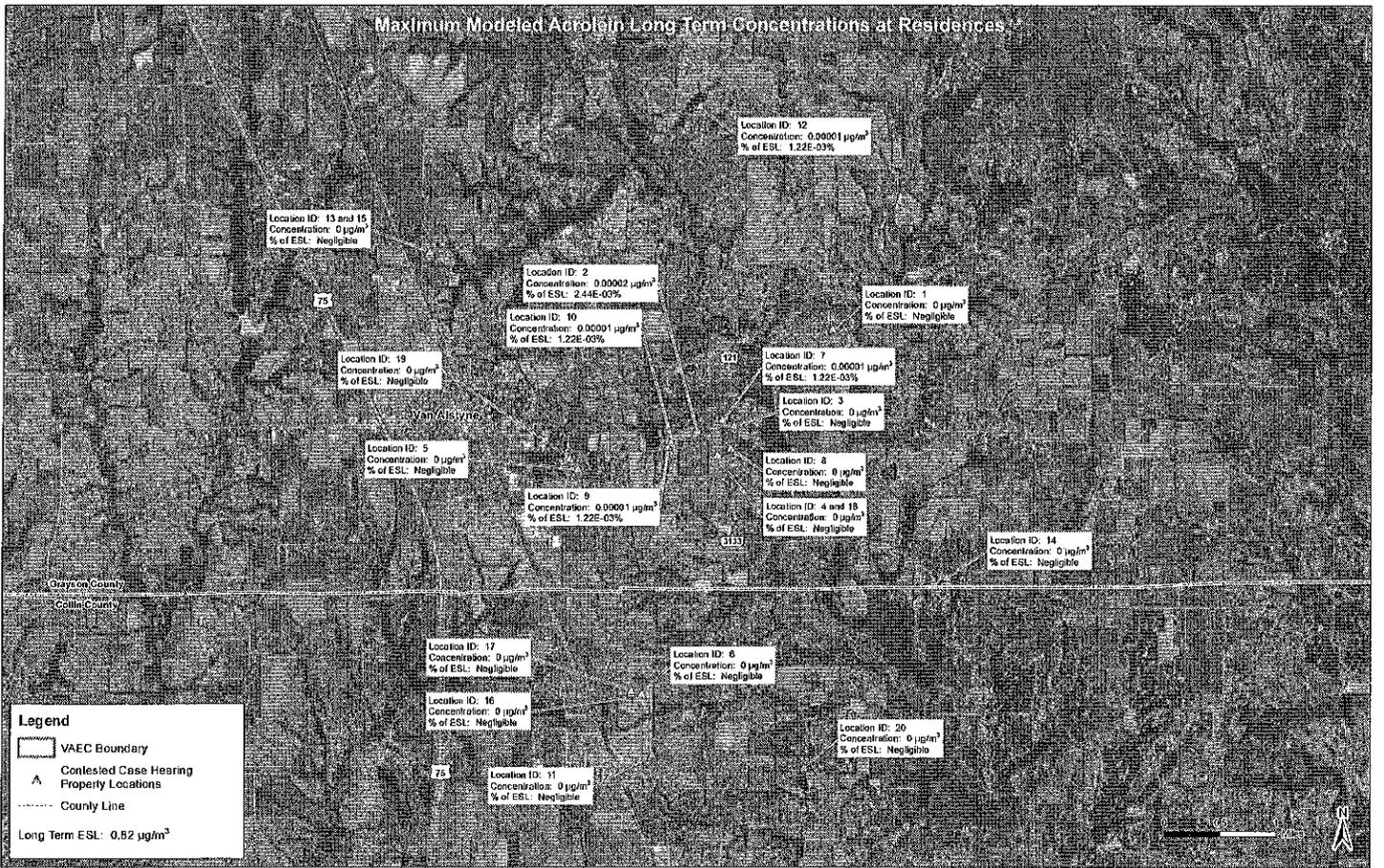


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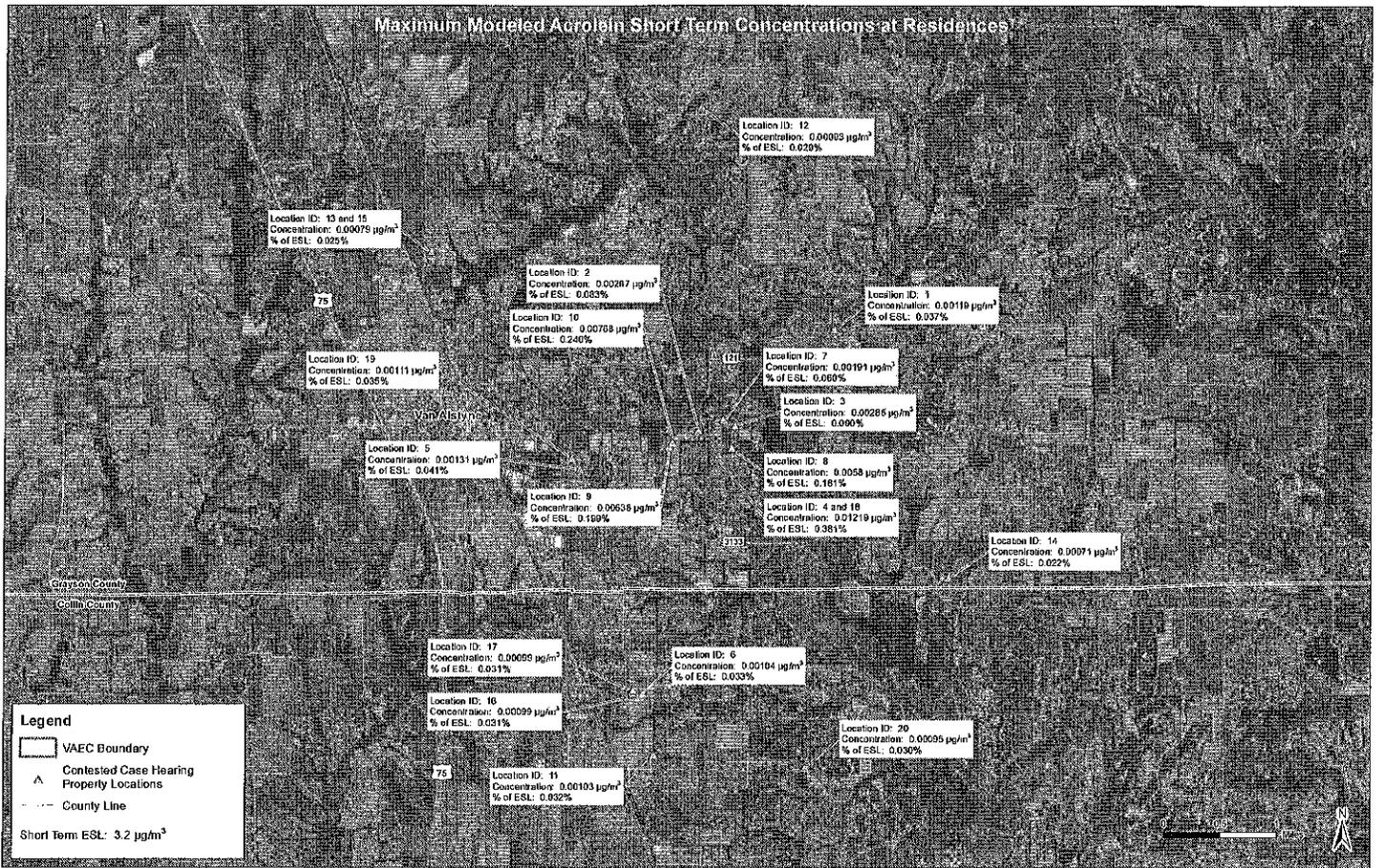
Maximum Modeled Acetaldehyde Short Term Concentrations at Residences



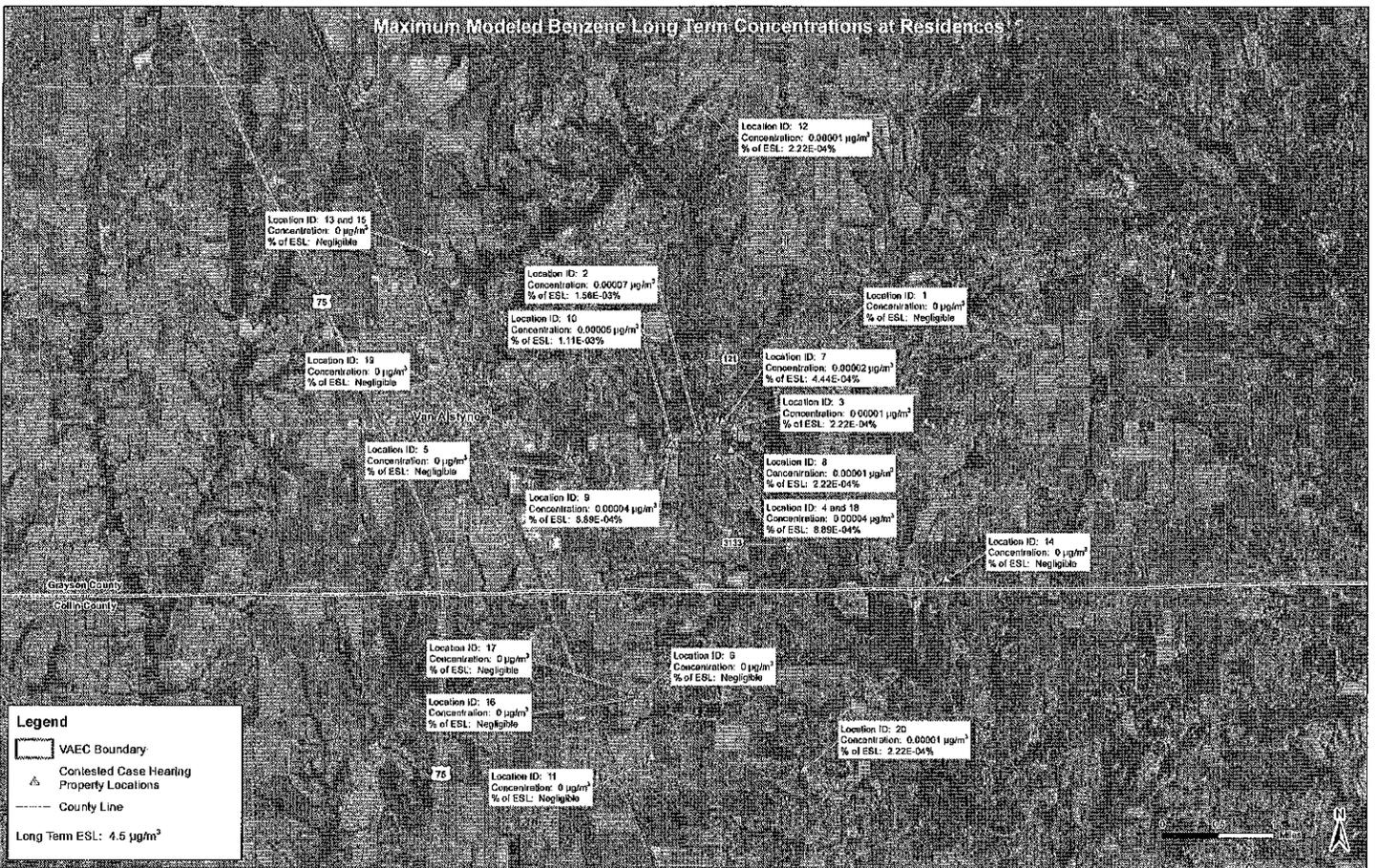
Maximum Modeled Acrolein Long Term Concentrations at Residences



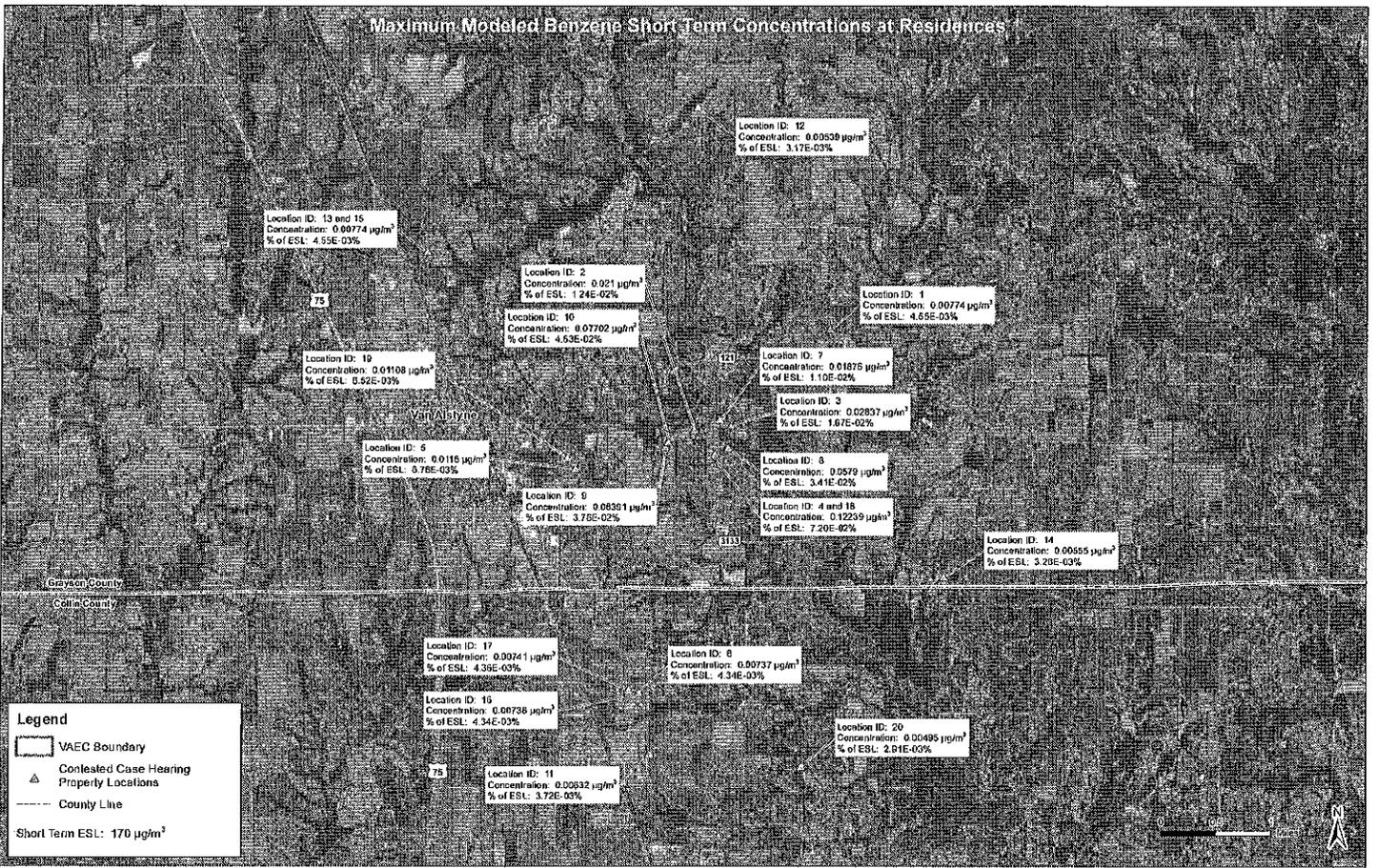
Maximum Modeled Acrolein Short Term Concentrations at Residences



