TCEQ Renewal Permit No. 20345

Application by	§	**Before the Texas**
ASARCO INCORPORATED	§	**Commission on**
Primary Copper Smelter	§	**Environmental Quality**
El Paso, El Paso County	§	

Executive Director's Response to Public Comment

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (RTC or Response) on the renewal application and Executive Director's preliminary decision. As required by Title 30 TEXAS ADMINISTRATIVE CODE (TAC) § 55.156 (Rule), before an application is approved, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comment letters from the following persons: Harless R. Benthul on behalf of the City of El Paso, Adele Siegel, Gilbert and Lina Trillo, Diego Fernandez, Molly Rosien, Bob Geyer, Ben Andrews & Linda Kittle, and Laurence Gibson. Notwithstanding the limitation in the Rule to relevant and material, or significant comment, this Response addresses all timely public comments received, whether or not withdrawn.

Background

Asarco Incorporated (Asarco) has applied to the TCEQ for the renewal of its existing air quality permit that would authorize the continuing operations of its Primary Copper Smelter. The facility is located in El Paso, El Paso County. The permit application was received on March 28, 2002 and was declared administratively complete on April 23, 2002. The Notice of Receipt and Intent to Obtain an Air Quality Permit was authorized for publication on the same date. Asarco published the Notice on May 15, 2002 in the *El Paso Times*. Asarco was also required to publish notice in an alternate language publication. Asarco published the alternative language Notice of Receipt and Intent to Obtain an Air Quality Permit on May 15, 2002 in *El Diario*. The 15 day comment period designated in the Notice ended May 30, 2002. Since this application was administratively complete after September 1, 1999, this action is subject to the procedural requirements adopted pursuant to House Bill 801.

Comments and Responses

Comment 1. One commenter stated that the allowable emission rate for lead from the primary smelter should have been reduced. The commenter stated, "Lead emissions allowed pursuant to the permit are 13.67 tons per year (tpy) which has not essentially changed since the permit was issued in 1992 (with a five year life) although there have been several amendments and at least two alterations. The unchanged permitted lead emission level is perplexing and of great concern to the city because (1) the Asarco facility is 'temporarily shut down' and has been for some time and (2) emissions of lead into the atmosphere and onto surrounding areas are specifically associated with such facilities and pose potentially great health hazards to those exposed to emissions." The

commenter also questioned the basis the TCEQ can issue a permit for 1992 operating levels when the facility is shutdown. (Benthul)

Response 1. Asarco was issued a permit in 1992 setting the emission rates for lead and other air contaminants. This review determined that Asarco's emissions are not expected to cause any harm to human health or the environment. See Responses 4, 6, and 8 for an explanation of how modeling, toxicology, and other factors helped to establish the allowable emission rates. The permit allowable for lead was subsequently modified through an amendment submitted by Asarco after stack testing determined that actual emissions of lead were higher than authorized by the permit. The amendment was issued November 4, 1994. The permit amendment increased lead allowables from two emission points. The lead allowable for emission point S-1 went from less than 0.0001 pounds per hour (lb/hr) to 0.0010 lb/hr and from less than 0.0001 tons per year (tpy) to 0.0039 tpy. Emission point CU/STK/AN was increased from 6.1300 tpy to 6.1304 tpy. The amendment application underwent the same evaluation as the original application to ensure public health and the environment would be protected. See Responses 4, 6, and 10 for a description of the type of evaluation performed. Asarco was required as part of the permit amendment application to demonstrate that the National Ambient Air Quality Standards (NAAQS) would not be exceeded by the increase and that the Best Available Control Technology Standard would continue to be met.

