

PROJECT TRANSMITTAL

I. Title: BURNER CONTROLS

Proj. No. 4811 Date: 1-4-74 Work Order No's: 1-4811-000

Dept. No. 246 Premise Issued: \_\_\_\_\_

TSD Job 91370: \_\_\_\_\_ Yes 7/3/73 (Date) \_\_\_\_\_

No \_\_\_\_\_

Justification: Savings \_\_\_\_\_ \$/Yr., Safety ☒ Air Pollution \_\_\_\_\_ Stream Pollution \_\_\_\_\_

Other \_\_\_\_\_, Total Project Cost \$12,000

II. 5 Copies to Proj. Plan. Supervisor

1 Copy to Prod. G.S./Prod. Supvr.

1 Copy to TSD Supt (Proc)/TSD Engr.

\_\_\_\_\_ Copies to Others

D. RES  
G. JONES  
R. ENGLISH  
K. BOUCHER

Circulate Copy To:

- 1) Safety Engineer D. SCHILLINGER
- 2) Environmental Engineer C. BARKLEY
- 3) Mech. Stds. Engr. C. BOEHLE
- 4) Others L. SPANGLER

| Date Reviewed | Initials |
|---------------|----------|
| _____         | _____    |
| _____         | _____    |
| _____         | _____    |
| _____         | _____    |
| _____         | _____    |

Return Circulation Copy to Project Engineer DAD MATTISON

III. Attached is: ☐ Partial Pkg. (Complete Pkg. by 1/1)

☒ Complete Pkg. EXCEPT VENDOR DRAWINGS

☐ Revised Pkg. (Revision \_\_\_\_\_ to Pkg. of 1/1)

Shutdown req'd (if known - Yes ☒ No \_\_\_\_\_ Est. Duration (Shifts) 1

☐ Formal Safety & Environmental Review Held (1/1)

☒ Informal " " " " " (1/29/74)

☐ Field Check (is)(is not) Scheduled.

IV. Drawing No's. & Material Lists

Rev. No.

Title

DSW 311754

WORK DESCRIPTION

FOR

BURNER CONTROL

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DEPARTMENT 246

ESTIMATE NO. 4811

WORK ORDER NO. 1-4811-000

MONSANTO INDUSTRIAL CHEMICALS COMPANY

TECHNICAL SERVICES DEPARTMENT

W. G. KRUMMRICH PLANT

SAUGET, ILLINOIS

Prepared By:  
D. Mattison  
1/2/74

DSW 311755

STLCOPCB4071741

I. SCOPE

This project will install a burner control unit on the #2 Aroclor still in Dept. 246.

II. DRAWINGS AND MATERIALS

All material marked with a "B" number have been ordered; all others and any additional can be obtained from stores and through project planner.

|             |        |                                                |
|-------------|--------|------------------------------------------------|
| D-510 E 53  | REV. 2 | ELEC. CHANGES & ADDITIONS ... CHLORINATION AR! |
| GEA HO 36-1 |        | Drawing                                        |
| C-6942      | Rev. 3 | Piping Diagram 2nd Still                       |
| TS-D-9369   | Rev. 1 | Panel A&C & Schematic Diagrams                 |
| TS-D-5401   | Rev. 4 | Elec. Layout & Details Al. Stg. Tank           |

~~GEA HO 36-1 SEE REV. 5~~ WIRING INSTRUMENT CONTROL PANEL

III. WORK DESCRIPTION

Move control system to second level of Dept. 246. Move in pieces if necessary.

Electrical

1. Run conduit up wall of building CR from panel C-3 to burner control cabinet.
2. Pull wires and connect up for 110 volts. Use CKT. #24.
3. Mount purple peeper in newly installed burner.
4. Run 3/4" conduit and wiring to burner leads, 8-#14's, 4 thermo-couple.
5. *MOUNT LIGHT BOX AND HORN IN PANEL, WIRE AS PER SKETCH ON GEA HO36-1 SEE DRAWINGS D-510-E53, EV 104 AND TS-D-5401*
6. Mount transformer for circulating pump in circuit panel and run conduit from panel B to burner control cabinet. See drawing TS-D-5401.

