STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

May 16, 1984

Mr. James T. Wilburn, Chief
Air Management Branch
Air & Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Wilburn:

RE: Final Determination - Georgia-Pacific Corporation
Federal Permit No. PSD-FL-079

Enclosed please find a copy of the proof of publication of the public notice, the public comments and the department's response to the public comments, and proposed Final Determination for the subject project. We recommend that the applicant be granted Authority to Construct, subject to the conditions in the Final Determination.

Sincerely,

for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Enclosure

STATE OF FLORIDA

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VICTORIA J. TSCHINKEL
SECRETARY

May 16, 1984

Mr. Roger C. Sherwood
Technical Director
Georgia-Pacific Corporation
Post Office Box 919
Palatka, Florida 32077

Dear Mr. Sherwood:

RE: Final Determination - Georgia-Pacific Corporation
Federal Permit No. PSD-FL-079

Enclosed please find one copy of the referenced Final Determination. Final approval of the Federal PSD permit is contingent upon review and acceptance of the permit conditions by the Environmental Protection Agency Region IV office in Atlanta. Questions concerning final issuance of the Federal permit should be directed to Mr. James T. Wilburn of the EPA office.

Sincerely,

for C. H. Thomas

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Enclosure

cc: Vernon L. Adams
David A. Buff
Doug Dutton
Nancy Wright

Georgia-Pacific Corporation
Putnam County
Palatka

Federal Permit Number:

PSD-FL-079

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

PUBLIC NOTICE

NOTICE OF HEARING

The State of Florida Department of Environmental Regulation gives notice that a public hearing pursuant to 40 C.F.R. Part 124 will be held regarding the proposed issuance of a federal PDS (Prevention of Significant Deterioration) air construction permit to Georgia-Pacific for its construction of a combination peat and bark fired boiler, a recovery boiler and associated smelt tanks (2), and a lime kiln at its existing facility in Putnam County. The hearing will be held at the following time and location: 17th day of February, 1984, at 10:00 a.m., St. Johns River Water Management District Office, located ¼ mile west of the Kay Larkin Airport on Highway 100, Palatka, Florida. Interested members of the public will be provided an opportunity to present written or oral comments at the hearing.

Jan. 10, 1984 15248

STATE OF FLORIDA
County of Putnam } ss:

Personally appeared before me, a Notary Public for the State of Florida at Large, Joyce Guthrie who deposes and says that she is Business Office Manager of The Palatka Daily News, a daily newspaper printed in the English Language and of general circulation, published in the City of Palatka, in said County and State; and that the attached order, notice, publication and/or advertisement of Notice of Hearing: The State of Florida Department of Environmental Regulation gives notice that a public hearing will be held regarding the proposed issuance of a federal PDS air construction permit to Georgia-Pacific.

was published in said newspaper Palatka Daily News

for a period of One Insertion consecutively,

Beginning Jan. 10, 1984 and ending Jan. 10, 1984

said publication being made on the following dates:

January 10, 1984

And deponent further says that The Palatka Daily News has been continuously published as a daily newspaper, and has been entered as second class mail matter at the postoffice at the City of Palatka, Putnam County, Florida, each for a period of more than one year next preceding the date of the first publication of the above described order, notice, publication and/or advertisement.

Subscribed and sworn to before me this

13 day of January A. D. 1984

Notary Public, State of Florida
My Commission Expires Oct. 23, 1984
Bonded Thru Tway Fain - Insurance

No. 15248

Joyce Guthrie

Final Determination

Georgia-Pacific Corporation

Nos. 5 Combination Boiler, Recovery Boiler, Smelt Dissolving Tanks (2), Lime Kiln

Georgia-Pacific Corporation's (GPC) federal PSD permit application to construct a combination boiler, a recovery boiler, two smelt dissolving tanks and a lime kiln at their existing mill in Putnam County has been reviewed by the Bureau of Air Quality Management (BAQM) for EPA. Public notice of the department's intent to recommend issuance to EPA was published in The Palatka Daily News on January 21, 1983. Copies of the technical review and preliminary determination were available for public inspection at the Palatka Public Library, the DER's Northeast District office in Jacksonville, the DER's Northeast District Branch office in Gainesville, and the DER's BAQM office in Tallahassee.

On February 2, 1983, the American Association of Retired People (AARP) of Florahome, Florida, requested a hearing on the proposed federal permit. The hearing was held at the St. Johns River Water Management District complex located in Palatka, Florida, on February 17, 1984. Mr. C. H. Fancy, Deputy Chief of the BAQM, was the EPA appointed hearing officer.

Questions and comments were offered by many of the persons attending. Some written comments were submitted at the end of the hearing. It was also stated that a comment period of 30 days after the hearing would be allowed so that anyone who wished could submit further comments. The bureau's responses to all of the comments submitted are contained herein.

The department has made a final recommendation that Region IV EPA grant GPC the authority to construct the proposed sources at their existing facility in accordance with the specific and general conditions contained in this proposed final determination.

The proposed final determination is organized in the following manner:

Section 1: The public hearing record of February 17, 1984.

Section 2: Written comments received and the bureau's response(s).

Section 3: The proposed final determination with the specific and general conditions.

Comments:

Written comments were received by the BAQM from the following persons and copies are attached:

- o Ms. Marjorie Benchoff - received 2/17/84
- o Ms. Mary Webster - received 3/15/84
- o Ms. Diane Smith - received 3/15/84
- o Ms. Cecelia G. Hitchins - received 2/17/84
- o Ms. Ruby Fogle - received 3/15/84
- o Mr. Bruce Mitchell - memo to file dated 3/16/84

1. As was brought out quite extensively during the federal public hearing and restated in the comments, there is a major concern about the air pollution in Putnam County being adequately monitored?

BAQM Response:

Based on modeling, it is our professional opinion that Putnam County has been and is being adequately monitored. There are two existing total suspended particulate monitors that have been and are still being operated and maintained by the DER's Northeast District office personnel. Appropriations have been approved for a sulfur dioxide monitor and a site has been properly cited; however, a location has not yet been secured.

2. Besides the first comment, Ms. Webster requested some clarification of some parts of the FAC Rule 17-2, and these are:

a) Is Prevention of Significant Deterioration review in force?

BAQM Response:

Yes, PSD review is in force. The bureau will review an attainment area air permit application for state and federal PSD applicability in accordance with FAC Rule 17-2.500 and 40 CFR 52.21, respectively.

b) Explain the followings phrases contained in FAC Rule 17-2.100, Definitions:

- o (104) "New Source"
- o (105) "New Source Allowance"
- o (106) "Nitric Acid Plant"
- o (107) "Nonattainment Area"
- o (108) "Objectionable Odor"

BAQM Response:

The bureau feels that the phrases are well defined in the rule.

c) Why isn't the FAC Rule 17-2.620(2), Objectionable Odor Prohibited, enforced?

BAQM Response:

Some of the hydrocarbon compounds emitted from the paper and pulp industry are malodorous. The problem is that the odor threshold of these compounds is very very small, on the ordor of parts per billion. Control techniques and strategies are currently being studied to reduce, if not eliminate, these compounds from being emitted.

SECTION 1

Federal Public Hearing

Federal Public Hearing

Georgia Pacific Corporation

PSD-FL-079

February 17, 1984

C. FANCY: Good morning ladies and gentleman. My name is Clair Fancy and I am the hearing officer in this matter this morning. The matter that we are going to have a hearing on is regarding the federal air pollution permit that the EPA is considering issuing pursuant to the federal rules and regulations governing air pollution. This hearing is basically a public information hearing whereby representatives from Georgia Pacific will discuss briefly the project that they are proposing to build and the Florida Department of Environmental Regulation will discuss briefly what our position is regarding this permit as we act as the reviewing agents for the Federal Environmental Protection Agency. Any comments that any members of the public wish to give at this hearing will be taken into consideration and any final permit recommendation that we may send to EPA. In addition to that, to allow for people who may not have been able to be present today, we will keep the hearing record open for 30 days so that anyone who is not here and may wish to submit written testimony can do so; and, at that point, we will consider that in any recommendation for issuance. The notice of public hearing for this meeting was published in the Palatka Daily News on January 10, 1984, giving this place and time to have this hearing. I also have a letter from the Regional Administrator of the United States

Environmental Protection Agency, in Atlanta, appointing me as hearing officer in this matter. So with that, I think we will proceed by first of all giving Georgia Pacific up to about fifteen minutes to describe this project for the people in the audience. And then, the department representatives will go ahead and give our brief presentation as to what type of controls are going to be used to minimize air pollution and what type of ambient impacts we have determined might possibly occur from this particular facility, so as to give people in the audience any kind of a background that they may find useful in deciding whether or not to ask any questions. Once those two things are done in an orderly fashion, I will call on people, just by raising your hand, to come up and make a presentation if you so desire. This meeting is going to be recorded on a tape and we will type out this for a permanent record as far as what is said at this hearing. I would like to stress that this is not an adversarial hearing, but rather one for public information. We will try to keep it semi-informal, in that if someone from the audience has a question that they would like addressed either by members of the Georgia Pacific Corporation or the Florida Department of Environmental Regulation, we will attempt to answer that question for clarification. I would also like to state that this is a hearing only for the federal air pollution aspects and we are not here to discuss matters such as peat mining, for example, because that is not what the purpose of the hearing is. If someone has a question regarding that particular matter and Georgia Pacific happens to want to answer it and is able to answer it, I have no objection to

them doing so, but that would strictly be off the record type of thing, just for your own information. So with that, if anyone has got any questions about how we are going to proceed, I would be happy to take those questions now; and, if not, I think we will just proceed and let the company representatives give us a few moments on describing what they are proposing to do here. O.K. If, when you make a presentation, you could state your name and affiliation, that would be helpful, and spell your name if there is any question on how it might be spelled.

V. ADAMS: Thank you Mr. Fancy. For the record, my name is Vernon Adams and I am the supervisor of the environmental affairs at Georgia Pacific's Palatka pulp and paper mill; and, I have with me today, Mr. David Buff from Environmental Science and Engineering, who is the project manager as far as preparing our applications and our ambient air monitoring plan; and, this is Sarah Turnipseed, who is an attorney with Georgia Pacific. O.K. Basically, to start out with, in early 1981, Georgia Pacific management decided that it would be beneficial and desirable to increase the size of the mill, to expand the mill here. And, as they were looking ahead, they sort of gave me a directive as a supervisor in environmental affairs to go out and start making the preparations necessary should such an expansion occur; and, we starting making plans for the expansion; and, one of the preparations that we needed to make was we had to go ahead and apply for the permits necessary for this expansion. These permits included three main permits: a permit for the new recovery boiler and its associated

smelt tank vents, permits for the new lime kiln, and permits for the combination boiler to be fired by bark and peat. We began making preparations to get these permits and we hired Environmental Science and Engineering to prepare for us an ambient air quality monitoring plan. In May of 1981, we met with the department to discuss our plans of what we intended to do and we presented the plan to them. And they made some comments on it and made a few changes in the plan. And in June of 1981, we met with the department again and submitted complete applications for permits for these three sources. At this same time, we began our monitoring scheme and I want to sort of point out what the monitoring scheme was that we did to check the ambient air quality surrounding the mill. This dark spot is the mill. Basically, we placed three ambient air quality monitors in the surrounding area. One was placed directly across Highway 216 at an FP&L substation, which was where we did our modeling. Our computer modeling determines where the most of the highest impacts in the mill were going to be. We decided that this was one of the high impact areas, which was directly across the street from the mill at this substation. So, we placed one monitor there for suspended particulate and we also placed a monitor there for SO_2, sulfur dixoide. We also placed another monitor. This purple area here is our waste treatment system for our water, and we placed a monitor at the southeast corner of that waste treatment system, which is west-southwest of the mill; no, west-northwest, excuse me. And, we placed two suspended particulate monitors there to make sure that we had our quality control right. We had two monitors there and one was just checking on the other one.

So, we checked the ambient air quality there and that was also considered to be a high impact area for the mill. The third monitor that we placed was down here at St. Johns River Junior College. We placed a monitor there mainly to get some background information, trying to find out what the quality of the air was in the general vicinity, and that was a suspended particulate monitor, too. And basically, we operated those three monitoring sites for about four months and we gathered ambient air quality data at that time. And, we took that data. We analyzed it. We also included our projected emissions from our new sources that we had into the computer modeling and we determined a couple of different things. One, we determined that there would be no violations of the ambient air quality standards due to the mill. There would be no violations in the area. And two, we decided that the increment consumption, the allowable increase that was allowed, would be within the allowable limits. That was when we operated these new sources. The change between what we have now and what we will have is within the allowable limits established by the state and by the federal government. We submitted this information to the Department of Environmental Regulation. They analyzed our data, again, and concurred with our determinations. They also took the applications that we submitted and analyzed the control strategy that we were going to use to control the emissions from the boilers and from the lime kiln, and they made a determination that the strategy that we were going to use was the Best Available Control Technology. Basically, what they are saying is that is what we needed to do. We were proposing to

apply the correct control strategy for our boilers and they issued us...

MS. BROWN: May I ask you a question?

V. ADAMS: Sure.

MS. BROWN: Are you saying that you are always now below the standards? I mean, that you are within the...

V. ADAMS: I am saying that the state has established ambient air quality standards. They say that the air that you breathe...

MS. BROWN: You're saying that you do not violate those at all?

V. ADAMS: No ma'am, we don't.

MS. BROWN: You could have more pollutants in the air, that they were allowed to have more, is that what you are saying?

V. ADAMS: I am saying that the state has established standards that say, as long as you don't go above this limit you are okay.

MS. BROWN: Okay.

V. ADAMS: Okay. And basically, when we monitored, we determined that we were down here, okay, instead of being up here. And when

we put in our new boilers, we will be like here instead of right here.

MS. BROWN: Well then, what I smelled this morning when I was coming in is still below the allowable, instead of being up there it is still down here?

V. ADAMS: Yes ma'am.

MS. BROWN: That's what I wanted to know.

V. ADAMS: Yes ma'am.

MS. BROWN: But it's still smelling with that.

V.ADAMS: Well, uh, most pulp and paper mills are going to have some odor and it's a very.....What your smelling is a substance called methylene mercaptan and it only takes like one part per billion for you to be able to smell that. And, it's almost impossible for a pulp and paper mill to, in fact, it is impossible for a pulp and paper mill to completely irradicate the odor. If you lived here like say 10 years...

MS. BROWN: I lived here before you all were built.

V. ADAMS: Okay, well then you've noticed, I am sure you noticed how much the odor has decreased, because it was just awful. I can remember when I couldn't even drive across Rice Creek Bridge.

MS. BROWN: Oh, I can too! But, it has increased in the last, I would say the last two to three years, the odor has increased very much lately.

V. ADAMS: Yes ma'am.

M. WEBSTER: I have one question. I am not quite sure of this technical bit. You are telling us you have monitors there. What I would like to know is who's responsible for monitoring the air in other areas in the county? And, I agree with Ms. Brown, that there are other areas that the pollution and smell have increased. Now I do not know the technical data there, but I would like to know who is responsible for the other areas of the county? I have a letter with me, we are not accusing Georgia Pacific or anyone, those are questions that we want to know...

V. ADAMS: Okay.

M. WEBSTER: I have explained to Mr. Bruce that I am not an engineer, but when you raise the smoke stack, I was reading some

of the reports that I can't understand, doesn't it disperse the air further and further into the community?

V. ADAMS: No ma'am. When you raise the smoke stack and raise it higher, to respond to that direct question first, when you raise the smoke stack up higher, basically, what it does is it takes the pollutants and spreads them up higher in the atmosphere and gets them to the point to where they don't fall down into the community.

M. WEBSTER: Unless there is...

V. ADAMS: Unless there is an inversion and more as a cap over there and that is the only time when it will keep it down. I am trying to remember your first question that you had there.

