

**PITTSBURGH PLATE GLASS COMPANY**

**CHEMICAL DIVISION**

**LAKE CHARLES, LOUISIANA**

## LABORATORY PRODUCT REPORT

| TRICHLOR<br>TYPE 107 SHIPMENTS  |      | 1965<br>AVG. | JAN   | FEB   | MAR    | APR   | MAY   | JUNE   | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|---------------------------------|------|--------------|-------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------------|
| TRANS 1,2-DICHLOROETHYLENE      | %    | 0.004        | 0     | 0     | 0      | 0     | 0     | 0      | 0.09  | 0     | 0     | 0     | 0     | (0.01 | (0.01        |
| CARBON TETRACHLORIDE            | %    | (0.01        | 0     | (0.01 | (0.01  | (0.01 | (0.01 | 0.01   | (0.01 | (0.01 | (0.01 | 0.02  | (0.01 | (0.01 | (0.01        |
| CIS 1,2 DICHLOROETHYLENE        | %    | 0.01         | 0     | 0     | 0      | 0     | 0     | 0      | 0.01  | 0     | 0     | 0     | 0.01  | 0     | (0.01        |
| TRICHLOROETHYLENE               | %    | 99.39        | 99.46 | 99.48 | 99.49  | 99.46 | 99.50 | 99.47  | 99.45 | 99.42 | 99.51 | 99.48 | 99.47 | 99.51 | 99.48        |
| PERCHLOROETHYLENE               | %    | (0.01        | 0     | (0.01 | 0      | 0     | (0.01 | 0      | 0.01  | (0.01 | (0.01 | (0.01 | 0.01  | (0.01 | (0.01        |
| 1,1,2-TRICHLOROETHANE           | %    | (0.01        | 0     | (0.01 | (0.01  | (0.01 | (0.01 | (0.01  | (0.01 | 0.01  | (0.01 | (0.01 | (0.01 | (0.01 | (0.01        |
| GDL                             | %    | 0.05         | 0.05  | 0.05  | 0.05   | 0.05  | 0.04  | 0.05   | 0.05  | 0.06  | 0.05  | 0.05  | 0.05  | 0.06  | 0.05         |
| NPL                             | %    | 0.14         | 0.14  | 0.13  | 0.13   | 0.13  | 0.14  | 0.14   | 0.14  | 0.13  | 0.13  | 0.14  | 0.13  | 0.13  | 0.13         |
| APPEARANCE                      |      | Clear        | Clear | Clear | Clear  | Clear | Clear | Clear  | Clear | Clear | Clear | Clear | Clear | Clear | Clear        |
| SPOT                            |      | None         | None  | None  | None   | None  | None  | None   | None  | None  | None  | None  | None  | None  | None         |
| RESIDUAL ODOR                   |      | None         | None  | None  | None   | None  | None  | None   | None  | None  | None  | None  | Non   | Non   | Non          |
| COLOR                           | APHA | (5           | 7     | 8     | 7      | 5     | (5    | (5     | (5    | (5    | 5     | (5    | 6     | 6     | (5           |
| SPECIFIC GRAVITY 20/20°C        |      | 1.460        | 1.460 | 1.460 | 1.460  | 1.460 | 1.460 | 1.460  | 1.460 | 1.460 | 1.460 | 1.460 | 1.460 | 1.460 | 1.460        |
| DISTILLATION RANGE              | °C   |              |       |       |        |       |       |        |       |       |       |       |       |       |              |
| Low                             |      | 86.1         | 86.1  | 86.1  | 85.9   | 86.0  | 86.0  | 86.0   | 85.8  | 85.8  | 86.0  | 86.1  | 86.1  | 86.1  | 86.0         |
| HIGH                            |      | 87.7         | 87.6  | 87.7  | 87.5   | 87.6  | 87.6  | 87.6   | 87.6  | 87.7  | 87.7  | 87.9  | 87.8  | 87.6  | 87.7         |
| FREE CHLORINE                   |      | None         | None  | None  | None   | None  | None  | None   | None  | None  | None  | None  | None  | None  | None         |
| WATER CONTENT CLOUD POINT       | °C   | (-10         | (-10  | (-10  | (-10   | (-10  | (-10  | (-10   | (-10  | (-10  | (-10  | (-10  | (-10  | (-10  | (-10         |
| NON-VOLATILE                    | %    | .0011        | .0013 | .0013 | .0011  | .0008 | .0008 | .0015  | .0020 | .0019 | .0012 | .0010 | .0012 | .0014 | .0013        |
| PH                              |      | 7.3          | 7.3   | 7.2   | 7.1    | 7.3   | 7.1   | 7.1    | 7.2   | 7.5   | 7.4   | 7.4   | 7.3   | 7.1   | 7.2          |
| % AS NaOH                       |      | .0003        | .0002 | .0003 | (.0001 | .0004 | .0001 | (.0001 | .0001 | .0003 | .0002 | .0002 | .0002 | .0001 | .0002        |
| ACID ACCEPTANCE % AS NaOH       |      | 0.14         | 0.14  | 0.14  | 0.14   | 0.13  | 0.13  | 0.13   | 0.14  | 0.15  | 0.13  | 0.14  | 0.14  | 0.14  | 0.14         |
| COPPER CORROSION                |      | None         | None  | None  | None   | None  | None  | None   | None  | None  | None  | None  | None  | None  | None         |
| STANDARD STABILITY              |      | OK           | OK    | OK    | OK     | OK    | OK    | OK     | OK    | OK    | OK    | OK    | OK    | OK    | OK           |
| TYL                             | %    | .009         | .008  | .008  | .009   | .009  | .009  | .010   | .010  | .010  | .010  | .010  | .009  | .010  | .009         |
| ADH ALKALINITY                  |      | .012         | .012  | .013  | .012   | .012  | .012  | .013   | .013  | .013  | .012  | .013  | .012  | .013  | .013         |
| CONFIDENTIAL:                   |      |              |       |       |        |       |       |        |       |       |       |       |       |       |              |
| Subject to Protective Order     |      |              |       |       |        |       |       |        |       |       |       |       |       |       |              |
| of 14th Judicial District Court |      |              |       |       |        |       |       |        |       |       |       |       |       |       |              |
| No. 91-1145                     |      |              |       |       |        |       |       |        |       |       |       |       |       |       |              |

