## RAILROAD COMMISSION OF TEXAS SURFACE MINING AND RECLAMATION DIVISION

RE:	PETITION TO DESIGNATE CERTAIN	§	DOCKET NO.
	AREAS IN BASTROP AND LEE COUNTIES	§	C0-0051-SC-00-U
	AS UNSUITABLE FOR SURFACE COAL	§	
	MINING OPERATIONS (P-4 PETITION)	§	

## ORDER DENYING PETITION TO DESIGNATE CERTAIN AREAS IN BASTROP AND LEE COUNTIES AS UNSUITABLE FOR SURFACE COAL MINING OPERATIONS

The RAILROAD COMMISSION OF TEXAS, after consideration of the Examiner's Report on the Petition filed by Neighbors for Neighbors (NFN or petitioner) to designate certain areas as unsuitable for surface coal mining operations in Bastrop and Lee Counties (P-4 Petition) pursuant to the Texas Surface Coal Mining and Reclamation Act, TEX. NAT. RES. CODE Ch. 134, (Vernon 2000) (Act) and the "Coal Mining Regulations," 16 TEX. ADMIN. CODE Ch. 12 (West Group 2000) (Regulations), the exceptions and replies, oral argument, and filings allowed by the Commission subsequent to oral argument, hereby makes the following Findings of Fact and Conclusions of Law and issues the following Order:

## FINDINGS OF FACT

- 1. On November 12, 1999, Neighbors for Neighbors (NFN) filed a petition with the Railroad Commission of Texas to declare all or portions of approximately 9,622 acres in Bastrop and Lee Counties as unsuitable for surface coal mining operations.
- 2. Within 60 days of receipt of the petition, the Commission notified the petitioner by certified mail that the petition was not yet complete and indicated the information necessary for completeness. The petition was amended and was subsequently declared administratively complete on January 11, 2000. The Commission determined that there were identified coal resources in the area covered by the petition and that the petition was not frivolous.
- 3. NFN is a nonprofit organization of approximately 850 families in Bastrop and Lee Counties formed in 1999 to oppose Alcoa's plans to mine lignite in northwestern Bastrop County and southwestern Lee County. NFN is opposed to mining by any entity.
- 4. NFN asserts that mining in the areas for which the petition is sought would affect fragile lands and could result in significant damage to important scientific and esthetic values and natural systems, particularly the sands delineated by the petitioner [sand hills designated H1

on Sheet 1 of the University of Texas Bureau of Economic Geology Report of Investigation No. 98, Environmental Geology of the Wilcox Group Lignite Belt, East Texas (1979) and further described in the petition] as suitable for Houston Toad (*Bufo houstonensis*) habitation and estivation in times of drought or near-drought. NFN alleges (1) that the Houston Toad, a federally listed endangered species, may inhabit the petitioned area and that mining could be a serious threat to the continued existence of the Houston Toad, (2) that massive groundwater pumping that is stated by NFN to accompany mining might threaten the continued viability of the supply of groundwater for the area, and (3) that mining is incompatible with existing state or local land use plans or programs. In its petition, NFN alleged specific interests which would be affected and specific injuries which were alleged to occur if the petition were not granted such as damage to water wells, springs and creeks, surface waters and groundwater, destruction of habitat of the Houston Toad, damage to the aesthetic qualities of the area, lowering of property values, and nuisance effects from dust and noise. Persons were described who were alleged to be personally affected should the petition not be granted.

- 5. Notice to owners, agencies, and interest-holders was given as provided in §12.80(b)(1) of the Regulations. Notice was published in local newspapers and in the Texas Register. In addition, copies of the petition were made available to the public and were provided to other interested governmental agencies, intervenors, persons with an ownership interest of record in the property, and other persons known to the Commission to have an interest in the property. Notice published requested relevant information from the public.
- 6. No application for a mining permit for the areas petitioned had been filed with the Commission as of the date of the filing of the petition. Prior to the filing the petition, an application for the Lee County Construction Site permit was filed by Alcoa Inc. which included depictions of the proposed permit area of the Three Oaks Mine. Alcoa Inc. filed its application for permit for the Three Oaks Mine after the petition was filed.
- 7. The petition as administratively complete contained all the materials and information required pursuant to \$12.79(b)(1) and the additional information required by the Commission pursuant to \$12.79(b)(2).
- 8. No lands within the petitioned areas have previously been designated as unsuitable for surface coal mining operations, although two petitions, together termed P-3, which included all lands within the NFN-petitioned areas and other lands were denied by the Commission by Order dated July 2, 1990.
- 9. Notice of the date, time, and location of the public hearing was provided by publication of notice of hearing in local newspapers three times in accordance with §12.81(c): once each week for two weeks beginning between 4 and 5 weeks prior to the scheduled hearing date and then once during the week prior to the hearing date. Notice was also provided to the petitioner and intervenors by certified mail and to government agencies and owners of record