During the life of a permit, the TCEQ can only change the maximum allowable emission rates when the applicant requests the change, it is necessary to avoid a condition of air pollution, to ensure compliance with applicable federal or state air quality control requirements, or to address compliance issues. Asarco has never requested a decrease in the emission rate of lead. There has been no determination of a condition of air pollution in El Paso during the life of the permit. No applicable federal or state air quality control requirements were enacted requiring a reduction in the emission rate of lead. Lastly, if the Asarco's compliance history contains violations which are unresolved and which constitute a recurring pattern of egregious conduct which demonstrates a consistent disregard for the regulatory process, including the failure to make a timely and substantial attempt to correct the violations then the TCEQ may impose additional requirements, such as a decrease in an emission rate as needed to address compliance issues. At no time did Asarco's compliance history rise is rise to that level. Therefore, the emission rate of lead has not been required to be reduced during the ten year life of the permit. In a permit renewal action, the Texas Clean Air Act (TCAA) prohibits the TCEQ from imposing requirements more stringent than those of the existing permit unless the TCEQ determines the requirements necessary to avoid a condition of air pollution, to ensure compliance with otherwise applicable federal or state air quality control requirements, or to address compliance issues. The review of the renewal application has found no new federal or state air quality control requirements that would require the reduction of the maximum allowable emission rate of lead. Additionally, because the El Paso area has not been found to be subjected to a condition of air pollution, the TCEQ cannot impose new requirements, such as a lowering the maximum allowable emission rate for lead. A compliance history report was complied during the review of the renewal application. Only if the compliance history contains violations which are unresolved and which constitute a recurring pattern of egregious conduct which demonstrates a consistent disregard for the regulatory process, including the failure to make a timely and substantial attempt to correct the violations then the TCEQ may impose additional requirements such as a decrease in a maximum

emission rate. A review of the compliance history did not reveal compliance issues rising to that level. Thus, if the renewal application does not propose to lower the authorized lead emission rate.

The review of the renewal permit application consists of compiling and reviewing the compliance history so that compliance issues can be addressed, and review of applicable state and federal air quality control requirements so that new or amended requirements can be incorporated into the permit. The review of the renewal application is limited and does not require a new review of impacts of air emissions. During the review, a compliance history report is generated. The compliance history is reviewed to determine if it contains violations which are unresolved and which constitute a recurring pattern of egregious conduct which demonstrates a consistent disregard for the regulatory process including the failure to make a timely and substantial attempt to correct the violations. If compliance history does contain violations of sufficient magnitude, then additional requirements may be placed in the permit to ensure compliance. A review of Asarco's compliance history did not reveal compliance issues rising to that level. Also, applicable federal or state air quality control requirements are reviewed to determine if there are any new requirements since the original permit was issued. If these new requirements are more stringent than those currently in the permit, those requirements are then incorporated into the permit. A review of applicable state and federal air quality control requirements did not reveal any more stringent requirements for Asarco.

The fact that Asarco is temporarily shut down, and not emitting lead or any other contaminant does not affect the allowable emissions of a facility or the review of the renewal application. See also Response 3 for more information.

The air quality permit issued to Asarco had a 10 year life.

Comment 2. One commenter pointed out that Asarco is operating under an Agreed Order to identify and remediate on-site lead contamination of soil and groundwater. The EPA is conducting an investigation to determine off-site soil contamination that the commenter stated is in all likelihood attributable to Asarco. The commenter further stated that the EPA has named Asarco as a Potentially Responsible Party pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act with regard to a residential area with high levels of lead contamination near Asarco because the EPA's modeling indicated the contamination was caused by Asarco's historic emissions. The commenter stated the presence of the lead (and arsenic) from the Asarco facility in soils from the historic emissions coupled with emissions from the permitted allowables constitute a potential threat to the public health of El Paso. (Benthul)

One commenter stated that "based on the impacts to other cities/states, until the full extent of the previous and continuing spread of air and water-bourne contaminants from previous Asarco operations is determined by comprehensive, state-of-the-art methods, it is in El Paso's best interest that the Asarco operation in El Paso remain closed." (Gibson)

Another commenter stated that the Asarco smelter in King County, Washington is suspected of contaminating a 200 square mile area with lead and arsenic. Because of this wide spread

contamination in King County, the commenter concluded that emissions from the Asarco smelter in El Paso could impact the entire city of El Paso. (Geyer)

Response 2. The amount and severity of the area of contamination attributable to Asarco in the El Paso area has not yet been determined. Investigation and remediation of soils at certain properties in El Paso have or will occur to address levels of lead and arsenic that are harmful to human health. However, it is important to distinguish between historical and current sources of lead and arsenic in El Paso. It is not expected that the emissions of lead and arsenic allowed by this permit would adversely affect public health. See Response 4 below. At yards with elevated lead and arsenic levels in soil, exposure to soil would likely be much more of a contributor to overall exposure than would the air emissions covered by this permit. Therefore, the cumulative exposure to air emissions from Asarco are not expected to increase human health risks for individuals also exposed to soil with elevated amounts of lead and arsenic.