SL 013020

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY PRODUCT REPORT**

| TRICHLOR<br>TYPE 113 SHIPMENTS |      | 1965<br>AVG. | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP    | OCT   | NOV   | DEC    | 1966<br>Avg. |
|--------------------------------|------|--------------|-----|-----|-----|-----|-----|------|------|-----|--------|-------|-------|--------|--------------|
| TRANS 1,2-DICHLOROETHYLENE     | %    |              |     |     |     |     |     |      |      |     | 0      | (0.01 | 0     | -      | (0.01        |
| CARBON TETRACHLORIDE           | %    |              |     |     |     |     |     |      |      |     | 0      | (0.01 | 0     | -      | (0.01        |
| CIS 1,2 DICHLOROETHYLENE       | %    |              |     |     |     |     |     |      |      |     | 0      | 0     | 0     | -      | 0            |
| TRICHLOROETHYLENE              | %    |              |     |     |     |     |     |      |      |     | 99.99  | 99.98 | 99.98 | -      | 99.98        |
| PERCHLOROETHYLENE              | %    |              |     |     |     |     |     |      |      |     | 0      | 0     | 0     | -      | 0            |
| 1,1,2-TRICHLOROETHANE          | %    |              |     |     |     |     |     |      |      |     | (.01   | (0.01 | (0.01 | -      | (0.01        |
| GDL                            | %    |              |     |     |     |     |     |      |      |     | 0      | 0     | 0     | -      | 0            |
| NPL                            | %    |              |     |     |     |     |     |      |      |     | 0      | 0     | 0     | -      | 0            |
| APPEARANCE                     |      |              |     |     |     |     |     |      |      |     | Clear  | Clear | Clear | Clear  | Clear        |
| SPOT                           |      |              |     |     |     |     |     |      |      |     | None   | None  | Non   | -      | None         |
| RESIDUAL ODOR                  |      |              |     |     |     |     |     |      |      |     | None   | None  | None  | -      | None         |
| COLOR                          | APHA |              |     |     |     |     |     |      |      |     | (5     | (5    | (5    | 5      | (5           |
| SPECIFIC GRAVITY 20/20°C       |      |              |     |     |     |     |     |      |      |     | 1.466  | 1.466 | 1.466 | -      | 1.466        |
| DISTILLATION RANGE             | °C   |              |     |     |     |     |     |      |      |     | 86.5   | 86.6  | 86.9  | 86.7   | 86.7         |
|                                | LOW  |              |     |     |     |     |     |      |      |     | 87.1   | 87.2  | 87.3  | 87.3   | 87.2         |
|                                | HIGH |              |     |     |     |     |     |      |      |     | None   | None  | None  | -      | None         |
| FREE CHLORINE                  |      |              |     |     |     |     |     |      |      |     | None   | None  | None  | -      | None         |
| WATER CONTENT CLOUD POINT      | °C   |              |     |     |     |     |     |      |      |     | (-10   | (-10  | (-10  | (-10   | (-10         |
| NON-VOLATILE                   | %    |              |     |     |     |     |     |      |      |     | (.0001 | .0001 | .0001 | (.0001 | (.0001       |
| PH                             |      |              |     |     |     |     |     |      |      |     | 9.4    | 9.6   | 9.4   | 9.6    | 9.5          |
| % AS NaOH                      |      |              |     |     |     |     |     |      |      |     | .0007  | .0009 | .0008 | .0010  | .0008        |
| ACID ACCEPTANCE % AS NaOH      |      |              |     |     |     |     |     |      |      |     | -      | -     | -     | -      | -            |
| COPPER CORROSION               |      |              |     |     |     |     |     |      |      |     | -      | -     | -     | -      | -            |
| STANDARD STABILITY             |      |              |     |     |     |     |     |      |      |     | -      | -     | -     | -      | -            |
| TYL                            | %    |              |     |     |     |     |     |      |      |     | -      | -     | -     | -      | -            |
| ADN ALKALINITY                 |      |              |     |     |     |     |     |      |      |     | -      | -     | -     | -      | -            |

