TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

TCEQ AIR QUALITY PERMIT NO. 8068 and PSD-TX-437

2010 AUG -2 PM 4: 22

APPLICATION BY	§	**BEFORE THE** CHIEF CLERKS OFFICE
	§	
ABITIBI-CONSOLIDATED CORP.	§	**TEXAS COMMISSION ON**
	§	
LUFKIN, ANGELINA COUNTY	§	**ENVIRONMENTAL QUALITY**

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the request to renew Air Quality Permit No. 8068 filed by Abitibi-Consolidated Corp.(the Applicant).

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters from the following persons after the Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) for this permit application was published in English on May 30, 2001in the *Lufkin Daily News* and in Spanish on the same date in *La Lengua*: Dian Avriett, Faye & James Griggs, Fenner Avriett, Johnny Arney, Jimmy Laird, Richard Donovan. These Commenters are referred to as Group A. The Office of the Chief Clerk received timely form comment letters from the following persons after the Notice of Application and Preliminary Decision was published in English on December 5, 2001 in the *Lufkin Daily News* and in Spanish on the same date in *La Lengua*: Mary Taylor, Deadra Johnson, Gina Donovan, Dr. Maryjane W. Cable, Bonnie Donovan, Cary Kirby, Louis Cable, Richard Donovan, Gaylyn Kirby, Fenner Avriett, James Griggs, Dian Avriett, David Melton, Jerry Ferguson, Helen Madden, Faye Griggs, Juanita Gandy, Sara Ortega, Julia Robles, Roy McCroskey, Susana Encarnación, Sammy Madden, Daniel Orta, Carmen Rogue, Jay Avriett, Sandra Rummer, Norma Tousha, Donna Stanley, Jo Ellen Atkinson, Rachael Woodson, Johnny Arney, Heather Seay, Dusty Rhodes, Tanya Thompson, Dwayne Sumrall, Kim Seay, William Shelton, Jr., M.D., Kerry Bryant Lemon, James & Kerry Lemon. Those who submitted form letters will be referred to below as Group B. Comment letters were also received from Walter West, Louis Bronaugh, and Dennis Robertson. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.tx.us.

BACKGROUND

Description of Facility

Abitibi-Consolidated Corp. has applied to the TCEQ for renewal of Air Quality Permit No. 8068, which would authorize continued operation of its Lufkin Pulp and Paper Mill located at 3331

East Highway 103, Lufkin, Angelina County, Texas. The existing facility is authorized to emit the following air contaminants: nitrogen oxides (NO_X), sulfur dioxide (SO_2), particulate matter (PM), chlorine (Cl_2), total reduced sulfur (TRS), organic compounds, and carbon monoxide (CO).

Procedural Background

On June 1, 1998, the Applicant applied for the renewal of permit no. 8068 to authorize the continued operation of the Pulp & Paper Mill. The TCEQ Region 10 Office in Beaumont (TCEQ Regional Office) inspected the mill and concluded that the Applicant should have its emissions from the Blowheat Recovery System (BRS) represented in the permit. Air Permits Division (APD) staff concurred with this decision. The BRS was originally installed in the 1990's to comply with Texas Regulation II (Now in TCEQ Rules at 30 TAC Chapter 112) regarding emissions from kraft pulp mill digesters. The BRS in the facility includes an accumulator that is equipped with a water seal that is set to approximately 3.5 pounds per square inch gauge (psig) to prevent tank and equipment ruptures. Pressure changes both internally and externally can result in the seal being periodically compromised resulting in a release of Non-Condensible Gases (NCGs). These releases are unpredictable and highly dependent on several factors which include atmospheric pressure and temperature changes, upsets in the digester cooking systems that result in cooking too long or not long enough, off-specification raw materials, malfunction of instruments that monitor pressures in the system, and changes in the control set points. Once the water seal is compromised, it can be automatically or manually reset quickly, and the resulting NCG vent typically lasts for one minute or less. The Applicant contends that emissions from this water seal are upset emissions and that it has recorded them as per the instructions of 30 TAC §§ 101.201-101.211. During an investigation in February 2000, the TCEQ Regional Office concluded that even if the emissions are unpredictable, the frequency of occurrences makes them part of normal operations, and the emissions should therefore be represented in the permit.