M. WEBSTER: Who is responsible for monitoring in the other areas of the county? But please don't take as criticism, I want it to be constructive dialogue. I agree, I have lived here a long time too, and the second time. But I lived here before any area was grown up. But in the last, I would say, four or five years, I have had to keep my windows closed and have an air conditioner and the odor is terrible. It smells up the whole house if you leave, and maybe it's something we can't do anything about. I am just asking of the dialogue, is there anything you can do about it, because we have the utility company saying conserve the energy, open your windows, and so on and so forth? This is not as an AARP

chairman, this is as a private citizen, I would like to know if there is anything that can be done about the odor and it does create breathing problems for a lot of people? Not me personally, I can't stand the stench unless I keep my windows closed.

V. ADAMS: To answer that particular question, there have been some new technology developed and right now we are in the process of investigating this new technology and trying to figure out how it could be applied and how it best could be applied. It's very expensive technology, but we intend to put it in. It's just a case of trying to decide what it is we are going to and when it is that we are going to do it. As I said, it is extremely expensive and even once we can get it in, it will not eliminate the odor of the mill completely. Pulp and paper mills are going to have some odor because, like I say, it's only like one part per billion which is, just trying to give you an example of what one part per billion is, it's probably about like putting a quart of water into the St. Johns River. That's how little it takes for you to be able to smell it. To answer your question about who is responsible for monitoring the other areas. And basically, any monitoring that's done in the other areas is the responsibility of the Department of Environmental Regulation or any other private citizen that wants to do that monitoring or mainly I am talking about other companies. And normally, we do not monitor ambient air quality all the time. We monitor ambient air quality when we are proposing to do, to build a new source. That's part of the regulations. Okay. We monitor our smoke stacks and what we put out all the time.

M. WEBSTER: With the diversity of duplicate industries here, could it be possible that the things that we are experiencing could be a combination of these different things? I am not technical. I am just asking as a private citizen. Like SO_2, with some other particulate that another industry, or SO_5? I am not a chemist and I regret that the one that is capable for our group to speak on these things, to give you an intelligent discussion, is not here.

V. ADAMS: Basically, anything within the area is influenced by everything within the area.

M. WEBSTER: And that creates something we perhaps are experiencing that you do not know about since you are just concerned with Georgia Pacific?

V. ADAMS: I can't answer what the other facilities in the area are doing. I know what their permits say they're doing and what the Department of Environmental Regulation says they're doing, but I can't answer that question.

B. MITCHELL: In talking about the mercaptans, it's like when you open up a bottle of ammonia or pine sol, as soon as you open the cap, and sometimes even when you shut the bottle off, you can still smell the residuals, and it really doesn't take much, as he said, in the range of the one part per billion to get the threshold of your olfactories just to detect the smell. It's very small in a certain amount of air.

M. WEBSTER: The smell, if it isn't unhealthy, is it a problem? Odor is a problem, but I was questioning the....How far does the odor go before it gets unhealthy? There are times that I am sure I have heard people complain, although they don't know what it is. I think Georgia Pacific gets blamed more for than it's share. This has been a learning experience perhaps, I do not know, I am saying that, but what degree does the odor have to get before it is unhealthy? Leave the technical lingo out of it.

B. MITCHELL: The EPA sets guideline standards that they set for both primary and secondary standards, one is a health effect and the other is a welfare effect. And, one is more stringent than the other one. And, when they set these thresholds, one cannot allow the...The prevailing agency will model it to the point that it reaches that threshold. And, again, to show you how far it can be dispersed and still be detected, I'm a Hogtown native from Gainesville and when we have these inversions, it does get dispersed even that far ahead. That's a good distance for a pollutant to travel; yet, it is easily detectable. When you get down to one part per billion, you are talking about a very small amount, still just to trigger the affect of smelling. But, they do state guidelines and they tend to modeling done both by Environmental Science and by checking through our department. We still evaluated it as a point and that it does not exceed that limit.

M. WEBSTER: Please don't take my questions as criticism, I am trying to ask .....

B. MITCHELL: We aren't. We are just trying to tell you the information that will help you understand what is going on and what might take place.

V. ADAMS: The Environmental Protection Agency is also determined that the odor that you smell is not a health related pollutant. It's a welfare related pollutant and it agitates, you know. You don't like the smell of it, but it doesn't affect your health is what EPA has determined.

M. WEBSTER: They have a doctor to say this?

V. ADAMS: Yes ma'am. Can I help you sir?

C. YOUNG: As I understand it, the furthest point away from the plant, when you place one of these monitoring systems to monitor the new boiler your planning to put in, is St. Johns River College?

V. ADAMS: Yes sir.

C. YOUNG: How can you get valid data from that from so close to the plant, when you raise the smoke stacks and disperse this stuff to the distance: say, what about areas 20, 40 to 50 and 100 miles away?

V. ADAMS: Basically, what we are trying to find out with our computer models and with our ambient air monitoring was, we were trying to find out where the worst situation would exist from the mill, that would be caused by the mill. And the computers and everything that the environmental scientists have gone through and done a lot of ambient air monitoring in different areas and they develop these computer models to determine: you put something here, and you put it up so high, put the smoke stack here and it's so high, it's putting out these pollutants, where are they going to wind up?

C. YOUNG: In other words, you are saying the heavier concentrations will be in those three areas?

V. ADAMS: Right. I am saying the heavier concentrations will be in two of those three areas. One, right there across the street from the mill, and the other one out by our waste treatment ponds. And the third one that could be monitored was the area that we figured we had relatively low impact on according to the computer model and not influenced very much.

C. YOUNG: Thank you.

M. WEBSTER: I would like to know how, I understand from those computers you use, weather data and those areas, it's my experience the winds, you set northeast winds and southwest, I don't know what your other areas have, or southeast rather, let me correct myself, how do they do that? I think Mr. uh, one of

them, explained that to us and I would like for them to explain to the people. I think it would be helpful.

C. FANCY: When our department gets on we'll go into that sort of thing for you when it's their turn to speak.

V. ADAMS: Basically, to sort of finish up my presentation, I just wanted to say that, after we made the determinations that we would be in compliance with the regulations and would not cause any significant harm to the environment, the DER concurred with those determinations, they issued state construction permits for these sources, and recommended to EPA that they approve the federal permits. EPA went out on public notice, I believe it was in January, 1983, and basically, the Florida Home Chapter of the American Association of Retired People requested a public hearing and that's the reason we are here and we are going to try to answer any questions that we can. Yes sir?

C. FANCY: Excuse me just a minute. Could we get your name for the record, could I just get your name?

C. YOUNG: Have you had an experience, recent or previous, in the burning of peat or bark on a industrial scale?

V. ADAMS: The only experience we have had with it ourselves has been on some, basically, rail car loads of peat that we have brought in from other places and we burn them in our bark boiler

right now. We can burn peat in that boiler on experimental basis but, it's not designed to burn peat on a regular full scale basis; and, there are boilers that are used in Europe and places like this that are designed to do this. And basically, we have looked at these and determined that this is how we need to build a particular boiler. One of the reasons we need to build the boiler is it would have to be built specifically in order to burn peat correctly and to burn it so you don't have a lot of pollution. You've got to build it the way you are supposed to, to be burned.

C. YOUNG: Thank you very much.

C. FANCY: I've got a couple of questions if I might?

V. ADAMS: Yes sir.

C. FANCY: Could you just very briefly, for the benefit of the people in the audience, explain what the size of the boiler is and what you are planning on burning in it; and, how much of a plant expansion the smelt tanks and lime kilns actually would be relative to what you've got now?

V. ADAMS: Basically, the smelt tanks, the lime kiln, and recovery boiler, for this expansion were sized and designed to be exactly like the new ones we just put in in 1975-76. It would be a duplication of it. And basically, it would be sized up and would double the size of the mill. But, something I should point

out with that is, by doubling the size of the mill, we would not be doubling the pollutants from the mill. Basically, the entire set-up and everything is designed so that we would probably double the size of the mill; but, when you finally get down to it and started adding everything together, it would only be a very, very small increase in the emissions from the mill.

C. FANCY: That would be because the pollution control equipment on the new sources would be substantially more modern than that that you have on the old ones?

V. ADAMS: Right.

C. FANCY: That is correct?

V. ADAMS: Right.

C. FANCY: Could you also, very briefly, explain what the boiler is, in the same kind of way that you had described those sources?

V. ADAMS: Basically, the boiler, as far as the size of the peat and bark boiler will be designed such that it would....Right now, we have boilers that are set-up to make so much steam, so we can make so much electricity, and drive so much product. And basically, the other boilers, new boilers, would be such that it could replace, or it would be the same size as all, as three boilers we already have; but, the emissions from that boiler would

probably be, I am trying to remember exactly, I think that the emissions from that boiler would be somewhere in the neighborhood of a third of the total emissions from the three boilers that it would be comparable to when you add the three of them together.

C. FANCY: And the fuel you are using in the current boilers would be what?

V. ADAMS: The fuel we are using in the current boilers is bark and also oil. It is foreign oil, like all oil that's used in this area. And basically, one of the purposes of the deal would be to try and avoid the dependence on foreign oil and make it so that the mill could continue to operate in times when there may be a foreign oil crunch. And, this sort of relieves that dependence.

C. FANCY: But this new boiler would be made to supplement the existing boilers, wouldn't it, because of the new demand you would have for the larger mill?

V. ADAMS: Right. It would be made so that it could supplement. And basically, or the contentions at the moment, are such that have this boiler operate to a point where we could keep one of the boilers that we've got currently just on stand-by, instead of operating it full-time.

C. FANCY: So, if that were to happen and this was the third of what those would be, then the pollution from the plant by using that could actually decrease, is that correct?

V. ADAMS: Yes, and if the....Something else that needs to be brought out is the fact that, should we go ahead and expand and double the size of the mill, part of that would be, part of the requirements before we could do that would be that we would have to put in an odor control system. And actually, the odor from the mill would actually reduce instead of going up.

C. FANCY: Okay.

V. ADAMS: Because that would be one of the federal requirements, it would be if we had to put in that odor control system should we double the size of the mill.

C. FANCY: When do you propose this construction project to start?

V. ADAMS: The project right now is, due to economic conditions, is sort of going to delay a little bit; but, we would propose that the project will start within the next year to two years.

C. FANCY: And when would it be completed?

V. ADAMS: Probably two years after it started, at the date it started.

C. FANCY: And, what would that do to the employment at the mill?

V. ADAMS: I would just be guessing at that. I would condition that the employment at the mill would probably go up by a third. That would be my guess; but, that is strictly a guess. Yes Ms. Webster.

M. WEBSTER: As you know we live in a peaked area, in classification I understand, and when we have a fire there, the suffocation is horrible. What I want to know is do you know if there is any classification set up for peat air standards? I don't know if I'm phrasing this right, or are you the one to ask? Are there any air quality standards, that is what I want to ask? Do you know?

V. ADAMS: Air quality standards are not set up according to a particular source of fuel that's being burned. Air quality standards are set up according to how clean we need the air to be, how clean we want the air to be, and that's the way they set up the air quality standards. But, there are standards set up as far as what you're allowed to put out of your smoke stacks before according to what sort of fuel you are burning. And basically, what DER determined was that when we were applying for the permit, was that they wanted the emissions and the peat to be as low or lower than if we were burning oil.

M. WEBSTER: You say oil, what classification is oil? I just have to ask you because I don't understand some of those reports and haven't had time to get the information. What classifications do you burn if we have an oil crunch?

V. ADAMS: If we have an oil crunch?

M. WEBSTER: Uh huh.

V. ADAMS: If we have an oil crunch, we burn any classification of oil we can get. But, we haven't got to that point yet.

M. WEBSTER: Oh, I realize that.

V. ADAMS: Any type that we can get that DER will allow us to do so.

M. WEBSTER: What will DER allow or should I ask that later?

C. FANCY: You can ask that later. I'm not sure that we could necessarily give you a bonafide answer to that right now.

M. WEBSTER: Alright.

C. FANCY: Hopefully, that won't happen. Okay, does anyone else have any more questions for Mr. Adams? Okay, after our department gives a presentation, then we will allow anyone in the

audience who wants to give an opinion or a followup presentation. Fine, and then if not, we'll give one more shot at anybody asking Georgia Pacific or their consultants any questions they may have that would be of interest to them. Okay, I guess the next thing we will do is have Bruce Mitchell talk a little bit about the project regarding some of the things that Mr. Adams talked about, as far as the emissions and the controls and what have you. And after he is done, Larry George will talk about some of the ambient impacts; and, I think I would like him to address the difference between the emissions standards part, what is actually coming out of the stack and the ambient impact, and that is what you would be subject to if you were walking down the street or in your house or on your porch. We will try to clarify that a little bit. So, you want to just state your name and affiliation.

B. MITCHELL: My name is Bruce Mitchell and I am the review engineer with the Central Air Permitting Section, Bureau of Air Quality Management, Department of Environmental Regulation, and we're in Tallahassee. In reviewing permits that have come in, there are certain acronyms I am going to use. So, I am going to let you know an acronym is just a short way of expressing a long term so that when you hear NSPS, that stands for a New Source Performance Standard, which is a federal guideline standard promulgated. A standard that we are talking about are the NSPS Subpart D, which is a standard performance for fossil fuel-fired steam generators and Subpart BB, which is the standards of performance for kraft pulp mills. The State of Florida has

adopted these by reference except for, I believe, the TRS standard, which they are still working on. So, we did apply the standards as they were. The other acronym that will be used is the BACT, which Mr. Adams referred to earlier, which is the Best Available Control Technology. The project consisted of a combination boiler, recovery boiler, lime kilns, and smelt dissolving tanks. The State of Florida, since we could never determine exactly, and the standards have not been developed, that peat is clearly a fossil fuel. So, what we did on the combination boiler on trying to establish a limit for peat, in the state permit, we did establish a BACT for peat as another fuel; but, we applied the standard of Subpart D, which is a .1 pounds per million Btu allowed out the stack per heat input. Now in the recovery boiler, the lime kilns and the smelt dissolving tanks, the New Source Performance Standard, Subpart BB, was applied in that category, also. So, the standards that have been set, both in the BACT, whether it be new and if it was the most current at the time that it was developed, it was the ones that were applied to each one of these sources; and, the emission limits were also based on efficiencies of controls. The electrostatic precipitator will be applied to both the combination and recovery boiler and scrubbers will be applied to the smelt dissolving tanks and the lime kilns. The efficiencies are such and the emission limits are based on those emissions, on those percent efficiencies, and also applied with the standard that is in the New Source Performance Standards. That is basically what I did.

C. FANCY: Okay. Could you, for the audience, just address what the, you said the New Source Performance Standard for the peat boiler, to relate that to oil as far as the emissions are concerned, what we would allow if they were going to build an oil boiler, say?

B. MITCHELL: Well the, on the oil, let's see what the standard would be. Is it .2?

V. ADAMS: .1.

B. MITCHELL: Is it .1? Okay, it would be the same....on particulate matter.

C. FANCY: On the particulate matter he is, as he indicated, that whether they were burning peat or whether they were burning fuel oil, which they are doing now and fuel oil is generally considered a cleaner fuel, which burned by itself it is, the emission limits are the same for either type of boiler; and that, in order to be able to do that, the company would have to add on pollution control equipment beyond what they would have to do if they were just going to burn oil. And, the general purpose of the federal regulations is to allow companies to burn fuels nationwide that are plentiful such as coal, but at the same time to protect the environment by not allowing any more emissions from the coal firing than they would if someone were to burn oil.

B. MITCHELL: I guess I could entertain any questions pertaining to the exact review, if you want to get into that? If anybody...Yes ma'am.

MS. BROWN: I want to ask a question. I'd just like to know the comments, this is my first time at one of these, St. Johns Water Management, and I decided that the acoustics must be very bad in here or all of you have very deep voices. I have to strain to hear you and I've just been to the doctor and he said my hearing is fine. You are difficult to hear!

B. MITCHELL: Would you like to come forward closer?

MS. BROWN: Do you also talk that way when you are speaking to the public?

