

The Commission, having considered the following Applications for Permit submitted by the following respective firms and having reviewed the staff recommendations and the Summary Reports attached hereto does hereby approve said Applications subject to the conditions contained with the Application, Summary Reports, or amendments thereto, provided, however, that the applicant complies with all general terms of the permit and all special terms and conditions to the permit, if any, which are so specified.

APPLICATION FOR PERMIT - INDUSTRIAL FACILITIES

<u>PERMIT NO.</u>	<u>FACILITY & LOCATION</u>	<u>COST</u>
379-A	Riceland Foods, Inc. (Parboil Rice Mill) Jonesboro, Arkansas	\$ 354,000
380-A	Riceland Foods, Inc. (Rice Parboiling Plant) Jonesboro, Arkansas	270,000
381-A	Transvaal, Inc. Jacksonville, Arkansas	50,000
382-A	Frank Murchison Company Coy, Arkansas	26,000
383-A	Mounds Neighbor Gin, Inc. Rector, Arkansas	37,000
384-A	Jonesboro Grain Drying Cooperative Jonesboro, Arkansas	760,000
385-A	Weyerhaeuser Company Pine Bluff, Arkansas	1,320,000
279-A (MODIFICATION)	Arkansas Aluminum Alloys Hot Springs, Arkansas	40,000

COMMISSIONERS

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FOR by *[Signature]*
[Signature]

Billy Fraz SUBMITTED BY Jarrell E. Southall DATE PASSED 11-19-76
CHAIRMAN

APPLICATION FOR PERMIT - INCINERATOR

<u>PERMIT NO.</u>	<u>FACILITY & LOCATION</u>	<u>COST</u>
273-AI	Zimmerman Nursing Home Carlisle, Arkansas	\$ 2,387
274-AI	Washington Regional Medical Center Fayetteville, Arkansas	
275-AI	Arkansas State Building Association Little Rock, Arkansas	

The Summary Reports, prepared by the staff, are designed to facilitate the administration of the air pollution control program for the State of Arkansas and, otherwise, for the convenience of the Commission and other interested persons. Copies of the Minute Orders, the Permits, and the Summary Reports are to be attached to the Applications for Permit which are on file in the Department's central office. It is further noted that the approvals of these applications are based upon information contained within the Application for Permit - not the Summary Reports. Nevertheless, the applicant is expected to forthwith notify the Department of any discrepancies found between the two documents.

COMMISSIONERS

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CHAIRMAN

SUBMITTED BY Jarrell E. Southall

DATE PASSED 11-19-76

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Riceland Foods, Inc. (Parboil Rice Mill)
Jonesboro, Arkansas

CSN: 160106

FIRST SUBMITTAL: October 18, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Riceland Foods proposes to construct and operate a parboil rice mill at their Jonesboro location. Raw materials for the mill will be furnished by the new parboil plant just west of the mill. The process entails the cleaning of the raw materials, the removal of the shell or hull, the milling of the bran from the rice kernels, and the separating of these kernels into three streams based upon particle size. Finished products will go either to a clean rice storage building or the by-products plant.

Fourteen baghouses will be used for emission control. The baghouses will be located on the mill roof with discharge air returned to the mill interior. Seven stacks will handle the particulate emissions consisting of rice hulls and bran. Total predicted emissions are .27 pounds per hour of particulate.

ESTIMATED COST: \$354,000 TOTAL PROJECT: \$2,500,000

COMMENCEMENT OF INSTALLATION: October 1976

COMMENCEMENT OF OPERATION: August 1977

REVIEWED BY: JBJ APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 379-A

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Riceland Foods, Inc. (Rice Parboiling Plant)
Jonesboro, Arkansas

CSN: 160107

FIRST SUBMITTAL: October 18, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Riceland Foods proposes to construct and operate a new rice parboiling plant at their Jonesboro location. The processing entails the cleaning and grading of the raw material and the soaking, cooking, and drying of the processed rice. Raw rice will come from storage elevators at the Jonesboro facilities and the finished product will go to either the by-product plant (hulls) or to the parboil mill via temporary storage. Three rice dryers will be controlled by 3 cyclones with individual stacks. Other emission sources (aspirators, transfer points, graders, shellers, cooker) will be controlled by 5 baghouses with one common stack. Total predicted emissions are 4.03 pounds per hour of rice hulls.