In response, the Applicant submitted an amendment application on December 18, 2000. The amendment was not regarded as an increase in emissions but rather as an authorization of existing emissions that were previously reported as upset emissions. Because the emissions could not be easily quantified, the Applicant applied two percent of the operating hours of the digester to determine the emissions.

On December 20, 2000, the commission approved an Agreed Order (AO), Docket No. 2000-0405-AIR-E, requiring, among other things, the Applicant either certify in writing that actual emissions from the BRS are being maintained below the emission limits specified in Air Permit Nos. 8068 and PSD-TX-437, or submit an application to amend Air Permit Nos. 8068 and PSD-TX-437 to ensure that all emissions from the BRS during normal operating conditions are authorized.

On October 25, 2002, the Applicant submitted a second amendment application that included a demonstration and a commitment to reduce the number of blown seal incidents thereby lowering the applicant's requested emissions below the de minimis level requiring public notice. The draft permit was sent out for comments to the TCEQ Regional Office on January 22, 2003. After an extended period of communication exchanges on the language of the special conditions, there was a meeting on July 8, 2003 involving the TCEQ Air Permits Division (APD), the TCEQ Office of Compliance and Enforcement, the TCEQ Regional Office, the TCEQ Office of Legal Services, and the Applicant. Participants at that meeting agreed the Applicant should submit a Compliance Assurance Plan (CAP) to the TCEQ Enforcement Division. The Enforcement Division concluded that the Applicant needed to put into place some corrective action plan to bring the BRS into compliance, and the plan would need to be enforceable either by inclusion in a permit, or possibly outside the permit as an extension of the December 20, 2000 Commission ordering provision. The amendment application of October 25, 2002 was then voided on August 25, 2003. In order to be in compliance with the AO, the Applicant voluntarily stopped production, or idled the mill, in December 2003.

After several months of continued negotiations, the TCEQ and the Applicant came to the conclusion that because no new emissions are involved in the BRS, the Applicant could address the blown seals under a Startup, Shutdown, and Malfunction (SSM) plan. For this reason, the permit was altered on November 16, 2005 to include the requirement for an SSM plan, and the Applicant requested that the December 18, 2000 amendment be withdrawn. That amendment application was voided on August 21, 2006, and all the commenters were notified in a letter dated that day. Therefore, the remaining application is for the renewal of Air Quality Permit No. 8068.

This permit application is for a renewal. The permit application was received June 1, 1998 and declared administratively complete on May 14, 2001. The Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) for this permit application was published on May 30, 2001 in the *Lufkin Daily News*. Alternative Language Notice was published on May 30, 2001 in *La Lengua*. The Notice of Application and Preliminary Decision was published on December 5, 2001, in the *Lufkin Daily News*. Alternative Language Notice was published on December 5, 2001 in *La Lengua*. The Notice of Receipt and Intent to Obtain an Air Quality Permit for this permit application was re-published on April 11, 2007 in the *Lufkin Daily News*. Alternative Language Notice was re-published on April 11, 2007 in *La Lengua*. No further comments or requests were received during the 15-day comment period after the re-publication. The public comment period ended on April 26, 2007. Because this application was administratively complete after September 1, 1999, this action is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

COMMENTS AND RESPONSES

COMMENT 1: Group A Commenters express concern regarding the release into the atmosphere of toxic emissions, including chloroform, acetone, ammonia, chlorine, hydrochloric acid, methanol, and sulfuric acid. Group A Commenters and Walter West, P.E., note that the Applicant's facility is the second largest emitter of carcinogenic chloroform in the United States. Walter West, P.E., also notes that in the period from 1993 to 1999, Abitibi's chloroform releases were always in the excess of 400,000 pounds per year (lb/yr). Group A wanted the citizens of Lufkin to have the opportunity to become informed of these air emissions and their possible effects upon local residents. Group B Commenters state that other potential pollutants like dioxins, furans, polycyclic aromatic hydrocarbons (PAHs), heavy metals, benzene, carbon disulfide, and carbonyl sulfide were not identified in the draft permit and that none of the air pollutants that Abitibi is allowed to emit by TCEQ is safe to breathe. Group B Commenters state that the draft permit allows a substantial increase in toxic emissions and state that a 9 percent increase of total criteria emissions over 1995 and 1997 levels would be allowed. Dennis Robertson and Groups B Commenters express concern over the effect of emissions from the facility on air quality, stating that Abitibi emits 14 different chemicals or PM into the air, that CO is emitted at 2,023 tons per year (tpy), and with other chemicals total about 15 million lb/yr. Dennis Robertson and Walter West, P.E., express concern over years of air pollution from the facility and also the proposed 15 fold increase in emissions. Dennis Robertson worries that if this number is confirmed that people living near the facility are expected to experience certain health risks when exposed to such chemicals over a lengthy period of time or even a short period of time. Walter West requests an independent health effects study, including a review of human health records.