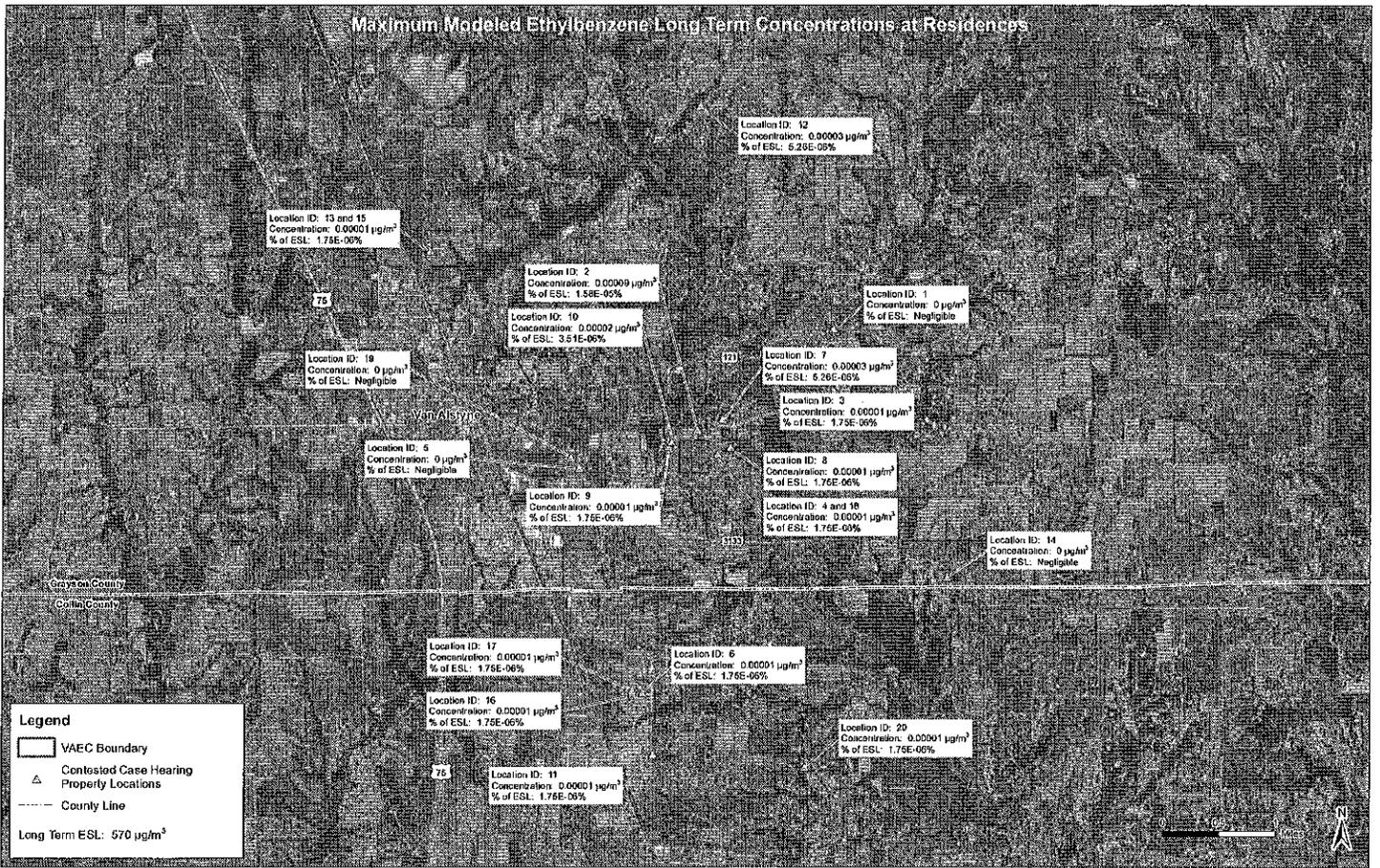
Maximum Modeled Benzene Long Term Concentrations at Residences



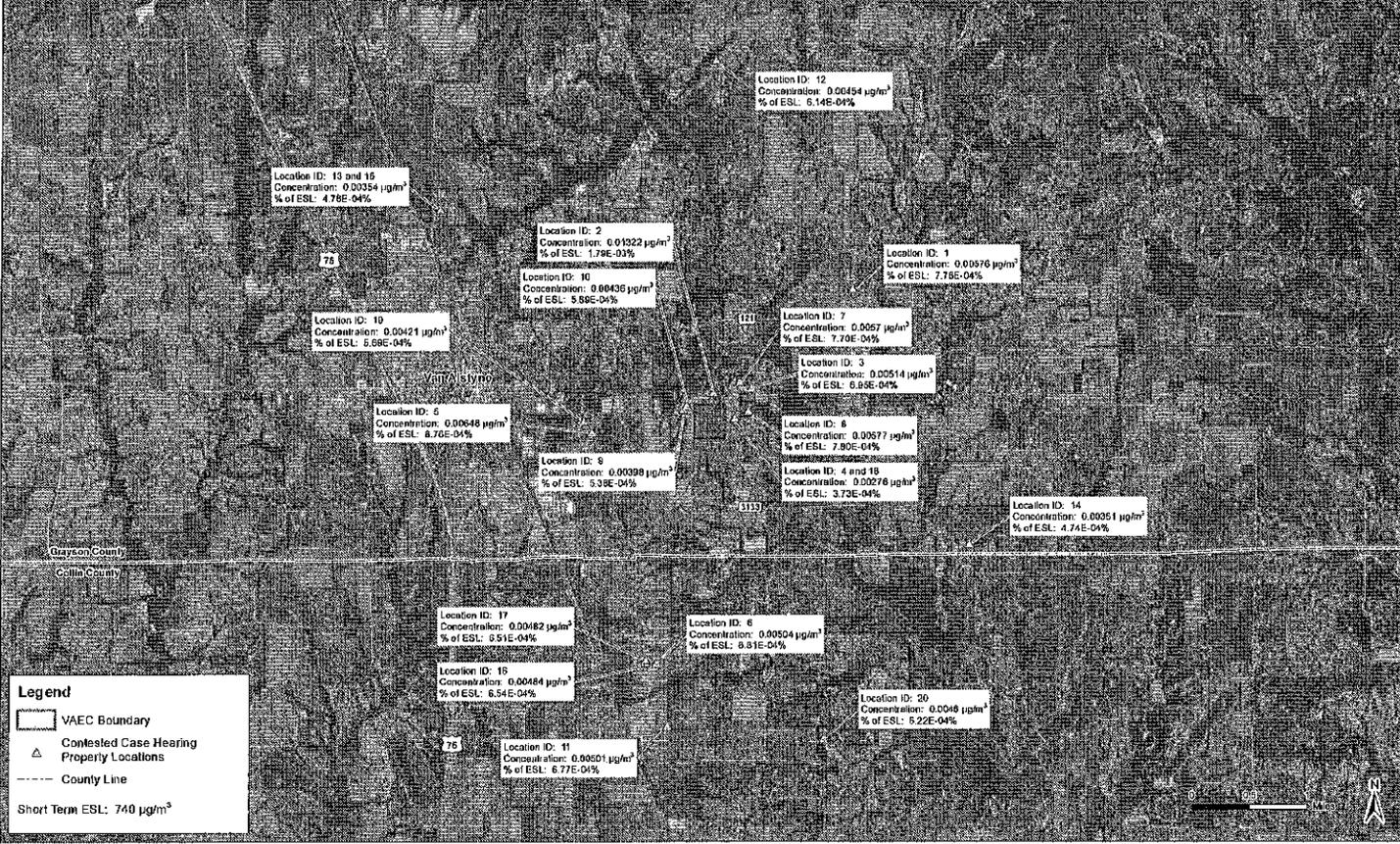
Maximum Modeled Benzene Short Term Concentrations at Residences