Comment 3. One commenter stated that the TCAA does not allow the TCEQ to issue a permit to Asarco because it is currently shutdown. The commenter stated further that the smelter facility is not currently operating and does not need a permit. (Benthul)

Response 3. The TCAA does not impose as a condition of possessing an air permit that the permitted facility be operating. The fact that the Asarco facility is not currently operating does not affect the TCEQ's review of the renewal permit application.

Comment 4. One commenter asked what the representations were made by Asarco regarding operating conditions and emission limits in the 1992 permit application, and about the analysis performed by the TCEQ on the 1992 permit application and the renewal application to ensure the protection of health. (Benthul)

One commenter expressed opposition to the granting of the new permit because of potential impacts to health. (Fernandez) Another commenter expressed opposition to the granting of the permit and Asarco reopening the facility because of "detrimental complexities that has been created in our environmental especially for our children and the future of our children." (Trillo) Another commenter expressed concern about health impacts from emissions from Asarco to himself because he suffers from impaired breathing due to a spinal cord injury. (Geyer) Another commenter opposes granting of the renewal permit because of impacts to health. The commenter goes on to point out "in the early 1970's it was discovered that residence of Smelter Town and the surrounding area, including colonias across the Rio Grande River in Juarez, Mexico, suffered from lead poisoning. More recently high levels of lead were found in children who live in the vicinity of Mesita Elementary School on El Paso's Westside. A Multiple Scherosis Cluster has also been discovered in that same area." (Andrews & Kittle)

Response 4. When the ConTop Project for Asarco was approved on May 11, 1992, it permitted facilities that had never been permitted. At the time of issuance, this primary copper smelter was

the most modern copper smelter in the United States. Reductions from this facility as a result of the ConTop project were:

- sulfur dioxide reduced 40,109.04 tons per year (tpy);
- oxides of nitrogen reduced 526.38 tpy;
- carbon monoxide reduced 0.29 tpy;
- volatile organic compounds reduced 0.84 tpy;
- particulate matter reduced 178.60 tpy;
- particulate matter less than 10 microns in diameter reduced 161.30 tpy;
- sulfuric acid mist reduced 24.90 tpy;
- lead reduced 7.30 tpy; and
- fluorides reduced 245.40 tpy.

The TCEQ recognizes that there has been significant historical health issues in neighborhoods in the general vicinity of Asarco in El Paso. While investigations of some of these concerns are still on-going (such as the Multiple Sclerosis cluster), TCEQ does not believe that the levels of lead and arsenic emissions currently allowed under this permit would cause or contribute to these types of suspected adverse health effects.

The entire air quality permit application constitutes representations made by the applicant, which includes modeling performed by the applicant, emissions calculations, emission limits, operating conditions, and so on. It is impractical to reproduce all of Asarco's representations in the 1992 permit application because of the large amount of information involved. However, Asarco did represent that Asarco would install and operate Best Available Control Technology (BACT) to control lead and arsenic, that the emissions from Asarco would not cause or contribute to an exceedence of the NAAQS or a condition of air pollution, and that all air quality control equipment will be properly operated and maintained.

The 1992 air quality permit application was evaluated by an air permit engineer to ensure that the application was complete and all requirements were addressed, including BACT. As part of the technical review, the process description and plot plans are reviewed to verify all emission points were listed. Emissions calculations and BACT are verified for each emission point. BACT includes baghouse filtration of air emissions prior to discharge. BACT for fugitive emissions of lead and arsenic includes good housekeeping practices, such as sweeping, spraying with water or chemicals, and other procedures to minimize fugitive dust emissions.