Piping

1. Run new piping from gas train outlets to burner.
2. Disconnect present gas supply from burner and repipe to gas train inlet.
3. Install new John Zink burner in still. *AS PER GEA DRAWING*
4. Connect main and pilot gas lines to burner as per C-6942.

III. WORK DESCRIPTION

Piping (Cont'd)

5. Run air purge to burner for flame scanner. Tap nearest available plant air supply.
  6. Pipe purge up as per GEA Drawing.
- Any questions, call Dan Mattison at 546.

SMS

DSW 311757

## Project Authority For Expenditure

PAGE 1 OF 1

| PLANT | BUS. GROUP | DEPT. NO. | DATE    | ENG. JOB NO. | AUTHORITY |
|-------|------------|-----------|---------|--------------|-----------|
| WGK   | Specialty  | 246       | 7/31/73 |              | 4811      |

DESCRIPTION, REASON AND JUSTIFICATION FOR WORK:

DESCRIPTION: Install burner control on #2 Aroclor stillREASON: Present system does not afford adequate control or protectionJUSTIFICATION: Safety.

## NON-EARNINGS

| PREPARED BY | REVIEWED BY       | GROUP DIR. | DATE   | DATE | DATE |
|-------------|-------------------|------------|--------|------|------|
| ttison      | Heider<br>Boucher | W. COREY   | 8/9/73 |      |      |

| M | DESCRIPTION                                              | EQUIPMENT |     | CONTR. WORK | MAT. & SUPP. | STORES O'HEAD | DIRECT LABOR | SHOP O'HEAD | TOTAL        |
|---|----------------------------------------------------------|-----------|-----|-------------|--------------|---------------|--------------|-------------|--------------|
|   |                                                          | TRANS.    | NEW |             |              |               |              |             |              |
|   | ADD-TO - 200066<br>Install Burner Control<br>Contingency |           |     |             | 5900         | 590           | 2800         | 1650        | 10910<br>120 |
|   | ITEM 133                                                 |           |     |             |              |               |              |             |              |

## INFORMATION FOR EXPENDITURES

| CLASSIFICATION OF AMOUNT AUTHORIZED |        | PROJECT SUMMARY                  |      |
|-------------------------------------|--------|----------------------------------|------|
| 1. CAPITAL EXPENDITURE              | 12,000 | 4. PROJECT TOTAL (ORIG OR REV.)  | 12,0 |
| 2. Transferred Eq.                  |        | 5. Less Prev. Auth.              |      |
|                                     |        | 6. Proj. Total - This Req. (4-5) | 12,0 |
|                                     |        | 7. LESS TRANSFERRED EQUIP.       |      |
|                                     |        | 8. NET CASH REQUIRED (6-7)       | 12,0 |
| (1 + 2)<br>3. Level For Appr.       | 12,000 | 9. AMOUNT AUTHORIZED = (6)       | 12,0 |

DSW 311758

# PROJECT PRIORITY LISTINGS

1 2 3 4  
4 8 1 1  
Project Estimate Number  
(e.g. 4438)

5 6 7  
2 1 6  
Cost Center Code - Dept.  
(e.g. 232)

8  
5  
Manufacturing Group  
(See Note 1)

9  
5  
Business Group  
(See Note 2)

10 11  
0 8  
Originating Group  
(See Note 3)

12 13 14 15 16 17  
B U R N E R

18 19 20 21 22 23  
C O N T R

24 25 26 27 28 29  
O L

30 31 32 33 34  
[ ] [ ] [ ] [ ] [ ]

35 36 37 38 39 40  
1 2 0 0 0

41 42 43 44 45 46  
1 2 0 0 0

47 48 49 50 51 52  
[ ] [ ] [ ] [ ] [ ] [ ]

53 54 55 56 57 58  
0 8 0 9 7 3

59 60 61 62 63 64  
0 8 3 1 7 3  
Est. Date Design Package  
To P & S

65 66 67 68 69 70  
[ ] [ ] [ ] [ ] [ ] [ ]  
Act. Date Design Package  
To P & S