**CONFIDENTIAL:**  
Subject to Protective Order  
of 14th Judicial District Court  
No. 91-1145

SL 013021

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY PRODUCT REPORT**

| TRICHLOR<br>TYPE 115 SHIPMENTS |      | 1965<br>AVG. | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|--------------------------------|------|--------------|-----|-----|-----|-----|-----|------|------|-----|-------|-------|-------|-------|--------------|
| TRANS 1,2-DICHLOROETHYLENE     | %    |              |     |     |     |     |     |      |      |     | 0     | 0     | 0     | 0     | 0            |
| CARBON TETRACHLORIDE           | %    |              |     |     |     |     |     |      |      |     | 0     | (0.01 | (0.01 | 0     | (0.01        |
| CIS 1,2 DICHLOROETHYLENE       | %    |              |     |     |     |     |     |      |      |     | 0     | 0     | 0     | 0     | 0            |
| TRICHLOROETHYLENE              | %    |              |     |     |     |     |     |      |      |     | 99.50 | 99.52 | 99.43 | 99.49 | 99.48        |
| PERCHLOROETHYLENE              | %    |              |     |     |     |     |     |      |      |     | 0     | 0     | (0.01 | (0.01 | (0.01        |
| 1,1,2-TRICHLOROETHANE          | %    |              |     |     |     |     |     |      |      |     | (.01  | (0.01 | (0.01 | (0.01 | (0.01        |
|                                |      |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
|                                |      |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
| GDL                            | %    |              |     |     |     |     |     |      |      |     | 0     | 0     | 0     | 0     | 0            |
| NPL                            | %    |              |     |     |     |     |     |      |      |     | 0     | 0     | 0     | 0     | 0            |
|                                |      |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
| APPEARANCE                     |      |              |     |     |     |     |     |      |      |     | Clear | Clear | Clear | Clear | Clear        |
| SPOT                           |      |              |     |     |     |     |     |      |      |     | None  | None  | None  | None  | None         |
| RESIDUAL ODOR                  |      |              |     |     |     |     |     |      |      |     | None  | None  | None  | None  | None         |
| COLOR                          | APHA |              |     |     |     |     |     |      |      |     | 6     | 5     | 6     | 5     | 5            |
| SPECIFIC GRAVITY 20/20°C       |      |              |     |     |     |     |     |      |      |     | 1.461 | 1.462 | 1.461 | 1.462 | 1.462        |
| DISTILLATION RANGE             | °C   |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
|                                | LOW  |              |     |     |     |     |     |      |      |     | 86.4  | 86.6  | 86.6  | 86.6  | 86.6         |
|                                | HIGH |              |     |     |     |     |     |      |      |     | 88.4  | 87.3  | 87.4  | 87.6  | 87.7         |
| FREE CHLORINE                  |      |              |     |     |     |     |     |      |      |     | None  | None  | None  | None  | None         |
| WATER CONTENT CLOUD POINT      | °C   |              |     |     |     |     |     |      |      |     | (-10  | (-10  | (-10  | (-10  | (-10         |
| NON-VOLATILE                   | %    |              |     |     |     |     |     |      |      |     | .0001 | .0001 | .0002 | .0001 | .0001        |
| PH                             |      |              |     |     |     |     |     |      |      |     | 9.4   | 9.4   | 9.5   | 9.6   | 9.5          |
| % AS NaOH                      |      |              |     |     |     |     |     |      |      |     | .0008 | .0007 | .0010 | .0009 | .0008        |
| ACID ACCEPTANCE % AS NaOH      |      |              |     |     |     |     |     |      |      |     | 0.10  | 0.11  | 0.12  | 0.10  | 0.11         |
| COPPER CORROSION               |      |              |     |     |     |     |     |      |      |     | None  | None  | None  | None  | Non          |
| STANDARD STABILITY             |      |              |     |     |     |     |     |      |      |     | OK    | OK    | OK    | OK    | OK           |
| TYL                            | %    |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |
| ADH ALKALINITY                 |      |              |     |     |     |     |     |      |      |     | 0.013 | 0.014 | 0.014 | 0.014 | 0.014        |