Riceland will also install a baghouse on existing truck grain dumps number 1 and number 2 located between units 1 and 2 just east of the parboil plant.

ESTIMATED COST: \$270,000 TOTAL PROJECT: \$2,500,000

COMMENCEMENT OF INSTALLATION: October 1976

COMMENCEMENT OF OPERATION: August 1977

REVIEWED BY: JB APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 380-A

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Transvaal, Inc.
Jacksonville, Arkansas

CSN: 600078

FIRST SUBMITTAL: 09/07/76 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Transvaal has built a plant for the separation of 1234 and 1245 tetrachlorobenzene. The mixture is received in tank cars and pumped to storage tanks to await processing. The material is pumped from the storage tanks to a reactor where it is mixed with a solvent. The mixture then goes through a centrifuge where the 1234 is separated from the 1245. The 1234 is sent through a dryer where any excess solvent is removed, and then it is conveyed to a storage hopper. The 1245 is transferred to a still where the excess solvent is evaporated and the 1245 is sent back to storage tanks prior to shipment. (The emissions are to be less than five pounds an hour of solvent and less than 0.1 pounds an hour of tetrachlorobenzene).

The process has three separate control systems each consisting of a knockout pot, mist eliminator, condenser, positive flame arrestor vent, and a desiccant breather all in series. One system controls emissions from the storage tanks, another the reactors and centrifuge, and the third, emissions from the dryer system.

ESTIMATED COST: \$50,000 TOTAL PROJECT: \$600,000

COMMENCEMENT OF INSTALLATION: 01/75

COMMENCEMENT OF OPERATION: 05/76

REVIEWED BY: PDD APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 381-A

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Frank Murchison Company
Coy, Arkansas

CSN: 430010

FIRST SUBMITTAL: 11/03/76 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Frank Murchison Company operates a gin with a maximum production of 12 bales per hour. At this maximum rate, approximately 1,500 pounds of waste are produced per hour. An experimental incinerator/heat recovery unit has been installed which incinerates the waste with the flue gases going through an air to air heat exchanger. The heated air is used to dry the cotton in the ginning operation, and thereby reducing the use of fossil fuel. This installation was operated during the last ginning season for experimental purposes. Several modifications were tested at that time and during this ginning season. This installation was tested by the Department prior to the ginning season. This special test was performed while the incinerator was being operated with waste from a cotton gin in Mississippi. The particulate emission rate was 0.024 grains per standard cubic foot corrected to 12% CO₂ (1.141 pounds per hour). Earlier in this ginning season, the unit was tested by the Department. While in normal operation, the emission rate was 0.122 grains per cubic foot corrected to 12% CO₂ (0.9 pounds per hour). During upset conditions the emission rate was found to be 0.24 grains per cubic foot corrected to 12% CO₂.

ESTIMATED COST: \$26,000 TOTAL PROJECT: \$26,000

COMMENCEMENT OF INSTALLATION: 1975

COMMENCEMENT OF OPERATION: 1975

REVIEWED BY: CDH APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 382-A

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Mounds Neighbors Gin, Inc.
Rector, Arkansas

CSN: 110044

FIRST SUBMITTAL: November 4, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Mounds Neighbors Gin operates a gin with a maximum capacity of twelve bales per hour, and proposes the installation of an incinerator/heat recovery unit to consume approximately 1,500 pounds per hour of waste. The flue gases are to be used to heat ambient air for use in drying the cotton in the ginning operation. Emissions from a similar installation at Murchison Gin at Coy has been tested and found to operate in compliance with provisions of the Air Code.

ESTIMATED COST: \$37,000 TOTAL PROJECT: ----

COMMENCEMENT OF INSTALLATION: Upon Approval

COMMENCEMENT OF OPERATION: _____

REVIEWED BY: CDH APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 383-A

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Jonesboro Grain Drying Cooperative
Jonesboro, Arkansas

CSN: 160017

FIRST SUBMITTAL: November 15, 1976 AMENDED: _____

CASE REFERENCES: Registration - November 20, 1969

SUMMARY:

The Jonesboro Cooperative plans to construct a new facility for drying and storage of grain adjacent to its existing plant. The cooperative will also install emission control equipment on nine existing grain dryers and three existing truck grain dumps.