Maximum Modeled Ethylbenzene Long Term Concentrations at Residences

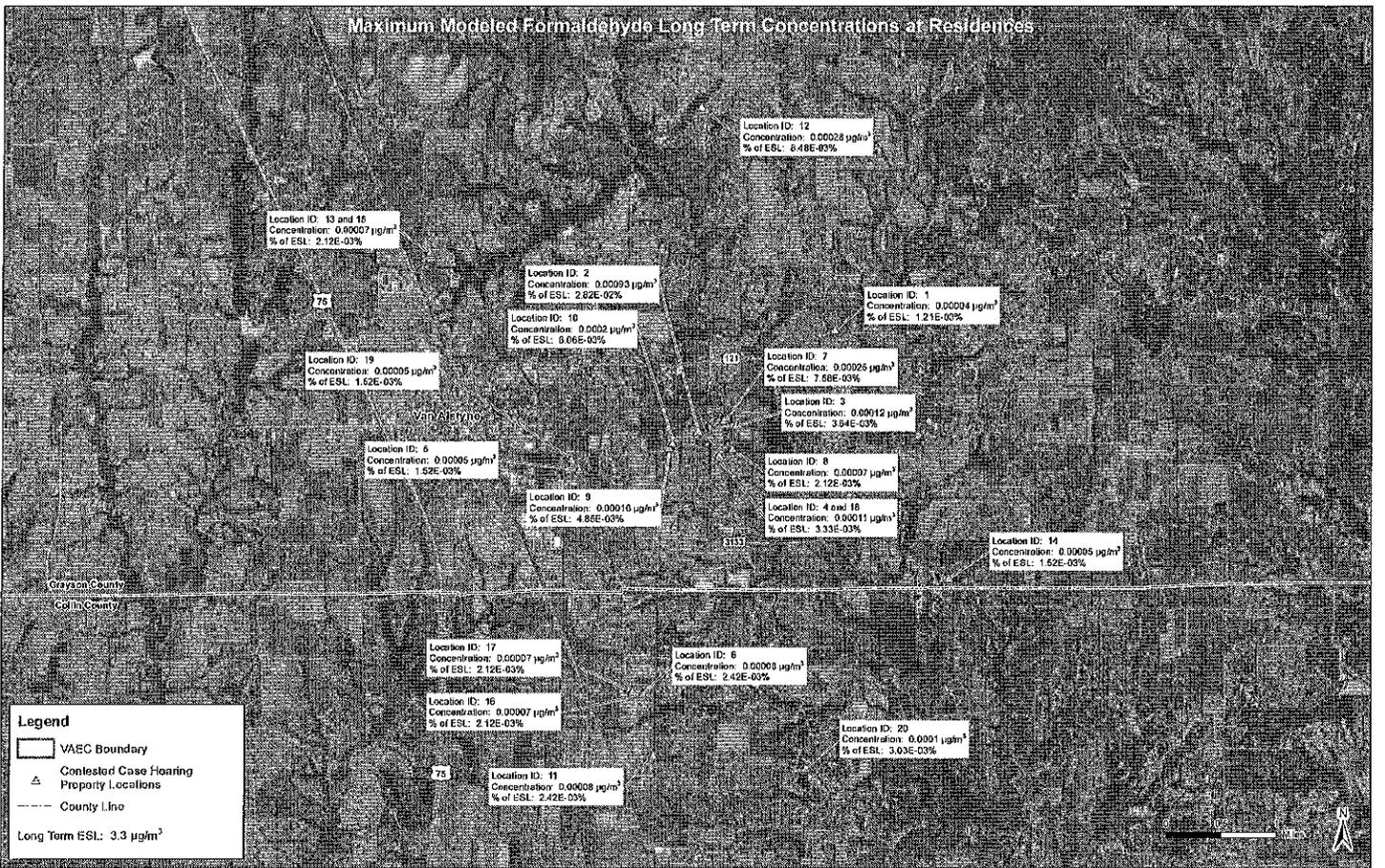


Maximum Modeled Ethylbenzene Short Term Concentrations at Residences

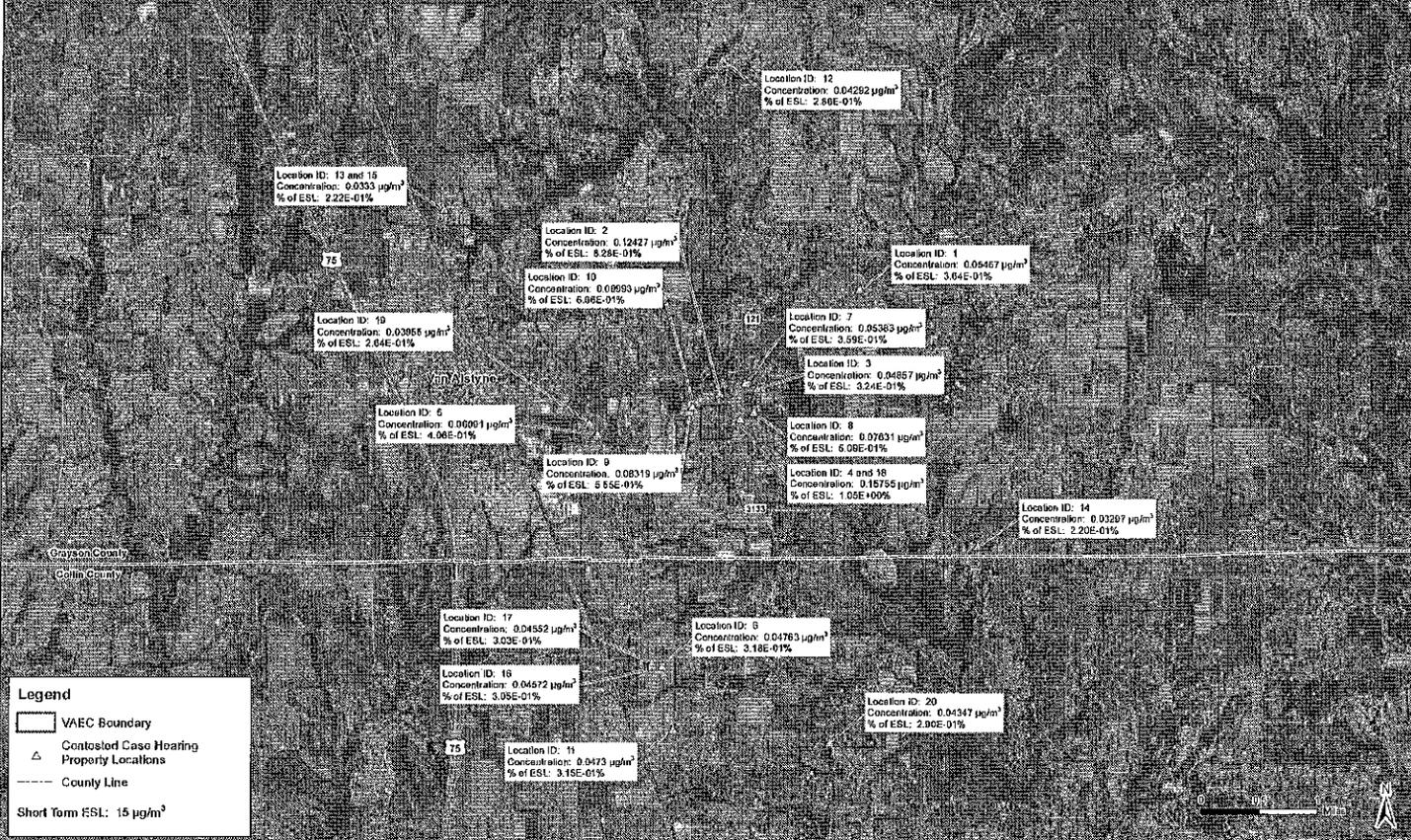


Confidential Attorney Client Privilege; Attorney Work Product

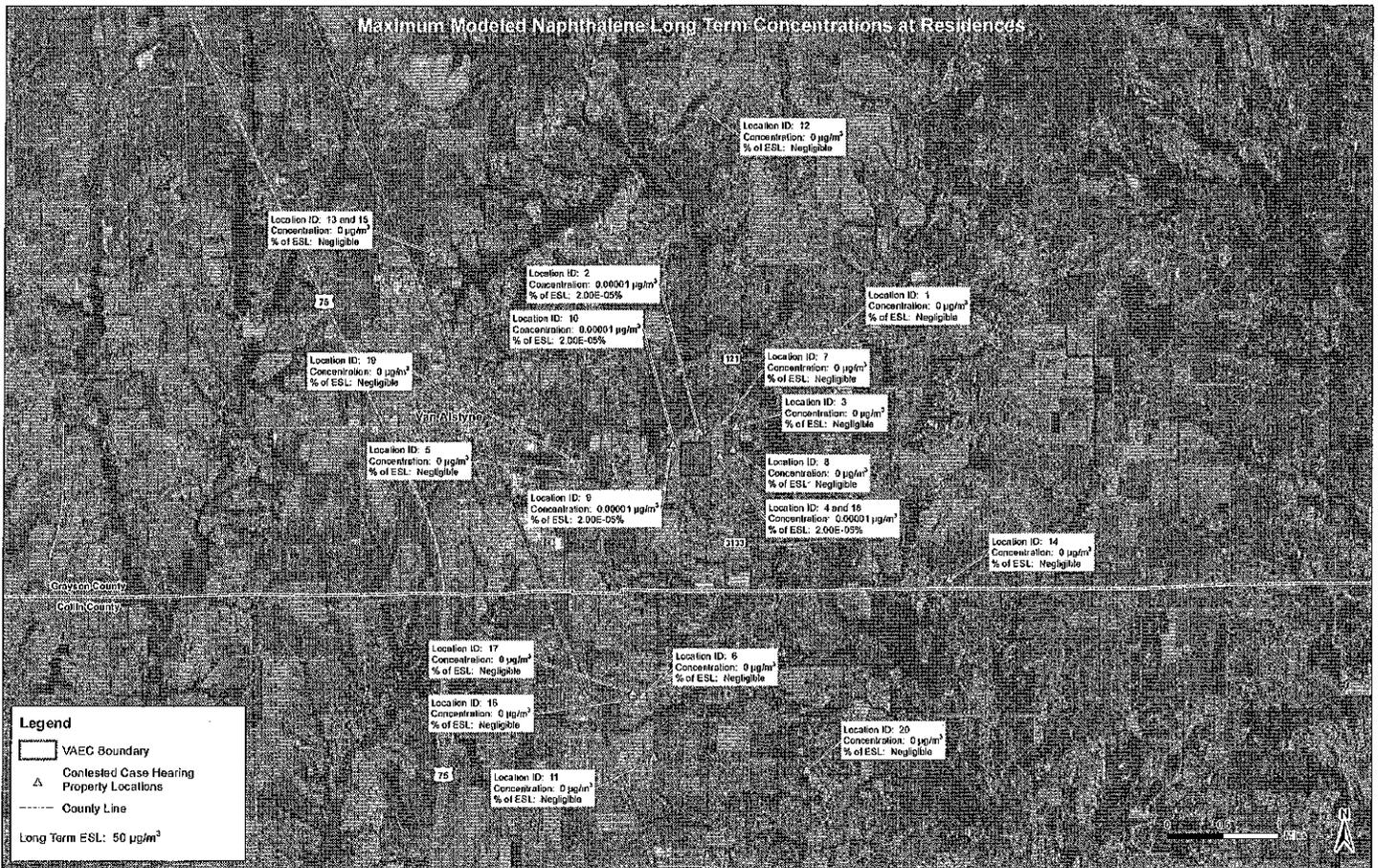
Maximum Modeled Formaldehyde Long Term Concentrations at Residences



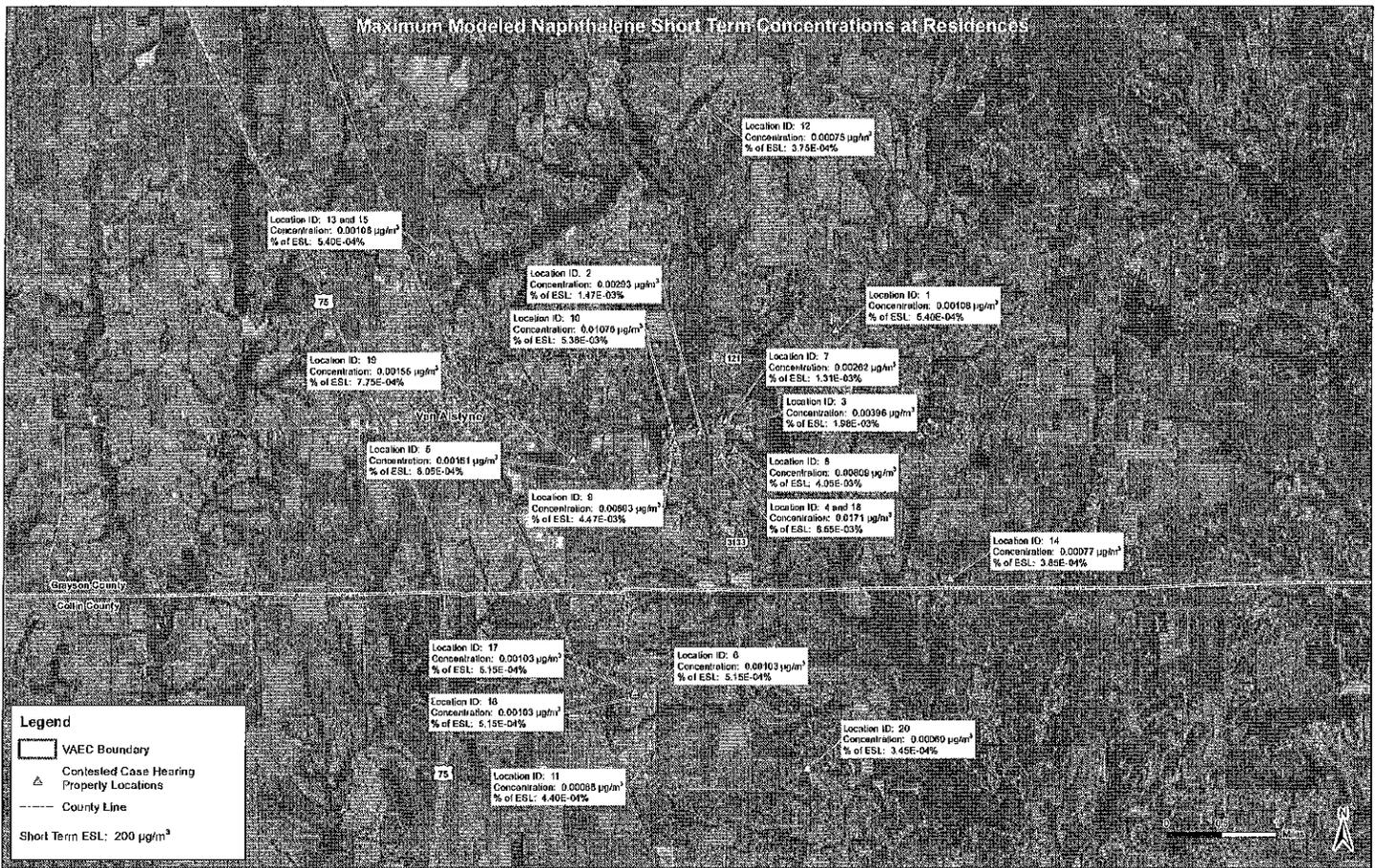
Maximum Modeled Formaldehyde Short Term Concentrations at Residences



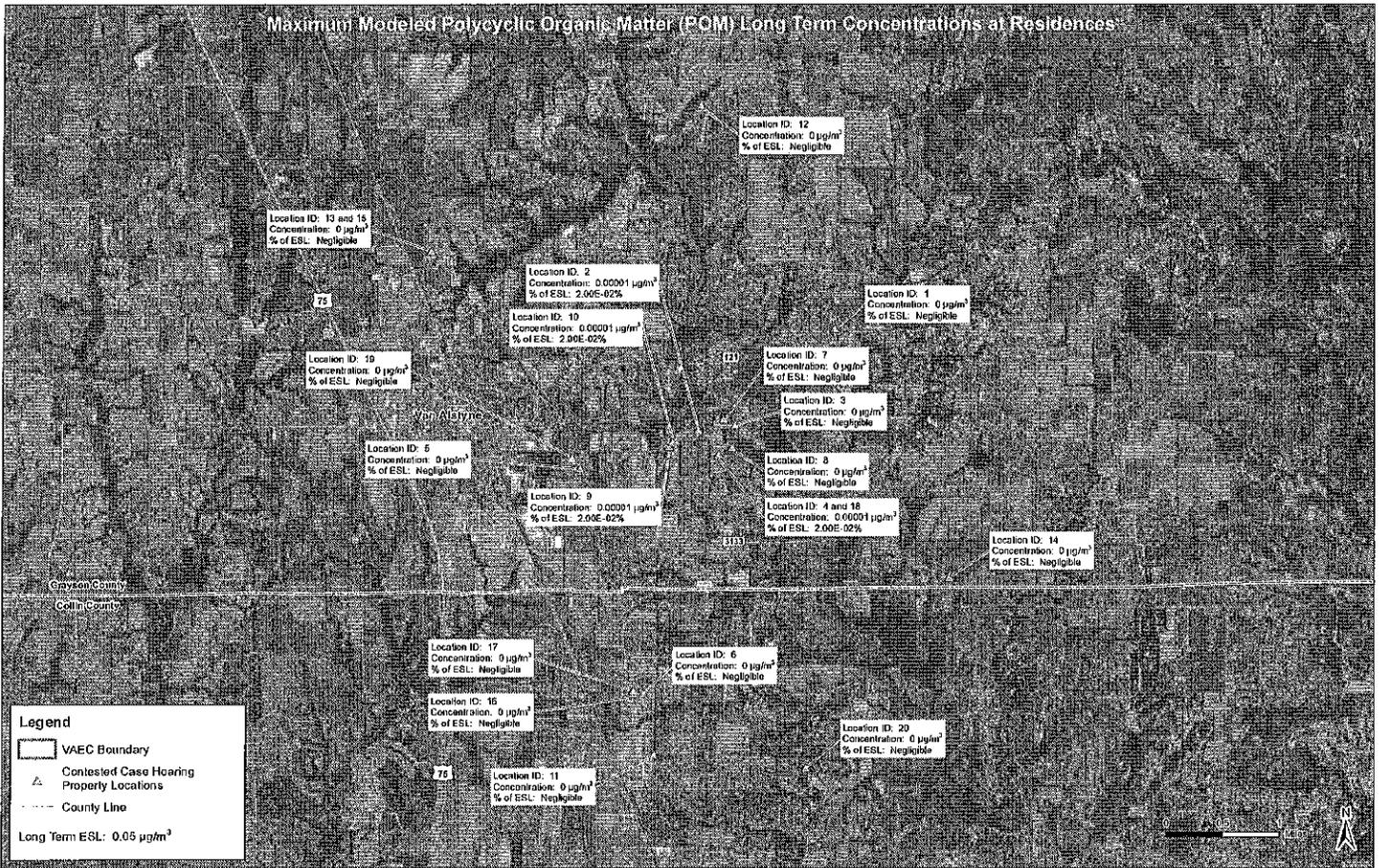
Maximum Modeled Naphthalene Long Term Concentrations at Residences