For the 1992 permit, air dispersion modeling was performed by Asarco, and then audited and approved by TCEQ's air dispersion modeling team as part of the permit review. In the audit, the TCEQ modeling team verified proper procedures were employed so that the results are consistent with good modeling standards. The modeled emissions from Asarco met all of the NAAQS and TCEQ standards, and are summarized in the table below. The air dispersion modeling was conducted for the emission of oxides of nitrogen (NO_x), carbon monoxide (CO), oxides of sulfur (SO_2), lead (Pb), total suspended particulate (TSP), and particulate matter less than 10 microns in diameter (PM_{10}). To address the cumulative air quality effect of adding emissions of SO_2 and lead to the existing sources in the region, monitored ambient air background concentrations were added

to the projected project impacts. The combined total of the project emissions plus background (column 6 in the table below) were then compared to the NAAQS or TCEQ standard (the last 2 columns in the table below). However, if the modeled emissions from the project only (see column 3 in the table below) were less than the NAAQS *de minimus* level (a level determined by the EPA to have an insignificant or negligible impact; see column 4 in the table below) then background concentrations were not added and no further review was necessary.

Summary of Modeling Results
Maximum Concentrations in µg/m³

Pollutant	Averaging Time	Modeling Results	Significance Level	Back-ground	Total	TCEQ Standard	NAAQS
NO_x	Annual	0.95	1.00	---	---		100
CO	1-hour	75.70	2000				40,000
	8-hour	25.90	500				10,000
SO_2	30-min	1007	---	---	---		1137
	3-hour	1012	25	121	1133		1300
	24-hour	307	5	30	337		365
	annual	11.24	1	14	25.24		80
PM_{10}	24-hour	3.09	5	---	---		150
	Annual	0.37	1				50
TSP	1-hour	311	---	---	---	400	
	3-hour	177	---	---	---	200	
Lead	Quarterly	0.67	---	0.42	1.09		1.50

The TCEQ's Toxicity and Risk Assessment Division (TARA) reviewed the predicted concentrations from the modeling to determine if human health and welfare would be protected. To ensure that the emissions are protective, the TCEQ employs federal and state standards, and guidance levels to evaluate the potential emissions including the National Ambient Air Quality Standards (NAAQS) and TCEQ Property-Line Standards. The potential for adverse health effects to occur in members of the general public, including sensitive subgroups such as children, the elderly, or those with existing respiratory conditions, was determined by comparing the predicted air dispersion modeling concentrations resulting from emissions from the proposed facility to the respective state and federal health- or welfare-based standards. NAAQS, which are created by the EPA, are set to protect sensitive members of the population such as children, the elderly, and individuals with existing respiratory conditions.

The 1992 application was found to comply with all rules and regulations of the TCEQ and the intent of the TCAA. A contested case hearing on the application was also held. The hearing found that the 1992 application complied with all rules and regulations of the TCEQ and the intent of the TCAA.

Review of the renewal application is limited. The compliance history of the applicant is reviewed

to determine if additional requirements are necessary to ensure compliance with TCEQ rules. Requirements are incorporated into the permit to incorporate federal or state air quality requirements that have been promulgated since the original issuance of the permit. See Response 1 for more information regarding the review performed.

Comment 5. One commenter asked what representations are being made in connection with the renewal of permit 20345 in 2002? The commenter also asks what representations Asarco has made in its 2002 permit renewal application regarding protection of health and property? The commenter states that the representations that Asarco has made in its renewal permit application have no basis in reality. (Benthul)

Response 5. The entire permit renewal application constitutes representations made by the Asarco. It would be impractical to restate all of the representations made by Asarco in its renewal permit, however, Asarco did represent that there will be no change to the operation of the facility if and when operation resumes. Also, as required by TCEQ rules, Asarco represented the following:

- that the facility is being operated in accordance with all requirements and conditions of the existing permit, including alterations and amendments to that permit;
- that the facility meets the requirements of applicable New Source Performance Standards as listed under Title 40 Code of Federal Regulations (CFR) Part 60, promulgated by the EPA under the authority of the FCAA, §111, as amended;
- that the facility meets the requirements of applicable emission standard for hazardous air pollutants as listed under Title 40 CFR Part 61, promulgated by EPA under the authority of the FCAA, §112, as amended;
- that the facility meets the requirements of applicable maximum achievable control technology (MACT) standard as listed under 40 CFR Part 63, promulgated by the EPA under FCAA, §112 or as listed under Chapter 113, Subchapter C of this title (relating to National Emissions Standards for Hazardous Air Pollutants for Source Categories (FCAA §112, 40 CFR 63)); and
- that the facility meets the requirements of Subchapter C of this chapter (relating to Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources (FCAA, §112(g), 40 CFR Part 63)).