B. MITCHELL: I feel like I am shouting, but I don't, but that's what I'm hearing.

N. WRIGHT: Yes, we can't tell if you're not able to hear us unless you speak up like she just did. So, if you have problems hearing it, I know I'm one of the worst defenders in trying and speaking loudly, just raise your hand during the course of this. You know, wave us down a little bit and let us know if you can't hear us.

C. FANCY: Okay, I will try to speak up. Is that better?

MS. BROWN: That's better.

C. FANCY: Okay, I haven't said much of substance, so you haven't missed much, but...

MS. BROWN: Well, I gathered that.

C. FANCY: Okay.

B. MITCHELL: Now, there is a point that I do want to make now. Since the review under the state and the federal guidelines are different on what we call credible decreases and increases, and under the original review according to the federal standard, that you can take credit for shutdown of certain types of equipment that have like and similar pollutant characteristics if you do it within a five year period prior to the beginning of construction. Since the delays have been imposed on Georgia Pacific for certain reasons, whether it be water quality or air quality problems, and they had to deal with this, the time frame has elasped such that we can't grant them certain credits that we originally credited when we first issued this and then it was acknowledged by the association that they would like to go to a public workshop. So, we will be bringing into this and incorporating into the text, even though it is already contained in the specific conditions, the limits under the Best Available Control Technology and we will

be applying this to both particulate matter and the TRS. Now, I am going to let Larry George, who is our meteorologist and modeling consultant with the department, to handle the air quality as it will pertain to these types of pollutant increases. But, since they had shutdown some equipment prior to this time and were given credit originally, we will now be bringing that into the text and probably a couple of paragraphs stating it in the BACT area. But, they have already got the limits imposed in the both the state and the federal specific conditions as they are. All we are going to do is bring it further into the text as a BACT limit. They were given credit, originally, so there is actually showing a net decrease in both these pollutants; or, the possibility is that they did not go above the threshold of what we call the significant levels. These siginificant levels are numbers that have been determined by EPA as to certain amounts of modifications or new source construction that can take place prior to doing certain types of review. BACT is one of the reviews that is triggered if you go above a certain level: 25 tons per year is for particulate; 40 tons per year for NO_x, SO_2; and 100 for CO or carbon monoxide. So, being the fact that they had been given credit and these were showing net decreases, they will now show a net increase. But, that will still be addressed within the text, even though the limits have already been established in the specific conditions.

D. BUFF: So what you are saying is that Georgia Pacific is already applying BACT and it doesn't state that as such in the BACT?

B. MITCHELL: It does in the state BACT. It does in the specific conditions. We have not brought it into the text of the federal, but it will now be brought into the federal because you have gone beyond the five year time limit that is allowed. The difference in the state is that it's five years prior to a complete application. So, they were allowed to get the credible decreases in the state and they were originally in the federal; but now, the time's elasped. So, we cannot grant that. And, to do the correct review, that's another reason for keeping the 30 day review or comment period beyond this particular hearing date.

C. FANCY: Thank you.

L. GEORGE: My name is Larry George; I'm an Environmental Administrator with DER in Tallahassee. By training I am a meteorologist. I've been in air pollution meteorology about 10 years, and what really that means is, instead of forecasting the weather I've been forecasting air pollution during this time, which is a little different application. The permit that Bruce Mitchell referred to and I don't know if anyone has mentioned it yet, but we do have some additional copies of the federal permit available here, up front, in case you would like to have one and look it over, and certainly I invite you to take one.

B. MITCHELL: And the Subparts are up here, too.

L. GEORGE: What that contains is our, the summary of our analysis of the project and also the conditions that we have proposed the company meet as conditions of approval. I was asked to explain the difference between emission standards and ambient standards. Mr. Mitchell was talking about emission standards, primarily. This is what the company will be allowed to emit through the top of the stack, what they will be required to test for the stack and continuously meet in terms of how much pollutant is allowed out the top of the stack. There are regulations which he referred to, New Source Performance Standards, Best Available Control Technology determinations, these things enable us to set a limit on what Georgia Pacific would be allowed to emit from their stacks. Having set that limit and really, this is a circular process, because it's in the process of setting these limits we need to take into account what happens to that pollutant after it leaves the stack and begins to disperse in the atmosphere. This is where my review came into play and this is really on the theory that an ounce of prevention is worth a pound of cure. But, the regulations now in the land require that any sizeable project, such as this, be reviewed before it's constructed and forecast, if you will, made of how it's going to affect the air quality in an area. The way the forecasting, if you will, is done, is that first an evaluation is made of the existing air quality. Now, this was done. We have, DER has operated one monitor in Putnam County for particulate for a number of years. Georgia Pacific, under our

approval and overview and so on, established the three monitors that Mr. Adams mentioned, to give us a little more detail look at the air quality in the county prior to their submitting an application. We then took this information and predicted through a computer model what additional pollution would be added to the levels already in the county if this project was approved and met the emission limits that we would make conditions of the permit. Now, the modeling is done by taking meteorological data, actual hourly observations of wind speed, wind direction, temperature, cloud cover, and all of these variables into account....we take....The nearest meteorological station which has data that is representative of this area is at the Jacksonville International Airport. We took five years of meteorological data, this is forty thousand and some hours of weather observations, and predicted what the pollution impacts would be for each one of those forty thousand hours and selected the worst cases, the worst events that could happen, if that worst prediction to what existing air quality levels in the county are, and then compare the result to the ambient air quality standards to determine whether there would be any threat to human health. The ambient air quality standards are levels that have been established by EPA. They apply nationwide. They are based on toxicological and epidemiological studies that have been conducted where there has been an attempt to find out at what level does pollution in the ambient air begin to affect the health of people. And the way the standards are actually set, is that....You may hear about some of this in recent months when Congress considers changing the Clean Air Act. The way it is done, now, is

that the most sensitive portion of the population is identified, normally as asthmatics, people that are particularly sensitive to air pollution and any outside air, the levels of which the studies show they are distressed are determined; and then, the standard is set with some margin of safety below that level. Now, what we've been doing at the state level is take those ambient standards, and our job is to insure that, giving ourselves what we call reasonable assurance that any project is not going to resolve in air pollution above those levels. So, we have, in this case, given ourselves reasonable assurance that if the permit is approved and Georgia Pacific meets the conditions of the permit, their emissions at the stack remained below the limits that were set in the permit, that the ambient air quality there that we all breathe at ground level around the county will not be higher than any of the ambient air quality standards. In fact, the levels that we predict range from negligible impacts for pollutants such as carbon monoxide up to typically levels of one-third to one-half the ambient air quality standards for the other pollutants: sulfur dioxide, the particulate matter (this is smoke dust and so forth), and nitrogen dioxide. Now, we mentioned that methyl mercaptan, which is one of the reduced sulfur compounds that pulp and paper mills characteristically emit, there are no ambient air quality standards for these reduced sulfur compounds because, at levels that you would normally find in the air, there are no reported health effects. EPA has, in their review of the scientific literature and so on, has never found health effects associated with the reduced sulfur compounds. It's not to say they aren't a

nuisance; and, it's not to say that when you are smelling a reduced sulfur compound there isn't something else in the air that's not detectable that could be a distressful agent; but in any case, we don't have ambient air quality standards for the reduced sulfur compounds. So, our control strategy there is just to make sure that the company controls those emissions to the greatest extent that they can. I would be happy now to entertain any questions on this aspect of it. Yes sir?

C. YOUNG: I have been listening for sometime here and I have got a question. We have had a lot of problems here about the standards of air quality--that the smell doesn't affect anything, that the emissions coming from smoke stacks are of such low quality that they will not affect anything--the question I have is, if this is true, why are so many people detrimentally effected by the emissions from these power plants and these paper mills? They are affected by anything from respiratory distress, to lung cancer, or dying, and it is continually getting worse all the time. Is this because they are not as effective as they were supposed to be or is it because the standards are too low?

L. GEORGE: I am afraid that we have to look at this from a point of view of cause and effect and evidence and so on, and I don't want to sound like I am not concerned with what you are saying, it's just that we don't, and I personally don't know of anyone in the department that has any evidence that health problems, air pollution caused health problems, are occurring here or occurring

here at any worse extent than anywhere else. You know there are other factors, of course, in the environment: smoking being a large one; the carcinogenic agents that we don't even know of yet. So, it's difficult. We really have to rely, at our level, on the national health research; and, the national health research to date would say that the levels that we are experiencing here are not likely to cause any out of the ordinary effects on health.

C. YOUNG: The University of Gainesville has on record, and you are welcome to go over and check it out, has a record study conducted last year by a number of environmental scientists over there which determined that Jacksonville, Florida, and Duval County have the highest lung cancer rate in the nation.

L. GEORGE: I am aware of that.

C. YOUNG: And, they prove that pollutants are coming out of the smoke stacks of the generating plants and the other plants to the northeast of us. And, they are drifting down this way from Jacksonville.

L. GEORGE: I am aware of the study. That's one that is of great concern, the high lung cancer rate in the Jacksonville and generally North Florida area.

C. YOUNG: This, if you agree that both sides are right, that there is no problem to the present air standards (inaudible due to

a cough) and there are so many people dying from the same thing from Jacksonville and Duval County area?

L. GEORGE: I can only say that, no, there is no....So far, the research is not progressed to the point where it shows that there is a problem of the standards there.

C. YOUNG: You are going to have to be hit over the head with a two by four if you don't understand that!

L. GEORGE: Well, I know that in the case of the Jacksonville lung cancer studies, for example, there are different theories put forth on that. One of them being that humidity, combined with high levels of absolute humidity in the air, combined with smoking, for example, would make a person who smoked in Jacksonville, for example, more inclined perhaps to be susceptible to cancer than someone who smoked in New Jersey. But, it's not that these are....You are on the frontier of the science now, and we really have no, at the state level and even at the national level now, any way that they can connect that finding of the problem in Jacksonville with anything that we are doing here. Yes ma'am.

MS. BROWN: I have been told that there's a wind tunnel that exists from Jacksonville to Putnam County. We have the same problems that they have. You're a meteorologist. Maybe you know? But, what affects the breathing in Jacksonville also affects us here!

L. GEORGE: You are close to Jacksonville, there's no question that....

MS. BROWN: Then, what the pollutants they have, we receive?

L. GEORGE: You will on the days that the wind is blowing from that direction. It's....You are not going to receive it in nearly the amount that Jacksonville's experiencing.

MS. BROWN: (Inaudible - not spoken clearly) which are _____.

L. GEORGE: Alright. I would like to add something about the air quality analysis that was done and that is, these air quality models, first of all, included not only the Georgia Pacific plant, but all the other sources of air pollution in Putnam County and in the immediate area--the Seminole electric plant, the Florida Power & Light generating station across the river--these were included in the modeling. Then, by adding the monitoring results off of those predictions, you can effective account for Jacksonville's contribution, because any of the monitors in the area, when the winds are from the Jacksonville area, are going to pick up any contribution that might be from those sources. And we....The levels that we've monitored in Putnam County of the pollutants that we do monitor are not excessible. It's...

MS. BROWN: You should live here. You should live in this area.

M. WEBSTER: Do you feel....I've plainly stated to you gentleman before, that we....I have problems with the amount of monitoring. This was what AARP attempted to do was, what we felt that we had problems, and I also have letters from various people all over the county explaining why. Do you feel that you have the funds and means and the equipment that you need that these people are talking about?

L. GEORGE: I think we do, now!

M. WEBSTER: I am trying to say...

L. GEORGE: Since the time that this permit was applied for, the department has added an additional particulate monitor at the Long Elementary School, yes, Long Elementary School; and, we planned to add a third monitoring site, which would monitor not only particulate but also sulfur dioxide and ozone as soon as we can get the equipment together; and, we do have funding out for that. So, I believe that with those three monitors in this county we will have a more than adequate picture of what's happening here.

M. WEBSTER: When I say adequate monitors, there are so many different, and as I have told you before....But, you feel that we have the type of monitors that are adequate for this county?

L. GEORGE: Yes I do.

M. WEBSTER: You do, and you are basing it on your data that you have projected the weather and so on and so forth, that's projected, isn't it?

L. GEORGE: Right. We would....Personally, I would love to blanket the state with hundreds of monitors and...But, you know, real well decisions have to be made with the limited amount of money and so forth as to where we monitor and how effectively we monitor. And typically, a lot of monitors in a short time period can tell you the same thing that a few monitors over a long time period will tell you. So, our strategy has always been to establish monitoring sites and modeling for a long period of time and, over time, get a feeling for what the air quality is and that's what we will be doing in the county.

C. FANCY: Okay, are there any other questions for Mr. George at this time? Thank you. Okay, I would like now to allow anyone out in the audience who wishes to make a statement for the record regarding this permit application for Georgia Pacific to install this boiler and associated production equipment. It is mentioned at the onset of this hearing, not only will statements given today, either in writing or orally or both be considered, but that we will keep the hearing record open for 30 more days if someone who wasn't able to attend or who, because of this meeting, has generated some comments and questions in their mind, would be able

to submit to the department for consideration in this permit. So, at this point, I will let anyone speak that would like to speak. Yes ma'am?

M. WEBSTER: Since our association of retired people were asking for monitors and we referred to the increased emissions, I would like to pass this to Mr. George as our official position in the letter and would you care to read it for Mr. Hood and Mr. Buck and Mr. Adams? This is from the AARP, not as private citizens.

C. FANCY: Would you like to present that yourself?

M. WEBSTER: I presented it, no, I would like...

C. FANCY: Would you like to read it?

M. WEBSTER: Because I have problems...

N. WRIGHT: Do you want it read?

M. WEBSTER: Yes, (inaudible - coughing), this is our position as the AARP in Florahome.

L. GEORGE: Okay, this is addressed to the Department of Environmental Regulation, attention Mr. Larry George. Ladies and gentlemen. In 1982, our association requested monitors. In our opinion air quality was declining and unhealthy. Apparently the

letter was inadvertently sent to the wrong address. In 1983, our telegram referred to PSD 079, that's the designation of this permit by the way, our understanding was there would be increased air pollutants, referred to February 2, 1983 telegram. As stated in our November 12, 1983 letter, our association did not place pollution problems on any specific industry. We are not opposed to expansion of industry; however, we think it paramount in the interest of present and future citizens, that we have air monitors to prevent significant deteoriation of air. Sincerely, Association of Retired Persons, Florida Home Chapter, Mary Webster, Environmental Committee Chairman.

L George: We would be glad to.

M. WEBSTER: I also have some more letters for you and I understand that I can present them? Not to do with the Association of Retired Persons, just the one presented.

L. GEORGE: And, we will be glad to put these in the record of hearing.

C. FANCY: Yes Mr. Young.

C. YOUNG: Yes sir, I have a real professional mouth and prefer to read sir, on my own behalf, if you don't mind?

C. FANCY: I don't mind a bit.

C. YOUNG: And, I want to state also, that I am not associated with AARP because I don't want to influence your opinion for them, in case I say something you don't like.

C. FANCY: Okay.

C. YOUNG: May I use the podium?

C. FANCY: What's that?

C. YOUNG: May I use the podium?

C. FANCY: Yes sir, you may.

C. YOUNG: These are my own opinions; and, after listening to the testimony, I believe they are more valid than ever. My purpose here is to request a denial of the permit for Georgia Pacific for burning peat and bark in the...

END OF TAPE: SIDE 1.