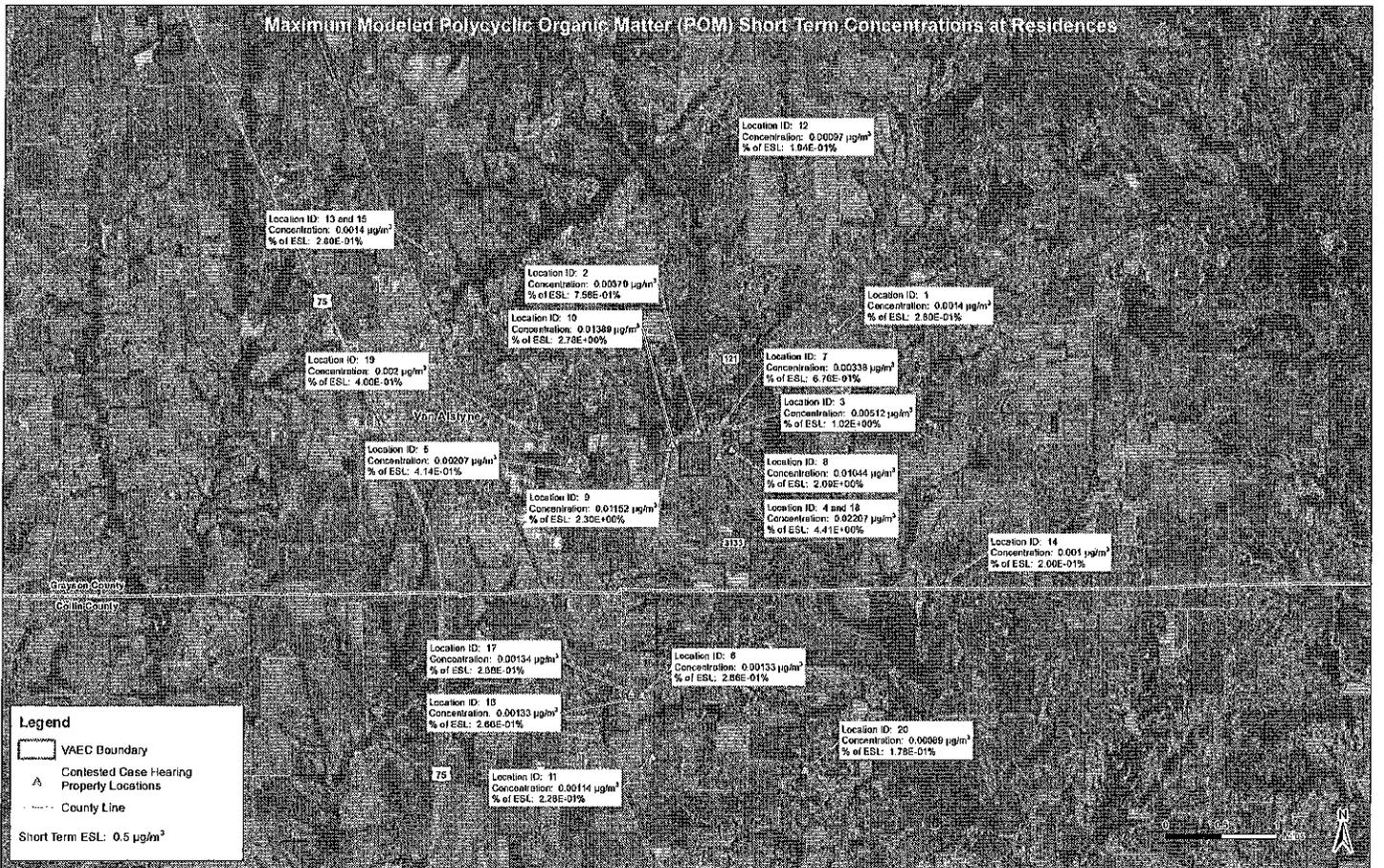
Maximum Modeled Naphthalene Short Term Concentrations at Residences



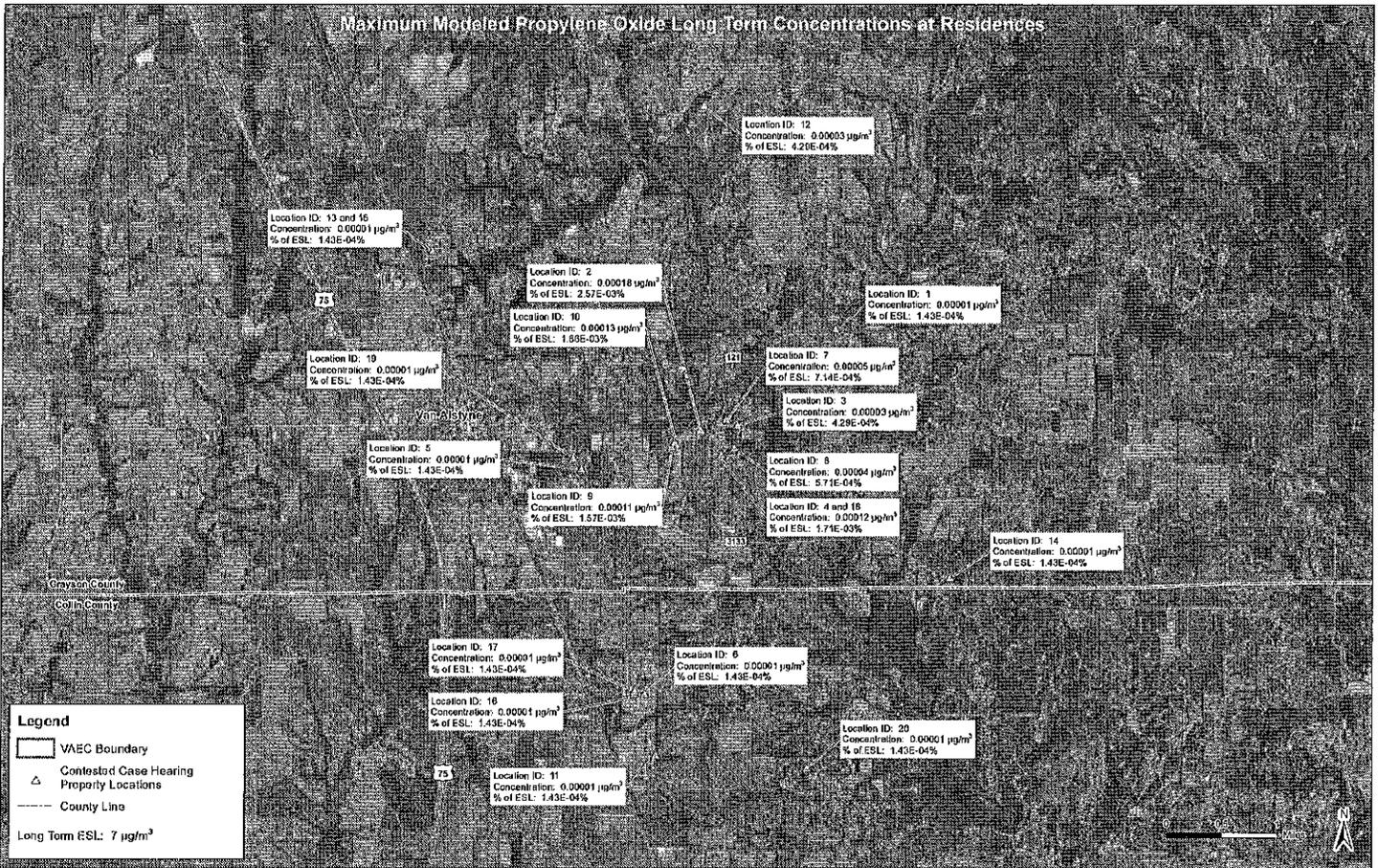
Maximum Modeled Polycyclic Organic Matter (POM) Long Term Concentrations at Residences



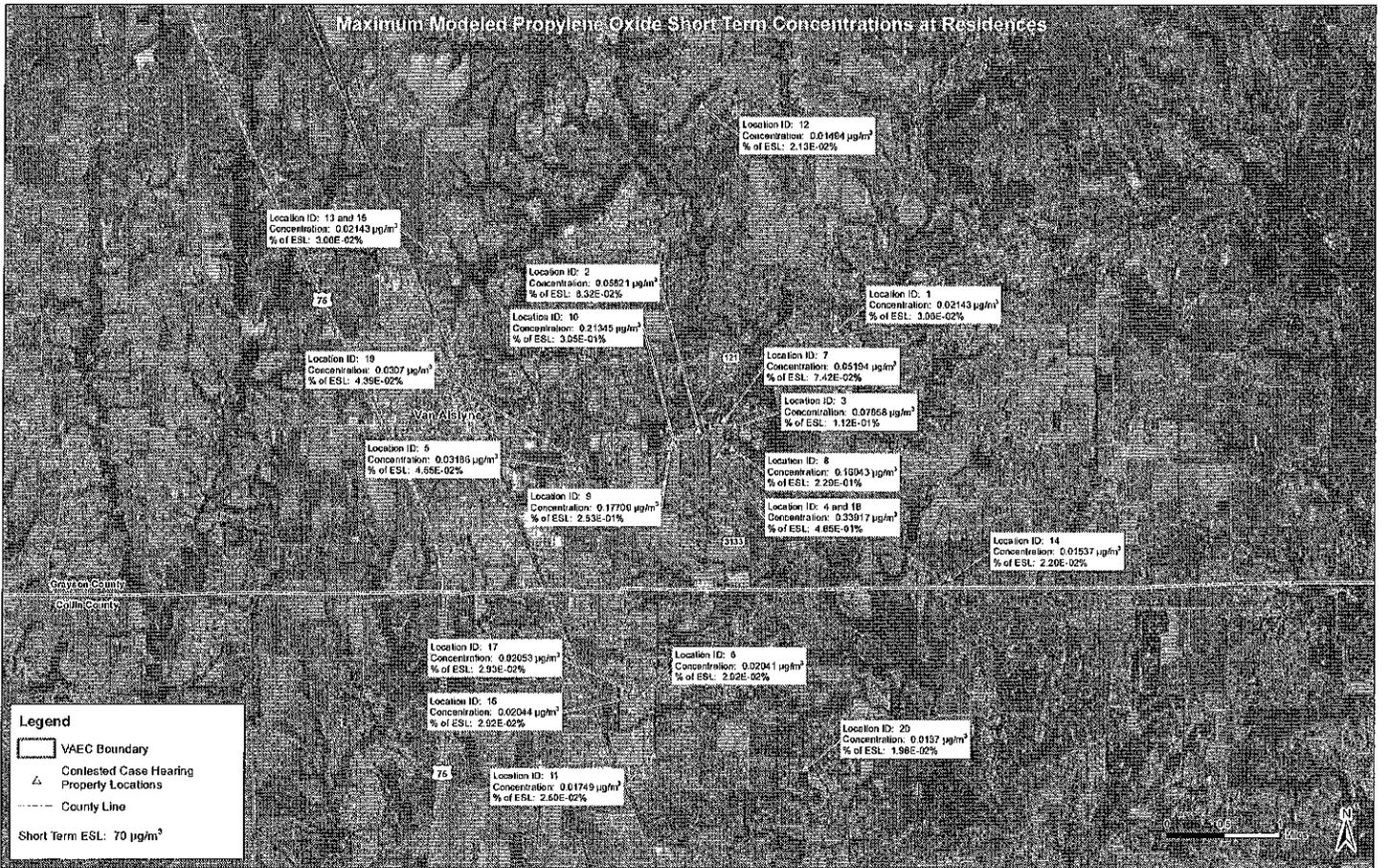
Maximum Modeled Polycyclic Organic Matter (POM) Short Term Concentrations at Residences