RESPONSE 1: Pollutants emitted by Abitibi are the same pollutants as those from other pulp and paper mills in the United States. When Abitibi converted its bleach plant from chlorine to chlorine dioxide in August of 1999, chloroform was significantly reduced (Standard Permit No. 41396 shows reduction in Cl_2 from 12.1 tpy to 1.3 tpy and VOC from 31.3 tpy to 9.2 tpy.) Total Reduced Sulfur (TRS) was also reduced in 1999 through combustion in an incinerator.

The scope of the December 18, 2000 amendment (withdrawn August 21, 2006) was not to address the increase in emissions from 1995 and 1997, but to address existing emissions from the BRS that were previously reported as upset emissions. This permit was also amended in October 2000, thereby establishing new emission levels, making the issue of 1995 and 1997 emission levels moot.

Similar to most large sites with many point sources, Abitibi has several different authorizations to cover different pieces of equipment and different processes. Abitibi has received authorizations through a Permit-by-Rule (PBR), Standard Permit, Senate Bill 1126, and Voluntary Emission Reduction Permits (VERPs) which could establish new total sitewide emissions. These authorizations were deemed to meet the requirements of federal and state

regulations before approval. However, this renewal application for permit no. 8068 does not authorize any increase above the existing emission levels for the equipment and sources it covers.

With regard to health concerns expressed in comment, before authorizing an increase in emissions, potential concentrations are reviewed by the Executive Director's staff. This review would normally include the TCEQ staff conducting Best Available Control Technology (BACT) review, and impacts analysis comparing proposed emissions to TCEQ's Effects Screening Levels (ESLs), and the National Ambient Air Quality Standard (NAAQS). In this case, the TCEQ is not authorizing new emissions, but rather is renewing the existing permit and updating the conditions such that emissions previously reported as upset emissions are now considered part of the normal operations without any increase to the emission limits listed in the Maximum Allowable Emission Rates Table (MAERT). The pollutants listed on the MAERT represent all the existing pollutants authorized under this permit. If the facilities are operated as specified in the permit terms and conditions, the emissions from the equipment covered by this permit should not adversely impact human health or air quality. Therefore, the requested independent study is necessary. See also response 2 below for more information on TCEQ's health effects evaluation process.

With regard to public participation concerns, the Applicant applied for a second amendment on October 25, 2002 which was withdrawn and voided on August 25, 2003 when the mill was idled. In this amendment, the Applicant requested to revise the total hours for the blown seals to only 76 hours per year, which would bring the total annual emissions from the BRS to less than five tons, and thus did not require additional public notice.

To resolve the BRS issue, the Applicant was required to submit a Compliance Assurance Plan (CAP) prior to restart of operation. Therefore, an alteration request was submitted on October 2, 2005 and approved on November 16, 2005. The CAP requirement is incorporated in to the permit as special condition 4A which states:"Prior to restart of operation, the permit holder shall submit and obtain approval for the relevant portions of a detailed Start-up, Shut-down, and Malfunction (SSM) plan to the Texas Commission on Environmental Quality (TCEQ) Beaumont Regional Office. This portion of the SSM plan must list and describe likely "scenarios" which could result in a malfunction through the Accumulator Stack (Emission Point No. [EPN] 89-1) on the blow heat recovery system. In addition, the plan shall include the corrective action that will be taken for each scenario to demonstrate compliance with 40 CFR Part 63, NESHAPS, Subpart S, NESHAPS for the Pulp and Paper Industry. Any changes to the SSM plan that affect EPN 89-1 shall be submitted to the TCEQ Beaumont Regional Office within 15 days of the revision." However, because the facility has not been operational since 2003, the Applicant has yet to do so.