C. FANCY: Give your name just for the record.

B. MITCHELL: Testing, testing. Start all over again.

C. YOUNG. My name is Charles Young and I'm resident of Palatka. My purpose here is to request a denial of the permit for Georgia Pacific to burn peat and bark as a fuel. The reason being is that, as of now, we have no hard and factual information on the long range by-products of these two materials on the atmosphere or the environment. Peat represents the first stage in the development of coal from vegetable matter, and since it can be heavily stated that the harder the coal, the more efficiently it burns, and the less it produces harmful pollutants such as sulfur, it stands to reason that peat may present problems of an unknown nature. Acid rain and it's aesthetical effects, for example, were not anticipated when the fairly recent coal burning boom started as an alternate for fossil fuels. Peat as a fuel may be expected to have unexpected injurious effects to the environment. Wood is also not an efficient key producer. It was probably the first fuel used by ancient man, but it was rapidly replaced by more efficient fuels such as coal, oil, and gas. The use of wood bark, that is inferior even to wood, should be closely monitored and could well be suspect as a possible production of unanticipated ill effects to the environment. But what we have in effect is the request to burn on industrial scale two fuels that we really know very little about. I believe we should proceed on the conservative side until these effects are well documented and we can actually predict how they will react with the environment. Valid documentation indicates that, in the Southeast, we are being

drastically affected by pollution from coal burning power plants in the upwind Northeastern States. Jacksonville, Florida, for example, has the highest rate of lung cancer in the entire country and this is contributed mostly to the air born pollutants from out of the state that converge on that area. The question is, do we want to bring these same risks into our own back yards to the detrimental effect of not only the immediate area, but also to the rest of the state to the south? And so, what my position is that until we know for a fact the long range environmental and public health effects of the burning of peat and bark, your responsibility is to the public welfare and not to the industrial welfare. We all know that General Pacific, pardon me, Georgia Pacific contributes much to the economy of both the state and the county by, pardon me, through employment and taxes; but, these benefits are extremely small when compared to the possible detriment of the environment by the issue of experimental fuels. Georgia Pacific certainly has the general public interests at heart; but, being a profit-oriented corporation, it is entirely possible that the public interests could be overriden by profit interest. I urge you to reject this permit until further facts are known; or, if you cannot do this, to at least conduct extensive monitoring of the effects of this experiment until all the facts, good and bad, are known and could be accurately predicted. To allow Georgia Pacific to do its own monitoring is like allowing a politician to set his own salary. Thank you very much.

C. FANCY: Thank you.

B. MITCHELL: You want to present that sir?

C. FANCY: Sir, were you planning on leaving that as part of the record or not?

C. YOUNG: I can, if you like?

C. FANCY: Do you have a copy of it yourself?

C. YOUNG: No sir, I know it by heart just about.

C. FANCY: Okay, cause we can zerox it and send it back to you so you've got it. Okay, are there....Would anyone else like to make a comment from the audience? Yes sir. If you could state your name and...

J. PRIMISON: Mr. Hearing Officer, members of the agency, representatives from Hudson-Georgia Pacific, ladies and gentleman in the audience. My name is Jeff Primison. I reside at 1007 South 17th Street in Palatka, Florida. I have been a registered voter since 1954. I have operated and/or owned businesses in Palatka for the last 10 years. I am also employed at Georgia Pacific and have been for the past 30 years. I represent the International Brotherhood of Electrical workers out there as a business manager. I have a very deep interest in Georgia Pacific. Everyone has got

neighbors. You know there are good neighbors and bad neighbors. Now, Georgia Pacific has always been a good neighbor to Putnam County and to me. If you came here along with your neighbor, you've got laws to protect yourself; but, you have to give your neighbor a chance. I think we should give Georgia Pacific a chance as a neighbor to prove that they can operate these boilers. And if they can't, then the federal agency will take care of that. But, they will stay within the guidelines because they have in the past when they built the last expansion and they're still within the guidelines. I am married and I have two children and three grandchildren. My son works at the power plant and he's one of the fellows that burns that bark and that refuse. They have been burning it since 1947. They know how you can burn bark. Peat burning is something different, of course. Countries across from Europe burn it all the time and I think there are a few mills in South Carolina and one in Alabama, I think, burn peat right now. And, I'm sure the GP people are looking deeply into this peat burning situation, that they'll come out and they'll know what can or cannot be done in burning peat. As I have said before, my son works at the mill and my son-in-law works at the paper mill. My daughter works at a plant that makes cores for the paper mill. I've got a sister-in-law that works out there and I've got a brother-in-law that works out there. I've got three nephews that work out there. I've got a brother-in-law that, two brother-in-laws that retired from that paper mill and are drawing pension right now from Georgia Pacific. I've got a sister-in-law that works downtown in a shop where people from that mill come in and

buy goods. Now you multiply my case by a hundred or thousand and you'll find that GP contributes a great deal to Putnam County. And I think that we need, at this time, when the paper industry is so competive, that these people have got to be given a chance to expand and to modernize. If they don't, they are going to go under like every other paper mill right now that's going under because they have not expanded and modernized. They've got to have the chance because if they don't make it in this county, this county will stagnate and die. And I'm sure, me for one, don't want that to happen. I want the young people in this county to have a place to work in the future so they don't have to leave here. Of course, some will leave looking for better things. They will go to college, leave town because the opportunities aren't here. But the working person, the person that doesn't have these advantages, he's looking for a job with his hands. GP's a good contractor, and I hope and I request that this variance or this permit be granted to Georgia Pacific. Thank you.

C. FANCY: Thank you. Do we have any other comments relative to this permit? Okay, what I'm going to do is, as I said, keep the record open for 30 days if anyone else would like to comment on this. So I guess we can go ahead and turn the recorder off at this point and time. Ms. Webster do you want to....

M. WEBSTER: Yes, I'd like to thank all of you coming and I think it was good we have a dialogue, even though we sometimes disagree; and, I'm like Mr. George, I think an ounce of prevention is worth

a pound cure; and, if we work to prevent these things, instead of having to do the things that we are having to do now to clean up our water. We feel that that is our primary purpose and that was the purpose to have this public hearing. No animosity, I have my opinions about the medical and so on so forth. We just wanted a dialogue and let the people speak. And, I thank you Mr. Mitchell and Mr. George for bringing us this.

C. FANCY: Okay, thank you.

SECTION 2

Written Comments Submitted and the Bureau's Responses

Comments:

Written comments were received by the BAQM from the following persons and copies are attached:

- o Ms. Marjorie Benchoff - received 2/17/84
- o Ms. Mary Webster - received 3/15/84
- o Ms. Diane Smith - received 3/15/84
- o Ms. Cecelia G. Hitchins - received 2/17/84
- o Ms. Ruby Fogle - received 3/15/84
- o Mr. Bruce Mitchell - memo to file dated 3/16/84

1. As was brought out quite extensively during the federal public hearing and restated in the comments, there is a major concern about the air pollution in Putnam County being adequately monitored?

BAQM Response:

Based on modeling, it is our professional opinion that Putnam County has been and is being adequately monitored. There are two existing total suspended particulate monitors that have been and are still being operated and maintained by the DER's Northeast District office personnel. Appropriations have been approved for a sulfur dioxide monitor and a site has been properly cited; however, a location has not yet been secured.

2. Besides the first comment, Ms. Webster requested some clarification of some parts of the FAC Rule 17-2, and these are:

a) Is Prevention of Significant Deterioration review in force?

BAQM Response:

Yes, PSD review is in force. The bureau will review an attainment area air permit application for state and federal PSD applicability in accordance with FAC Rule 17-2.500 and 40 CFR 52.21, respectively.

b) Explain the followings phrases contained in FAC Rule 17-2.100, Definitions:

- o (104) "New Source"
- o (105) "New Source Allowance"
- o (106) "Nitric Acid Plant"
- o (107) "Nonattainment Area"
- o (108) "Objectionable Odor"

BAQM Response:

The bureau feels that the phrases are well defined in the rule.

c) Why isn't the FAC Rule 17-2.620(2), Objectionable Odor Prohibited, enforced?

BAQM Response:

Some of the hydrocarbon compounds emitted from the paper and pulp industry are malodorous. The problem is that the odor threshold of these compounds is very very small, on the ordor of parts per billion. Control techniques and strategies are currently being studied to reduce, if not eliminate, these compounds from being emitted.

Georgetown Fl, 32039
February 13, 1984

DER
FEB 17 1984
BAQM

Bureau air Quality Control
Palatka, Fl.

To Whom It May Concern:

I am writing in reference to the air pollution in Putnam County.

I was born and reared in Georgetown, Florida. We moved away for a few years but returned to Georgetown in 1957.

Now I find the quality of the air deteriorating. also I see upper respiratory problems with many children and older people, which we didn't see before.

I have an upper respiratory problem which is aggravated by the polluted atmosphere. There are days I cannot even walk around my yard, or sit on my dock and fish because of the polluted air, I have to remain indoors with all the windows closed.

I think we need adequate monitors in different areas of the county to determine the source and prevent further deterioration of our air.

Sincerely.

(Mrs) Marjorie Benchoff

P. O. Box 146
Florahome, Florida 32635
March 14, 1984

Mr. C. H. Fancy
Central Air Permitting Section
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallhassee, Florida 32301

Dear Mr. Fancy:

I have lived in my home for twenty-five years. The last five I have needed an air conditioner. Usually it is a necessity to sleep and breathe. You dare not leave a windowopen early in the morning, late afternoon, or night because of odors and various sprays. Often if you go outdoors after dark, your eyes and nose burn.

The following are reasons why I feel our air quality has deteriorated in Putnam County causing citizens to have lung problems and various diseases:

Expansion of Georgia Pacific - taller smokestacks spread pollution
2 coal fired plants - one in operation
Various Florida Power & Light Plants (It is my understanding they have a lot of emergencies and burn No. 6 fuel oil)
Not sure
Large areas of forest burning and development clearing
Mosquito spraying by planes and trucks
Rivers sprayed for weed control using toxic chemicals
Farmers spraying fields by planes (drifts carried by wind)
Chemical plants that manufacture and store chemicals that have burned and exploded
People
Two JEA Coal plants under construction within 50 miles

Expansion without pollution control for jobs is a false economy. Acid rain and ill health far outweigh the cost for the individual taxpayer and government.

Mr. Adams said G. P. Emissions meet "National Standards" and perhaps each industry does. However, if they do, you should have standards raised if you are going to allow so many pollutants in one area.

For years Putnam County has issued tax exempt bonds for pollution control. I'd like you to monitor and enforce what regulations we have not industry.

Each incident keeps piling up and air quality can't help deteriorating. Individuals need to be responsible for their actions but controlling air quality is something an individual has to rely on E.P.A. to monitor and control.

We all have responsibilities and I feel corporations and business organizations are not assuming their share. The E.P.A. either doesn't have the tools to work with or isn't doing what the private citizens thought was the intent of the law.

I want to express my appreciation to you for the manner in which you conducted the recent public hearing. There was no ridicule and rudeness as sometimes happens in public hearings concerning environmental issues or concerns the average person may have.

The above opinions are my own. We need your help to improve and correct the deterioration of our air in Putnam County.

Sincerely,

Mary Webster

Mary Webster

Enclosures

P. O. Box 148
Florahome, Florida 32635
March 14, 1984

Mr. C. H. Fancy
Central Air Permitting Section
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Fancy:

Over the past years the air quality has deteriorated in Putnam County. With the local industry's expansion and new industry moving here, I have noticed increased air pollution.

One of the areas of most concern to me is my children's school located on Horseman Club Road. The smoke plume completely covers the school and helps contribute to upper respiratory illness.

I recommend having an air monitoring system installed at that location and would appreciate your immediate action on this matter.

Sincerely,

Diane Smith

Diane Smith

CHAPTER 17-2

AIR POLLUTION

PART I
DEFINITIONS

PART II
GENERAL PROVISIONS

Mr Fancy, I am not an attorney and can't understand all of these. Are any of these in force? Many were (Copy from Public Library)

frequently supplemented by fillers and toners.

(104) "New Source" - A source which is not in existence, for which an application for a permit to construct has not been submitted before the effective date of an applicable section or provision, or which has been reclassified as a new source pursuant to any provision of this Chapter.

(105) "New Source Allowance" - An emission allowance as provided in Sections 17-2.510(5) to accommodate the growth in emissions resulting from the operation of new or modified facilities in a nonattainment area.

(106) "Nitric Acid Plant" - Any facility producing weak nitric acid by employing either the pressure or atmospheric pressure process.

(107) "Nonattainment Area" - Any area not meeting ambient air quality standards and designated as a nonattainment area under Section 17-2.410 of this Chapter. Such an area may be designated as a particulate, sulfur dioxide, nitrogen dioxide, carbon monoxide or ozone nonattainment area, depending on which ambient standard has been violated. An area may be designated as nonattainment for more than one air pollutant.

(108) "Objectionable Odor" - Any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

(109) "Odor" - A sensation resulting from stimulation of the human olfactory organ.

(110) "Opacity" - A condition which renders material partially or wholly impervious to rays of light causing obstruction of observer's view.

(111) "Open Top Vapor Degreasing" - The batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(112) "Organic Compounds" - Any substance that contains the element carbon, except carbon oxides, and various carbonates.

(a) "Halogenated Organic Compound" - Any organic compound in which one or more hydrogen atoms have been replaced by a halogen atom(s).

(113) "Oven" - A chamber within which heat is used to bake, cure, polymerize, and/or dry a surface coating.

(114) "Overvarnish" - A coating applied directly over ink to reduce the coefficient of friction, to provide a gloss, and to protect the finish against abrasion and corrosion.

(115) "Owner" or "Operator" - Any person or entity who or which owns, leases, operates, controls, or supervises a stationary source.

(116) "Packaging Rotogravure Printing" - Rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packing products and labels for articles to be sold.

(117) "Paper Coating" - Coatings put on paper and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition.

control devices or systems deemed necessary and ordered by the Department.

(2) Objectionable Odor Prohibited - No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

Specific Authority: 403.061, F.S. Law Implemented: 403.021, 403.031, 403.061, 403.087, F.S. History: Formerly 17-2.04(4) and (5), 17-2.05(4) and (5); Revised 1-18-72; Renumbered 1-3-78; Amended and Renumbered 11-1-81.

17-2.630 Best Available Control Technology (BACT).

(a) Determination.

Following receipt of a complete application for a permit to construct a source or facility which requires a determination of Best Available Control Technology, the Department shall make a determination of Best Available Control Technology. In making the BACT determination, the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants). The above references are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., and may be inspected at the Department's Tallahassee office. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed under 40 CFR Parts 60 or 61.

(b) All scientific, engineering, and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determinations of any other state.

(d) The social and economic impact of the application of such technology.

(2) Exceptions

(a) Any source which has received a written determination of Latest Reasonably Available Control Technology from the Department prior to the effective date of this Subsection shall be exempt from the requirements of Best Available Control Technology.

(b) Any pending petition or proceeding involving a determination of Latest Reasonably Available Control Technology (LRACT) in process on the effective date of this Subsection, and any construction permit application or construction permit proceeding relating to a category of sources encompassed by such proceeding shall be governed by the provisions of the LRACT rule, Chapter 17-2.02(30), and 17-2.03(1), Florida Administrative Code (Repealed).

(3) Phased Construction Projects - For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time not later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the facility may be required to demonstrate the adequacy of any previous determination of BACT.

(4) Use of Innovative Control Technology

Feb-13-84

To whom it may Concern.

In regards to having the air monitor. I would like to make a request to have the air monitor, in our area of Florahome & also the neighboring areas around us. I do believe that this is more than necessary. We do have many people living here that has respiratory problems, plus allergies, asthma & many of them have had heart trouble. I have seen several of my neighbors with these problems, have to spend many a day in doors on real nice days & all due to the orders & pollution in the air.

I for one would appreciate it & so would they, if you would take this into consideration & do all that you possable could do to help this situation.

I am Cecelia G. Hitchins. I moved here from New Jersey & when we moved here we chose this area because of its better breathing air. We moved here in 1977. Now since that time things have changed quite a lot and really not for the better.

Please do give this matter some thought.