71 72 73 74 75 76  
[ ] [ ] [ ] [ ] [ ] [ ]  
P & S Est'd. Date of  
Completion

77  
1  
Primary Justification Code  
(See Note 4)

78  
2  
Secondary Justification Code  
(See Note 4)

79  
[ ]  
Design Package Code (1 = Package Issued)

80  
[ ]  
Field Work Complete (1 = Yes 0 = No)

## MANUFACTURING GROUP CODE:

- Mfg. Group E ..... 1
- Mfg. Group A ..... 2
- Mfg. Group B ..... 3
- Mfg. Group F ..... 4
- Mfg. Group D ..... 5
- Mfg. Group C ..... 6
- Utilities ..... 7
- Other ..... 8

## ORIGINATING GROUP CODE:

- Process Group E & F.. 1
- Process Group A ..... 2
- Process Group B ..... 3
- Inorganic TSD ..... 4
- Process Group D ..... 5
- Process Group C ..... 6
- Mech. Design G.P. .... 7
- Control Group ..... 8
- Maint. Area ..... 9
- Program Planning .... 10
- Other ..... 11

## BUSINESS GROUP:

- Ag. Chem. .... 1
- Rubber Chem. .... 2
- Cellul. Chem. .... 3
- Inorganic. .... 4
- Funct. Fluids. .... 5
- Food & Fine. .... 6
- General Chem. .... 7
- Plasticizers. .... 8
- Oil Additives. .... 9
- Other ..... 10

## JUSTIFICATION CODE:

- 1. Safety
- 2. Potential Hazard
- 3. Stream Pollution
- 4. Air Pollution
- 5. Savings
- 6. New Earnings
- 7. Retain Sales
- 8. Improve Quality
- 9. Plant Improvement
- 0. Maintenance

NOTE: Repeat Primary if there is no Secondary.

NOTE: Always Use 6 Digits for Dates  
Date Project Approved  
(e.g. Code 8/1/68 As 080168)

JUSTIFICATION \$'s Per Yr.  
(e.g. bd2800)

Project Total \$'s  
(e.g. bd14000)

NOTE: Right Hand Adjust All Dollar Figs.  
Capital Expenditures, \$'s  
(e.g. bd12500)

Use spaces 12 thru 34  
to Put in a JOB TITLE.  
Use Capital Letters and  
Leave Blanks Between  
Words.

# MANPOWER ESTIMATES (ORIGINATOR)

NOTE: LABOR MAN DAYS BY SHOP GROUP

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 4 | 8 | 1 | 1 |

Estimate No.

|   |   |   |
|---|---|---|
| 5 | 6 | 7 |
| 2 | 4 | 6 |

Cost Center

|   |   |
|---|---|
| 8 | 9 |
| 0 | 8 |

Originating Group ①

|    |    |    |
|----|----|----|
| 10 | 11 | 12 |
| 0  |    | C  |

Maintenance Planners  
Initials (Capital Letters)

|    |    |    |    |    |
|----|----|----|----|----|
| 13 | 14 | 15 | 16 | 17 |
| B  | U  | R  | N  | E  |

|    |    |    |    |    |
|----|----|----|----|----|
| 18 | 19 | 20 | 21 | 22 |
| R  |    | C  | O  | N  |

Use Spaces 13 thru  
37 to Put in a JOB  
TITLE. Use Capital  
Letters and Leave  
Blanks Between  
Words.

|    |    |    |    |    |
|----|----|----|----|----|
| 23 | 24 | 25 | 26 | 27 |
| T  | R  | O  | L  |    |

|    |    |    |    |    |
|----|----|----|----|----|
| 28 | 29 | 30 | 31 | 32 |
|    |    |    |    |    |

|    |    |    |    |    |
|----|----|----|----|----|
| 33 | 34 | 35 | 36 | 37 |
|    |    |    |    |    |

