



P. O. Box 330
Port Allen, LA 70767

Louisiana Contractor's
License #7334

DATE: JANUARY 30, 1991
TO: GLEN CROUSILLAC (POWER-1)
FROM: RON LEE
RE: ASBESTOS

THE FOLLOWING IS THE RESULTS OF A ASBESTOS SURVEY,
RECENTLY COMPLETED IN THE POWER-1 BLOCK.

THIS ESTIMATE DOES NOT INCLUDE SCAFFOLDING OR MATERIAL
RENTAL, BUT DOES INCLUDE ALL ASBESTOS RELATED MATERIAL.

UPON COMPLETION OF THIS REMOVAL PROJECT, YOUR
RESPONSIBILITY FOR COMPLIANCE WITH DIVISION, OSHA AND EPA
POLICY REGARDING ASBESTOS REMOVAL WILL BE GREATLY
IMPROVED.

MANHOURS- 2,739
MATERIAL- \$18,885.00
REMOVAL & ENCAPSULATION- \$54,527.00
TOTAL JOB COST- \$73,197.00

IF WE MAY BE OF ANY FURTHER ASSISTANCE PLEASE FEEL
FREE TO CONTACT ME AT EXTENSION 6300.

THANK YOU,

RONALD C. LEE, SUPERINTENDENT
PETRIN CORPORATION, DOW CHEMICAL

DO 074274
CONFIDENTIAL

BOILER NO. 1 GRADE LEVEL

1. 4" LINE OUT OF BOILER HAS 6 FEET THAT NEEDS TO BE REPAIRED.
2. 4" LINE FROM BLOW DOWN TANKS HAS TWO 90'S THAT NEED REPAIR.
3. 1 1/2" LINE HAS TWO 90'S THAT NEED REPAIR.
4. 235# 8" STEAM LINE NEEDS REPAIR.

M/H 20
LABOR COST \$432.00
MAT'L COST \$127.00
TOTAL \$559.00

BOILER NO. 1 DECK LEVEL WESTSIDE

1. 1250# STEAM LINE HAS TWO 90'S NEEDS REPAIR ON 14" LINE.
2. 10" 235# STEAM LINE STRIP AND REINSULATE 9 FEET.

M/H 13
LABOR COST \$ 280.00
MAT'L COST \$ 150.00
TOTAL \$ 430.00

BOILER NO. 1 SECOND LEVEL SOUTHSIDE

1. SOUTH EAST CORNER LINE NEEDS 6 FEET REPAIRED ON 3" LINE.

M/H 5
LABOR COST \$108.00
MAT'L COST \$27.00
TOTAL \$135.00

BOILER NO. 1 THIRD LEVEL

1. SOUTH SIDE 2" LINE 9 FEET NEEDS REPAIR.
2. SOUTH WEST CORNER 1" LINE NEEDS 6 FEET REPAIRED.
3. BETWEEN BOILER 1&2 STEAM BLOCK VALVES AREA 1" LINE NEEDS 6 FEET STRIPPED AND REINSULATED.

DO 074275
CONFIDENTIAL

4. BELOW CATWALK 2" LINE NEEDS 3 FEET OF REPAIR.

M/H 23
LABOR COST \$495.00
MAT'L COST \$105.00
TOTAL \$600.00

BOILER NO. 1 FOURTH LEVEL

1. EAST SIDE 6" FEED WATER LINE AND VALVE NEEDS 6 FEET OF REPAIR.
2. NORTHSIDE 6 FEET OF 3" LINE NEEDS REPAIR.
3. NORTH SIDE NEED REPAIR ON TWO 2" 90'S.

M/H 15
LABOR COST \$324.00
MAT'L COST \$ 88.00
TOTAL \$412.00

BOILER NO. 1 FIFTH LEVEL

1. 1250# 8" STEAM LINE HAS ONE 90 NEEDS REPAIR.
2. 1250# 8" STEAM LINE HAS ONE 90 SWEEP AND 9 FEET TO REPAIR.
3. EASTSIDE 2" LINE FROM 5TH LEVEL TO GRADE LEVEL 75 FEET NEEDS TO BE STRIPPED FOR DEMO.