The new facility, to be known as unit eight, will have 24 bins with a total storage capacity of 1,500,000 bushels of rice. The plant will include two truck grain dumps and four 3000 bushel-per-hour grain dryers. The dumps will be controlled by two baghouses and dryer emissions will be controlled by a system which will include screen filters, filter cleaners, and cyclones. Particulate collected by the cyclones will be sent to refuse trash collection and the exhaust air recycled through the cleaning system. The plant will incorporate two additional baghouses as an "in-house" dust system to control emissions at storage transfer points, grain cleaners, and shipping facilities.

The nine existing dryers to be controlled are located in facilities designated as units three, four, and seven at Jonesboro. All of these dryers have 2000 bushels/hour capacities, and one is to be relocated from another building in the area. Controls to be installed will be similar to these at the new facility (unit eight) and will include screen filters, filter cleaners, and cyclones.

ESTIMATED COST: \$760,000 TOTAL PROJECT: \$5,358,507

COMMENCEMENT OF INSTALLATION: _____

COMMENCEMENT OF OPERATION: September 1977

REVIEWED BY: JB APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 384-A

COMMISSION MINUTE ORDER NUMBER: _____

Jonesboro Grain Drying Cooperative
Summary
Page 2

Three existing grain dumps adjacent to units three and four and elevator H will have baghouses installed for grain dust emission control. When the equipment detailed above becomes operational, all major sources of grain-dust ~~emissions~~ at Jonesboro Cooperative will be controlled.

Qualification: After all control equipment for dryers has been installed and become operational, a minimum of one dryer utilizing the new equipment will be tested for grain-dust emissions.

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Weyerhaeuser Company

Pine Bluff, Arkansas

CSN: 350017

FIRST SUBMITTAL: _____

AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

To reduce its dependence upon natural gas and fossil fuels and to provide for improved emission controls, Weyerhaeuser proposes the installation and operation of the following equipment at the company's Pine Bluff pulp and paper mill:

1. A woodwaste-fired boiler having a maximum 80,000 pounds per hour steam capacity. Boiler emission will be controlled by two Joy Multiclone dust collectors operating in series. Particulate emissions are predicted to be 70 pounds per hour. Ash and sand collected from the dust collectors will be sent to a landfill on company property for disposal. Total installation cost will be \$1,900,000, with pollution control equipment to cost \$200,000. Estimated date for start of operation is February, 1977.

2. Standby fuel oil capabilities to serve the existing lime kiln. The kiln is currently fired with natural gas, and is controlled by two wet scrubbers operating in series. Predicted emissions burning number 6 fuel oil will be 8.4 pounds per hour of particulate and 18 pounds per hour of SO₂. Normal process weight rate is 20,000 pounds per hour of lime mud. Conversion to oil costs are estimated at \$130,000. No changes will be made to pollution control equipment. The system will be operational 60 days after receipt of permit approval.

ESTIMATED COST: \$1,320,000

TOTAL PROJECT: \$2,030,000

COMMENCEMENT OF INSTALLATION: _____

COMMENCEMENT OF OPERATION: January 1977 to July 1977

REVIEWED BY: JB

APPROVED: JES

RECOMMENDATION: Approval

ASSIGNED PERMIT NUMBER: 385-A

COMMISSION MINUTE ORDER NUMBER: _____

3. A wet scrubber to be placed in series with an existing electrostatic precipitator presently serving to control emissions from the chemical recovery boiler. The average process weight rate of the boiler is 42,000 pounds per hour of black liquor. In addition to reducing boiler emissions, the Air Pol venturi scrubber will give a secondary benefit of reduced odorous gas emissions from this source. Predicted emission rate for the scrubber is less than 80 pounds per hour of particulate. Control equipment costs will be \$600,000 with an estimated operational date of May 1, 1977.

4. A black liquor oxidation system to reduce emissions of reduced sulfur-containing compounds (TRS). The installation will be a Chemetics black liquor oxidation system with an oxidation efficiency of 99.4%. Unoxidized black liquor will be pumped from storage tanks to the unit and then directly to the recovery furnace's direct contact evaporator after deaeration. The unit should reduce TRS emissions by 108 pounds per hour. Existing TRS emissions from the recovery boiler stack are in the 178-298 pounds per hour range. Cost of the control equipment is \$520,000 with an estimated operational date of July 1, 1977.

5. Two cyclones to reduce wood particulate emissions from the mill's bark mulch and wood chip facilities. The cyclones are part of pneumatic systems used to convey wood chips or bark mulch from the chipper and mulch hog to either a storage facility or to screens for further processing. Predicted emissions for the two cyclones total 3 pounds per hour of wood particulate. Cost information is not presently available.