- of interests in the petitioned areas by regular mail.
- 10. The Commission prepared a detailed statement using existing and available information on the potential coal resources of the area, the demand for coal resources, and the impact of such designation on the environment, the economy, and the supply of coal.
- 11. The public hearing was held on November 2 and 3, 2000, in Giddings, Texas and on November 6 10, 2000, in Austin, Texas and closed with the receipt of closing argument on November 20, 2000. The Commission accepted public comment through that date.
- 12. The Commission compiled a data base and inventory system which permits evaluation whether reclamation is feasible in the petitioned areas including information from the U.S. Fish and Wildlife Service, the State Historic Preservation Officer, and the Texas Natural Resource Conservation Commission.
- 13. The Commission added to the data base and inventory system information on potential coal resources of the area, the demand for coal resources, and the impact of such designation on the environment, the economy, and the supply of coal sufficient to enable the Commission to prepare the detailed economic statement and information available from the petition, publications, experiments, permit applications, mining and reclamation operations, and other sources.
- 14. The data base and inventory system information was made available to the public for inspection free of charge and for copying at reasonable cost in accordance with §12.84 of the Regulations.
- 15. The Commission made information available to the public on the petition procedures necessary to have an area designated as unsuitable for all or certain types of surface coal mining operations and described how the inventory and data base system can be used.
- 16. The Commission's Surface Mining and Reclamation Division was a party to the proceeding for the purposes set out in the Act and Regulations pertinent to compilation of the data base and inventory system and the economic impact analysis. In addition to the Petitioner as a party, the following intervenors were named in the proceeding: The Lone Star Chapter of the Sierra Club (Sierra Club), Friends of the Lost Pines State Park (Friends), Bastrop County Environmental Network (BCEN), the Cities of Cameron, Milano, Lexington, Rockdale, and Thorndale, Thorndale Independent School District, Rockdale Independent School District, Doris Seelig (who later withdrew as a party), KRXT-FM, Milam County Commissioners Court, the International Brotherhood of Electrical Workers Local 2078 (IBEW), the Estate of H.H. Coffield (which later withdrew as a party), Elgin-Butler Brick, City Public Service of San Antonio, Texas (CPS), the Texas Mining and Reclamation Association (TMRA), and Alcoa, Inc. (Alcoa). Many of the parties did not participate directly in the proceeding by formal presentations. Formal presentations of witnesses were made only by Petitioner, the Sierra Club, BCEN, Friends, Alcoa, and CPS.