M/H 24
LABOR COST \$477.00
MAT'L COST \$118.00
TOTAL \$595.00

BOILER NO. 1 ROOF

1. 1 1/2" VENT LINE NEEDS REPAIR ON 15 FEET.

M/H 11
LABOR COST \$237.00
MAT'L COST \$50.00
TOTAL \$287.00

DO 074276
CONFIDENTIAL

BOILER # 2 GRADE LEVEL

1. 3/4" LINE NEEDS 300 FEET STRIPPED
2. 4" LINE AND 1 1/2" LINES TO BE ENCAPSULATED.
3. 475# STEAM LINE HAS TWO VALVES THAT NEEDS REPAIR ON A 10" LINE.
4. 4" LINE NEEDS 9 FEET OF REPAIR.

M/H 97
LABOR COST \$2,092.00
MAT'L COST \$ 370.00
TOTAL \$2,462.00

BOILER NO. 2 DECK LEVEL

1. SOUTHWEST CORNER DRAIN HEADER 6 FEET OF 2" LINE NEEDS REPAIRS.
2. 4" 30# STEAM LINE FROM FLASH TANK HAS 3-90'S SWEEPS NEEDS REPAIR.
3. SOUTH SIDE 6" FEED WATER LINE NEEDS 20 FEET REPAIRED.
4. LARGE 12" VALVE NEAR SAFETY SHOWERS NEEDS TO BE REPAIRED.
5. NORTH WEST CORNER 2" VENT LINES NEEDS 9 FEET TO BE REPAIRED.

M/H 44
LABOR COST \$946.00
MAT'L COST \$329.00
TOTAL \$1,275.00

BOILER NO. 2 SECOND LEVEL

1. 6" FEED WATER LINE NEXT TO HAND RAIL HAS TWO VALVE THAT NEEDS REPAIR.

DO 074277
CONFIDENTIAL

2. 10 FEET OF 2" LINE NEEDS REPAIR.

M/H 22
LABOR COST \$ 473.00
MAT'L COST \$ 117.00
TOTAL \$ 590.00

BOILER NO. 2 THIRD LEVEL

1. SOUTH WEST CORNER OVERHEAD 20 FEET OF A 14" LINE NEEDS REPAIRS.
2. 3" LINE NEEDS 9 FEET OF REPAIR.
3. NORTHEAST CORNER HAS 6 FEET OF 4" TO BE REPAIRED.

M/H 26
LABOR COST \$559.00
MAT'L COST \$302.00
TOTAL \$861.00

BOILER NO. 2 FOURTH LEVEL

1. 1250# 14" STEAM LINE HAS 6 FEET AND ONE 90 TO BE REPAIRED.
2. SOUTHWEST CORNER JUST BELOW CATWALK NEEDS 15 FEET OF 2" LINE TO BE STRIPPED AND REINSULATED.
3. SOUTH WEST CORNER HAS 10 FEET OF 2" TO BE REPAIRED.
4. NORTHSIDE 12" LINE UNDER CATWALK HAS 100 FEET TO BE REPAIRED.

M/H 104
LABOR COST \$ 1,980.00
MAT'L COST \$ 276.00
TOTAL \$ 3,300.00

BOILER NO. 2 FIFTH LEVEL

1. 6" FEED WATER LINE HAS 10 FEET AND ONE VALVE NEEDS REPAIR.
2. 1" LINE NEEDS 3 FEET STRIPPED.
3. SOUTH SIDE SUB DECK REPAIR, 2 12" BLOCK VALVES.
4. NORTH SIDE 3" LINE HAS 9 FEET TO BE REPAIRED.
5. NORTH WEST CORNER 2 FEET OF AN 1" LINE STRIPPED AND REINSULATED.
6. 2" LINE BETWEEN BOILERS 1&2 100 FEET NEEDS TO BE STRIPPED TO BE DEMO.