COMMENT 2: Group B Commenters and Dennis Robertson express concern over the complex mixtures and amounts of pollutants to be emitted and their effect on health, including respiratory

illness, cancer, and birth defects, immune system effects, reproductive system, nervous systems, brain, kidneys, liver, endocrine system, and other organ systems. Group B Commenters express concern over the health of their child/children, including those who work or live near the facility, and that there is a school approximately 2,700 (instead of 3,000 feet as stated by TCEQ) feet from the plant and that the elderly and the young are especially vulnerable to air pollution and deserve extra protection.

RESPONSE 2: Because the scope to the remaining application is limited to renewal of the prior authorization, an additional health effects review for this application is unnecessary. However, before authorizing an increase in emissions, potential concentrations were reviewed by the Executive Director's staff and this review would normally include the TCEQ staff conducting BACT review and impacts analysis, when necessary, using ESLs and NAAQS. ESLs are constituent-specific concentrations used in the Executive Director's effects evaluation of constituent concentrations in air. These health-based screening levels are derived by TCEQ's Toxicology Section and are based on a constituent's potential to cause adverse health effects, odor nuisances, vegetation effects, or materials damage (e.g., corrosion). The health-based screening levels are set at levels lower than levels reported to produce adverse health effects, and are set with a conservative safety factor to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. Generally, maximum concentrations predicted to occur at a sensitive receptor at or below the ESL would not be expected to cause adverse effects. There is much conservatism in ESLs and layers of conservative assumptions are made in the worst-case modeling analysis itself. Each facility reviewed is evaluated against these criteria so multiple facilities in an area have been reviewed to the same level of protectiveness. Furthermore, in the event that multiple facilities in an area emit the same chemicals, it is very unlikely that the maximum concentrations resulting from emissions from other facilities emitting the same chemicals would occur at the same place. Adverse health or welfare effects are not expected to occur if the air concentration of a constituent is below its ESL. If an air concentration of a constituent is above the screening level, it is not necessarily indicative that an adverse effect will occur, but rather that further evaluation is warranted. ESLs, together with the NAAQS, are the TCEQ's best tools for evaluating health impacts.

See also response 5 below regarding distance to schools.

COMMENT 3: Group B Commenters state that not all the facilities meet BACT since public health and their families' health are not being adequately protected at the proposed level of emissions. Commenters state that either more controls or a completely closed system is necessary to protect human health.

RESPONSE 3: The Texas Clean Air Act (TCAA) and TCEQ rules require an evaluation of air quality permit applications to determine whether adverse effects to public health, general welfare, or physical property are expected to result from a facility's proposed emissions. As part

of the evaluation of applications for new or amended permits, the permit reviewer identifies all sources of air contaminants at the proposed facility and ensures that the facility will be using BACT applicable for the sources and types of contaminants emitted. The BACT is based upon control measures that are designed to minimize the level of emissions from specific sources at a facility. Applying BACT results in requiring technology that best controls air emissions with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions. See TCAA § 382.0518 and 30 TAC § 116.111. However, BACT, at times, can be no controls.

When the permit was amended in October 2000, to allow for automation of the digester capping valve, the review indicated that the Applicant used what was deemed appropriate BACT. Because the current renewal is not requesting an increase in emissions, the TCEQ determined that the Applicant is in compliance with what was deemed as BACT in 2000. For this reason, no BACT analysis was required or requested by the ED.

COMMENT 4: Group B Commenters state that the Groundwood Mill emits an excessive amount of fugitive Volatile Organic Compounds (VOC), 1,091.9 tpy or 2,183,800 lb/yr, and that modeling predictions previously conducted are in error. Group B Commenters request that TCEQ require Abitibi to consider installing some type of control technology to biodegrade or incinerate the waste gases in another unit at the plant.

RESPONSE 4: The Applicant has not requested any operational or emission limit changes to the Groundwood Mill and thus the scope of this project does not extend to the fugitive VOC emissions from that facility. When permitted, the Groundwood Mill met all applicable state and federal requirements, and its emissions were duly authorized as shown on the permit MAERT.