- 17. In an unsuitability proceeding, no party bears the burden of proof [§ 12.80(a)(3)], or persuasion [§ 12.81(a)] (Regulations).
- 18. In an unsuitability proceeding, § 12.81(a)(Regulations) provides that the hearing may be conducted with cross examination of expert witnesses only. Unsworn public comment and reports may be considered by the Commission in its decision.
- 19. Reclamation is technologically and economically feasible under the Act and Regulations. [§134.020(a), Act, and §12.75(a), Regulations]. Geological information, along with other exhibits in the record relating to topsoil substitution and Commission regulation of the process which includes postmine soil testing shows that the technology exists to enable mining of this area and successful reclamation of the soils.
- 20. The petition, termed P-4, encompasses an area for which two previous petitions, together termed P-3, were filed. The P-3 petition was denied. The P-4 petition met requirements that the new petition presents significant new allegations of facts which tends to establish the allegations requirements. The petition alleged that members of NFN use and enjoy air, water, and other resources within and adjacent to the area petitioned and that these resources will be adversely impacted if surface mining occurs within the lands petitioned. In addition, the petition references persons who study the endangered Houston Toad which is alleged to be adversely affected and its survival threatened, as well as the feasibility of "establishing or expanding" (Petition, page 3) the toad population reduced or eliminated if mining occurs in the area. Other allegations were included that mining will threaten the abundance of wildlife, will increase noise and light pollution, exacerbate the suffering of persons who are asthmatic or who are allergic, would threaten surface water flows and quality, and the abundance of woodlands. The petition also alleged that mining activities would result in the dewatering of perched aguifers in the Calvert Bluff Formation and depressurization of the Simsboro formation reducing soil moisture, causing adverse effects for agriculture and animals, in particular the Houston Toad which relies on near-surface moisture in deep sands for estivation. The petition on page 3 stated specifically, "If the Petitioned Area is mined," the ability of one member of NFN to continue research on the Houston Toad would be harmed "since the feasibility of establishing or expanding (emphasis added) toad populations in the areas would be greatly reduced or eliminated." The petition by NFN did not state specifically that Houston Toads were within the Three Oaks Project Area. The Commission finds based on the use of the term "establishing or expanding" the population that the petition met requirements for processing.
- 21. None of the evidence included in the record shows that any areas contained in the petition meet the criterion of natural hazard lands [§ 12.3(102) of the Regulations] such as areas of unstable geology, areas subject to frequent flooding, landslides, cave-ins, sand dunes, severe wind or soil erosion or avalanches which would endanger life or property, or in any other way contains natural hazard lands as defined which would be affected by a mining operation

- so as to endanger life and property. This was not alleged in the petition, and no evidence tends to establish this as of concern.
- 22. The Carrizo-Wilcox aquifer system is made up of four sedimentary groups, the Carrizo, Calvert Bluff, from which the lignite is proposed to be recovered within the Three Oaks Mine Area, Hooper, and Simsboro formations (Alcoa Exhibit 4-3). The Carrizo and the Simsboro are the primary aquifers. The Carrizo has been described as nearly full and the Simsboro as largely untapped. The amount of the Carrizo-Wilcox in Texas estimated to be disrupted by mining at the Three Oaks site is approximately 0.004 percent. The amount of pumping proposed as a peak due to mining at Three Oaks (10,000 acre-feet per year) would be approximately one-tenth of the existing pumping in the Carrizo-Wilcox between the Colorado and Trinity Rivers.
- 23. The Carrizo unit does not overlie the proposed permit area or petitioned areas (Alcoa Exhibit 4-4). Suitable habitat for the Houston Toad exists and is inhabited by Houston Toads to the east of the petitioned areas on the Carrizo in the Kuhl Houston Toad Study Area but does not exist within the petitioned areas.
- 24. Dewatering, managing water in the overburden sands to provide for stability of the highwall, spoil piles, and inflow to the pit, is proposed in the Calvert Bluff. Dewatering of the Calvert Bluff will generally only affect a small area of low yielding water zones in the Calvert Bluff due to the types of materials present and that the water is found in discontinuous sands. The Calvert Bluff is made up mostly of lower permeability clay, silt, and lignite with only a portion of the unit containing laterally discontinuous water-producing sands, some of which are water sources for localized areas. As indicated in the Bureau of Economic Geology's Circular 78-4, 1978, Exhibit 8, Database, the lignite in the Carrizo-Wilcox Group occurs generally in interchannel sands where the sand percentages are less than 55%. This is a generally applicable estimate for the proposed mining area. The materials interspersed with the sands act as confining aguitards between the Carrizo and the Simsboro below as well as between sand zones within the Calvert Bluff, so that the system is made up of isolated aguifers. Laboratory vertical hydraulic conductivity tests on clay materials from the Calvert Buff indicate values which are orders of magnitude lower than clay liners used for landfills. Over 300 feet of Calvert Bluff materials not to be affected by mining which contain significant amounts of the clay materials separate the Calvert Bluff and the Carrizo. The Calvert Bluff is not a renewable resource for which effects by mining would constitute damage to long-term productivity of a water supply. Due to the types of materials within the Calvert Bluff it is most unlikely that there would be any such effects. The materials include sands which are small, localized, and do not produce significant amounts of water.
- 25. Perched water zones are limited in the petitioned areas. There are no streams recommended as unique in Bastrop County, Database, G-13, and none have been identified in Lee County. Springs are small (0.28 to 2.8 cfs) or very small (0.028-0.28 cfs)(Petitioner's Exhibit 9, p. 11-12). Any impacts to streamflow or to springs will be insignificant.