M/H 52
LABOR COST \$1,042.00
MAT'L COST \$ 272.00
TOTAL \$ 1,318.00

BOILER NO. 2 SIXTH LEVEL

1. NORTHSIDE 6 FOOT DIA. HEAD AND 5 VALVES AROUND HEAD NEEDS REPAIR.
2. 6 FEET OF 12" LINE NEEDS REPAIR.
3. 9 FEET OF 8" VENT LINE NEEDS TO BE STRIPPED AND REINSULATED.
4. WEST SIDE 14" 1250# STEAM LINE HAS 3 FEET AND ONE 90 TO BE REPAIRED.
5. SOUTHSIDE REPAIR 14" 1250# STEAM LINE IN SPOTS 15 FEET TO BE REPAIRED.

M/H 64
LABOR COST \$ 1,223.00
MAT'L COST \$ 714.00
TOTAL \$ 1,937.00

DO 074279
CONFIDENTIAL

BOILER NO. 3 THIRD LEVEL SOUTH EAST CORNER

1. 8" FEED WATER LINE HAS 6 FEET TO STRIP AND REINSULATE.
2. 2" LINE RUNNING ABOVE CENTER OF CATWALK HAS 52 FEET TO BE REPAIRED.
3. 1 1/2" LINE HAS 6 FEET TO STRIP AND REINSULATE.
4. 3/4" LINE HAS 250 FEET AND 16 90'S TO BE STRIPPED AND REINSULATE.
5. 8" 1250# STEAM LINE NEEDS 30 FEET TO BE REPAIRED.
6. 50 FEET OF A 2" LINE SOUTHSIDE OF BOILER UNDERHEAD NEEDS TO BE STRIPPED AND REINSULATED.

M/H 386
LABOR COST \$ 7,065.00
MAT'L COST \$ 1,761.00
TOTAL \$ 8,826.00

BOILER NO. 3 FOURTH LEVEL

1. SOUTHSIDE 18 FEET OF 3/4" LINE TO BE STRIPPED AND REINSULATED.

M/H 12
LABOR COST \$ 220.00
MAT'L COST \$ 74.00
TOTAL \$ 294.00

BOILER NO. 3 FIFTH LEVEL

1. SOUTH SIDE CORNER PIPING AROUND 6 FEET DIA. VESSEL NEEDS REPAIR AND ENCAPSULATION .(30 FEET).
2. NORTH SIDE SAME AS ABOVE

M/H 240
LABOR COST \$4,320.00
MAT'L COST \$ 846.00
TOTAL \$5,184.00

DO 074280
CONFIDENTIAL

BOILER NO. THIRD LEVEL

1. 4" AND 10" LINES NEED REPAIR AND ENCAPSULATE 15 FEET.
2. NORTHSIDE 6" LINE NEEDS REPAIR PLUS 2" CONDENSATE BLOWDOWN LINES NEED 9 FEET REPAIRED.

M/H 18
LABOR COST \$ 362.00
MAT'L COST \$ 180.00
TOTAL \$ 542.00

BOILER NO. 4 FOURTH LEVEL

1. 8" VALVE STRIP AND REINSULATE.
2. 6 FEET OF A 12 " LINE NEEDS TO BE STRIPPED AND REINSULATE.
3. 60 FEET AND 90'S OF 2" LINE NEED TO BE STRIPPED AND REINSULATED.
4. 8 FEET OF 8" LINE TO BE STRIPPED AND REINSULATED.
5. 70 FEET OF 3" LINE AND 6 90'S NEED TO BE ENCAPSULATED.

M/H 114
LABOR COST \$ 2,416.00
MAT'L COST \$ 620.00
TOTAL \$ 3,036.00

BOILER NO. 4 FIFTH LEVEL

1. 100 FEET OF 2" LINE TO STRIP AND REINSULATE.

M/H 78
LABOR COST \$ 1,427.00
MAT'L COST \$ 500.00
TOTAL \$ 1,927.00

BOILER NO. 4 SIXTH LEVEL

1. 14" LINE HAS 30 FEET AND ONE 90 TO BE STRIP & REINSULATED.
2. 10" LINE HAS 50 FEET AND ONE 90 TO BE REPAIRED.