|    |
|----|
| 38 |
|    |

Status Code ②

|    |    |
|----|----|
| 39 | 40 |
|    |    |

Execution Group ③

|    |
|----|
| 41 |
|    |

Time ③

|    |    |    |
|----|----|----|
| 42 | 43 | 44 |
|    | 1  | 0  |

Electricians

|    |    |    |
|----|----|----|
| 45 | 46 | 47 |
|    |    | 6  |

Carpenters

|    |    |    |
|----|----|----|
| 48 | 49 | 50 |
|    |    |    |

Iron Workers

|    |    |    |
|----|----|----|
| 51 | 52 | 53 |
|    |    |    |

Machinists

|    |    |    |
|----|----|----|
| 54 | 55 | 56 |
|    |    |    |

Brick Layers

|    |    |    |
|----|----|----|
| 57 | 58 | 59 |
|    | 1  | 2  |

Pipe Fitters

|    |    |    |
|----|----|----|
| 60 | 61 | 62 |
|    |    |    |

Painters

|    |    |    |
|----|----|----|
| 63 | 64 | 65 |
|    |    |    |

Riggers

|    |    |    |
|----|----|----|
| 66 | 67 | 68 |
|    |    |    |

Laborers

|    |    |    |
|----|----|----|
| 69 | 70 | 71 |
|    |    | 4  |

Insulators

|    |    |    |
|----|----|----|
| 72 | 73 | 74 |
|    |    | 4  |

Welders

|    |    |    |
|----|----|----|
| 75 | 76 | 77 |
|    |    | 5  |

Instrument Men

|    |    |    |
|----|----|----|
| 78 | 79 | 80 |
|    |    |    |

Others

## ① ORIGINATING GROUP CODE

- Process Group E & F 1
- Process Group A 2
- Process Group B 3
- Inorganic TSD 4
- Process Group D 5
- Process Group C 6
- Mech. Design Gp. 7
- Control Group 8
- Maint. Area 9
- Program Planning 10
- Other 11

## ② STATUS CODE:

- 1. In Process
- 2. Ready
- 3. Dept. Not Ready
- 4. Mat'l. Not Avail.
- 5. Equip. Not Ready
- 6. Project Originated

## ③ FOR SCHEDULING ONLY

**REQUISITIONER: FILL IN KNOWN DATA  
WITH PEN OR SOFT SHARP PENCIL. PRESS  
FIRMLY FOR CLEAR IMAGE. PLEASE PRINT  
LEGIBLY.**

**Monsanto**  
COMPANY

**PURCHASING DEPARTMENT**

**Sauget, Illinois 62201**

REQUISITION  
PURCHASE  
ORDER

DATE MATERIAL REQUIRED  
AT PLANT SITE.

2-1-74  
OR SOONER

OR SOONER

**Journal of Management Education**

**-NOTE**

PLEASE SHOW THIS ORDER NUMBER ON EACH  
INVOICE, PACKAGE, BILL OF LADING, AND  
SHIPPING NOTICE.

**- BILLING INSTRUCTIONS -**

**FORWARD TO ADDRESS AT TOP OF THIS FORM**

1. ACKNOWLEDGEMENT OF ORDER GIVING SHIPPING DATE
2. BILL OF LADING IN DUPLICATE
3. INVOICE IN DUPLICATE PRICING EACH ITEM SEPARATELY
4. MAIL INVOICES C/O ACCOUNTING DEPT.

- SHIPPING INSTRUCTIONS -**
1. DELIVER BETWEEN 8 A.M. AND 3 P.M. MONDAY THROUGH FRIDAY
  2. SHIP CHEAPEST ROUTING UNLESS OTHERWISE SPECIFIED
  3. ON LOCAL DELIVERIES SURRENDER DELIVERY TICKET

MONSANTO COMPANY

### W. G. Krummrich Plant

**Sauget, Illinois 62201**

618/271-5835

**VENDOR**

SHIP TO

| F.O.B. |                 | VIA |  | TERMS            |      |
|--------|-----------------|-----|--|------------------|------|
|        | DELIVERED       |     |  |                  | N-30 |
|        | SHIPPING POINT  |     |  | BEST WAY         |      |
|        | FREIGHT ALLOWED |     |  | VENDOR DELIVERED |      |

[illegible]

SALES TAX APPLIES: ☐  
ADD TO INVOICE

USE TAX APPLIES: ☐  
ADD TO INVOICE

PURCHASE EXEMPT  
FROM SALES/USE TAX ☐



BY SHIPPING THE ABOVE GOODS OR BY ACKNOWLEDGING RECEIPT OF THIS ORDER, HEREAFTER CALLED "CONTRACT," YOU AGREE TO THE TERMS AND CONDITIONS SET FORTH ON THE FACE SIDE AND THE REVERSE SIDE HEREOF. ANY DIFFERENT OR ADDITIONAL TERMS IN YOUR ACCEPTANCE OF THIS OFFER ARE HEREBY OBJECTED TO.