- 26. Depressurization pumping (managing water in the underburden sands under pressure to provide stability to the pit floor, is proposed in the Simsboro. The low permeability and great thickness of the Calvert Bluff (the intervening formation between the Carrizo and the Simsboro) will reduce any effect to the Carrizo, known habitat of the Houston Toad, to insignificant or immeasurable. Additionally, the fact that pumping from the lower Calvert Bluff is needed to dewater the lower Calvert Bluff adjacent to the mine pit demonstrates that reducing the artesian pressure of the Simsboro has no material impact on the Calvert Bluff. [Artesian pressure occurs when a sand zone is saturated and has an upward water pressure to the overlying clay layer (Exhibit 4-1A, p. 7)]. Impacts on the lower Calvert Bluff are relatively insignificant due to position, depth and lateral extent of the major aquifer zones. Reduction in artesian pressure of the Simsboro is the major effect resulting from depressurization pumping in the Simsboro.
- 27. Faulting in the area is part of the Mexia-Talco fault system and is inactive (Database, A-45, p. 10). Faulting can restrict groundwater movement. Areas of higher lignite correlate well with low sand percentage areas (Data base A-45, p. 12) Clay and silty clay present in the unit (Calvert Bluff) between the Carrizo and the Simsboro and between the Calvert Bluff and the Simsboro will significantly retard vertical movement of water. Pg.12 The hydraulic characteristics of strata composed significantly of clays and silty clays is described as virtually impermeable. (Data base A-45, p. 23)
- 28. Groundwater modeling results indicate that pumping of the Simsboro by Alcoa for mining purposes not in excess of recharge of the Carrizo-Wilcox aquifer will not affect the long-range productivity of the Carrizo-Wilcox aquifer, including the geological units and land surface. Modeling results contained in the record show that over a 30-50 year period with pumping of the Carrizo-Wilcox aquifer in excess of recharge, some effect to the long-range water supply may occur which could affect the availability of water in some areas. Such modeling contains conservative assumptions, including planned pumpage of amounts of water estimated by many entities in many locations. These modeling efforts include pumping amounts attributed to Alcoa's pumping for mining purposes in excess of the amounts proposed by Alcoa in the record of this proceeding and for a longer period of time.
- 29. The Houston Toad is an amphibian which is 2-3.5 inches long, a small woodland species. Only experts can identify the species by its appearance; however, the male of the species has a distinctive trilling call during its breeding season, which is the most reliable indication of its presence in the area. The toad requires any form of still water for breeding, even manmade stock tanks.
- 30. Critical habitat designated for the Houston Toad species is essentially the Lost Pines area. (BCEN'S Exhibit 1). This critical habitat does not include the petitioned areas. The Houston Toad has only been found in areas approximately 1-2 miles away from the petitioned areas on the Carrizo unit. The Carrizo does not outcrop in the petitioned areas. Surveys completed in the proposed permit area of Three Oaks and its vicinity including some

petitioned areas have not located any Houston Toad. Approximately 80 to 90% of the suitable habitat breeding sites was surveyed. Mitochondrial DNA testing of tadpoles collected from representative ponds within the proposed permit area reflected other species of toad tadpoles but no Houston Toad tadpoles. The only Houston Toad tadpoles identified were from known Houston Toad habitat within the Carrizo and well outside the proposed permit area. Based on Alcoa Exhibits 5-1A, testimony of Lee Sherrod, Tr., Vol. 5, p. 183, et seq .), Alcoa Exhibit 5-2 (Houston Toad report), the geologic outcrop boundaries (Alcoa Exhibit 5-3), soils distribution (Alcoa Exhibit 5-4), habitat analysis, 1999 and 2000 surveys, and locations of surveys, (Alcoa Exhibit 5-5) it is unlikely that Houston Toads have breeding sites within the petitioned areas.