Thanking you in advance

Sincerely
Cecelia G. Hitchins
P.O. Box 74
Florahome - Fla. 32635
Corner of Ivey & Michigan Ave - Florahome -

C H - Fancy P.E -
Deputy Bureau chief
Bureau of air quality Management -

Dear Sir;

In regards to the quality of the air in & around Putnam County. When I lived in Battalia, there were many days I could not go outside for the smell in the air until late in the day. I now live fifteen miles east, in Florahome - There are times when I have to stay inside because of the air quality here -

Days when I have to go into town, just a little ways down the road, it is so bad, (the air) you couldn't stand it without air conditioning in your car. It even seeps through there - I have a breathing problem which is very bad, as I'm sure many others have. But do need clean air, by all means -

Thank you for listening,

a concerned citizen

Mrs - Ruby Fogle -
Florahome Fla -

TO: Georgia-Pacific Corporation File

FROM: Bruce Mitchell

DATE: March 16, 1984

SUBJ: Comments on PSD-FL-079

1. There should be provisions covering the operation and maintenance of the control equipment systems.

SECTION 3

Proposed Final Determination

Revised
Technical Evaluation
and
Preliminary Determination

and

Proposed Final Determination

Georgia-Pacific Corporation
Putnam County
Palatka, Florida

Federal Permit Number:

PSD-FL-079

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

PUBLIC NOTICE

PSD-FL-079

Georgia-Pacific Corporation proposes to modify its existing kraft pulp mill located in Palatka, Florida. The modification will double production to 2,400 tons per day of unbleached pulp. The new facilities to be constructed include a recovery boiler and associated smelt tanks (2), a lime kiln, and a combination boiler fired by bark and peat. Each new facility will have associated pollution control equipment installed.

The United States Environmental Protection Agency (EPA) has promulgated regulations concerning the Prevention of Significant Deterioration (PSD), 40 CFR 52.21. The proposed action is subject to federal PSD regulations by virtue of an increase over specified emission levels for particulate matter (PM), sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and total reduced sulfur (TRS).

The net projected emission increase of air pollutants from the affected facilities in tons per year will be:

PM	SO_2	NO_x	CO	VOC	TRS
999	4,372	2,208	6,855	591	34

By authority of the EPA, the Florida Department of Environmental Regulation (FDER) has reviewed the proposed

construction project under federal regulation 40 CFR 52.21, PSD. The FDER has made a preliminary determination that the construction can be approved provided certain conditions are met. A summary of the basis for this determination and the application for a PSD permit submitted by Georgia-Pacific Corporation are available for public review at the following places:

FDER
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

FDER
Northeast District Branch
Office
825 N. W. 23rd Ave., Suite G
Gainesville, Florida 32601

FDER
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Palatka Public Library
216 Reid
Palatka, Florida 32077

The maximum percentage of allowable PSD increment consumed by the proposed project will be:

Class II Increment

Pollutant	Annual	24-Hour	3-Hour
PM	0	0	--
SO_2	30	16	19

Any person may submit written comments to FDER regarding the proposed construction/modification. All comments postmarked not later than 30 days from the date of this notice will be considered by FDER in making a final determination regarding approval of this project. These comments will be made available for public review at the above locations. All comments should be addressed to:

Mr. C. H. Fancy
Central Air Permitting Section
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Furthermore, a public hearing can be requested by any person. Such requests should be submitted in writing within 14 days of the date of this notice. Letters should be addressed to:

Ms. Nancy E. Wright
Office of General Counsel
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Technical Evaluation

and

Preliminary Determination

(PSD-FL-079)

CONTENTS

I. APPLICANT AND SITE LOCATION

Georgia-Pacific Corporation

P.O. Box 919

Palatka, Florida 32077

The existing kraft pulp mill to be modified is located on the north-northwest side of S. R. 216 between S. R. 100 and U. S. 17 in Palatka, Putnam County, Florida. The UTM coordinates are Zone 17-434.0 km East and 3283.4 km North.

II. PROJECT AND PROCESS DESCRIPTION

The applicant proposes to modify the existing kraft pulp mill by constructing a recovery boiler (No. 5) and two associated smelt dissolving tanks (No. 5), a combination boiler (No. 5), and a lime kiln (No. 5). Currently, there are two power boilers, a combination boiler, a recovery boiler and two associated smelt dissolving tanks, and a lime kiln operating at the mill. The proposed action will enable the mill to double the unbleached pulp production from the current rate of 1200 tons per day (TPD) to 2400 TPD. The permitted operating time will be 8760 hours per year.

The proposed combination boiler will fire peat and wood for steam production while the recovery boiler will burn black liquor solids. New No. 6 Fuel Oil will be burned in these boilers only for startup, shutdown, emergencies, and system checking. "New" means an oil which has been refined from crude oil and has not been used, and which may or may not contain additives. The lime kiln uses lime mud ($CaCO_3$) in the process and will also fire new No. 6 Fuel Oil.

Air pollution control equipment will be installed for each proposed new facility.

III. EMISSIONS AND CONTROLS

The five proposed facilities (listed below) will be evaluated for their control(s) of the various pollutant (6) emissions:

(1) No. 5 Combination Boiler (CB)
(2) No. 5 Black Liquor Recovery Boiler (RB)
(3) No. 5 Smelt Dissolving Tanks x 2 (SDTs)
(4) No. 5 Lime Kiln (LK)

A. Particulate Matter (PM) Emissions Control for the CB, RB, SDTs, and LK

The maximum PM emissions expected from the CB will be from the firing of bark. The projected allowable emissions are 108 lbs/hr and 475 TPY. To maintain the allowable emission limits, the CB flue gas will be controlled with an electrostatic precipitator (ESP), with an expected efficiency of 99%+ and without a mechanical collector precleaner. The BACT limit for visible emissions (VE) for the CB shall be 20% maximum opacity.

The maximum PM emissions expected from the RB are 75.4 lbs/hr and 330 TPY. The projected allowable emission limits will be maintained by the use of an ESP, with an expected efficiency of 99%. The VE limit for the RB, not to exceed 20% opacity, is determined to be BACT and within the range that the majority of the existing RBs in Florida have been exhibiting. The two associated SDTs to the RB will have maximum total projected PM emissions of 15.0 lbs/hr and 65.7 TPY. The projected allowable emission limits will be maintained by the use of a scrubber

(each unit will have its own scrubber) with an expected removal efficiency of 98%.

The maximum PM emissions expected from the LK are 29.3 lbs/hr and 128 TPY. The projected allowable emission limits will be maintained by the use of a scrubber, with an expected efficiency of 99.7%. The VE limit of 20% maximum opacity for the LK is based on BACT for this type of unit.

B. Sulfur Dioxide (SO_2) Emissions Control for the CB and RB

The maximum SO_2 emissions expected from the CB will be from the firing of new No. 6 Fuel Oil in emergency conditions only. The projected emissions are 704 lbs/hr, based on a maximum of 2.5% sulfur content by weight and the permitted maximum allowable BTU heat input from the firing of bark. While firing the permitted fuels, bark and peat, the maximum SO_2 emissions will be emitted from bark. At 100% firing of bark, estimated emissions are 704 lbs/hr and 3085 TPY. Under normal operations, firing 70% peat and 30% bark, the maximum projected SO_2 emissions are 503 lbs/hr and 2205 TPY.

For the CB, there will not be any mechanical controls for SO_2 while firing the permitted fuels, peat and bark. The fuels contain a very low sulfur content by weight.

The maximum SO_2 emissions projected from the RB are 244 lbs/hr and 1287 TPY while firing black liquor (65% solids), based on BACT of 150 ppm by volume on a dry basis. No controls for SO_2 emissions will be imposed on this facility unless there is a failure to meet the BACT and allowable emission limit imposed.

C. Nitrogen Oxides (NO_2), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC) Emissions Control for the CB, RB, and LK

The maximum NO_x emissions from the CB of 0.30 $lb/10^6$ Btu heat input can be achieved through good boiler design and proper operation. No emission limits will be imposed for CO and VOC except good boiler design and proper operation.

Since there are no emission limiting standards for the RB and LK in the NSPS for the pollutants NO_x, CO, and VOC, there will be no emission limits imposed, only proper operation.

D. Total Reduced Sulfur (TRS) Emissions Control for the RB, SDTs and LK

The maximum allowable emissions from the RB are 5.2 lbs/hr and 22.8 TPY, and are in accordance with the NSPS, Subpart BB. The same NSPS was imposed on the SDTs and LK with maximum allowable emissions of 1.3 lbs/hr, 5.5 TPY and 1.1 lbs/hr, 4.8 TPY, respectively.

E. Net Emissions of the Proposed Project

Table 1 summarizes the net emissions of all the pollutants regulated under the Clean Air Act which will be emitted by the proposed construction. As shown by the table, the mill will be a major emitter (>100 TPY) of PM, SO_2, NO_x, CO, and VOC as defined in the PSD regulations and a significant emitter (> de minimus) of TRS. Annual permitted hours of operation are 8760.

TABLE 1

Net Emissions of the Proposed Project

	Emissions(TPY)					
	PM	SO_2	NO_x	CO	VOC	TRS
Proposed Facilities						
No. 5 Combination Boiler	475	3085	1424	981	282	---
No. 5 Recovery Boiler	330	1287	382	3732	206	23
No. 5 Smelt Tanks(2)	66	--	--	--	--	6
No. 5 Lime Kiln	128	--	402	2142	103	5
TOTAL	999	4372	2208	6855	591	34

F. Maximum Allowable Emissions

Based on the BACT determination for the proposed facilities, the pollutant emissions from each unit shall not exceed the allowable emission limits listed in Table 2. Annual permitted hours of operation are 8760.

TABLE 2

Maximum Allowable Emissions

Source	Pollutant	Emission Limitation	Emissions (lbs/hr) Bark	Peat
Combination Boiler No. 5[1]	PM	0.10 lb/10^6Btu heat input	108	101
	SO_2	0.65 lb/10^6 Btu heat input	704	654
	NO_x	0.30 lb/10^6 Btu heat input	325	302
	VE	20% maximum Opacity, except for one 6-minute period per hour of not more than 27% Opacity		
Recovery Boiler No. 5[2]	PM	0.044 gr/DSCF, corrected to 8% oxygen	75.4	
	SO_2	150 ppm by volume on a dry basis	294	
	TRS	5 ppm by volume on a dry basis, corrected to 8% oxygen	5.2	
	VE	20% maximum opacity		
Smelt Tanks No. 5[3]	PM	0.20 lb/ton black liquor solids, dry weight	15.0 (total)	
	TRS	0.0168 lb/ton black liquor solids,dry weight	1.3 (total)	

Maximum Allowable Emissions

Source	Pollutant	Emission Limitation	Emissions (lbs/hr)
Lime Kiln No. 5[4]	PM	not to exceed 0.13 gr/DSCF, corrected to 10% oxygen	29.3
	TRS	8 ppm by volume on a dry basis, corrected to 10% oxygen	1.1
	VE	20% maximum opacity	

1. Emissions are based on a maximum heat input of 1083.6 x 10^6 Btu/hr.
2. Emissions are based on a maximum heat input of 990.0 x 10^6 Btu/hr, 63,000 lbs/hr of smelt, and 230,769 lbs/hr black liquor solids (BLS, 65%)
3. Emissions are based on 150,000 lbs/hr BLS (dry).
4. Emissions are based on 26,300 dscfm.

The maximum allowable emissions established through BACT are equal to or more stringent than the New Source Performance Standards (NSPS), 40 CFR 60, Subparts D and BB.

IV. RULE APPLICABILITY

The proposed project (new construction) is subject to preconstruction review under federal Prevention of Significant Deterioration (PSD) regulations, Section 52.21 of Title 40 of the Code of Federal Regulations (40 CFR 52.21) as amended in the Federal Register of August 7, 1980 (45 FR 52676). Specifically,

Georgia-Pacific Corporation's kraft pulp mill is a major existing stationary source (40 CFR 52.21(b)) located in an area currently designated as attainment in accordance with 40 CFR 81.310 for all criteria pollutants regulated under the Clean Air Act (CAA).

The proposed project will be a major modification (40 CFR 52.21(b)(2)) for particulate matter (PM), sulfur dioxide (SO_2), nitrogen oxides (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and total reduced sulfur (TRS). Emissions of PM, SO_2, NO_x, VOC, CO, and TRS will increase above the significant criteria set in the PSD regulations. Therefore, the proposed project is subject to PSD review for these pollutants.

This review consists of a determination of Best Available Control Technology (BACT) and, unless otherwise exempted, an analysis of the air quality impact of the increased emissions. The review also includes an analysis of the project's impacts on soils, vegetation and visibility, along with air quality impacts resulting from associated commercial, residential and industrial growth.

The proposed project is also subject to the provisions of the federal New Source Performance Standards (NSPS) for kraft pulp mills, 40 CFR 60, Subpart BB.

V. CONTROL TECHNOLOGY REVIEW

For each facility and each CAA pollutant subject to PSD review, a Best Available Control Technology (BACT) emission standard (See Table 2) is required as a PSD permit condition.

A. No. 5 Combination Boiler

The pollutant emission limits determined as BACT for the combination steam generator for PM, SO_2, NO_x, and percent opacity are equal to or more stringent than the New Source Performance Standards (NSPS), Subpart D. Even though peat is presently considered an unclassified fuel, being neither a fossil-fuel nor a carbonaceous fuel as defined in FAC Rule 17-2 and 40 CFR 60.41(b), the BACT emission limit for PM will be equal to that of a fossil-fuel fired unit as contained in the referenced subpart. Carbon monoxide does not lend itself to exhaust gas removal techniques. The control of its formation by following the boiler design firing parameters is determined as BACT. The PM emissions will be controlled with an ESP system. The reference methods as provided under subsection 60.46 of the NSPS, Subpart D, shall be used to determine compliance.

B. No. 5 Recovery Boiler

The pollutant emission limits determined as BACT for the recovery boiler for PM and total reduced sulfur (TRS) are equal to the limits of the NSPS, Subpart BB. Since the majority of the existing RBs in Florida have been exhibiting visible emissions of 20% opacity or less, the bureau contends that a new RB with its associated control equipment should be capable of attaining this same limit. Therefore, BACT for visible emissions shall be 20% maximum opacity. The moisture content of the black liquor and the reducing atmosphere above the smelt bed tend to inhibit both flame temperature and oxygen levels in the combustion zone. This normally limits the concentration of NO_x emitted. BACT for the

control of NO_x and CO is to maintain furnace operation within range of the design parameters. The SO_2 emission limit is based on BACT. The PM emissions will be controlled with an ESP system.

C. No. 5 Smelt Tanks (2)

The pollutant emission limits determined as BACT for the smelt tanks for PM and TRS are equal to the NSPS, Subpart BB. The PM and TRS emissions will be controlled with a scrubber system per smelt tank.

D. No. 5 Lime Kiln

The pollutant emission limits determined as BACT for the lime kiln for PM and TRS are equal to the NSPS, Subpart BB. The SO_2 emissions are normally minimized because the CaO can act as an efficient adsorption and reaction medium to convert SO_2 to $CaSO_4$. Consequently, emission limits for SO_2 were not included in this determination. The percent opacity has been determined to be BACT by the EPA.

The reference methods as provided under subsection 60.285 of the NSPS, Subpart BB, shall be used to determine compliance for the recovery furnace, smelt tanks, and lime kiln.

The department has reasonable assurance that, at the levels determined as BACT, emissions from the proposed modification would not cause or contribute to a violation of any ambient air quality standard or PSD increment.

VI. AIR QUALITY IMPACT ANALYSIS

The air quality impact analysis required for PM, SO_2, NO_x, VOC, CO, and TRS consists of:

- An analysis of existing air quality;
- A PSD increment analysis (for PM and SO_2 only);
- A National Ambient Air Quality Standards (NAAQS) analysis;
- An analysis of impacts on soils, vegetation and visibility and of growth-related air quality impacts; and
- A "good engineering practice (GEP)" stack height evaluation.

The analysis of existing air quality generally relies on preconstruction ambient air monitoring data collected in accordance with EPA-approved methods. The PSD increment and NAAQS analyses depend on air quality modeling carried out in accordance with EPA guidelines.

Based on these analyses, FDER has reasonable assurance that the proposed Georgia-Pacific kraft pulp mill expansion, as described in this permit and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any PSD increment or ambient air quality standard. A discussion of the modeling methodology and required analyses follows.