MONSANTO COMPANY

BY

|                        |                |               |           |       |                                                                                 |
|------------------------|----------------|---------------|-----------|-------|---------------------------------------------------------------------------------|
| DATE<br>1-7-74         | INQUIRY NO.    |               | APPROVAL  | BUYER | SAFETY JOB? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
|                        |                |               |           |       | POLLUTION CONTROL? <input type="checkbox"/> YES <input type="checkbox"/> NO     |
| DATE MATERIAL RECEIVED | COMP. SHIPMENT | PART SHIPMENT | UNLOAD AT |       | DELIVER TO (LOCATION)<br>B. I. W. G. K.                                         |

**STANDARDS APPROVAL**

DEPT.

ESTIMATE NO.

REQUISITIONER (NAME TO BE PRINTED CLEARLY)

MATTISON / CLARK

| 53   | ACCOUNT |      |     |       |      | AMOUNT | C R | TAX CODE | N D I | MATERIAL | QUANTITY | OTHER  |            |
|------|---------|------|-----|-------|------|--------|-----|----------|-------|----------|----------|--------|------------|
| DIV. | LOC.    | MAIN | SUB | CLASS | TYPE |        |     |          |       |          |          | DETAIL |            |
| 02   | 03      | 154  | 01  | 000   |      |        |     |          |       |          | 100%     | TIN    | 1- 441-000 |
|      |         |      |     |       |      |        |     |          |       |          |          |        |            |
|      |         |      |     |       |      |        |     |          |       |          |          |        |            |
|      |         |      |     |       |      |        |     |          |       |          |          |        |            |
|      |         |      |     |       |      |        |     |          |       |          |          |        |            |

DSW 311761

DSW 311761

SUPPLIES OF KNOWN

G.E.A. AIREXCHANGERS

6 Worthington Dr. STL 63043

ESTIMATED COST

\$7200

REQUISITIONER: FILL IN KNOWN DATA WITH PEN OR SOFT SHARP PENCIL. PRESS FIRMLY FOR CLEAR IMAGE. PLEASE PRINT LEGIBLY.

**Monsanto**  
COMPANY

PURCHASING DEPARTMENT

Sauget, Illinois 62201

DATE MATERIAL REQUIRED AT PLANT SITE.

2-1-74

OR SOONER

NOTE

DATE

OCT 19 1973

PURCHASE ORDER NUMBER

BT 13171

PLEASE SHOW THIS ORDER NUMBER ON EACH INVOICE, PACKAGE, BILL OF LADING, AND SHIPPING NOTICE.

- BILLING INSTRUCTIONS -

FORWARD TO ADDRESS AT TOP OF THIS FORM

1. ACKNOWLEDGEMENT OF ORDER GIVING SHIPPING DATE
2. BILL OF LADING IN DUPLICATE
3. INVOICE IN DUPLICATE PRICING EACH ITEM SEPARATELY
4. MAIL INVOICES C/O ACCOUNTING DEPT.

- SHIPPING INSTRUCTIONS -

1. DELIVER BETWEEN 8 A.M. AND 3 P.M. MONDAY THROUGH FRIDAY
2. SHIP CHEAPEST ROUTING UNLESS OTHERWISE SPECIFIED
3. ON LOCAL DELIVERIES SURRENDER DELIVERY TICKET

RFQ  
REQUISITION  
PURCHASE  
ORDER

F.O.B.