Maximum Modeled Propylene Oxide Long Term Concentrations at Residences

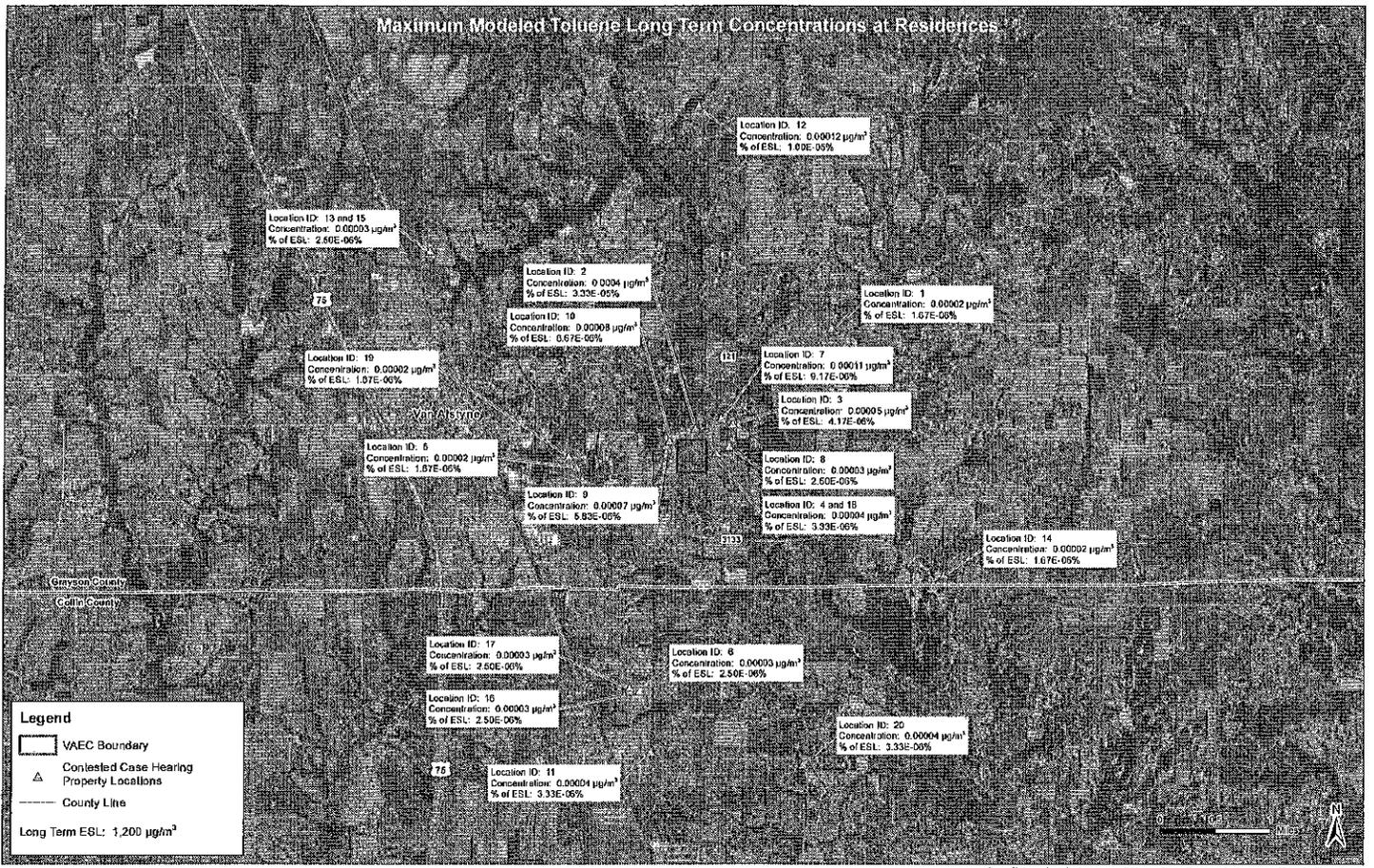


Maximum Modeled Propylene Oxide Short Term Concentrations at Residences

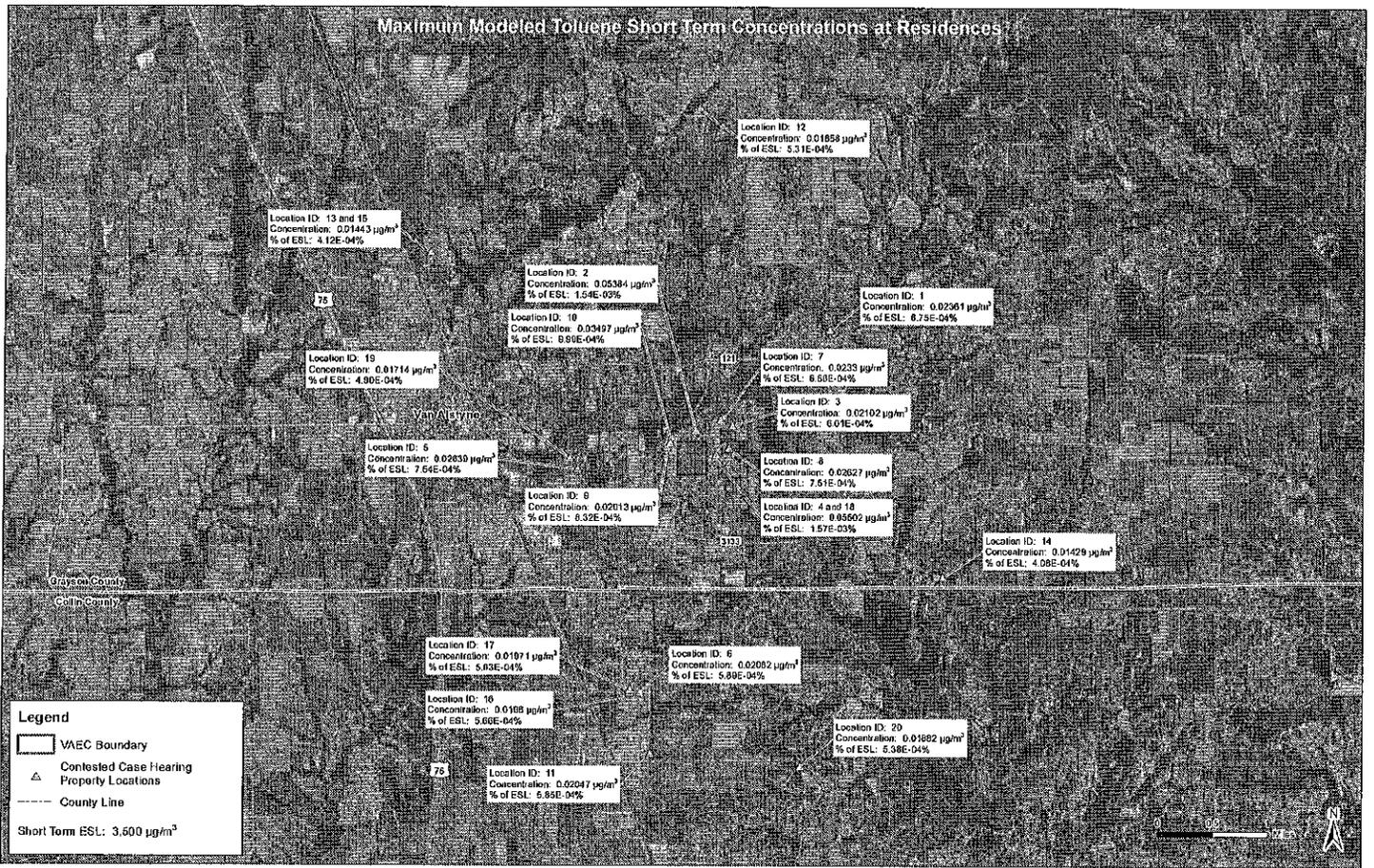


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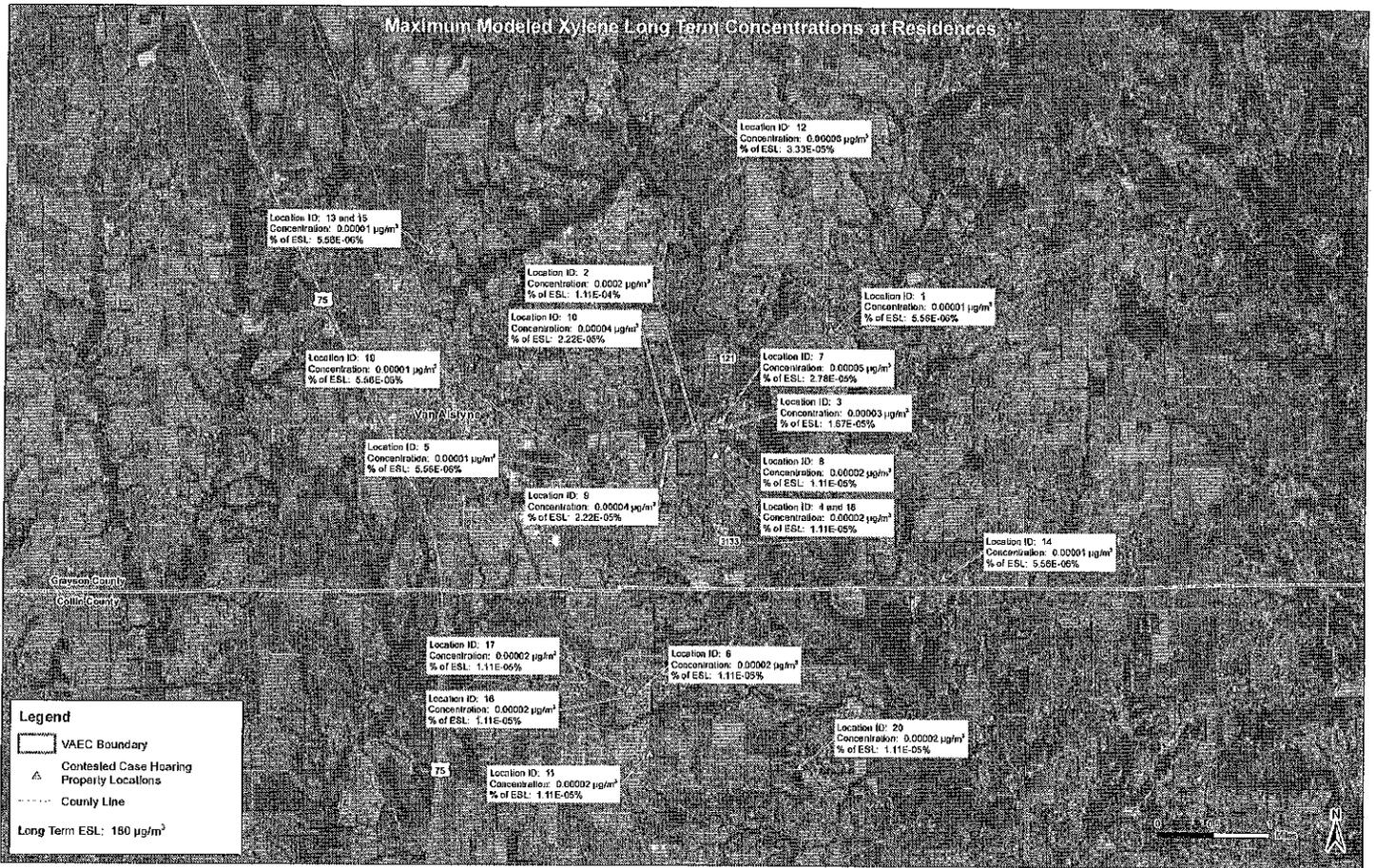
Maximum Modeled Toluene Long Term Concentrations at Residences



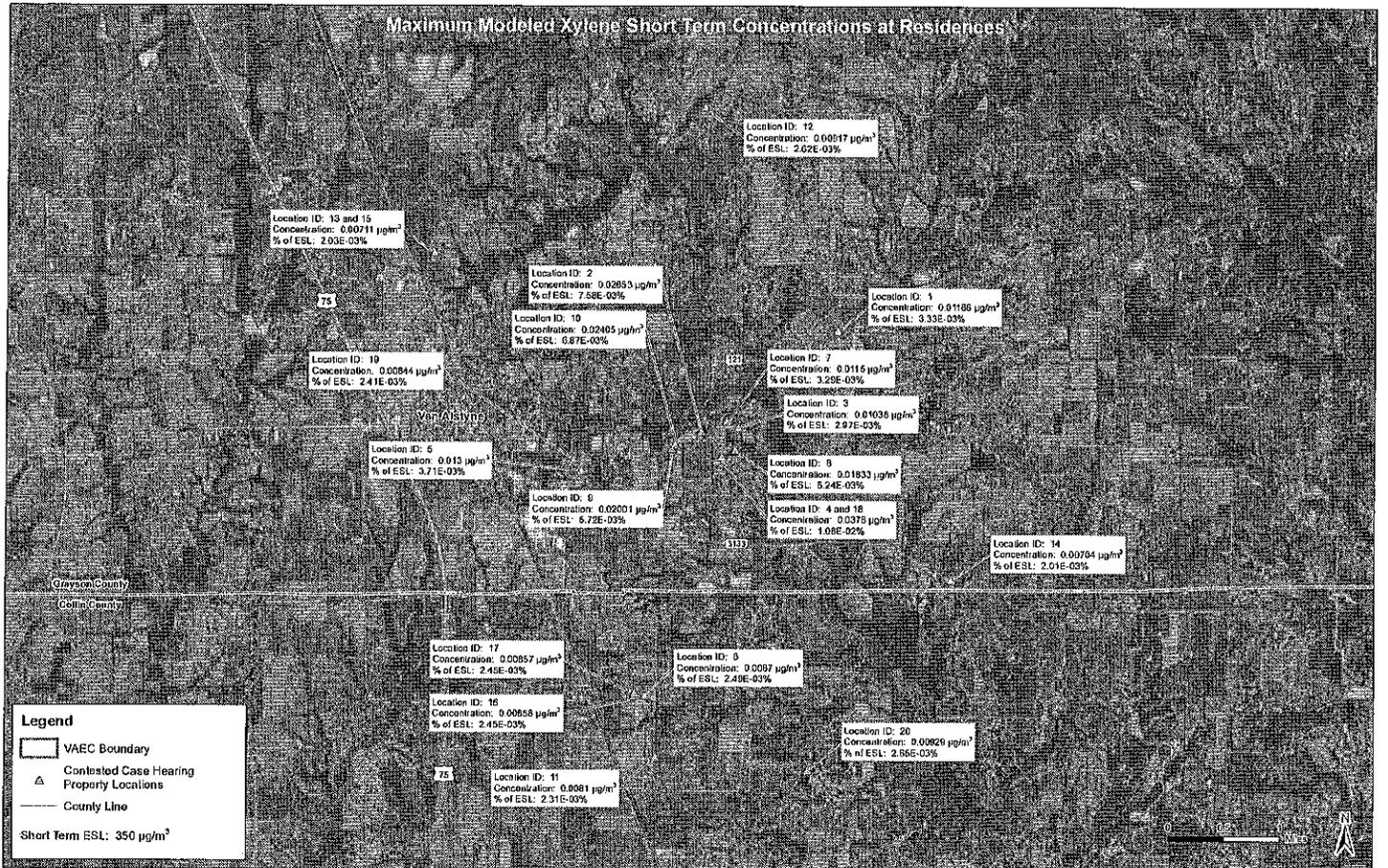
Maximum Modeled Toluene Short Term Concentrations at Residences



Maximum Modeled Xylene Long Term Concentrations at Residences



Maximum Modeled Xylene Short Term Concentrations at Residences



Attachment B

TCEQ DOCKET NO. 2015-0566-AIR

APPLICATION BY NAVASOTA § BEFORE THE
NORTH COUNTRY PEAKERS §
OPERATING COMPANY I, LLC § TEXAS COMMISSION ON
PERMIT NOS. 121051 AND §
PSDTX1418 § ENVIRONMENTAL QUALITY
VAN ALSTYNE, GRAYSON COUNTY §

AFFIDAVIT OF DR. THOMAS DYDEK, PhD, DABT, PE

State of Texas §
County of Travis §

Before me, the undersigned Notary Public in and for Travis County Texas, personally appeared THOMAS DYDEK, Ph.D., D.A.B.T., P.E., the affiant, whose identity is known to me. After I administered an oath, affiant testified as follows:

1. My name is Thomas Dydek. I am over 18 years of age, of sound mind, and capable of making this affidavit. The facts in this affidavit are within my personal knowledge and are true and correct.