CONFIDENTIAL:  
 Subject to Protective Order  
 of 14th Judicial District Court  
 No. 91-1145

SL 013022

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY PRODUCT REPORT**

[illegible]

PITTSBURGH PLATE GLASS COMPANY  
 CHEMICAL DIVISION  
 LAKE CHARLES, LOUISIANA  
 LABORATORY PRODUCT REPORT

| PERCHLOR<br>TYPE 209 SHIPMENTS  | 1965<br>AVG. | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP   | OCT   | NOV   | LEC   | 1966<br>AVG. |
|---------------------------------|--------------|-----|-----|-----|-----|-----|------|------|-----|-------|-------|-------|-------|--------------|
| TRICHLOROETHYLENE %             |              |     |     |     |     |     |      |      |     | 0     | (0.01 | 0     | 0     | (0.01        |
| PERCHLOROETHYLENE %             |              |     |     |     |     |     |      |      |     | 99.93 | 99.94 | 99.92 | 99.92 | 99.93        |
| 1,1,2 TRICHLOROETHANE %         |              |     |     |     |     |     |      |      |     | (0.01 | (0.01 | (0.01 | (0.01 | (0.01        |
| U-TETRACHLOROETHANE %           |              |     |     |     |     |     |      |      |     | 0.02  | 0.03  | 0.04  | 0.05  | 0.04         |
| EPE %                           |              |     |     |     |     |     |      |      |     | 0     | 0     | 0     | 0     | 0            |
| APPEARANCE                      |              |     |     |     |     |     |      |      |     | Clear | Clear | Clear | Clear | Clear        |
| SPOT                            |              |     |     |     |     |     |      |      |     | -     | -     | -     | None  | Non          |
| RESIDUAL ODOR                   |              |     |     |     |     |     |      |      |     | -     | -     | -     | None  | None         |
| COLOR APHA                      |              |     |     |     |     |     |      |      |     | 6     | 9     | 10    | 8     | 8            |
| SPECIFIC GRAVITY 20/20°C        |              |     |     |     |     |     |      |      |     | -     | -     | -     | 1.625 | 1.625        |
| DISTILLATION RANGE °C           |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
| LOW                             |              |     |     |     |     |     |      |      |     | -     | -     | -     | 120   | 120          |
| HIGH                            |              |     |     |     |     |     |      |      |     | -     | -     | -     | 122   | 122          |
| FREE CHLORINE                   |              |     |     |     |     |     |      |      |     | -     | -     | -     | None  | None         |
| WATER CONTENT, CLOUD POINT °C   |              |     |     |     |     |     |      |      |     | (0    | (0    | (0    | (0    | (0           |
| NON-VOLATILE GM/100 ML          |              |     |     |     |     |     |      |      |     | -     | -     | -     | .004  | .004         |
| PH                              |              |     |     |     |     |     |      |      |     | 7.0   | 6.8   | 6.8   | 6.5   | 6.8          |
| HOME %                          |              |     |     |     |     |     |      |      |     | -     | -     | -     | .010  | .010         |
| COPPER CORROSION                |              |     |     |     |     |     |      |      |     |       |       |       |       |              |
| ACIDITY ML OF 0.01 N NaOH       |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |
| FLASK MG/30 CM <sup>2</sup>     |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |
| SOXHLET MG/30 CM <sup>2</sup>   |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |
| CONDENSER MG/30 CM <sup>2</sup> |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |
| CHLORIDES PPM                   |              |     |     |     |     |     |      |      |     | -     | -     | -     | -     | -            |