COMMENT 5: Group B Commenters express concern over past, present, and future nuisance issues related to dust and odor. Specifically, the commenters challenge the TCEQ's response to Impacts Evaluation Question No. 3 that concerns whether the facility is in a sensitive location regarding nuisance. The TCEQ should require the Applicant to develop a plan to respond to nuisance conditions.

RESPONSE 5: The determination of whether the facility is in a sensitive location depends on the types of receptors that surround the facility. According to Toxicology Division Modeling and Effects Review Applicability (MERA) guidance, nonindustrial receptors are defined as "A receptor type such as residential, recreational, commercial, business, agricultural, or a school, hospital, day-care center, or church ... Nonindustrial receptors may also be referred to as sensitive." Therefore, when conducting a site review regional staff looks at the area surrounding the site for these non-industrial receptors. The TCEQ Beaumont Regional Office conducted a site review of the area on March 2, 2000 that indicated that there is no school within 3,000 feet. According to that site review, nuisance, odor, and hazard potentials were moderate. The permit application must meet standards outlined in the TCAA and applicable state and federal rules and regulations.

Applicants must comply with 30 TAC § 101.4, which prohibits nuisance conditions. Specifically the rule states, "No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property." Because the rule is a prohibition against nuisance conditions, the applicant must take all steps necessary to prevent them. As long as the facility is operated in compliance with the terms of the permit, nuisance conditions are not expected. However, individuals are encouraged to report any concerns about nuisance issues by contacting the Regional Office at 409-898-3838, or by calling the twenty-four hour toll-free Environmental Complaints Hotline at 1-888-777-3186. The TCEQ investigates all complaints received. If the facility is found to be out of compliance with the terms and conditions of the permit, it may be subject to potential enforcement action. See also Response 1 above regarding the submittal and approval of a Compliance Assurance Plan prior to restart of operations.

Also, the TCEQ cannot deny authorization of a facility if a permit application demonstrates that all applicable statutes, rules, and regulations will be met. See Response 6 below regarding compliance history.

COMMENT 6: Group B Commenters and Walter West, P.E., express concern over the Applicant's compliance history, including violations. Group B Commenters state that the Applicant's compliance history warrants denial of the renewal application, reducing emissions or changes made to the permit so that Abitibi does not continue to poison the Lufkin and surrounding areas.

RESPONSE 6: In accordance with Texas Clean Air Act (TCAA) § 382.055(d)(1), the TCEQ considers the compliance history of the company and the site during the technical review of an air quality permit application as required by Texas Water Code (TWC) § 5.754. The TCEQ reviews the compliance history of the site and the company based on the criteria in 30 TAC Chapter 60. The compliance history of individual sites and the company that owns or operates the site is available on the TCEQ website at the following address: http://www.tceq.state.tx.us/compliance/enforcement/history/get_list.html.

The compliance history period includes the five years prior to the date the permit application is received by the executive director. The compliance history includes multimedia compliance-related components about the site under review. These components include the following: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance.

The permit renewal application was received prior to September 1, 2002 and, in accordance with Title 30, Chapter 60 of TAC, a review of the components was conducted. It was determined that the company has an average compliance history (Site rating of 1.69 and company rating of 0.73) and does not have a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process. Therefore, changes to the permit or denial of the permit renewal are unnecessary.

See Response 5 above regarding nuisance conditions.

COMMENT 7: Group B Commenters state that the upset emissions from the Applicant's facility are persistent, illegal and should be stopped rather than permitted. Group B Commenters express concern over a history of property damage caused by the facility. Group B Commenters also express concern over the likelihood of future damage to their homes, property, and public access areas. Dennis Robertson expresses concern over the effect of emissions from the facility on animals and vegetation.

RESPONSE 7: It is the result of the persistent blown seal events that the TCEQ Regional Office requested that these emissions be permitted so that they will be subject to more restrictions. Upset emissions are addressed by 30 TAC § 101.201, § 101.211, and § 101.222. When approved, this application requires the applicant to consider emissions from the digester in the total emissions for the facility without any increase to the emission limits in the MAERT.