2. I am a Board Certified Toxicologist as a Diplomat of the American Board of Toxicology (D.A.B.T.) and a Licensed Professional Engineer (P.E.). I have over 30 year's continuous experience in the environmental field as a toxicologist focusing on human health risk assessments and evaluations of the potential for adverse public health effects of exposure to air contaminants. I have a Bachelor's Degree in Mechanical Engineering and a Master's Degree in Environmental Science and Engineering from Rice University in Houston, Texas. My doctoral degree is in Environmental Science and Engineering from the University of North Carolina School of Public Health. I have also done a Post-Doctoral Fellowship in Toxicology in the College of Pharmacy at the University of Texas at Austin.

3. Board certification in toxicology is similar to that in the medical fields. The American Board of Toxicology is the organization that conducts board certification activities for toxicology in this country. Candidates for certification must demonstrate a high level of education and a sufficient number of years in professional practice to qualify to sit for the Board Certification examination. The examination is a two-day written test that covers all aspects of toxicology. If that examination is passed, the candidate becomes a Diplomat of the American Board of Toxicology, or D.A.B.T. for short. To keep one's certification current, it must be renewed every five years. I became Board-Certified in 1995 and I have been re-certified in 2000, 2005, and 2010. I became a Licensed Professional Engineer in Texas in 1992 and I have kept my P.E. license current since that time.

4. My chief area of expertise is the evaluation of human health and welfare effects of exposure to environmental pollution. While with the U.S. Fish and Wildlife Service in Albuquerque, New

Mexico, I was responsible for control of air, water, and solid waste pollution at agency facilities in an eight-state area. I also worked for the U.S. Environmental Protection Agency in Dallas, Texas as a permit engineer in the National Pollutant Discharge Elimination System (NPDES) program. During my doctoral program, I worked for the EPA in North Carolina in the area of air pollution research and air pollutant exposure studies using human volunteers. After returning to Texas in 1982, I taught several courses in the Environmental Studies Program at St. Edward's University in Austin. I then entered my Post-doctoral program at the University of Texas.

5. From 1984 to 1991, I was the Senior Staff Toxicologist at the Texas Air Control Board (a predecessor agency to the TCEQ) in Austin. In that job, I performed health and welfare effects evaluations for over 1,000 permit applications. I also reviewed many ambient air and contaminated soil sampling reports to determine the potential for adverse effects on public health. I participated in many Public Meetings and gave extensive expert toxicological testimony at agency Public Hearings.

6. In 1991, I joined the staff of Jones and Neuse, Inc., an environmental consulting services company in Austin, Texas. In that job, I performed quantitative human health risk assessments for chemical contamination of air, water, and soil. I have owned and operated my own toxicology and engineering consulting firm, Dydek Toxicology Consulting, since 1994. In my current job, I have continued my work on human health risk assessments for air quality permitting and other agency-related programs.

7. My additional professional activities include active membership in many technical associations and service on various City and State citizen committees in the areas of air quality, toxicology, risk assessment, and solid waste management. I have also served as an Adjunct Professor in the Environmental Health Division of the University of Texas School of Public Health in San Antonio (1987-2000). I have attended more than 130 technical environmental conferences and made presentations at more than 25 of these meetings. My current curriculum vitae is attached to this Affidavit as Exhibit A.

8. I have prepared this Affidavit in support of Applicant Navasota North Country Peakers Operating Company I, L.L.C.'s ("Navasota's") Response to Hearing Request filed in the above identified docket. The opinions I give in this Affidavit were formulated based upon my experience, training and education in the fields of toxicology and engineering, and my review of information concerning air emissions from Navasota's proposed plant.

9. That information included the results of air dispersion modeling. Specific modeling determined the maximum possible off-property impacts of air contaminants to be emitted by the proposed plant at any location off-property and specifically at the residences of the individual Hearing Requestors.

10. Based on my review of this information, and on my expertise and experience as a toxicologist, I have reached the conclusions set forth as follows in this affidavit.

11. It is one of the basic tenets of toxicology that "the dose makes the poison". In other words, a person's exposure to a potentially toxic chemical will not result in any adverse effects unless that exposure is of sufficient magnitude, duration, and frequency to cause those effects. It is my opinion in this matter that the levels of air contaminants to be emitted from the proposed Navasota plant will not be of a magnitude, duration, or frequency great enough to cause any adverse human health or welfare effects to the Hearing Requestors in this case.

12. There are two major categories of air contaminants of concern in this type of health effects evaluation process: criteria air pollutants and non-criteria air pollutants. Criteria air contaminants are those for which a National Ambient Air Quality Standard (NAAQS) or a Texas Commission on Environmental Quality (TCEQ) Property Line or "Net Ground Level Concentration" (NGLC) Standard has been set. The NAAQSs and the State of Texas standards have been set at levels protective of the health and welfare of even the most sensitive members of the general population with an adequate margin of safety. Sensitive members of the population include the very young, the very old, and people with pre-existing medical conditions such as asthma and other respiratory diseases and diseases of the cardiovascular system.

13. Non-criteria air pollutants are those that have neither a NAAQS nor a State of Texas standard. While there are no air quality standards for these air contaminants, the TCEQ has established guideline exposure levels which are used to evaluate the potential for adverse health or welfare effects of community exposures to these air contaminants. Non-criteria air contaminants include, but are not limited to, those recognized as Hazardous Air Pollutants (HAPS) by the U.S. Environmental Protection Agency. These guideline levels are called Effects Screening Levels (ESLs). ESLs have been set at levels at or below which no adverse human health or welfare effects are expected.

14. Health-based ESLs have been set based on human or animal data that show the levels of chemical exposures at which no adverse effects (what's called a no adverse effects level or NOAEL) or very minor adverse effects (a low adverse effects level or LOAEL) occur. These NOAELs or LOAELs are then reduced by safety factors designed to make the data applicable to community exposures to air contaminants. ESLs are very conservative because they have been set at levels typically orders of magnitude smaller than exposure levels that can actually cause adverse health effects.

15. Welfare-based ESLs are based on prevention of odor nuisance and effects on vegetation. Most welfare-based ESLs have been set to prevent odor nuisances. These ESLs are set at the odor thresholds for chemicals as determined in a laboratory setting. These ESLs are very conservative as well, since the levels at which odors can be detected in the laboratory will be lower than those likely to be detected in a community setting. There are only a few vegetation-based ESLs (for hydrogen fluoride, other fluorides, and ethylene). These ESLs have been set at levels at which minor damage to plant species has been found. Plants and crops are protected from adverse effects of other chemicals because the health-based or odor-nuisance-avoidance-based ESLs for those other chemicals are lower than the vegetation protection-based. Thus meeting those other ESLs will also protect vegetation.

16. The proposed Navasota plant will emit five air contaminants that have NAAQSs: carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). The proposed Plant will also emit two air contaminants that have State of Texas standards: sulfur dioxide and sulfuric acid mist. Non-criteria air contaminants to be emitted from the proposed plant include very small amounts of various volatile organic compounds (VOCs).

17. The health effects evaluation procedure used in Texas in air quality permitting matters is to first predict the expected off-property airborne levels of air contaminants to be emitted from an industrial source and then to compare those predicted levels to the air quality standards and guidelines mentioned above. If predicted levels do not exceed health- and welfare-based standards and guidelines, no adverse effects will occur. This is a well-recognized, accepted, and scientifically reliable method of evaluating the human health and welfare risks (if any) of chemicals emitted into the air. As an independent toxicologist, I agree that this is the best way to evaluate the potential for adverse effects from air contaminant emissions in air quality permitting situations.

18. Since the TCEQ air quality permits are "pre-construction" permits, computer-based methods are used to predict the impacts of emissions that will occur after the plants are built. This type of computer modeling is referred to as air dispersion modeling. Air dispersion modeling is a well-accepted and almost universally used method by which off-property air concentrations of chemicals emitted from emission sources are predicted. The model used in Texas is called AERMOD. This model was developed and tested by the U.S. Environmental Protection Agency and is used by permit applicants seeking air quality permits from the TCEQ.

19. Air dispersion modeling was performed on behalf of the Applicant to determine the maximum possible off-property impacts (i.e. airborne concentrations) of the air contaminants to be emitted from the proposed Navasota plant. It is a common and accepted practice to rely on the results of such modeling when determining compliance with NAAQSs and Texas NGLC Standards. I relied on those modeling results in the preparation of this Affidavit. That modeling showed that the maximum impacts of these type of air contaminants anywhere off of the Navasota property would meet all applicable federal and state guidelines. The TCEQ Air Dispersion Modeling Team has reviewed and approved the modeling submitted by the Applicant for this plant.

20. It is also a common and accepted practice to rely on the results of such modeling when performing human health effects evaluations for chemicals without Federal or State of Texas standards. To analyze potential impacts at individual Hearing Requestor's residences receptors were located at the location of each residence and the predicted values of air contaminants were determined by the air dispersion model.

21. The airborne concentrations predicted by the Applicant's air dispersion modeling are conservative; that is, they likely over-predict the levels of air contaminants that could actually occur in the vicinity of the proposed Navasota Plant and/or at the residences of the Hearing Requestors. For example, it was assumed that the maximum emissions would occur during the hours in which meteorological conditions least favor the dispersion of those air contaminants.

22. Table 1 at the end of this Affidavit summarizes the maximum predicted impacts resulting from the emissions of air contaminants having NAAQSs at any of the residential receptors identified above. These impacts ranged from 0.03% to 4.47% of the applicable standards. Another way to express this is that the predicted impacts were from 22.4 to more than 3,000 times lower than the applicable NAAQSs. Since these data pertain to the one residence receptor having the greatest predicted impact, the impacts at the other residences would be even smaller percentages of the NAAQSs.

23. Two chemicals (sulfur dioxide and sulfuric acid) to be emitted from the proposed plant have State of Texas NGLC standards. The maximum predicted impacts at any location off company property for this analysis. This is a conservative approach since the maximum impacts anywhere would be higher than those at the Requestors' residences. Table 2 shows a summary of that data. The impacts ranged from 0.10% to 0.96% of the State of Texas Property Line Standards. In other words, these impacts were from 104 to 1,000 times lower than those standards.

24. Table 3 shows the maximum predicted impacts at all residential receptors for chemicals to be emitted having ESLs ranged from 0.000016% to 4.41% of the respective ESLs for those chemicals. Put another way, the highest impacts at these sites were from 23 to greater than 6.3 million times lower than the applicable ESLs.

25. The above analysis has considered the air contaminants to be emitted from the Navasota plant individually. Some mention of the potential for adverse effects of multiple chemicals ("additive" or "synergistic" effects) is warranted. From a toxicological point of view, additive or synergistic effects are not expected unless at least one of the chemicals involved is present at a level at which health effects can occur. This is not the case for the emissions from the Navasota plant. The nearby residents exposures to all chemicals are tiny fractions of health-based standards and guidelines, far below levels which can cause harm.

26. In conclusion, the maximum levels of all air contaminants to be emitted from the proposed Navasota plant near Van Alstyne, Texas have been determined by air dispersion modeling. The predicted maximum impacts at the Hearing Requestors' residences are from 20 to millions of times lower than all Federal and State of Texas health- and welfare-protective standards and guidelines, even considering the conservative assumptions that went into the dispersion modeling as mentioned above.

27. Those air quality standards and guidelines have been set at levels low enough to protect even the most sensitive members of the general population, including the very young, the very old, and people with pre-existing medical conditions such as asthma and other respiratory diseases and diseases of the cardiovascular system. These standards and guidelines are also in place to protect the safety and welfare of the public and of their property.

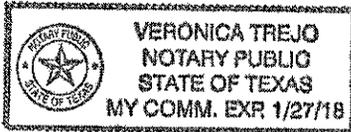
28. Going back to the point I made earlier in this Affidavit, the maximum (conservatively estimated) levels of air contaminants emitted from the proposed Navasota Plant at the Hearing Requestors' residences (the "dose") are not great enough to cause any adverse effects (the "poison"). This analysis has shown the emissions from the proposed Navasota facility will pose no actual or imminent risk of adverse effects on the health, safety, or welfare of the Requestors or their property.

Furthermore Affiant sayeth not.

Thomas Dydek

Thomas Dydek, PhD, DABT, PE

Sworn and subscribed before me by Thomas Dydek on 6/3/15, 2015.



Veronica Trejo
Notary Public in and for the State of Texas
My commission expires: 01/27/18

Table 1. Emissions Impact Analysis for Air Contaminants Having NAAQSS (at the Requestor's residence having the highest predicted impact).

Air Contaminant	Averaging Time	Maximum Impact (ug/m3)	NAAQS for Air Contaminant (ug/m3)	Maximum Impact as a Percentage of NAAQS
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carbon monoxide	1-hr	105.35	40,000	0.26%
carbon monoxide	8-hr	41.37	10,000	0.41%
nitrogen dioxide	1-hr	8.41	188	4.47%
nitrogen dioxide	Annual	0.100	100	0.10%
PM10	24-hr	0.843	150	0.56%
PM2.5	24-hr	0.632	35	1.81%
PM2.5	Annual	0.0181	12	0.15%
sulfur dioxide	1-hr	0.422	196	0.22%
sulfur dioxide	3-hr	0.3494	1,300	0.03%

Table 2. Emissions Impact Analysis for Air Contaminants Having State of Texas Standards (predicted levels are the maxima anywhere off-property).