If the renewal permit is issued, it does not propose to change any of the requirements of Asarco's air quality permit, however, it will change the references to the agency name from Texas Natural Resource Conservation Commission (TNRCC) to Texas Commission on Environmental Quality (TCEQ) along with other administrative items.

Comment 6. One commenter is concerned about cumulative impacts of Asarco's emissions with air pollution that comes from Mexico. (Fernandez)

Response 6. Asarco is prohibited from causing a condition of air pollution or an exceedence of the NAAQS even if combined with air emissions that originate from foreign countries. The review of

the renewal application is limited and does not require a new review of impacts of air emissions. See Response 1 for further explanation of the steps TCEQ takes during the renewal application review. During the review of the initial air permit issued in 1992, the TCEQ did take into account monitored background concentrations of sulfur dioxide and lead. The modeled impacts from Asarco for these pollutants were added to the monitored background levels to ensure that the emissions from Asarco would not cause an exceedence of the NAAQS. These monitored background levels would include contaminants that originated from foreign sources. Because the combined concentration did not exceed the NAAQS no adverse impacts to human health or the environment were anticipated. See Response 4 for further information.

Comment 7. One commenter asked what analysis is done to ensure that property is protected and the basis users of adjacent waters of the state be assured of no adverse health or property effects from the emissions. (Benthul) The commenter also asks what analysis is done to ensure publically used city-owned property, such as parks, will not become contaminated by Asarco's emissions thereby resulting in exposure to visitors to those areas. (Benthul) One commenter is concerned that Asarco's emissions may impact the environment. (Fernandez)

Response 7. The Air Permitting Division does not directly address water or land contamination issues, however, in addition to protecting health, the NAAQS are also set to address welfare effects such as impact to water bodies, visibility reduction, crop damage, and material damage. Section 302(h) of the Federal Clean Air Act defines effects on welfare to include effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, hazards to transportation, and impacts to personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants. Because the emissions from this facility is not expected to cause an exceedence of the NAAQS, no direct impact to water bodies or land is expected. See response number 4 above for more information.

Because the TCAA does not give the TCEQ authority to regulate air emissions beyond the direct impacts that the emissions have to human health or welfare, the TCEQ does not set emission limits to limit, or perform analysis to determine, impacts emissions may have after being depositing on land or water.

All facilities operating under an air permit must comply with the TCAA and all applicable TCEQ rules and regulations. The TCAA prohibits any person from causing or contributing to a condition of "air pollution." If the facility is not operated in compliance with its permit or TCEQ rules, it will be subject to enforcement action. Any citizen concerned that Asarco is failing to comply with the terms of its air quality permit or other environmental requirements are encouraged to call the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186 or contact Region 6, El Paso at 915-834-4949.

Comment 8. Several commenters expressed general concern about Asarco renewing its air permit. (Siegel, Gibson, Fernandez, Trillo, and Rosen) Several commenters were also concerned that Asarco

will restart the Primary Copper Smelter located in El Paso. (Fernandez, Siegel, Andrews & Kittle, and Trillo) One commenter expressed extreme opposition to the TCEQ renewing Asarco's permit. (Rosen)

Response 8. If the applicant meets all the requirements to obtain the renewal of its air quality permit, the TCEQ cannot deny renewal of the permit. Asarco could at anytime restart its operations, however, because Asarco has applied to renew its permit does not mean that it will. The opposition to the renewal of Asarco's air quality permit is noted.

Comment 9. One commenter expressed concern about the negative impacts of Asarco on the real estate values in El Paso. (Benthul)

Response 9. The TCEQ does not have zoning authority, and it is beyond the agency's power to grant or deny a permit because of the potential impacts to property values. The duty of the TCEQ in issuing an air quality permit is to ensure that facilities comply with the TCAA and applicable federal air quality requirements.

Changes Made in Response to Public Comments

No changes to the draft permit have been made.

Respectfully submitted,

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