A. Modeling Methodology

Two EPA-approved dispersion models were used to predict ground-level pollutant concentrations. The Industrial Source Complex Long Term (ISCLT) model was used to predict annual concentrations, and the Industrial Source Complex Short Term (ISCST) model was used to predict concentration values for shorter averaging periods.

In the ISCLT, sources within a 50 km radius of the mill were modeled. The receptors were placed at 0.3 km intervals along 10-degree radials beginning at 0.6 km for SO_2 and 0.3 km for PM to identify the periods of worst-case meteorological conditions. The receptor interval was reduced to 0.1 km to refine the predictions of ground-level concentrations for the worst-case periods.

The surface meteorological data used in the models were National Weather Service (NWS) data collected at the Jacksonville International Airport during the period 1970-74. Upper-air meteorological data used in the ISCST were collected during the same time period by the NWS at Waycross, Georgia.

Stack parameters and emission rates used in evaluating the proposed Georgia-Pacific plant expansion are given in Tables 3 and 4 for the baseline and proposed cases, respectively.

B. Analysis of Existing Air Quality

Four months (from June 12, 1981, through December 12, 1981) of preconstruction ambient air monitoring data were collected by Georgia-Pacific in the vicinity of the existing mill. Three PM monitoring sites, each operated every third day, and one SO_2 continuous monitor, located at the same site as one of the PM samplers, were used. The instruments, all EPA-reference or the equivalent, were sited in accordance with the recommendations given in Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA 450/2-78-019) and operated in accordance with the quality assurance procedures of 40 CFR 58, Appendix B. The results of the monitoring program are summarized in the following table (p. 15).

Table 3: Stack Parameters for Georgia-Pacific - Baseline Case

Emissions Unit	Stack Height (m)	Stack Diameter (m)	Exit Velocity (m/s)	Exit Temp. (K)	PM Emission Rate		SO_2 Emission Rate	
					Annual (g/s)	Short-Term (g/s)	Annual (g/s)	Short-Term (g/s)
Rcvry. Blr. 1	76.20	3.66	3.41	360.0	9.93	9.93	6.21	6.21
Rcvry. Blr. 2	76.20	3.66	5.40	372.0	12.69	12.69	8.88	8.88
Rcvry. Blr. 3	40.53	3.41	7.28	372.0	13.73	13.73	8.58	8.58
Rcvry. Blr. 4	70.10	3.66	16.86	474.0	20.98	20.98	34.97	34.97
Smelt Tank 1	30.48	0.76	7.53	366.0	0.30	0.30	0.13	0.13
Smelt Tank 2	30.48	0.91	9.51	375.0	0.45	0.45	0.18	0.18
Smelt Tank 3	33.22	0.76	3.57	369.0	0.42	0.42	0.18	0.18
Smelt Tank 4	67.70	1.52	8.26	346.0	3.81	3.81	0.71	0.71
Lime Kiln 1	15.24	1.28	5.24	401.0	22.68	22.68	0.24	0.24
Lime Kiln 2	15.85	1.71	10.67	341.0	11.97	11.97	0.24	0.24
Lime Kiln 3	15.85	1.71	8.47	342.0	11.72	11.72	0.48	0.48
Lime Kiln 4	45.42	1.31	16.46	351.0	1.57	3.98	1.40	1.40
Power Blr. 4	37.19	1.22	14.54	477.0	1.69	1.69	34.29	45.22
Power Blr. 5	76.20	2.74	15.97	520.0	5.35	5.85	134.00	161.15
Combo. Blr. 4	76.20	3.05	10.52	477.0	73.67	89.69	29.00	121.28

Table 4: Stack Parameters for Georgia-Pacific - Proposed Case

Emissions Unit	Stack Height (m)	Stack Diameter (m)	Exit Velocity (m/s)	Exit Temp. (K)	PM Emission Rate (g/s)	SO_2 Emission Rate (g/s)
Rcvry. Blr. 4	70.10	3.66	16.86	474.0	20.98	34.97
Rcvry. Blr. 5	76.20	4.02	13.93	474.0	9.50	37.03
Smelt Tank 4	67.70	1.52	8.26	346.0	3.81	0.71
Smelt Tank 5	76.20	1.52	8.26	346.0	1.89	0.66
Lime Kiln 4	45.42	1.31	16.46	351.0	3.98	1.40
Lime Kiln 5	45.42	1.31	16.46	351.0	3.69	1.32
Power Blr. 4	37.19	1.22	14.54	477.0	1.69	45.22
Power Blr. 5	76.20	2.74	15.97	520.0	5.85	161.15
Combo. Blr. 4	76.20	3.05	10.52	477.0	14.74	121.28
Combo. Blr. 5	76.20	3.66	15.39	450.0	13.65	88.75

Pollutant and Time Average	Maximum Concentration (ug/m^3) Site 1	Site 2	Site 3*
SO_2			
Three-hour	332	---	---
24-hour	188	---	---
Four-month**	10	---	---
PM			
24-hour	105	92	70
Four-month***	33	29	29

* Background site

** Arithmetic mean

*** Geometric mean

C. PSD Increment Analysis

The Georgia-Pacific mill is located in an area where the Class II PSD increments apply. The nearest Class I area is more than 100 km from the site; therefore, no analysis of Class I area impacts was performed.

Increment availability in the area is affected by increased SO_2 emissions at Florida Power and Light (FPL) Company's Putnam plant, increased PM emissions at FPL's Palatka plant, increased SO_2 and PM emissions projected to result from construction of the Seminole Electric Cooperative coal-fired plant, and decreased SO_2 and PM emissions resulting from the post-1974 shutdown of

lime kilns 1-3 and recovery boilers 1-3 at the Georgia-Pacific mill. As shown in the following table, modeling results predict no violation of any applicable PSD increment in the vicinity of the mill as a result of the proposed plant expansion in combination with the other increment-affecting emission changes in the area.

Pollutant and Time Average	Class II Increment (ug/m^3)	Predicted Increase (ug/m^3)	Percent Increment Consumed
SO_2			
Three-hour*	512	104	20
24-hour*	91	16	18
Annual	20	6	30
PM			
24-hour*	37	<0	0
Annual	19	<0	0

* Not to be exceeded more than once per year.

In addition, modeling results predict no violation of any increment in the vicinities of the Seminole Electric Cooperative and FPL plants as a result of the proposed plant expansion at Georgia-Pacific.

D. NAAQS Analysis

Given background pollutant concentrations in the area due to distant and natural sources, modeling results predict that the Georgia-Pacific mill, as proposed to be modified, will not cause or contribute to a violation of any ambient air quality standard. Background concentrations considered typical of remote areas were

used in the NAAQS analysis. The PM background values used in the analysis were slightly higher than those observed at the background site during the four-month ambient monitoring program conducted by Georgia-Pacific.

Results of the NAAQS analysis are summarized in the following table.

Pollutant, Units, and Time Average	Estimated Background Concentration	Predicted Impact of Modified Mill	Total Impact	NAAQS
SO_2 (ug/m^3)				
Three-hour*	20	409	429	1300**
24-hour*	20	113	133	365
Annual	20	22	42	80
PM (ug/m^3)				
24-hour*	80	28	108	150***
Annual	40	4	44	75
NO_2 (ug/m^3)				
Annual	20	19	39	100
CO (mg/m^3)				
One-hour*	1	<1	1	40
Eight-hour*	1	<1	1	10

* Not to be exceeded more than once per year.
** Secondary standard.
*** Secondary standard; primary standard is 260 ug/m^3.

Modeling techniques are not available to predict the impact of the increased VOC emissions on ground-level concentrations of ozone; however, VOC emissions from the modified mill are estimated to account for less than two percent of the total VOC emission burden in Putnam County and, therefore, are not expected to cause a violation of the ozone ambient standard.

No NAAQS exist for TRS since it is not considered harmful to human health. Therefore, an impact analysis for TRS was not performed.

E. Analysis of Impacts on Soils, Vegetation and Visibility and Growth-Related Air Quality Impacts

The maximum ground-level concentrations predicted to occur as a result of the proposed plant expansion at Georgia-Pacific are below all applicable NAAQS, including the secondary standards designed to protect public welfare-related values, and well below levels generally reported for damages to sensitive plant species. Therefore, no adverse impacts on soils and vegetation are expected. Since there are no Class I areas within 100 km of the mill, no adverse impacts on visibility in any such area are expected. Air quality impacts resulting from general commercial, residential, industrial and other growth associated with the plant expansion are expected to be minor since the existing mill is already an important element in the local economy and has been for many years.

F. GEP Stack Height Evaluation

Regulations published by EPA in the Federal Register of February 8, 1982, define GEP stack height as the highest of:

1. 65 meters; or
2. The maximum nearby building height plus 1.5 times the building height or width, whichever is less.

Emissions Unit	Building of Influence* Height (m)	Width (m)	Stack Height GEP (m)	Modeled (m)
No. 5 Recovery Boiler	65	27	105	76
No. 5 Smelt Tanks(2)	65	31	111	72
No. 5 Lime Kiln	25	14	65	45
No. 5 Combination Boiler	65	27	105	76

* All stacks except the lime kiln stack will be most influenced by the recovery boiler building; the lime kiln stack will be influenced by the lime kiln structure.

VII. CONCLUSIONS

FDER proposes approval of the preliminary determination, with conditions, for the construction of the No. 5 Combination Boiler, No. 5 Recovery Boiler, No. 5 Smelt Tanks (2), No. 5 Lime Kiln and associated pollution control equipment at Georgia-Pacific's existing mill in Palatka, Florida. The determination is made on the basis of information contained in the applications dated June 2, 1981, responses to technical discrepancies dated June 30, 1981, July 31, 1981, August 25, 1981, October 1, 1981, October 9, 1981, October 19, 1981, October 20, 1981, October 27, 1981, and February 22, 1982, the federal public hearing of February 17, 1984, and comments received through March 18, 1984. The determination of approval is contingent upon the specific and general conditions in the following next two sections.

VIII. SPECIFIC CONDITIONS

A. General

1. The applicant shall comply with the provisions and the requirements of the attached General Conditions.
2. As a requirement of this Specific Condition, the applicant shall comply with all emission limits and enforceable restrictions required by the State of Florida's Department of Environmental Regulation (FDER) which may equal or have more restrictive emissions limits and operating requirements than the following Specific Conditions.
3. An operation and maintenance plan of all control systems shall be submitted for approval prior to compliance testing and should address each facility start-up, continuous operation, malfunction, shut-down, soot-blowing, load changing, and emergency.

B. No. 5 Combination Boiler

1. Annual hours of operation are 8760.
2. Maximum steam generation shall not exceed 700,000 pounds per hour (lbs/hr) at 900°F.
3. Maximum bark consumption shall not exceed 254,965 lbs/hr and the a maximum heat input shall not exceed 1083.6×10^6 Btu per hour.
4. Maximum peat consumption shall not exceed 217,869 lbs/hr and the maximum heat input shall not exceed 1005.9×10^6 Btu per hour.

5. New No. 6 Fuel Oil is to be fired only as an auxiliary fuel for startup, shutdown, system checking and emergency. "New" means an oil which has been refined from crude oil and has not been used, and which may or may not contain additives. Maximum sulfur content shall not exceed 2.5 percent (%) by weight. Maximum consumption shall not exceed 40.0 barrels per hour and the maximum heat input shall not exceed 250 x 10^6 Btu per hour. Fuel sulfur analysis shall be required and submitted to the regulating agency(ies).
6. Maximum allowable particulate matter (PM) emissions shall not exceed 0.10 lb/10^6 Btu heat input, not to exceed 108 lbs/hr for bark and 101 lbs/hr for peat.
7. Maximum allowable sulfur dioxide (SO_2) emissions shall not exceed 0.65 lb/10^6 Btu heat input, not to exceed 704 lbs/hr for bark and 654 lbs/hr for peat. Fuel sulfur analysis shall be required in lieu of installing a SO_2 continuous emissions monitor (40 CFR 60.45) and the analysis shall be submitted to the regulating agency(ies).
8. Maximum allowable nitrogen oxide (NO_x) emissions shall not exceed 0.30 lb/10^6 Btu heat input, not to exceed 325 lbs/hr for bark and 302 lbs/hr for peat. If, after the initial performance test, the NO_x emissions are less than 70% of the applicable standard, a NO_x continuous monitor will not be

required. If the NO_x continuous emissions are greater than 70% of the applicable standard, a NO_x continuous emissions monitor shall be installed within one year after the initial performance test (40 CFR 60.45).

9. Visible emissions (VE) shall not exceed 20% opacity, except for one 6-minute period per hour of not more than 27% opacity. A continuous emissions monitor for opacity shall be required (40 CFR 60.45).
10. PM, SO_2 and NO_x emissions shall be tested in accordance with the provisions of Paragraph 60.46 of 40 CFR 60, Subpart D.
11. Immediately after construction has been completed, initial performance tests for PM, SO_2, and NO_x shall be required. Test procedures shall be EPA reference methods 1, 3, 5, 6, and 7 as published in 40 CFR 60, Appendix A, dated July 1, 1978. Minimum sampling volume and time per run shall be as defined in 40 CFR 60, Subpart D.
12. State construction permit, No. AC 54-43773, expires December 31, 1985.

C. <u>No. 5 Recovery Boiler</u>

1. Annual hours of operation are 8760.
2. Maximum steam generation shall not exceed 607,500 lbs/hr of steam at 900°F.
3. Maximum black liquor, at 65% solids, consumption shall not exceed 230,679 lbs/hr (150,000 lbs/hr black

liquor solids (BLS) dry, 50 tons air dried unbleached pulp (ADUP)) with a maximum heat input not to exceed 990 x 10^6 Btu per hour, yielding a total of 63,000 lbs/hr of smelt.

4. New No. 6 Fuel Oil is to be fired only as an auxiliary fuel for startup, shutdown, system checking and emergency. "New" means an oil which has been refined from crude oil and has not been used, and which may or may not contain additives. Maximum sulfur content shall not exceed 2.5% by weight. Maximum new No. 6 fuel oil consumption shall not exceed 23.80 barrels per hour and the maximum heat shall not exceed 146 x 10^6 Btu per hour. Fuel sulfur analysis shall be required and submitted to the regulating agency(ies).
5. Maximum allowable PM emissions shall not exceed 0.044 grain per dry standard cubic foot (gr/DSCF), corrected to 8% oxygen, and not to exceed 75.40 lbs/hr.
6. Maximum allowable total reduced sulfur (TRS) emissions shall not exceed 5 parts per million (ppm) by volume on a dry basis, corrected to 8% oxygen, and not to exceed 5.2 lbs/hr. A continuous emissions monitor for TRS shall be required (40 CFR 60.284).
7. A continuous oxygen monitor shall be required (40 CFR 60.284).

8. Maximum allowable SO_2 emissions shall not exceed 150 ppm by volume on a dry basis, corrected to 8% oxygen, and not to exceed 294 lbs/hr.

9. VE shall not exceed 20% opacity. A continuous emissions monitor for opacity shall be required (40 CFR 60.284).

10. PM, SO_2, TRS, and visible emissions shall be tested in accordance with the provisions of Paragraph 60.285 of 40 CFR 60, Subpart BB.

11. Immediately after construction has been completed, initial performance tests for PM, SO_2, TRS and VE shall be required. Test procedures shall be EPA reference methods 1, 2, 3, 5 or 17, 6, 9, and 16 as published in 40 CFR 60, Appendix A, dated July 1, 1978. Minimum sampling volume and time shall be as defined in 40 CFR 60, Subpart BB.

12. State construction permit, No. AC 54-43791, expires December 31, 1985.

No. 5 Smelt Tanks (2)

1. Annual hours of operation are 8760.

2. Maximum total smelt utilization in the smelt dissolving tanks is 63,000 lbs/hr.

3. Maximum allowable PM emissions shall not exceed 0.20 lb/ton BLS, dry weight, and shall not exceed 15.0 lbs/hr (total).