Air Contaminant	Averaging Time	Maximum Predicted Impact (ug/m3)	NGLC for Air Contaminant (ug/m3)	Maximum Impact as a Percentage of the NGLC
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sulfur dioxide	30-min	1.03	1,048	0.10%
sulfuric acid	1-hr	0.48	50	0.96%
sulfuric acid	24-hr	0.08	15	0.53%

Table 3. Emissions Impact Analysis for Air Contaminants Having ESLs (at the Requestor's residence having the highest predicted impact).

Air Contaminant	Averaging Time	Maximum Predicted Impact (ug/m3)	ESL for Air Contaminant (ug/m3)	Maximum Impact as Percentage of ESL
Acetaldehyde	1-hr	0.09982	15	0.67%
Acetaldehyde	annual	0.00015	45	0.00033%
Acrolein	1-hr	0.01219	3.2	0.381%
Acrolein	annual	0.00002	0.82	0.00244%
Benzene	1-hr	0.12239	170	0.072%
Benzene	annual	0.00007	4.5	0.0016%
Butadiene, 1,3-	1-hr	0.0053	510	0.0010%
Butadiene, 1,3-	annual	< 0.00001	9.9	< 0.000101%
Ethyl benzene	1-hr	0.01322	740	0.0018%
Ethyl benzene	annual	0.00009	570	0.000016%
Formaldehyde	1-hr	0.15755	15	1.05%
Formaldehyde	annual	0.00093	3.3	0.028%
Naphthalene	1-hr	0.0171	200	0.0086%
Naphthalene	annual	0.00001	50	0.000020%
POM*	1-hr	0.02207	0.5	4.41%
POM*	annual	0.00001	0.05	0.020%
Propylene oxide	1-hr	0.33917	70	0.48%
Propylene oxide	annual	0.00018	7	0.0026%
Toluene	1-hr	0.05502	3500	0.0016%
Toluene	annual	0.00040	1200	0.000033%
Xylenes	1-hr	0.0378	350	0.0108%
Xylenes	annual	0.00020	180	0.00011%

* POM is polycyclic organic matter.

EXHIBIT A.

Current curriculum vitae for Dr. Thomas Dydek

CURRICULUM VITAE
Dr. Thomas Dydek, Ph.D., D.A.B.T., P.E.
Board-Certified Toxicologist and Professional Engineer

Dydek Toxicology Consulting
5208 Avenue H
Austin, Texas 78751

Phone: (512) 280-5477
Mobile: (512) 663-7836

E-mail: dydek@tox-expert.com
Web Page: <http://www.tox-expert.com>

I. AREAS OF EXPERTISE:

Evaluating the potential human health effects associated with exposure to toxic chemicals such as metals, gases, pesticides, petroleum products, oil and gas fracking emissions, solvents, and many other chemicals in occupational and community settings.

Evaluating the potential for odor nuisance conditions caused by airborne emissions of industrial chemicals such as those listed above.

Evaluating the potential for adverse health effects of implanted medical devices.

Preparing Baseline Risk Assessments, establishing clean-up guidelines or standards, conducting state of the art reviews, and doing chemical exposure assessments.

Investigating indoor air quality including projects involving exposure to molds and/or bacteria, and

Functioning as an expert witness in toxic tort cases, criminal proceedings, worker's compensation matters, and administrative hearings before environmental agencies.

II. EDUCATION:

A. Rice University, Houston, Texas. Bachelor of Arts degree in Mechanical Engineering. Major subjects were engineering, chemistry, physics, and mathematics.

B. Rice University, Houston, Texas. Master of Science degree in Environmental Science and Engineering. Major subjects were water and wastewater engineering and biology.

C. University of North Carolina School of Public Health. Doctorate in Environmental Science and Engineering, majoring in toxicology and minoring in epidemiology and biostatistics. Other major subjects were air pollution engineering and chemistry, aerosol science, biochemistry, and industrial hygiene.

D. University of Texas at Austin. Post-doctoral research fellowship in toxicology in the UT School of Pharmacy. Chief area of research was the effects of drugs and environmental contaminants on the respiratory systems of experimental animals.

III. WORK EXPERIENCE:

A. Dydek Toxicology Consulting, Austin, Texas. Dr. Dydek operates his own environmental consulting firm that specializes in toxicology and human health risk assessment. His work includes health risk analyses for site remediations, health effects evaluations for air and hazardous waste permitting, and other toxicological evaluations. He is very familiar with the State of Texas and the U.S. Environmental Protection Agency quantitative risk assessment methodologies and with other methods for assessing the potential for adverse effects from exposure to environmental contaminants. Dr. Dydek also serves as an expert witness in toxic tort cases, regulatory agency public hearings, and other legal proceedings.

B. Jones and Neuse, Inc., Austin, Texas. Dr. Dydek was employed as Senior Toxicologist and Project Engineer for this environmental consulting firm for three and one-half years. This job entailed health risk assessments, air emissions calculations, writing proposals, doing cost estimates and other functions associated with assisting clients in obtaining necessary permits and other authorizations to operate within the existing framework of environmental regulations in this country and abroad. This included work on Superfund and other remediation activities using the Risk Reduction Rules, air quality permitting, Resource and Recovery Act (RCRA) activities, preparing No-Migration Petitions, and expert testimony in public hearings as well as toxic tort and other legal cases.

C. Private Environmental Consulting Work, Austin, Texas. Dr. Dydek worked on several human health risk analysis projects on his own time while at the Texas Air Control Board. These included two reports on the potential human health effects of exposures to ambient levels of air pollutants in the Mexico City area, and an analysis of sulfur dioxide levels in an industrial area in Hong Kong.

D. Texas Air Control Board, Austin, Texas. Dr. Dydek was employed as the Senior Staff Toxicologist in the Health Effects Division. His major duty in this job was to assess the potential for adverse public health and welfare effects from emissions of air pollutants. He conducted extensive independent evaluations of the impacts of potentially-toxic air contaminants on human health and welfare. He participated in public meetings and testified as an expert witness in public hearings concerning air pollution hazards. He also monitored the scientific literature, attended workshops and conferences, and kept the health effects computerized databases current.

E. Saint Edward's University, Austin, Texas. Dr. Dydek taught several undergraduate courses in the Environmental Studies Program in the Department of Physical and Biological Sciences. These courses included Environmental Studies, Toxicology, Industrial Hygiene, and Urban Planning.

F. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. Dr. Dydek worked as a research scientist in the planning, implementation, and evaluation of air pollution control research projects, either as principal investigator or as project officer.

G. U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. Dr. Dydek held several 20-hour per week appointments in various EPA research laboratories during doctoral program at the University of North Carolina School of Public Health. This work was in the areas of air quality data analysis and in human health effects of exposures to air pollutants at the EPA Human Exposures Laboratory.

H. U.S. Environmental Protection Agency, Dallas, Texas. Dr. Dydek worked as an environmental engineer in the area of water pollution control, writing water pollution (National Pollutant Discharge Elimination System) permits and compliance schedules for major industrial and Federal facilities.

I. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. Dr. Dydek was in charge of planning, designing, and inspecting facilities for water supply, wastewater pollution control, and solid waste management at Federal hatcheries and refuges in an eight-state area.

IV. CERTIFICATIONS, LICENSES, AFFILIATIONS, AND PROFESSIONAL ACTIVITIES:

- A. Board Certified Toxicologist as a Diplomate of the American Board of Toxicology (D.A.B.T.).
- B. Licensed and authorized to practice as a Professional Engineer in Texas (License No. 71831).
- C. Adjunct Professor of Environmental Health at the University of Texas School of Public Health at San Antonio, Texas.

CERTIFICATIONS, LICENSES, AFFILIATIONS, AND PROFESSIONAL ACTIVITIES (continued):

D. Member of the Society of Toxicology, the American College of Toxicology, the Society for Risk Analysis, the Roundtable of Toxicology Consultants, the American Conference of Governmental Industrial Hygienists, and the Air and Waste Management Association (Vice-Chair of the Air Toxics Committee, International AWMA; Treasurer of Central Texas Chapter of AWMA; Membership Chair of Central Texas AWMA).

E. Professional Activities at Local Level: Member of the Citizen's Advisory Task Force on Solid Waste Management. Member of an ad hoc committee on air quality issues in Austin. Member of a steering committee which aided the City in working with the local mass transit authority (Capital Metro) on environmental compliance.

F. Professional Activities at State Level: Member of the Human Health Workgroup in the State of Texas Environmental Priorities Project (STEPP). This was the comparative risk project for Texas. Also provided comments for Sunset Review of Texas Natural Resource Conservation Commission.

G. Technical Advisor for television shows "CSI: Las Vegas", and "Bones" (2009 to present).

H. Peer-reviewer for U.S. Environmental Protection Agency "Provisional Toxicity Value" documents (2011 to present).

V. HONORS AND AWARDS:

Dean's List, Rice University.

Special Achievement Award, U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

Special Achievement Award, U.S. Environmental Protection Agency, Dallas, Texas.

Certificate of Appreciation, City of Austin (for work on the Solid Waste Management Task Force).

Outstanding Employee Award, Texas Air Control Board, Austin, Texas.

Austin City Council Award (for work on Clean Air committee).

VI. PERSONAL ACCOMPLISHMENTS

Member, National Championship Soccer Team (Veteran's Cup, Over 50's Division), 2000.

Member, National Championship Soccer Team (Veteran's Cup, Over 60's Division), 2007, 2008, 2009, 2010.

Member of Austin City League Championship Soccer Team (Over 50's Division), 2007, 2010, and 2011.

VII. PUBLICATIONS:

"Spring Creek: Water Resource Planning for Local Development" Dydek, T., et al., Environmental Sciences and Engineering Report No. 1, Rice University, Houston, Texas, 1971.

"Effects of Chlorination on Bacterial Polysaccharide Material", Master's Thesis, Rice University, 1972.

"The Influence of Carbon-Nitrogen Ratio on the Chlorination of Microbial Aggregates", W.G. Characklis and S.T. Dydek, Water Research 10:515-522, 1976.

"Neutralization and Size Changes of Sulfuric Acid Mist Particles", Ph.D. Dissertation, University of North Carolina School of Public Health, 1981.

"Analysis of Pulmonary Collagen Production by HPLC Separation of Radiolabeled Hydroxyproline and Proline", Proceedings of the Western Pharmacology Society 27:319, 1984.

"Effects of Sodium Chloride on the HPLC Separation of Hydroxyproline and Proline", Liquid Chromatography 2:536, 1984.

"Effects Evaluation of Accidental Releases of Air Toxics: A Case Study of a Vinyl Chloride/Hydrogen Chloride Release", in Toxics, CAER, and Title III, Proceedings of the APCA Southwest Section Technical Meeting, ed. J. Shields, Corpus Christi, Texas, 1988.

VII. PUBLICATIONS (continued):

- "Use of Odor Thresholds for Predicting Off-Property Odor Impacts", Willhite, M.T. and S.T. Dydek, in Recent Developments and Current Practices in Odor Regulations, Controls and Technology, International Specialty Conference, Detroit, Michigan, Derenzo, D.R. and A. Gnyp, eds., Air & Waste Management Association, Pittsburgh, Pennsylvania, 1989, pp. 235-245.
- "TNRCC's New Approach to Air Quality Permits", Texas Lawyer Environmental Law Issue, pp. 30-34, 1995.
- "Health Risk Analysis Methods and the Law", The Texas Law Reporter, Volume 2, Issue 7, 1996.
- "A Review of 'Microbial Toxins. Molecular and Cellular Biology'", International Journal of Toxicology 25:433-434, 2006.
- "Investigating Carbon Monoxide Poisonings", book chapter in Carbon Monoxide Poisonings, 3rd Edition, D. Penney, ed., CRC Press, Taylor & Francis Group, Boca Raton, Florida, 2008.
- "Shale Oil Toxicity", book chapter in the Encyclopedia of Toxicology, 3rd Edition, Elsevier Publishing Company, Waltham, Massachusetts, 2014.

VIII. TECHNICAL AND BUSINESS RELATED PRESENTATIONS:

- "Effects of Dynamic Operating Parameters on the Calibration Stability of CHAMP Aerometric Sensors", Air Pollution Control Association Annual Meeting, Toronto, Canada (1977).
- "Neutralization and Size Changes of Sulfuric Acid Mist Particles in a Model of the Human Upper Airways", American Association for Aerosol Research Annual Meeting; Santa Monica, California (1982).
- "Studies of the Behavior of Sulfuric Acid Mist in a Model of the Human Upper Airways", Sixth World Congress on Air Quality, Paris, France (1983).
- "Human Exposure to Potentially-Toxic Elements Through Ambient Air in Texas", Air Pollution Control Association Annual Meeting; San Francisco, California (1984).
- "Ozone Health Effects", Ozone-Its Environmental and Economic Impact on Southeast Texas; Environmental Quality Council of Southeast Texas; Beaumont, Texas (1984).
- "Risk Assessment in Health Effects Review of Air Permits in Texas", Air Pollution Control Association Annual Meeting; Detroit, Michigan (1985).
- "Effects Evaluation of Non-Criteria Air Pollutant Emissions from Hazardous Waste Management Facilities in Texas", Control of Air Pollution from Hazardous/Solid Waste Management Facilities; Austin, Texas (1986).
- "Texas Procedure for Assessing Air Toxics", Setting Air Toxics Standards; Society for Risk Analysis; Houston, Texas (1987).
- "Texas Experience in Hazard, Exposure, and Risk Assessment Methods", Developing and Implementing Air Toxics Control Programs; USEPA; Boston, Massachusetts (1987).
- "Texas Procedure for Assessing Air Toxics", Solid and Hazardous Waste Management Symposium; Texas Water Pollution Control Association; Houston, Texas (1987).
- "Effects Evaluation of Hazardous Waste Handling Facilities", Annual Technical Meeting of the Southwest Section of the Air Pollution Control Association; Irving, Texas (1987).
- "Air Toxics Regulation- Federal and State"; Meeting of the North Texas Chapter of the Air Pollution Control Association; Dallas, Texas (1987).
- "Effects Evaluation of Accidental Releases or Air Toxics: A Case Study of a Vinyl Chloride Release", Southwest Section of the APCA Annual Meeting; Corpus Christi, Texas (1988).
- "Risk Communication in Air Permitting in Texas" APCA Annual Meeting; Dallas, Texas (1988).
- "Air Toxics", Texas Environmental Super Conference; Austin, Texas (1988).
- "Update on the Gulf Coast Community Exposure Study", Community Leader/News Media Briefing; Port Arthur, Texas (1988).
- "Air Toxics Review", Air Quality Permits Workshop, Texas Air Control Board, Austin, Texas (1988).
- "Comparison of Health Risk Assessment Approaches for Carcinogenic Air Pollutants", APCA; Anaheim, California (1989) and Haztech International Conference; Houston, Texas (1990).
- "Texas Air Control Board Programs Concerning Air Toxics", North Texas Council of Governments, Dallas, Texas (1989).
- "Essentials of Qualitative Risk Assessment", Solid and Hazardous Waste Management Conference, Lafayette, Louisiana (1993).