Qualifications:

1. Emission rates for the equipment to be installed will not exceed those rates listed as predicted emissions in the permit application(s).
2. Opacity resulting from operation of the equipment to be installed will not exceed 20%.
3. Weyerhaeuser will continue to conduct its comprehensive plant-wide testing program to characterize TRS emissions, and will report the results of this testing program to the Department no later than January 1, 1977.

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Arkansas Aluminum Alloys
Hot Springs, Arkansas

CSN: 260077

FIRST SUBMITTAL: November 11, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Arkansas Aluminum Alloys proposes to modify existing equipment to obtain more efficient emission control. A baghouse controlling emissions from the aluminum remelting furnace will receive new Teflon-coated bags and a fifth bag compartment will be added to increase collection effectiveness. The furnace exhaust stack system will be modified to direct some flue gases through the baghouse, thereby increasing operating temperatures and air flow. This will maintain temperatures above possible dew point values and eliminate buildup of moisture on the bag surfaces. Also, total system pressure drops will be decreased. The system exhaust fan will be modified to handle the increased air flow.

ESTIMATED COST: \$40,000 TOTAL PROJECT: _____

COMMENCEMENT OF INSTALLATION: _____

COMMENCEMENT OF OPERATION: Approximately January 1, 1977

REVIEWED BY: JBJ APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 279-A (MODIFICATION)

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Zimmerman Nursing Home
Carlisle, Arkansas

CSN: 430040

FIRST SUBMITTAL: November 18, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Zimmerman Nursing Home of Carlisle proposes to install a SWESCO pathological incinerator, Model SP-3, to dispose of 10 to 15 pounds of pathological waste per day. The incinerator has a capacity of 20 pounds per hour for type IV waste and will be operated for one hour per day. The incinerator has two burners, one primary and one secondary, each with a maximum capacity of 400,000 BTU per hour. Particulate emissions are not to exceed 0.15 grains/SCF at 12 CO₂.

ESTIMATED COST: \$2,387 TOTAL PROJECT: \$2,387

COMMENCEMENT OF INSTALLATION: _____

COMMENCEMENT OF OPERATION: _____

REVIEWED BY: IHB APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 273-AI

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Washington Regional Medical Center
Fayetteville, Arkansas

CSN: 720096

FIRST SUBMITTAL: November 1, 1976 AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Washington Regional Medical Center of Fayetteville proposes to install a Consumat Pathological incinerator, Model C-125P, to dispose of 3000 pounds per day of type 0, 1, 2, and 4 wastes. The incinerator has a capacity of 435 pounds per hour for type 0 waste, 560 pounds per hour for type 4 waste. The incinerator shall be operated for 8 hours per day. The unit is a dual chamber, controlled air incinerator and has one primary burner and one secondary burner, each with a maximum capacity of 350,000 BTU per hour each. The test data submitted with the application shows the particulate emissions to be 0.097 gr/DSCF at 12% CO₂. Permitted emission rate is 0.15 gr/DSCF at 12% CO₂.

ESTIMATED COST: _____ TOTAL PROJECT: _____

COMMENCEMENT OF INSTALLATION: _____

COMMENCEMENT OF OPERATION: _____

REVIEWED BY: THB APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 274-AI

COMMISSION MINUTE ORDER NUMBER: _____

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
D.A.P.C.

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY: Arkansas State Building Services

West Markham at I-430

CSN: _____

FIRST SUBMITTAL: October 8, 1976

AMENDED: _____

CASE REFERENCES: _____

SUMMARY:

Applicant proposes the installation of a "top-loading" pathological incinerator to serve at the Natural Resource Complex for the disposal of waste generated by the Livestock and Poultry Commission.

Particulate emissions are to be limited to 0.15 grains/SCF at 12% CO₂ and less than 5% equivalent opacity.

ESTIMATED COST: _____ TOTAL PROJECT: _____

COMMENCEMENT OF INSTALLATION: December 1, 1976

COMMENCEMENT OF OPERATION: _____

REVIEWED BY: JES

APPROVED: JES

RECOMMENDATION: APPROVAL

ASSIGNED PERMIT NUMBER: 275-AI

COMMISSION MINUTE ORDER NUMBER: _____