4. Maximum allowable TRS emissions shall not exceed 0.0168 lb/ton BLS, dry weight, and shall not exceed 1.3 lbs/hr (total)

5. A monitor shall be required for the continuous measurement of the pressure loss of the gas stream through the control equipment (40 CFR 60.284).
6. A monitor shall be required for the continuous measurement of the scrubbing liquid supply pressure to the control equipment (40 CFR 60.284).
7. PM and TRS emissions shall be tested in accordance with the provisions of Paragraph 60.285 of 40 CFR 60, Subpart BB.
8. Immediately after construction has been completed, initial performance tests for PM and TRS shall be required. Test procedures shall be EPA reference methods 1, 2, 3, 5 or 17, and 16 as published in 40 CFR 60, Appendix A, dated July 1, 1978. Minimum sampling volume and time shall be as defined in 40 CFR 60, Subpart BB.
9. State construction permit, No. AC 54-43791, expires December 31, 1985.

E. <u>No. 5 Lime Kiln</u>

1. Annual hours of operation are 8760.
2. Maximum total process input rate shall not exceed 63,229 lbs/hr. Maximum product rate of 90% CaO shall not exceed 26,667 lbs/hr.
3. Maximum new No. 6 Fuel Oil consumption shall not exceed 16.60 barrels per hour and the maximum heat input shall not exceed 102 x 10^6 Btu per hour. "New" means an oil which has been refined from crude

oil which has not been used, and which may or may not contain additives. Maximum sulfur content shall not exceed 2.5% by weight. Fuel sulfur analysis shall be required and submitted to the regulating agency(ies).

4. Maximum allowable PM emissions shall not exceed 0.13 gr/DSCF, corrected to 10% oxygen, and not to exceed 29.3 lbs/hr.
5. Maximum allowable TRS emissions shall not exceed 8 ppm by volume on a dry basis, corrected to 10% oxygen, and not to exceed 1.1 lbs/hr. A continuous emissions monitor for TRS shall be required (40 CFR 60.284).
6. A continuous oxygen monitor shall be required (40 CFR 60.284).
7. VE shall not exceed 20% opacity.
8. A monitor shall be required for the continuous measurement of the pressure loss of the gas stream through the control equipment (40 CFR 60.284).
9. A monitor shall be required for the continuous measurement of the scrubbing liquid supply pressure to the control equipment (40 CFR 60.284).
10. PM, TRS, and visible emissions shall be tested in accordance with the provisions of Paragraph 60.285 of 40 CFR 60, Subpart BB.
11. Immediately after construction has been completed, initial performance tests for PM, TRS, and VE shall be required. Test procedures shall be EPA reference

methods 1, 2, 3, 5 or 17, 9, and 16 as published in 40 CFR 60, Appendix A, dated July 1, 1978. Minimum sampling volume and time shall be as defined in 40 CFR 60, Subpart BB.

12. State construction permit, No. AC 54-43795, expires December 31, 1985.

IX. GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.

2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.

3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.

4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.

5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall immediately notify the State District Manager by telephone and provide the District Office and the permitting authority with the following information in writing within four (4) days of such conditions:

   (a) description for noncomplying emission(s),

   (b) cause of noncompliance,

   (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,

(d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

(e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.

7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.

8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:

(a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;

(b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;

(c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

(d) to sample at reasonable times any emission of pollutants;

and

(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted to this permit to the permitting agency shall be mailed to:

Mr. James T. Wilburn
Chief, Air Management Branch
Air & Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 21 1984

DER
JUN 25 1984
BAQM

REF: 4AW-AM

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

RE: PSD-FL-079, Georgia Pacific Corporation

Dear Mr. Fancy:

This is to acknowledge receipt of your May 16, 1984, letter containing the final determination and proposed permit conditions for the above company's kraft pulp mill modifications in Palatka, Florida.

In the process of checking this submittal, three issues requiring resolution have arisen as a result of our February 11, 1983, comment letter on the preliminary determination and the review of the final determination and proposed PSD permit conditions. These issues involve the acceptance of less than one year of preconstruction monitoring data for sulfur dioxide, enforceable permit conditions for sulfur dioxide emissions from the lime kilns (4 and 5), and shutdown of three recovery boilers, three smelt tanks, and three lime kilns.

As per our February 11, 1983, letter and in accordance with "Ambient Monitoring Guidelines for Prevention of Significant Deterioration" (EPA 450/4-80-022), less than one full year of sulfur dioxide ambient monitoring data will be acceptable if the applicant demonstrates through historical data or dispersion modeling that the data are obtained during a time period when maximum air quality levels can be expected. We do not have any demonstration to this effect in our files and request that this issue be addressed.

The stack parameters given in the proposed case for the modifications at this facility document each lime kiln as emitting approximately 11 lbs./hr. of sulfur dioxide. However, the calculations below demonstrate that sulfur dioxide emissions of 11 lbs./hr. equate to a 98% control efficiency.

No. 6, 2.5% S, fuel oil emissions - 1 kiln

$$\frac{102 \times 10^6 \text{ BTU/hr.}}{149{,}000 \text{ BTU/gal.}} \times \frac{8 \text{ lbs.}}{\text{gal.}} \times .025 \times 2 = 274 \text{ lbs./hr. } SO_2$$

TRS Incineration - 1 kiln
Digester = 1.6 lbs. Sulfur/Ton ADP (AP-42)
Brown Stock Washer = 0.22 lbs. Sulfur/Ton ADP (AP-42)
Multiple Effect Evaporators = 0.5 lbs. Sulfur/Ton ADP (AP-42)

$$(1.6 + 0.22 + 0.5) \frac{1200 \text{ TADP}}{\text{DAY-KILN}} \times 2 \times \frac{\text{DAY}}{24 \text{ hrs.}} = 232 \text{ lbs./hr. } SO_2$$

$$1-[11/(274+232)] \times 100 = 97.8\%$$

Even though calcium oxide is an excellent adsorption media for sulfur dioxide, we have reservations regarding the high efficiency of the control from a device not specifically designed to remove sulfur dioxide. We therefore recommend that sulfur dioxide emissions limits of 11 lbs./hr. for each kiln be stated in the permit and that these kilns be tested for compliance upon start-up. Also, please note that the above calculations show that TRS emissions from existing equipment (as sulfur) are greater than the significance levels of 10 TPY for reduced sulfur compounds. However, since the BACT that is to be employed for these emissions will be incineration in the lime kilns, we feel that addressing these contemporaneous emission increases further is not necessary.

In regard to the shutdown of three lime kilns, three recovery boilers and three smelt tanks from which offsets were claimed for netting purposes, we request that either the company submit a letter stating that this equipment is to be dismantled upon start-up of the new mill, or prohibiton of their operation be included as a permit condition. In addition, we request that you verify the operation of this equipment prior (two years) to the PSD baseline date for this area. Verification should consist of actual emissions inventory for this equipment during the two years prior to the PSD baseline date.

We will await your response to the above issues prior to our issuance of the PSD construction permit for this source. If you have any questions regarding this letter, please contact Mr. Michael Brandon of my staff at 404/881-7654.

Sincerely yours,

James T. Wilburn, Chief
Air Management Branch
Air and Waste Management Division

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

September 24, 1984

Mr. James T. Wilburn, Chief
Air Management Branch
Air & Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Wilburn:

RE: Final Determination - Georgia-Pacific Corporation
Federal Permit No. PSD-FL-079

Enclosed please find the department's response to your comments on the Final Determination for the subject project. We recommend that the applicant be granted Authority to Construct, subject to the conditions in the Final Determination as amended.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Enclosure

cc: Vernon Adams
David Buff
Doug Dutton
Bill Blommel
Nancy Wright

FDER's Response to Comments on the Final Determination

Georgia-Pacific Corporation
Putnam County
Palatka, Florida

Federal Permit Number:
PSD-FL-079

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

September 24, 1984

Response to Comments
Georgia-Pacific Corporation
PSD-FL-079

Comments were received on June 29, 1984, from Mr. James T. Wilburn of the U.S. Environmental Protection Agency, Region IV. Three issues that require resolution will be stated below. Each issue will be followed by the FDER's response. Mr. Wilburn's letter will be attached for reference.

Issue No. 1

As per our February 11, 1983, letter and in accordance with "Ambient Monitoring Guidelines for Prevention of Significant Deterioration" (EPA 450/4-80-022), less than one full year of sulfur dioxide ambient monitoring data will be acceptable if the applicant demonstrates through historical data or dispersion modeling that the data are obtained during a time period when maximum air quality levels can be expected. We do not have any demonstration to this effect in our files and request that this issue be addressed.

Response

The sulfur dioxide monitoring program conducted by Georgia-Pacific was a voluntary effort and was not used in analyzing the air quality impact of the proposed modification except to confirm that the 20 ug/m^3 background value that was used in the analysis was a conservative choice. Since the company submitted a complete application for a PSD permit prior to June 7, 1981, it was subject to the 1978 ambient monitoring guidelines (EPA 450/2-78-019, May 1978). These guidelines state: "The primary use of preconstruction monitoring is to determine the status of the particular area with respect to the NAAQS. If a source is shown not to pose a threat to NAAQS and is remote, then no monitoring will be required." It was in accordance with these guidelines that the department determined that the SO_2 monitoring program proposed by Georgia-Pacific, while not required, would be acceptable.

Since the monitoring program was not required and would not be directly used in the air quality impact analysis, no consideration was given to possible seasonal variations in SO_2 levels. It is our belief, however, that any seasonal variations that may exist would be insignificant. SO_2 emissions from power plants in the state are likely to be highest during the summer air conditioning season, but this is also the season of generally favorable dispersion conditions. Also, most of the SO_2 monitors in the state, including those that have been operated in the vicinity of Georgia-Pacific, have recorded annual mean concentrations barely above the minimum detectable levels

of these monitors. For example, site 3780-001 at Kay Larkin airport had an annual mean of 6 ug/m^3 during 1981 (the minimum detectable level for a pulsed fluorescent SO_2 analyzer such as that used by Georgia-Pacific's consultant is 5 ug/m^3). During the four-month monitoring program, the Georgia-Pacific SO_2 monitor had a mean concentration of 10 ug/m^3. Monthly or seasonal variations in levels this close to the minimum detectable would not be meaningful.

Issue No. 2

The stack parameters given in the proposed case for the modifications at this facility document each lime kiln as emitting approximately 11 lbs./hr. of sulfur dioxide. However, the calculations below demonstrate that sulfur dioxide emissions of 11 lbs./hr. equate to a 98% control efficiency.

No. 6, 2.5% S, fuel oil emissions - 1 kiln

$$\frac{102 \times 10^6 \text{ BTU/hr.}}{149{,}000 \text{ BTU/gal.}} \times \frac{8 \text{ lbs.}}{\text{gal.}} \times .025 \times 2 = 274 \text{ lbs./hr. } SO_2$$

TRS Incineration - 1 kiln
Digester = 1.6 lbs. Sulfur/Ton ADP (AP-42)
Brown Stock Washer = 0.22 lbs. Sulfur/Ton ADP (AP-42)
Multiple Effect Evaporators = 0.5 lbs. Sulfur/Ton ADP (AP-42)

$$(1.6 + 0.22 + 0.5) \frac{1200 \text{ TADP}}{\text{DAY-KILN}} \times 2 \times \frac{\text{Day}}{24 \text{ hrs.}} = 232 \text{ lbs./hr. } SO_2$$

$$1-(11/(274+232)) \times 100 = 97.8\%$$

Even though calcium oxide is an excellent absorption media for sulfur dioxide, we have reservations regarding the high efficiency of the control from a device not specifically designed to remove sulfur dioxide. We therefore recommend that sulfur dioxide emissions limits of 11 lbs./hr. for each kiln be stated in the permit and that these kilns be tested for compliance upon start-up.

Response

Since the efficiency of the in-process removal of SO_2 within the No. 5 lime kiln appears high (see reference calculations), the bureau agrees with the USEPA, Region IV, and the specific conditions will be amended to incorporate the recommended SO_2 limits and testing requirements for the No. 5 lime kiln. Therefore, the following shall be incorporated in and shall become a part of the permit, PSD-FL-079:

Specific Conditions

E. 13. SO_2 emission limits shall not exceed 11 lbs/hr.

E. 14. SO_2 emissions shall be tested for compliance upon start-up. Compliance testing shall be required using EPA Method 6 pursuant to Appendix A, Reference Methods. Compliance tests shall be conducted at 90-100% of the permitted maximum total process input rate. Test results shall be submitted to the FDER's Northeast District office and the USEPA Region IV office within 45 days of the completion of the final test run.

Issue No. 3

In regard to the shutdown of three lime kilns, three recovery boilers and three smelt tanks from which offsets were claimed for netting purposes, we request that either the company submit a letter stating that this equipment is to be dismantled upon start-up of the new mill, or prohibition of their operation be included as a permit condition. In addition, we request that you verify the operation of this equipment prior (two years) to the PSD baseline date for this area. Verification should consist of actual emissions inventory for this equipment during the two years prior to the PSD baseline date.

Response

In the Preliminary Determination, there was no emissions credit allowed the applicant due to the greater than five-year time-frame involved between the shutdown dates and the applicant's projected commencement of construction date. However, reasonable estimates of the emission reductions resulting from the shutdowns were used in the increment evaluation and analysis.

Enclosed is a document dated May 31, 1983, which is an affidavit from Mr. Vernon Adams with Georgia-Pacific Corporation attesting to the physical removal of the reference facilities in question. Also enclosed are annual operating reports for 1976 for the three recovery boilers and three smelt tanks. These reports are the only emissions inventory information we have for the baseline period. They show actual emission levels much greater than those used in modeling the increment expansion resulting from the shut-downs.

ATTACHMENT 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 21 1984

DER
JUN 25 1984
bAQM

REF: 4AW-AM

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

RE: PSD-FL-079, Georgia Pacific Corporation

Dear Mr. Fancy:

This is to acknowledge receipt of your May 16, 1984, letter containing the final determination and proposed permit conditions for the above company's kraft pulp mill modifications in Palatka, Florida.

In the process of checking this submittal, three issues requiring resolution have arisen as a result of our February 11, 1983, comment letter on the preliminary determination and the review of the final determination and proposed PSD permit conditions. These issues involve the acceptance of less than one year of preconstruction monitoring data for sulfur dioxide, enforceable permit conditions for sulfur dioxide emissions from the lime kilns (4 and 5), and shutdown of three recovery boilers, three smelt tanks, and three lime kilns.

As per our February 11, 1983, letter and in accordance with "Ambient Monitoring Guidelines for Prevention of Significant Deterioration" (EPA 450/4-80-022), less than one full year of sulfur dioxide ambient monitoring data will be acceptable if the applicant demonstrates through historical data or dispersion modeling that the data are obtained during a time period when maximum air quality levels can be expected. We do not have any demonstration to this effect in our files and request that this issue be addressed.

The stack parameters given in the proposed case for the modifications at this facility document each lime kiln as emitting approximately 11 lbs./hr. of sulfur dioxide. However, the calculations below demonstrate that sulfur dioxide emissions of 11 lbs./hr. equate to a 98% control efficiency.

No. 6, 2.5% S, fuel oil emissions - 1 kiln

$$\frac{102 \times 10^6 \text{ BTU/hr.}}{149{,}000 \text{ BTU/gal.}} \times \frac{8 \text{ lbs.}}{\text{gal.}} \times .025 \times 2 = 274 \text{ lbs./hr. } SO_2$$

TRS Incineration - 1 kiln
Digester = 1.6 lbs. Sulfur/Ton ADP (AP-42)
Brown Stock Washer = 0.22 lbs. Sulfur/Ton ADP (AP-42)
Multiple Effect Evaporators = 0.5 lbs. Sulfur/Ton ADP (AP-42)

$$(1.6 + 0.22 + 0.5) \frac{1200 \text{ TADP}}{\text{DAY-KILN}} \times 2 \times \frac{\text{DAY}}{24 \text{ hrs.}} = 232 \text{ lbs./hr. } SO_2$$

$$1-[11/(274+232)] \times 100 = 97.8\%$$

Even though calcium oxide is an excellent adsorption media for sulfur dioxide, we have reservations regarding the high efficiency of the control from a device not specifically designed to remove sulfur dioxide. We therefore recommend that sulfur dioxide emissions limits of 11 lbs./hr. for each kiln be stated in the permit and that these kilns be tested for compliance upon start-up. Also, please note that the above calculations show that TRS emissions from existing equipment (as sulfur) are greater than the significance levels of 10 TPY for reduced sulfur compounds. However, since the BACT that is to be employed for these emissions will be incineration in the lime kilns, we feel that addressing these contemporaneous emission increases further is not necessary.