In addition to protecting health, the NAAQS are also set to address welfare effects such as visibility reduction, crop damage, and material damage. The NAAQS, as defined in Title 40 of the Code of Federal Regulations (CFR) § 50.2, include both primary and secondary standards. The primary standards are those which the Administrator of the EPA determines are necessary, with an adequate margin of safety, to protect the public health, including sensitive members of the population such as children, the elderly, and individuals with existing lung or cardiovascular conditions.[1] Secondary NAAQS are those which the Administrator determines are necessary to protect the public welfare and the environment, including animals, crops, vegetation, and buildings, from any known or anticipated adverse affects associated with the presence of an air contaminant in the ambient air. The standards are set for criteria pollutants: ozone, lead, CO, SO_2, NO_X, and respirable PM. "Criteria pollutants" are those pollutants for which a NAAQS has been established.

Through prior technical review of amendment applications for this permit, staff concluded that the emissions from this mill would not cause an exceedance of the NAAQS therefore, no adverse

[1] EPA considered animal studies indicating allergic responses to particulate matter as well as studies in children indicating increased allergic responses to traffic-related gases and particles when they established the most recent NAAQS. Therefore, emissions below the applicable NAAQS would not be expected to exacerbate allergic conditions.

impact to land, livestock, crops, or visibility is expected, nor should emissions interfere with the use and enjoyment of surrounding land.

COMMENT 8: Group B Commenters, Dennis Robertson, and Walter West, P.E., state that TCEQ should consider the cumulative impact of air and water emissions. Specifically, Group B Commenters and Walter West, P.E., point out that water samples from the Angelina/Paper Mill Creek confluence regularly fail Environmental Protection Agency ambient chronic toxicity tests. Walter West, P.E., expresses concern over the Applicant's improper attempts to justify reducing water quality standards. Group B Commenters and Walter West, P.E., inquire whether the Applicant is telling the truth and that the surface water permit application recently submitted by the Applicant did not identify several metals (including mercury) as constituents of their effluent, even though TCEQ internal memoranda document the presence of significant concentrations of the metals in their discharges. Dennis Robertson expresses concern over the effect of emissions from the facility on water quality. Commenters ask if the Applicant is releasing harmful levels of mercury and other harmful chemicals into the air, which are not being reported or disclosed, as in the Applicant's application for a waste water permit amendment. Group B Commenters and Dennis Robertson also state that Lake Rayburn is a recreational resource that must be protected for fisheries and boating activities and that millions of dollars will be lost if pollution is allowed to ruin this resource.

RESPONSE 8: While the TCEQ is responsible for the environmental protection of all media (including water), the law governing air permits focuses specifically on air-related issues. The scope of this air quality permit renewal application review does not include water assessment or consideration of issues involving water quality. However, as discussed above, the secondary NAAQS have been established to protect public welfare and the environment. Because the results of the air modeling performed previously were within acceptable levels under state and federal standards, emissions from the mill are not expected to adversely impact water, vegetation, or animals in the area. If a citizen suspects a violation of water quality standards or rules in Angelina County, the violation should be reported to the TCEQ Regional Office in Beaumont at 409-898-3838.

Since the total pollutants authorized in this permit have previously been reviewed and deemed to meet all the requirements of state and federal regulations, additional modeling and an additional health effects review for this renewal application are unnecessary. However, monitoring and sampling are requirements of the permit. The technical merit of the application demonstrates compliance with state and federal standards.

COMMENT 9: Group B Commenters state that because Title V requires the prevention of significant deterioration (PSD) of air quality, the federal government should change the permit to prevent illegal exceedances of air emissions.

RESPONSE 9: The TCEQ applies all applicable rules and regulations, both state and federal, when reviewing an air permit application. Under Title V, a site is required to obtain a Federal Operating Permit (FOP) if it is considered to be a major source (per 30 TAC Section 122.10). This facility has a FOP (O-01622). The purpose of a FOP is to reduce violations of air pollution laws and improve enforcement of those laws. A FOP meets the following objectives: recording all air pollution control requirements that apply to the source; requiring the source to make regular reports on how it is meeting its emission control requirements; adding monitoring, testing, or record keeping requirements, where needed, to assure that the source complies with its emission or other pollution control requirements; requiring the source to certify each year whether or not it has met the air pollution requirements outlined in the FOP (these certifications are public information); and making the terms of the FOP federally enforceable.