DO 074281
CONFIDENTIAL

BOILER NO. 3 GRADE LEVEL

1. 10 FEET OF 12" LINE NEEDS ENCAPSULATED.
2. 3" LINE HAS 6 FEET AND ONE 90 TO BE REPAIRED.
3. 1" LINE HAS 15 FEET TO BE STRIPPED.
4. 3" LINE HAS 3 90'S AND 6 FEET TO BE REPAIRED AND ENCAPSUTATED.
5. 235# 10" LINE HAS 6 VALVE TO BE REPAIRED.
6. 5' DIA. VALVES NEED TO BE REPAIRED AND ENCAPSULATED.

M/H 110
LABOR COST \$ 2,683.00
MAT'L COST \$ 625.00
TOTAL 3,308.00

BOILER NO. 3 DECK LEVEL

1. SOUTH EAST CORNER FLASH TANK 4' DIA. NEEDS TO BE STRIPPED AND REINSULATED.
2. 4" LINE FROM BOTTOM OF TANK NEEDS TO BE STRIPPED (21 FEET)

M/H 52
LABOR COST \$ 933.00
MAT'L COST \$ 340.00
TOTAL \$ 1,273.00

BOILER 3 SECOND LEVEL

1. 14" STEAM LINES 1250# HAS 4-90'S NEEDS REPAIR.
2. EAST SIDE BETWEEN BOILER AND PREHEATER OVER HEAD 3/4" LINES TO STRIP AND REINSULATE 9 90'S AND 2 FEET.

M/H 30
LABOR COST \$ 551.00
MAT'L COST \$ 198.00

DO 074282
CONFIDENTIAL

3. 16 FEET OF 10" LINE TO STRIP & REINSULATE.
4. 16 FEET OF 2" LINE AND ONE BLOCK VALVE TO BE STRIP AND REINSULATED.
5. REPAIR 30 FEET OF 1" LINE.

M/H 90
 LABOR COST \$ 1,649.00
 MAT'L COST \$ 1,169.00
 TOTAL \$ 2,818.00

BOILER NO. 4 ROOF

1. STRIP AND REINSULATE 8 EA. 2" VALVES

M/H 14
 LABOR COST \$ 256.00
 MAT'L COST \$ 45.00
 TOTAL \$ 301.00

PIPES NORTH OF BOILER NO. 4

1. 24" STEAM LINE NEEDS TO BE REPAIRED AND ENCAPSULATED 3-24"- 90'S , 3-8" 90'S.
2. REPAIR 6 EA. 12" VALVES.

M/H 42
 LABOR COST \$ 770.00
 MAT'L COST \$ 344.00
 TOTAL \$ 1,114.00

PIPEWAY SOUTH OF INSTRUMENT SHOP

1. 12 FEET AND 4 EA 45'S OF 24" TO BE ENCAPSULATED AND REPAIRED.
2. 12" STEAM LINES HAS 9 EA. 90'S, 2 EA. CHECK VALVES AND 2 EA BLOCK VALVES.

M/H 50
 LABOR COST \$ 1,050.00
 MAT'L COST \$ 790.00
 TOTAL \$ 1,840.00

DO 074283
 CONFIDENTIAL

BOILER NO. 4 GRADE LEVEL

1. 14" LINE GOING INTO BOILER NEEDS 2 FEET STRIPPED AND REINSULATED.
2. 9 FEET OF 3/4" STEAM LINE FROM HEADER NEEDS REPAIR AND ENCAPSULATED.
3. 4" LINE FROM JUST SOUTH OF # 4 BOILER NEEDS 250 FEET STRIPPED. (DEMO)
4. 4" LINE STEAM HEADER AT TIE IN NEEDS 9 FEET ENCAPSULATED
5. BY PASS LINE HAS 2 8" 90 AND 2 BLOCK VALVES THAT NEED REPAIR AND ENCAPSULATED.

M/H 95
LABOR COST \$ 1,897.00
MAT'L COST \$ 444.00
TOTAL \$ 2,341.00

BOILER NO. 4 DECK LEVEL

1. 18" LINE NEEDS 200 FEET REPAIRED.

M/H 90
LABOR COST \$ 1,647.00
MAT'L COST \$ 700.00
TOTAL \$ 2,347.00

BOILER NO. 4 SECOND LEVEL

1. 2" LINE AND 4 VALVES NEED REPAIR SOUTH EAST CORNER
2. SOUTHWEST CORNER IN PIPE RACK NEEDS ONE 8" BLOCK VALVE REPAIRED.
3. 18" 30# STEAM LINE NEEDS REPAIR.