- 31. With reference to effects of mining activities on the Carrizo, known habitat of the Houston Toad, the low permeability of intervening formations will reduce any effect to insignificant or unmeasurable.
- 32. Clay recovery operations and a brick industrial complex are near the petitioned areas. Within approximately 20-30 miles in the Austin area are many other mining and excavation operations such as limestone quarries and sand and gravel excavation.
- 33. All road closures and relocations are subject to the approval of county commissioners court and/or the Texas Department of Transportation.
- 34. The vegetation and wildlife of the proposed mine area and the petitioned areas are typical of lands generally in the Post Oak Savannah area of eastern Central Texas. There are no unique lands within the petitioned areas. Alcoa Exhibit 3-4, a video (CD) of areas near County Road 304 including portions of the proposed permit area as well as portions of the P-4 areas (within and outside of the proposed permit area), and areas which are neither. The video depicts the area from an aesthetics point of view, showing that all of the areas are similar (video and Tr., Vol. 6, p. 154). The Lost Pines, the westernmost extremity of loblolly pine forest in the United States, is not within the P-4 petitioned areas; the nearest part is 4-5 miles away. Several endangered migratory birds such as whooping cranes are transient visitors to the petitioned areas; their migration corridors include the central part of Texas. There is a lack of suitable nesting habitat for permanent residence. The Timber rattlesnake and horned lizard utilize sandy areas and could occur within the proposed permit area and P-4 areas. The Texas Parks and Wildlife Department allows surveying and relocation of the Timber rattlesnake at the Sandow Mine where Alcoa has an approved relocation plan. This procedure would also be applicable to a proposed mine. The timber rattlesnake prefers woodlands along waterways and bottomland. The information on vegetative areas in the proposed permit area and surrounding areas indicates that there is little habitat of that type. The general area is not unique in that these species can occur anywhere in Central Texas where the general habitats are readily available.
- 35. The Lost Pines forest is located primarily on the Carrizo with portions to the northeast on the

Calvert Bluff (Alcoa Exhibit 5-10). The feeding roots of this tree are in the shallow soil zones, in the one to two foot range of soil horizons. Most of the moisture to support these areas of the soil comes from precipitation. No effects on recharge to which precipitation contributes will result from pumping of water from the Simsboro in the amount proposed in this proceeding for mining purposes.

- 36. The only sites in Lee and Bastrop Counties which have been listed in the National Register for Historic Places are within the towns of Bastrop, Elgin, Giddings, and Smithville, and no other eligible sites have been located after surveys performed in the general vicinity of the petitioned areas.
- 37. There are no municipalities in the petitioned areas or the proposed Three Oaks mine site.
- 38. Various planning efforts and planning policies exist in Lee and Bastrop Counties.
- 39. The only formal land use plan or program included in the record of the unsuitability proceeding in Bastrop and Lee Counties is the City of Elgin's comprehensive plan as included in the data base. Surface coal mining operations are not incompatible with this plan. The plan relates to the City of Elgin and its jurisdictional areas.
- 40. Surface coal mining operations are not incompatible with any other land use plans or programs in Bastrop and Lee Counties. Planning efforts are not formal complete plans, relate to specific areas other than the petitioned areas and the proposed Three Oaks mine site, are efforts by advisory bodies or municipalities which have no planning jurisdiction in the area, or are not incompatible with surface coal mining operations in accordance with the Act, Regulations, and other statutes and regulations.
- 41. City, county, and board resolutions from these entities throughout Central Texas which are a part of the record as public comment and/or exhibits are divided in their opinions for or against surface coal mining operations in Lee and Bastrop Counties (Appendix I to examiner's report).
- 42. Texas legislators and other officials throughout Central Texas are divided in their opinions for or against surface coal mining operations in Lee and Bastrop Counties (Appendix I to examiner's report).
- 43. Comment submitted by the public is divided for or against surface coal mining operations in Lee and Bastrop Counties (Appendix I to examiner's report).

## CONCLUSIONS OF LAW

1. Proper notice to the public and to landowners was provided in accordance with the Texas Surface Coal Mining and Reclamation Act, §§ 134.016(4)and 136.018 and the "Coal Mining"

Regulations, § 12.80(b)(1), relating to publication of notice that the petition had been received in local newspapers and the Texas Register, to agencies, intervenors, and to persons with an ownership interest of record in the property. Submissions were requested from the public in accordance with § 12.80(b)(3) of the Regulations.