VIA

TERMS

DELIVERED

SHIPPING POINT

FREIGHT ALLOWED

BEST WAY

VENDOR DELIVERED

N-30

VENDOR

VENDOR NO. 3091759  
G.E.A. AIREXCHANGERS, INC.  
46 WORTHINGTON DR.  
MARYLAND HEIGHTS, MO 63043

SHIP TO

MONSANTO COMPANY

W. G. Krummrich Plant

Sauget, Illinois 62201

618/271-5835

| ITEM                                                                                                       | QUANTITY | UNIT | DESCRIPTION                                                                               | PRICE              |
|------------------------------------------------------------------------------------------------------------|----------|------|-------------------------------------------------------------------------------------------|--------------------|
| 1                                                                                                          | 1        | ONLY | NATURAL GAS COMBUSTION CONTROL SYSTEM PRE-PIPED AND PRE-WIRED PER ENCLOSED SPECIFICATIONS | 7200 <sup>00</sup> |
| <p><b>CERTIFY ON YOUR INVOICE THE COUNTRY IN WHICH THE ITEM(S) COVERED BY THIS ORDER WERE PRODUCED</b></p> |          |      |                                                                                           |                    |

SALES TAX APPLIES: ☐ ADD TO INVOICE

USE TAX APPLIES: ☒ ADD TO INVOICE

PURCHASE EXEMPT FROM SALES/USE TAX ☐



BY SHIPPING THE ABOVE GOODS OR BY ACKNOWLEDGING RECEIPT OF THIS ORDER, HEREAFTER CALLED "CONTRACT," YOU AGREE TO THE TERMS AND CONDITIONS SET FORTH ON THE FACE SIDE AND THE REVERSE SIDE HEREOF. ANY DIFFERENT OR ADDITIONAL TERMS IN YOUR ACCEPTANCE OF THIS OFFER ARE HEREBY OBJECTED TO.

MONSANTO COMPANY

BY

*W. C. [Signature]*

DATE 10/10/73

INQUIRY NO.

K-454

APPROVAL

BUYER

SAFETY JOB?

☒ YES ☐ NO

POLLUTION CONTROL?

☐ YES ☒ NO

DATE MATERIAL RECEIVED

COMP. SHIPMENT

PART SHIPMENT

UNLOAD AT

DELIVER TO (LOCATION)

BT

STANDARDS APPROVAL

DEPT.

246

ESTIMATE NO.

4811

REQUISITIONER

HEIDEN

NAME TO BE PRINTED CLEARLY

MATTISON BOUCHER

| 53   | ACCOUNT |      |     |       | AMOUNT | C | R | TAX  | N | P | MATERIAL | QUANTITY | TYPE | OTHER  |
|------|---------|------|-----|-------|--------|---|---|------|---|---|----------|----------|------|--------|
| DIV. | LOC.    | MAIN | SUB | CLASS |        |   |   | CODE |   |   |          |          |      | DETAIL |
| 02   | 03      | 264  | 00  |       |        |   |   |      |   |   |          |          |      |        |
| 02   | 03      | 511  | 00  | 878   |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |
|      |         |      |     |       |        |   |   |      |   |   |          |          |      |        |

DSW 311762

[illegible]

|                                         |  |                    |  |                                                |  |                        |                |
|-----------------------------------------|--|--------------------|--|------------------------------------------------|--|------------------------|----------------|
| MONSANTO COMPANY                        |  | MATERIAL LIST      |  | MONSANTO, ILLINOIS<br>TECHNICAL SERVICES DEPT. |  | BY<br>D.M.             | DATE<br>1-28-7 |
| PROJ. TITLE<br>#2 STILL BURNER CONTROLS |  |                    |  | PROJ. NO.<br>4311                              |  | APPD.                  | DATE           |
|                                         |  |                    |  | DEPT.<br>246                                   |  | ISSUE                  | DATE           |
|                                         |  |                    |  | BLDG.                                          |  | SUPERSEDES<br>ISSUE OF | DATE           |
|                                         |  |                    |  | W.O. NO.<br>1-4311-000                         |  | ML A-7511              |                |
|                                         |  |                    |  | MISC. DATA                                     |  |                        |                |
| DWG. NO.                                |  | REFERENCE DRAWINGS |  |                                                |  |                        |                |

STLCOPCB4071749