While it is true that PSD is an applicable requirement of Title V permit, this facility already has a PSD permit (PSDTX437). To trigger further PSD review as a major modification, there must be a physical change, a change in the method of operation of the facility that would result in a significant net emissions increase of the pollutant subject to regulation under the Federal Clean Air Act. This renewal does not trigger any of the activities that would constitute a major modification. As long as the mill is operated in compliance with the terms of the permit, nuisance conditions or conditions of air pollution are not expected and thus prevent excess illegal exceedances of air emissions.

Furthermore, for facilities that have been shut down for more than two years, according to long-standing EPA policy, such shutdowns are presumed permanent for purposes of federal new source review (NSR). This EPA presumption is rebuttable by the owner or operator of the source. Therefore, prior to restarting operation of the facilities covered by this permit, the permit holder shall provide, for approval by the TCEQ Air Permits Division, an analysis of why the shutdown of these facilities should not be considered permanent for purposes of federal NSR. Special Condition No. 19 addresses this required analysis.

See also Response 3 above regarding the evaluation under the TCAA and TCEQ rules.

COMMENT 10: Group B Commenters inquire whether modeling demonstrates that emissions downwind of the facility have been consistently below maximum levels and thus whether federal standards have been met. Walter West, P.E., states that careful modeling should be performed before approving the application.

RESPONSE 10: Because of the nature of emissions from the BRS, the emissions are very difficult to model. However, overall TRS emissions have been lower since the implementation of the Pulp and Paper Cluster Rule, or Maximum Achievable Control Technology (MACT) Standards - (40 CFR 63, Subpart S) MACT I, MACT II, and MACT III, which are meant to protect human health and the environment by reducing toxic releases to the air and water from U.S. pulp and paper mills. This MACT rule is the air portion of the Pulp and Paper Cluster Rule.

The other portion of the Cluster Rule is the effluent limitations guidelines, pretreatment standards, and new source performance standards developed by EPA's Office of Water. The MACT standards for the pulp and paper industry were developed in three parts, as follows: MACT I was developed for controlling Hazardous Air Pollutant (HAP) emissions from the pulp and paper production areas of mills using the kraft, sulfite, semi-chemical, and soda pulping processes. MACT II was developed for controlling HAP emissions from the pulping chemical recovery combustion areas of the mills. MACT III was developed for controlling HAP emissions from pulp and paper production areas of mills using mechanical, secondary fiber, and non-wood pulping, and papermaking systems at all mills.

Because the current renewal application is not requesting an increase in emissions, the TCEQ determined that air dispersion modeling from the Applicant is not required.

COMMENT 11: Group B Commenters state that the process for developing ESLs was flawed. Consequently, the ESLs should not be used. Further, the ESLs have not been verified to protect human health.

RESPONSE 11: ESLs are constituent-specific guideline concentrations used in TCEQ's evaluation of constituent concentrations in air. These guidelines are developed by the Toxicology Division of the TCEQ and are based on a constituent's potential to cause adverse health effects, odor nuisances, and/or effects on vegetation.[2] These health-based screening levels are set at concentrations lower than those reported to produce adverse health effects, and are set to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. Adverse health effects are not expected to occur if the predicted air concentration of a constituent is below its ESL. Because of these conservative concentrations, if an air concentration of a constituent exceeds the ESL, it is not necessarily indicative that an adverse effect will occur, but rather that further evaluation is warranted.

The ESL system was developed to review ground level concentrations of constituents for which there are no established state or federal standards. ESLs serve as guideline comparison concentrations for use in TCEQ's effects evaluation to protect against adverse health effects to both, humans and animals, vegetation effects, and nuisance conditions (e. g., odor).

ESLs are designed to prevent adverse health effects through a two-step process. First, a level of a constituent is identified at which no adverse effects are observed (No Observed Adverse Effect Level (NOAEL) or it is derived from available toxicological information. Occupational exposure, epidemiological, and experimental data are considered in this process.