M/H 142
LABOR COST \$ 2,599.00
MAT'L COST \$ 1,001.00
TOTAL \$ 3,600.00

TURBINE NO. 1 TURBINE DECK

1. 10" 475# STEAM LINE NEEDS REPAIR.
2. 14" STEAM LINE RUNNING ALONG CATWALK ON WEST SIDE HAS TWO CHECK VALVES AND 2 BLOCK VALVES TO REPAIR AND ENCAPSULATE.
3. 14" STEAM LINE RUNNING ON SOUTH SIDE OF CATWALK HAS 25 FEET, 2 CHECK VALVES AND 2 BLOCK VALVES THAT NEEDS REPAIR.

M/H 62
LABOR COST \$ 1,302.00
MAT'L COST \$ 765.00
TOTAL \$ 2,067.00

GRADE LEVEL TURBINE 2

1. 15 FEET 2" AND 3" NEEDS ENCAPSULATION.
2. 5' DIA. VALVE NEEDS REPAIR.
3. 2 " LINE RUNNING FROM VALVE NEEDS REPAIR.
4. 14" MAIN LINE FROM TURBINE BOTTOM HAS 9 FEET AND ONE 90 TO BE REPAIRED.
5. 2 EA. 8" BLOCK VALVES UNDER TURBINE NEEDS REPAIR.
6. 2" LINE ON BOTTOM FLOOR HAS 20 FEET TO BE REPAIR.
7. DEMO ON A 2" LINE RUNNING FROM UNDER TURBINE #2 TO CATWALK ON WESTSIDE 60' TO BE STRIPPED.

M/H 80
LABOR COST \$1,680.00
MAT'L COST \$ 535.00
TOTAL \$2,215.00

TURBINE #2 WEST PIPEWAY

1. 6 EA. 14" BLOCK VALVES NEXT TO CATWALK NEEDS REPAIR.
2. 3" LINE RUNNING UNDER BLOCK VALVE NEEDS 21' REPAIRED.
3. 6" LINE COMING OUT OF BUILDING 2815 RUNNING OVER EAST/WEST WATER BOXES HAS 2 VALVES THAT NEED TO BE REPAIRED AND ENCAPSULATED.

M/H	40
LABOR COST	\$ 845.00
MAT'L COST	\$ 217.00
TOTAL	\$1,062.00

GRADE LEVEL TURBINE #3

1. 6" LINE HAS 1 EA. 90 AND 30' OF LINE THAT NEEDS TO BE REPAIRED.
2. 4" HOTWELL DUMP CONTROL VALVE NEEDS TO BE REPAIRED.
3. 6" LINE HAS 3' THAT NEEDS TO BE REPAIRED.
4. 14" LINE HAS 1 EA. 90 AT PLATFORM THAT NEEDS TO BE REPAIRED.
5. 4" STEAMLINE TO 14" HEADER HAS 2 EA. 90'S THAT NEED TO BE ENCAPSULATED.
6. 14" 90 FROM STOP VALVE NEEDS TO BE REPAIRED AND ENCAPSULATED.
7. DE-HOGGER HAS 9' OF 8" LINE COMING OUT OF THE TOP OF IT THAT NEEDS TO BE STRIPPED AND RE-INSULATED.
8. 12" LINE FROM #3 TURBINE EAST TO HEADER NEEDS 9' TO BE ENCAPSULATED.

M/H	56
LABOR COST	\$1,176.00
MAT'L COST	\$ 484.00
TOTAL	\$1,660.00

DO 074285
CONFIDENTIAL

WEST SIDE PLATFORM OVER ROOF OF BUILDING

1. REPAIR BOTTOM OF DEAIRATOR
2. 1" LINE NEEDS 16 FEET REPAIRED AND ENCAPSULATED.
3. REPAIR TANKS ON TOP OF DEAIRATORS.
4. 18 FEET OF 16" LINE TO REPAIR AND ENCAPSULATE.
5. NORTH DEAIRATORS NEXT TO BOILER 3 NEEDS REPAIR.
6. 20 FEET OF A 8" LINE FROM BOTTOM OF DEAIRATOR NEEDS REPAIR.
7. 18 FEET OF 16" LINE NEEDS TO BE REPAIRED.
8. 16 FEET OF 2" LINE OVERHEAD NEEDS REPAIR.
9. DEMO 280 FEET OF 12" LINE BETWEEN BOILERS 3 & PLATFORM NEEDS TO BE STRIP.