VIII. TECHNICAL AND BUSINESS RELATED PRESENTATIONS (continued):

- "Epidemiology: The Discipline and Its Uses", Sixth Annual Environmental Law Symposium, South Texas College of Law, Houston, Texas (1995).
- "Introduction to Risk Assessment and Risk Reduction", Alamo Chapter of the Air and Waste Management Association San Antonio, Texas (1995).
- "Toxicology, Epidemiology and Risk Assessment in Environmental Programs", Ninth Annual Texas Environmental Superconference, Austin, Texas (1997).
- "Overview of Environmental Risk Assessment Programs", Southwestern Association of Toxicologists, Spring Technical Meeting, Fort Worth, Texas (1998).
- "Quantitative Risk Assessment and its Applicability to Industrial Hygiene", American Industrial Hygiene Association Local Chapter meeting, Austin, Texas (1999).
- "Adventures of an Expert Witness Toxicologist", Air & Waste Management Association annual meeting, Salt Lake City, Utah (2000).
- "So You Want to be a Toxicology Consultant", American College of Toxicology annual meeting, San Diego, California (2000).
- "Working with an Expert Witness", Texas Environmental Superconference, Austin, Texas (2005).
- "Toxicology in the Media", Society of Environmental Journalists Annual Meeting, Austin, Texas (2005).
- "The Toxicologist as an Expert Witness", Roundtable of Toxicology Consultants Mid-Year Meeting, Tucson, Arizona (2008).
- "Toxicology Consulting for the Chemical Industry", Continuing Education Course at the American College of Toxicology Annual Meeting, Palm Springs, California (2009).

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED:

- "Environmental Law" (1972).
- "New Horizons in Environmental Biology" (1973).
- "Air Pollution and Public Health", University of Texas at Dallas course (Fall, 1975).
- "Environmental Medicine", Southwestern Medical School course (1975).
- "Introduction to Epidemiology", Southwestern Medical School course (1976).
- "Principles and Practice of Air Pollution Control" (1976).
- Science Seminar, National Institute of Environmental Health Sciences (1977).
- * American Association for Aerosol Research Annual Meeting (1982).
- "Hazardous Waste Management", University of Texas at Austin course (Fall, 1982).
- * "World Congress on Air Quality" (1983).
- "Structure-Activity Relationships and Toxicity Assessment" (1984).
- "The Occupational Health and Safety Professional in the Legal Environment", Southwest Occupational Health Services (1984).
- * Air Pollution Control Association Annual Meeting (1984).
- "Update on Cancer in the Deep South", Deep South Section of the American Industrial Hygiene Association (1984).
- "Evaluation of the Scientific Basis for the Ozone/Oxidant Standard", Air Pollution Control Association (1984).
- * "Ozone-Its Environmental and Economic Impact on Southeast Texas", Environmental Quality Council of Southeast Texas (1984).
- Society of Toxicology Annual Meeting (1985).
- * Air Pollution Control Association Annual Meeting (1985).
- "National Air Toxics Information Clearinghouse Database Seminar", U.S. Environmental Protection Agency (1985).
- "Air Toxics Control: Clearing the Air", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1985).
- "First National Regulatory Agency Resource Recovery Workshop", Northeast States for Coordinated Air Use Management and California Air Pollution Control Officers Association (1986).
- * Dr. Dydek gave a presentation at this meeting or conference

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

- American Public Health Association Annual Meeting (1986).
 "Energy from Municipal Waste: Opportunities for the Southwest", U.S. Department of Energy (1986).
- ** State of New Mexico Environmental Improvement Board Hearings concerning an air toxics program for New Mexico (1986).
- * "Setting Air Toxics Standards", Lone Star Chapter of the Society for Risk Analysis (1987).
 "Drug Metabolism and Toxicokinetics", Continuing Education Course, Society of Toxicology (1987).
 Society of Toxicology Annual Meeting (1987).
- * "Developing and Implementing Air Toxics Control Programs", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1987).
- * "Solid and Hazardous Waste Management Symposium" (1987).
- * Annual Technical Meeting, Southwest Section of the Air Pollution Control Association (1987).
- * "Air Toxics Regulation- Federal and State", North Texas Chapter of the Air & Waste Management Association (1987).
- American Public Health Association Annual Meeting (1987).
 Society for Risk Analysis Annual Meeting (1987).
 "Respiratory Tract Toxicology", Continuing Education Course, Society of Toxicology (1988).
 Society of Toxicology Annual Meeting (1988).
- * Southwest Section of the Air Pollution Control Association Annual Meeting (1988).
 "Environmental Health Faculty/Employer Forum", Association of Schools of Public Health (1988).
 "Hospital Infectious Waste Incineration and Hospital Sterilization Workshop", State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (1988).
- * Air Pollution Control Association Annual Meeting (1988).
- * "Air Quality Permits Workshop", Texas Air Control Board (1988).
 "Regional Risk Assessment Workshop", U.S. Environmental Protection Agency (1988).
- * "Texas Environmental Superconference", State Bar of Texas and the Southwest Section of the Air & Waste Management Association (1988).
- * "Community Leader/News Media Briefing", Joint Industry Council of South Jefferson County (1988).
 "Annual Conference on Occupational Health", American Academy of Occupational Medicine (1988).
 "Benzene and Leukemia", Lone Star Chapter of the Society for Risk Analysis (1989).
 "Regulatory Toxicology", Continuing Education Course, Society of Toxicology (1989).
 Society of Toxicology Annual Meeting (1989).
- * North Texas Council of Governments (1989).
 Southwest Section of the Air Pollution Control Association Annual Meeting (1989).
- * Air Pollution Control Association Annual Meeting (1989).
- * "Haztech International Conference" (1990).
 Air & Waste Management Association Annual Meeting (1990).
 "Practical Strategies for Managing Environmental Liabilities" (1993).
- * Solid and Hazardous Waste Management Conference, University of Southwest Louisiana and the Louisiana Department of Environmental Quality (1993).
 Society of Toxicology Annual Meeting (1994).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1994).
 Air Quality Operating Permits Seminar, Texas Natural Resource Conservation Commission (1995).
- * Sixth Annual Environmental Law Symposium, South Texas College of Law (1995).
- * Lone Star Chapter of the Air & Waste Management Association (1995).
- ** Environmental Business Development Conference, American Institute for Environmental Education (1995).
- * Dr. Dydek gave a presentation at this meeting or conference.
 ** Dr. Dydek moderated a panel at this meeting or conference.
 *** Dr. Dydek provided expert witness testimony at this hearing

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

- * Alamo Chapter of the Air & Waste Management Association (1995).
 "Advanced Topics in Pharmacokinetics", Continuing Education Course, Society of Toxicology (1996).
 Mid-America Toxicology Course, University of Kansas Medical Center (1995).
 Air & Waste Management Association Annual Meeting (1995).
 Environmental Remediation Opportunities Conference, U.S. Department of the Air Force and the
 U.S. Small Business Administration (1995).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1995).
 Society of Toxicology Annual Meeting (1996).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1996).
 Fifth Annual National Expert Witness and Litigation Seminar, S.E.A.K., Inc. (1996).
 Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air
 & Waste Management Association (1996).
 "Toxicology of Agents: Metals", Continuing Education Course, Society of Toxicology (1997).
 Society of Toxicology Annual Meeting (1997).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1997).
 "Industrial Hygiene Calculations", Continuing Education Course, American Industrial Hygiene
 Association (1997).
 American Industrial Hygiene Association Annual Meeting (1997).
 "EPA's Planned Revisions to the Ozone and Particulate Matter National Ambient Air Quality
 Standards", Continuing Education Course, Air & Waste Management Association (1997).
 Air & Waste Management Association Annual Meeting (1997).
- * Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air
 & Waste Management Association (1997).
 "Improving the Practice of Risk Assessment", Society for Risk Analysis, Lone Star Chapter First
 Annual State Conference (1997).
- * Southwestern Association of Toxicologists, Spring Technical Meeting (1998).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1998).
 Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air
 & Waste Management Association (1998).
 "Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (1998).
 "New Endpoints in Risk Assessment", Lone Star Chapter of the Society for Risk Analysis (1998).
 "Assessing and Managing Risks in a Democratic Society", Society for Risk Analysis Annual Meeting
 (1998).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (1999).
- ** Air & Waste Management Association Annual Meeting (1999).
 Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air
 & Waste Management Association (1999).
 Roundtable of Toxicology Consultants Annual Meeting (1999).
 "Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (1999).
- * American Industrial Hygiene Association Hill Country Chapter meeting (1999).
 Society for Risk Analysis, Lone Star Chapter Annual Meeting (1999).
 Air & Waste Management Association National Conference on Ozone Action Programs (1999).
 "The Role of Human Personal Exposure Assessment in Determining Health Impacts of Urban Air
 Toxics", National Urban Air Toxics Research Center (2000).
 Society of Toxicology Annual Meeting (2000).
 Texas Natural Resource Conservation Commission Environmental Trade Fair (2000).
- * Air & Waste Management Association Annual Meeting (2000).
 Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air
 & Waste Management Association (2000).
 Indoor Air Quality Association Annual Meeting (2000).
- * Dr. Dydek gave a presentation at this meeting or conference.
- ** Dr. Dydek was co-chairman of a technical session at this meeting or conference.

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

- Expert Witness Workshop (2000).
- * American College of Toxicology Annual Meeting (2000).
- American Industrial Hygiene Association Symposium, "Molds in the Indoor Environment" (2000).
- Air & Waste Management Association Annual Meeting (2001).
- Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2001).
- Texas Natural Resource Conservation Commission Environmental Trade Fair (2002).
- Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2002).
- Environmental Law Update Seminar, Fulbright & Jaworski (2002).
- Society for Risk Analysis Annual Meeting (2002).
- "Protecting the Central Texas Environment and Economy", Air and Waste Management Association, Central Texas Chapter (2004).
- Texas Commission on Environmental Quality Environmental Trade Fair (2004).
- American Bar Association Annual Meeting (as an exhibitor, 2004).
- "Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (2004).
- Environmental Law Update Seminar, Fulbright & Jaworski (2004).
- Society of Toxicology Annual Meeting (2005).
- Texas Commission on Environmental Quality Environmental Trade Fair (2005).
- Texas Legislative Update Seminar (2005).
- * Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2005).
- ** Society of Environmental Journalists Annual Meeting (2005).
- Society of Toxicology Annual Meeting (2006).
- Texas Commission on Environmental Quality Environmental Trade Fair (2006).
- Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2006).
- Society of Toxicology Annual Meeting (2007).
- Texas Commission on Environmental Quality Environmental Trade Fair (2007).
- Environmental Law Update Seminar, Fulbright & Jaworski (2007).
- Legislative Update Seminar, Vinson & Elkins (2007)
- Texas Environmental Superconference, State Bar of Texas and the Southwest Section of the Air & Waste Management Association (2007).
- "Chemical Specific Adjustment Factors", continuing education course taken at the Society for Risk Analysis Annual Meeting (2007).
- Society for Risk Analysis Annual Meeting (2007).
- Society of Toxicology Annual Meeting (2008).
- Texas Commission on Environmental Quality Environmental Trade Fair (2008).
- Texas Environmental Superconference (2008).
- *,** Roundtable of Toxicology Consultants Annual Meeting (2008).
- American College of Toxicology Annual Meeting (2008).
- "New Frontiers in Metal Toxicology: Genetic Susceptibility, Early Diagnosis, and Related Biological Indices", Continuing Education Course, Society of Toxicology (2009).
- Society of Toxicology Annual Meeting (2009).
- Texas Commission on Environmental Quality Environmental Trade Fair (2009).
- Roundtable of Toxicologists Mid-Winter Meeting (2009).
- * American College of Toxicology Annual Meeting, Continuing Education Course (2009).

- * Dr. Dydek gave a presentation at this meeting or conference.
- ** Dr. Dydek served on a panel at this meeting or conference.
- *** Dr. Dydek chaired a session at this meeting or conference.

IX. CONFERENCES, SEMINARS, COURSES, AND WORKSHOPS ATTENDED (continued):

Society of Toxicology Annual Meeting (2010).
Alliance for Risk Assessment, "Beyond Science and Decisions: from Problem Formulation to Dose-Response. Workshop Number 1" (2010).
Air and Waste Management Association Environmental Law Symposium (2010).
Texas Commission on Environmental Quality Environmental Trade Fair (2010).
National Urban Air Toxics Research Center "Air Toxics Symposium" (2010).
"Hot Air Topics" Conference, Gulf Coast Chapter of the Air & Waste Management Association (2011).
Society of Toxicology Annual Meeting (2011).
"Environmental Law Update Seminar", Fulbright & Jaworski (2011).
Society of Toxicology Annual Meeting (2012).
Texas Commission on Environmental Quality Environmental Trade Fair (2012).
"Beyond Science and Decisions" Webinar (2012).
Society of Toxicology Annual Meeting (2013).
Texas Commission on Environmental Quality Environmental Trade Fair (2013).
Roundtable of Toxicology Consultants Mid-year Meeting (2013).
"Independent Workshop on Ozone NAAQS: Science Policy" Webinar (2015).