Second, the NOAEL is divided by multiple safety factors of 10 to account for various considerations which may be relevant. Some of the considerations which may need to be

[2] See Response 2 for more information on the development of ESLs.

accounted for are differences between animals and humans (if the NOAEL is from an animal study), differences between people (to ensure ESLs are protective of the sensitive individuals within the general population), or differences in exposure time. Thus, if all three of the example considerations were relevant in the derivation of a particular ESL, the ESL would be obtained by dividing the NOAEL by 1,000 (3 factors of 10).

When information is lacking on the NOAEL for a specific constituent, the constituent of interest may be compared to constituents which have similar chemical structures and toxicological properties and which do have an ESL. In these situations, ESLs are calculated based on an estimation of relative toxicities. The less certain a specific constituent's toxicity, the lower or more conservative the resultant ESL is.

The health-based ESLs are set well below the concentrations reported to cause adverse health effects to any of the organisms studied, whether human or animal. By incorporation of conservative uncertainty factors, ESLs are set to protect members of the public, including children, the elderly, and people with pre-existing health conditions and to account for long-term exposures.

If predicted airborne levels of a constituent do not exceed the ESL, adverse health or welfare effects are not expected. If levels of constituents are expected to exceed the ESL, it does not necessarily indicate a problem but instead triggers a more in-depth review. This may include an examination of factors such as surrounding land use, magnitude of the concentration exceeding the ESL, existing levels of the same constituent, type of toxic effect caused by the constituent, margin of safety between the ESL and known-effects levels, and the degree of confidence in the toxicity database. After the health effects evaluation is complete, the toxicologist sends a memorandum, which is part of the public record, to the permit engineer providing information on the health effects evaluation.

The ESL process is very comprehensive. The TCEQ evaluates the emissions of all substances to be emitted from the facility, not just those substances for which the EPA has established reference concentrations or unit risk factors (about 100 substances). Additionally, the TCEQ Toxicology Division evaluates both short- and long-term concentrations of constituents, whereas other states and the EPA tend to evaluate only one or the other. This review is also more comprehensive than many other states in that it considers non-health impacts (odor and vegetative) for substances, as warranted by the available information.

For more information on ESLs or view the ESL list, visit the TCEQ's website at http://www.tceq.state.tx.us/implementcation/tox/esl/list_main.html.

COMMENT 12: Group B Commenters and Walter West, P.E., state that a portion of Abitibi's emissions are grandfathered and that modern standards should be applied to the emissions that

are currently grandfathered. Walter West, P.E., states that effective pollutant emissions monitoring should be considered before approving the application.

RESPONSE 12: The Applicant applied for a permit for its grandfathered sources, namely Wastewater Treatment Unit (Permit No. 56262) and Boilers 4, 5, 8, and 9 (Permit No. 56263), and they were duly authorized in 2004. They were deemed to meet the required controls. Based on the permit application, air contaminants from this plant include PM, CO, organic compounds, NO_X, SO_2, Cl_2, and TRS. Emissions will be monitored by stack sampling (Special Condition No. 8) and continuous emissions monitoring systems (Special Condition No. 6). Sampling will comply with the appropriate New Source Performance Standards and EPA test methods. Pursuant to the terms of the permit, the Applicant is required to maintain records of completed sampling as required in Special Condition No. 8. Special Condition Nos. 4, 6 and 12 through 18 require recordkeeping by the Applicant.

COMMENT 13: Richard Donovan expresses concern over having to insist that the laws be enforced.

RESPONSE 13: The Executive Director has reviewed the permit application in accordance with the applicable law, policy and procedures, and the TCEQ's mission to protect Texas' human and natural resources consistent with sustainable economic development. If the mill is operated as specified in the permit terms and conditions, the emissions from the equipment covered by this permit should not adversely impact people or air quality. See response 5 above regarding reporting environmental compliance concerns.

COMMENT 14: Louis Bronaugh supports the proposed action to amend and renew the permit.

RESPONSE 14: The ED acknowledges the commenter's support of the application.

CHANGES MADE IN RESPONSE TO COMMENT

During the review of the application, the ED has changed certain provisions of the draft permit (Special Condition Nos. 2, 4, 7, 8, and 17) to properly reflect the activities at the mill, but the changes are not necessarily in response to public comments.

Respectfully submitted,

Texas Commission on Environmental Quality

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