In regard to the shutdown of three lime kilns, three recovery boilers and three smelt tanks from which offsets were claimed for netting purposes, we request that either the company submit a letter stating that this equipment is to be dismantled upon start-up of the new mill, or prohibiton of their operation be included as a permit condition. In addition, we request that you verify the operation of this equipment prior (two years) to the PSD baseline date for this area. Verification should consist of actual emissions inventory for this equipment during the two years prior to the PSD baseline date.

We will await your response to the above issues prior to our issuance of the PSD construction permit for this source. If you have any questions regarding this letter, please contact Mr. Michael Brandon of my staff at 404/881-7654.

Sincerely yours,

James T. Wilburn, Chief
Air Management Branch
Air and Waste Management Division

ATTACHMENT 2

Georgia-Pacific Corporation

Hudson Pulp & Paper Corp.
A wholly-owned subsidiary

P.O. Box 919
Palatka, Florida 32077
Telephone (904) 325-2001

May 31, 1983

DER

JUN 03 1983

BAQM

Mr. Clair Fancy, Deputy Chief
Bureau of Air Quality
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Dear Mr. Fancy:

In order to document the permanent shutdown of Hudson's lime kilns 1-3 and recovery boilers 1-3 at the Palatka mill, I have prepared the attached affidavit. If this is not sufficient documentation, your permit files should contain the required information. We will be glad to supply more information if needed.

In regard to the requested public hearing, please send us a copy of the petition from the Florahome Chapter of the American Association of Retired Persons.

Our engineers are currently performing the requested testing and modeling for heavy metals. We will forward this information to you when it becomes available.

If you have any questions or if I can be of further service, please call me.

Sincerely,

Vernon L. Adams

Vernon L. Adams
Supervisor of Environmental
Affairs

:la
Attachment
cc: R. C. Sherwood

Georgia-Pacific Corporation

Hudson Pulp & Paper Corp.
A wholly-owned subsidiary

P.O. Box 919
Palatka, Florida 32077
Telephone (904) 325-2001

May 31, 1983

TO WHOM IT MAY CONCERN:

I hereby swear I have personal knowledge that Hudson Pulp & Paper Corp. has permanently shut down and dismantled Lime Kilns No. 1, No. 2, and No. 3, and Recovery Boilers No. 1, No. 2, and No. 3, at its Palatka, Florida plant.

Vernon L. Adams, Supervisor
Environmental Affairs

b

STATE OF FLORIDA

COUNTY OF PUTNAM

Sworn to me on this 31st day of May, 1983. Witness my hand and official seal at Palatka, Putnam County, Florida. My commission expires March 7, 1986.

Betty G. McInnis, Notary

b

ATTACHMENT 3

HUDSON PULP & PAPER CORP.
P. O. BOX 919 PALATKA, FLORIDA 32077 (904) 325-2001

March 1, 1977

Mr. Wm. R. Opp
Subdistrict Manager
Florida Department of Environmental Regulation
3426 Bills Road
Jacksonville, Florida 32207

Dear Mr. Opp:

Enclosed are the 1976 annual reports on permitted air pollution sources. As you are aware, the #1, #2, and #3 Recovery Boilers and Smelt Tank vents have been retired.

If you require any additional information, please feel free to call me.

Sincerely,

Bob

W. R. Wilson
Environmental Group Leader

mg

encl.

cc W. L. Baxter
D. A. Martinez

Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP.
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054 - 2058

SOURCE DESCRIPTION: Recovery Boiler #1

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 240 tons/day Black Liquor Solids Burned
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 340 tons/day Black Liquor Solids Burned
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY
Black Liquor Solids (BLS)	tons/yr
Used to Produce Smelt	120,326 Tons BLS = 50,898 Smelt tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu ft — 716.8 10^3 gal NO. 6 OIL 2.3 %SULFUR

10^3 gal PROPANE — 10^3 gal KEROSENE

tons COAL — 240.6 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 3390 tons of particulates — NA tons of sulfur dioxide

NA tons of nitrogen dioxide — NA tons of carbon monoxide

NA tons of hydrocarbon — tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test avg (lbs./hr) X 24 hrs/day X 7 days/wk. X 50 wks./yr. ÷ 2000

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: _____ date

STACK TEST CONDITIONS: _____ PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: _____

STACK TEST WITNESSED BY: _____

SECTION 6:. OPERATIONAL PROBLEMS, IF ANY: _____

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: Replaced

b. TYPE OF MAINTENANCE PERFORMED: _____

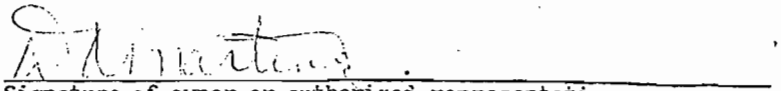
c. NUMBER OF UPSETS LASTING MORE THAN FOUR HOURS DURING THE YEAR: _____

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: ___

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: _____

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.



Signature of owner or authorized representative

D. A. Martinez - Vice President - Mfg.
Typed name and title

Date

ANNUAL OPERATING REPORT
Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054 - 2059

SOURCE DESCRIPTION: Recovery Boiler #2

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 375 Tons/Day Black Liquor Solids Burned
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 486 Tons/Day Black Liquor Solids Burned
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY
Black Liquor Solids (BLS) Used	tons/yr
to Produce Smelt	171,995 tons BLS = 72,754 Smelt tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu ft 884.5 10^3 gal NO. 6 OIL 2.3% SULFUR

10^3 gal PROPANE 10^3 gal KEROSENE

tons COAL 344.0 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 3510 tons of particulates NA tons of sulfur dioxide

NA tons of nitrogen dioxide NA tons of carbon monoxide

NA tons of hydrocarbon tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test lbs./hr X 24 hrs./day X 7 days/wk X 50 wk/year ÷ 2000

ANNUAL OPERATING REPORT
Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP.
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054 - 2063

SOURCE DESCRIPTION: Recovery Boiler #3

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 375 Tons/Day Black Liquor Solids Burned
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 471 Tons/Day Black Liquor Solids Burned
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY
Black Liquor Solids (BLS) Used	tons/yr
to Produce Smelt	166,686 tons BLS = 70,508 Smelt tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu. ft 922.7 10^3 gal NO. 6 OIL 2.3 %SULFUR

10^3 gal PROPANE 10^3 gal KEROSENE

tons COAL 333.4 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 3320 tons of particulates NA tons of sulfur dioxide

NA tons of nitrogen dioxide NA tons of carbon monoxide

NA tons of hydrocarbon tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test lbs./hr. X 24 hrs./day X 7 days/wk. X 50 wks./yr. ÷ 2000

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: _____ date

STACK TEST CONDITIONS: _____ PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: _____

STACK TEST WITNESSED BY: _____

SECTION 6:. OPERATIONAL PROBLEMS, IF ANY: _____

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: Replaced

b. TYPE OF MAINTENANCE PERFORMED: _____

c. NUMBER OF UPSETS LASTING MORE THAN FOUR HOURS DURING THE YEAR: _____

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: ___

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: _____

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.

_____
Signature of owner or authorized representative

D. A. Martinez - Vice President - Manufacturing
Typed name and title

_____
Date

ANNUAL OPERATING REPORT
Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP.
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054-2061

SOURCE DESCRIPTION: Smelt Dissolving Tank #1

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 101.5 tons/day Smelt
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 143.8 tons/day Smelt
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY
Smelt	50898 tons/yr
	tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu ft 10^3 gal NO. OIL %SULFUR

10^3 gal PROPANE 10^3 gal KEROSENE

tons COAL 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 31.2 tons of particulates NA tons of sulfur dioxide

NA tons of nitrogen dioxide NA tons of carbon monoxide

NA tons of hydrocarbon NA tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test lbs./hr. X 24 hrs./day X 7 days/wk X 50 wks./yr. ÷ 2000

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: _____ date

STACK TEST CONDITIONS: _____ PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: _____

STACK TEST WITNESSED BY: _____

SECTION 6:. OPERATIONAL PROBLEMS, IF ANY: _____

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: Replaced with new unit equipped with Venturi Scrubber

b. TYPE OF MAINTENANCE PERFORMED: _____

c. NUMBER OF UPSETS LASTING MORE)THAN FOUR HOURS DURING THE YEAR: _____

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: ___

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: _____

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.

D A Martinez
Signature of owner or authorized representative

D. A. Martinez - Vice President - Mfg.
Typed name and title

Date

ANNUAL OPERATING REPORT
Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP.
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054 - 2062

SOURCE DESCRIPTION: Smelt Dissolving Tank #2

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 158.6 tons/day Smelt
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 205.5 tons/day Smelt
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIEL)	INPUT PROCESS WEIGHT- DRY
Smelt	72754 tons/yr
	tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu. ft 10^3 gal NO. OIL %SULFUR

10^3 gal PROPANE 10^3 gal KEROSENE

tons COAL 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 55.8 tons of particulates NA tons of sulfur dioxide

NA tons of nitrogen dioxide NA tons of carbon monoxide

NA tons of hydrocarbon NA tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test lbs./hr. X 24 hrs./day X 7 days/wk. X 50 wks./yr. ÷ 2000

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: _____ date

STACK TEST CONDITIONS: _____ PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: _____

STACK TEST WITNESSED BY: _____

SECTION 6: OPERATIONAL PROBLEMS, IF ANY: _____

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: Replaced with new unit equipped with Venturi Scrubber

b. TYPE OF MAINTENANCE PERFORMED: _____

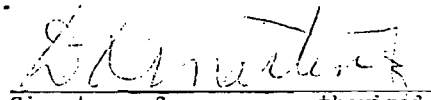
c. NUMBER OF UPSETS LASTING MORE THAN FOUR HOURS DURING THE YEAR: _____

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: _____

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: _____

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.



Signature of owner or authorized representative

D. A. Martinez - Vice President - Mfg.
Typed name and title

Date

ANNUAL OPERATING REPORT
Calendar year 1976

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General
SOURCE NAME:

MAILING ADDRESS: HUDSON PULP & PAPER CORP.
Palatka, Fla. 32077

TELEPHONE NO: 325-2001

OPERATING PERMIT NO: A054-2594

SOURCE DESCRIPTION: Smelt Dissolving Tank #3

SECTION 2: PROCESS OPERATIONS:

a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 50 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr.

b. DESIGN CRITERIA: MAXIMUM OUTPUT 158.6 tons/day Smelt
e.g. 850 MW, 750 tons/dy

c. NORMAL(AVERAGE) OUTPUT 199.2 tons/day Smelt
e.g. 424 MW, 670 tons/dy.

d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY
Smelt	70,508 tons/yr
	tons/yr
	tons/yr
	tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

10^6 cu ft 10^3 gal NO. OIL %SULFUR

10^3 gal PROPANE 10^3 gal KEROSENE

tons COAL 10^6 lb BLACK LIQUOR SOLIDS

OTHER, specify type and units

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

a. 44.0 tons of particulates tons of sulfur dioxide

tons of nitrogen dioxide tons of carbon monoxide

tons of hydrocarbon tons (other)

b. STATE METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES

Test avg. lb./hr. X 24 hrs./day X 7 days/wk. X 50 wk./yr. ÷ 2000

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: _____ date

STACK TEST CONDITIONS: _____ PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: _____

STACK TEST WITNESSED BY: _____

SECTION 6:. OPERATIONAL PROBLEMS, IF ANY: _____

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: Replaced with new unit equipped with Venturi Scrubber.

b. TYPE OF MAINTENANCE PERFORMED: _____

c. NUMBER OF UPSETS LASTING MORE THAN FOUR HOURS DURING THE YEAR: _____

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: _____

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: _____

CERTIFICATION:

I HEREBY CERTIFI THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.

D A Martinez
Signature of owner or authorized representative

D. A. Martinez - Vice President - Manufacturing
Typed name and title

Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

DEC 4 1984

REF: 4AW-AM

DER

DEC 10 1984

BAQM

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Vernon L. Adams
Supervisor of Environmental Affairs
Georgia Pacific Corporation
Post Office Box 919
Palatka, Florida 32077

RE: PSD - FL - 079

Dear Mr. Adams:

Review of your February 22, 1982, application to construct Recovery Boiler No. 5 and 2 smelt dissolving tanks, Combination Boiler No. 5, and Lime Kiln No. 5, at your Kraft Pulp Mill in Palatka, Florida, has been completed. The construction is subject to rules for the Prevention of Significant Deterioration (PSD) of air quality contained in 40 CFR §52.21. The Florida Department of Environmental Regulation (FDER) performed the preliminary determination concerning the proposed construction and published a request for public comment on January 21, 1983. In response to a request from the American Association of Retired Persons a hearing was held on February 17, 1984. On May 16, 1984, FDER prepared a final determination recommending issuance of the PSD permit by EPA. The final determination contains responses to issues raised during the hearing and the public comment period. In addition, the FDER satisfactorily responded to additional concerns raised by EPA in a letter dated September 24, 1984.

The Environmental Protection Agency (EPA) has determined that the construction as described in the application meets all the applicable requirements of 40 CFR 52.21. Accordingly, pursuant to 40 CFR 124.15, the Regional Administrator has made a final decision to issue the enclosed Permit to Construct - Part I Specific Conditions and Part II General Conditions. This authority to construct, granted as of the effective date of the permit, is based solely on the requirements of 40 CFR 52.21, air quality. It does not apply to other permits issued by this Agency or by other agencies. Please be advised that a violation of any permit condition, as well as any construction which proceeds in material variance with information submitted in your application, will be subject to enforcement action.

This final permit decision is subject to appeal under 40 CFR 124.19 by petitioning the Administrator of the EPA within thirty (30) days after receipt thereof. The petitioner must submit a statement of reasons for the appeal and the Administrator must decide on the petition within a reasonable time period. If the petition is denied, the permit shall become effective upon notice of such action to the parties to the apeeal. If the petition is granted, any applicable effective date shall be determined by the results of the appeal proceedings. If no appeal is filed with the Administrator, the permit shall become effective thirty (30) days after receipt of this letter. Upon the expiration of the thirty (30) day period, EPA will notify you of the status of the permit's effective date.

Receipt of this letter does not constitute authority to construct. Approval to construct this facility shall be granted as of the effective date of the permit. The complete analysis which justifies this approval has been fully documented for future reference, if necessary. Any questions concerning this approval may be directed to Mr. Jesse Baskerville, Acting Chief, Air Engineering Section, Air, Pesticides and Toxics Management Division at (404) 881-4253.

Sincerely yours,

George L. Harlow

for Thomas W. Devine, Acting Director
Air, Pesticides, and Toxics Management Division

Enclosure

cc: Mr. Steve Smallwood, P..E., Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)	
~~Clair~~ Fancy	Initial / Date
2. ~~Larry~~ JH, ~~Bruce~~,	Initial / Date
3. Patty – File	Initial / Date
4. also copy district	Initial / Date

REMARKS:

FYI

Hey, Hey!

[signature]

cc: John Brown
Johnny Cole 12/17/84
[initials]

INFORMATION
Review & Return
Review & File
Initial & Forward

DISPOSITION
Review & Respond
Prepare Response
For My Signature
For Your Signature
Let's Discuss
Set Up Meeting
Investigate & Report
Initial & Forward
Distribute
Concurrence
For Processing
Initial & Return

FROM: Steve Smallwood

DATE 12/10

PHONE