- 2. Notice of hearing was provided in accordance with § 12.81(b)(1) and (2) of the Regulations, and a public hearing was held as required by the Act and Regulations. All applicable processing, record-keeping, notification, procedural and other requirements under applicable statues and rules have been satisfied [§ 134.016, Act, § 12.80, Regulations], TEX. GOV'T CODE Ch. 2001, and the Commission's General Rules of Practice and Procedure, 16 TEX. ADMIN. CODE Ch.1.
- 3. The record contained all required materials.
- 4. Based on the information contained in the data base and inventory system, information provided by other governmental agencies, the detailed statement prepared under § 12.81(e) of the "Coal Mining Regulations," and any other relevant information submitted during the comment period, and in accordance with Conclusion of Law No. 10, surface coal mining and reclamation operations are technologically and economically feasible within the petitioned areas.
- 5. Based on the information contained in the data base and inventory system, information provided by other governmental agencies, the detailed statement prepared under § 12.81(e) of the "Coal Mining Regulations," and any other relevant information submitted during the comment period, and in accordance with Conclusion of Law No. 10, surface coal mining and reclamation operations in the petitioned areas will not affect natural hazard lands in which the operations could substantially endanger life and property, such lands to include areas subject to frequent flooding and areas of unstable geology.
- 6. Based on the information contained in the data base and inventory system, information provided by other governmental agencies, the detailed statement prepared under §12.81(e) of the "Coal Mining Regulations," and any other relevant information submitted during the comment period, and in accordance with Conclusion of Law No. 10, surface coal mining and reclamation operations in the petitioned areas will not affect fragile or historic lands in which operations could result in significant damage to important historic, cultural, scientific, or esthetic values or natural systems.
- 7. The Railroad Commission of Texas does not have jurisdiction over water supply contracts between Alcoa and City Public Service of San Antonio and/or San Antonio Water System. The Railroad Commission may limit the amount of water pumped for depressurization related to mining activities in its consideration of the pending application for a mine permit for the Three Oaks Mine [§ 134.041(17)(A)-(C) of the Act, and § 12.339 of the Regulations].

- 8. Based on the information contained in the data base and inventory system, information provided by other governmental agencies, the detailed statement prepared under § 12.81(e) of the "Coal Mining Regulations," and any other relevant information submitted during the comment period, and in accordance with Conclusion of Law No. 10, surface coal mining and reclamation operations in the petitioned areas will not affect renewable resource lands in which the operations could result in a substantial loss or reduction of long-range productivity of water supply or of food or fiber products.
- 9. Because none of the criteria for designation of lands as unsuitable for surface coal mining operations exist for the petitioned areas, the Commission may deny the petition in accordance with the findings and conclusions set out in this Order (§ 134.020, Act, and § 12.75, Regulations).
- 10. Due to the specific purpose of the unsuitability designation proceedings pursuant to the Act and Regulations, nothing contained in this Order shall in any way be binding on the Commission or any party in any other proceeding including, without limitation, proceedings before the Commission on applications for surface coal mining and reclamation permits, or for renewals or revisions of such permits.
- 11. Any areas designated by the legislature as unsuitable for surface coal mining operations and those which have been exempted by the legislature from the unsuitability review process are not affected by this proceeding.
- 12. The petition to declare lands unsuitable for surface mining operations is exempt from the Private Real Property Rights Preservation Act, TEX GOV'T CODE Chapter 2007 pursuant to Section 2007.003(b)(4) of the Act.

THEREFORE BE IT ORDERED BY THE RAILROAD COMMISSION OF TEXAS that the Findings of Fact and Conclusions of Law contained in this Order are hereby adopted; and

BE IT FURTHER ORDERED that the petition for designation of certain lands in Bastrop and Lee Counties as set forth in the petition filed by Neighbors for Neighbors (P-4 petition) is hereby denied in its entirety; and

BE IT FURTHER	ORDERED	that all	other relief 1	requested	which is	not herein	specifi	cally
granted is hereby denied.								

DONE IN AUSTIN, TEXAS this	day of	, 2001.
	RAILROAD CO	MMISSION OF TEXAS
	CHAIRMAN MI	CHAEL L. WILLIAMS
	COMMISSIONE	ER TONY GARZA
ATTEST:	COMMISSIONE	ER CHARLES R. MATTHEWS
Secretary Railroad Commission of Texas		