M/H 197
LABOR COST \$ 4,011.00
MAT'L COST \$ 1,422.00
TOTAL \$ 5,433.00

GRADE LEVEL TURBINE NO. 1

1. 475# STEAM LINE 12" NEEDS 6 FEET AND ONE 90 TO BE REPAIRED.
2. 5' DIA. VALVE NEEDS REPAIR, 20 FEET OF LINE COMING OUT OF VALVE NEEDS REPAIR.
3. 15 FEET OF 3" NEEDS ENCAPSULATION.
4. 6" & 8" NEEDS REPAIR, COMING OUT OF GLAND CONDITION.
5. 12" PIPE FROM TURBINE HAS 2 VALVE THAT NEEDS REPAIR.
6. 15 FEET OF 6" VAC BREAKER NO. 1 NEEDS REPAIR.

M/H 93
LABOR COST \$ 1,987.00
MAT'L COST \$ 611.00
TOTAL \$ 2,598.00

DO 074286
CONFIDENTIAL

GRADE LEVEL TURBINE #4

1. 4" LINE ON EAST SIDE OF OIL RESERVOIR HAS 9' THAT NEEDS TO REPAIRED AND ENCAPSULATED.
2. 1" AND 2" LINES BY SERVO PUMP 4-A WEST SIDE HAS 15' THAT NEEDS TO BE REPAIRED AND ENCAPSULATED.

M/H 8
LABOR COST \$168.00
MAT'L COST \$101.00
TOTAL \$269.00

TURBINE #4 DECK LEVEL

1. 12" 475 LB. STEAMLINE NEEDS TO BE REPAIRED.
2. 15' OF A STEAM CONTROL STATION ON PLATFORM NEEDS TO BE REPAIRED AND ENCAPSULATED.

M/H 15
LABOR COST \$ 315.00
MAT'L COST \$ 180.00
TOTAL \$ 495.00

PIPING BETWEEN TURBINE #1 & #2 AND BOILER #1 & #2

1. SOUTHWEST CORNER BY TURBINE #1 HAS 4 EA. 1" LINES (30 FEET) THAT NEED TO STRIPPED AND RE-INSULATED.
2. 6" LINE RUNNING OVER BUILDING 2806 HAS 6' TO BE STRIPPED AND RE-INSULATED.
3. 4" CONDENSATE LINE NEXT TO WATER FOUNTAIN ABOVE WALKWAY HAS 2 EA. 90'S THAT NEED TO BE REPAIRED.
4. 6" FEEDWATER LINE GOING INTO CENTRIFUGAL PUMPS 1 THRU 3 HAS 30' THAT NEED TO BE REPAIRED.
5. DEMO 100' OF 1" LINE RUNNING FROM BUILDING 2806 TO BOILERS 1 AND 2.

DO 074287
CONFIDENTIAL

6. 30' OF 6" FEEDWATER LINE COMING OUT OF BOILER FEEDPUMPS EAST OF TURBINE #2 NEEDS TO REPAIRED AND ENCAPSULATED.
7. 15' OF 1 1/2" LINE RUNNING BY LABORATORY NEXT TO WALL OF BUILDING 2801 NEEDS TO BE REPAIRED.
8. 10" LINE ABOVE BACKWASH PANEL #2 HAS 2 EA. 90'S THAT NEED TO BE REPAIRED.
9. 28' OF 1" LINE ABOVE BACKWASH PANEL #2 NEEDS TO REPAIRED AND ENCAPSULATED.

M/H 110

LABOR COST \$ 2,315.00

MAT'L COST \$ 822.00

TOTAL \$ 3,137.00

DO 074288
CONFIDENTIAL