CONFIDENTIAL:

Subject to Protective Order  
 of 14th Judicial District Court  
 No. 91-1145

SL 013024

| PERCHLOR<br>TYPE 208 SHIPMENTS |                       | 1965<br>AVG. | JAN    | FEB    | MAR   | APR   | MAY    | JUNE   | JULY  | AUG    | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|--------------------------------|-----------------------|--------------|--------|--------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------------|
| TRICHLOROETHYLENE              | %                     | (0.01        | 0      | 0      | 0     | 0     | (0.01  | (0.01  | (0.01 | 0      | 0     | 0     | 0     | 0     | (0.01        |
| PERCHLOROETHYLENE              | %                     | 99.90        | 99.88  | 99.88  | 99.86 | 99.87 | 99.89  | 99.92  | 99.92 | 99.93  | 99.86 | 99.91 | 99.87 | 99.87 | 99.89        |
| 1,1,2 TRICHLOROETHANE          | %                     | (0.01        | (0.01  | (0.01  | (0.01 | 0.01  | (0.01  | 0.01   | 0.01  | (0.01  | (0.01 | (0.01 | (0.01 | (0.01 | (0.01        |
| U-TETRACHLOROETHANE            | %                     | 0.03         | 0.07   | 0.07   | 0.08  | 0.08  | 0.03   | 0.01   | (0.01 | (0.01  | 0.05  | (0.01 | 0.03  | 0.05  | 0.04         |
| EPE                            | %                     | 0.05         | 0.04   | 0.04   | 0.04  | 0.04  | 0.04   | 0.04   | 0.04  | 0.04   | 0.05  | 0.05  | 0.05  | 0.05  | 0.04         |
| APPEARANCE                     |                       | Clear        | Clear  | Clear  | Clear | Clear | Clear  | Clear  | Clear | Clear  | Clear | Clear | Clear | Clear | Clear        |
| SPOT                           |                       | None         | None   | None   | None  | None  | None   | None   | None  | None   | None  | None  | None  | None  | None         |
| RESIDUAL ODOR                  |                       | None         | None   | None   | None  | None  | None   | None   | None  | None   | None  | None  | None  | None  | None         |
| COLOR                          | APHA                  | 6            | 8      | 8      | 8     | 7     | 3      | (5     | 6     | 5      | 8     | 9     | 11    | 9     | 7            |
| SPECIFIC GRAVITY 20/20°C       |                       | 1.624        | 1.624  | 1.624  | 1.624 | 1.624 | 1.624  | 1.624  | 1.624 | 1.624  | 1.624 | 1.624 | 1.623 | 1.624 | 1.624        |
| DISTILLATION RANGE             | °C                    |              |        |        |       |       |        |        |       |        |       |       |       |       |              |
| LOW                            |                       | 120.8        | 120.8  | 120.7  | 120.6 | 120.5 | 120.5  | 120.6  | 120.5 | 120.6  | 120.6 | 120.6 | 120.5 | 120.6 | 120.6        |
| HIGH                           |                       | 121.7        | 121.7  | 121.7  | 121.6 | 121.5 | 121.5  | 121.6  | 121.5 | 121.6  | 121.7 | 121.5 | 121.4 | 121.4 | 121.6        |
| FREE CHLORINE                  |                       | None         | None   | None   | None  | None  | None   | None   | None  | None   | None  | None  | None  | None  | None         |
| WATER CONTENT, CLOUD POINT     | °C                    | -3           | (0     | (0     | (0    | (0    | (0     | (0     | (0    | (0     | (0    | (0    | (0    | (0    | (0           |
| NON-VOLATILE                   | GM/100 ML             | .0007        | (.0001 | (.0001 | .0007 | .0002 | (.0001 | (.0001 | .0003 | (.0001 | .0005 | .0007 | .0005 | .0005 | .0003        |
| PH                             |                       | 6.7          | 6.8    | 6.8    | 6.8   | 6.8   | 6.7    | 6.8    | 6.9   | 6.8    | 6.9   | 6.7   | 6.8   | 6.7   | 6.8          |
| HQME                           | %                     | 0.009        | 0.008  | 0.009  | 0.008 | 0.009 | 0.009  | 0.009  | 0.010 | 0.009  | 0.011 | 0.010 | 0.010 | 0.010 | 0.009        |
| COPPER CORROSION               |                       |              |        |        |       |       |        |        |       |        |       |       |       |       |              |
| ACIDITY ML OF 0.01 N NaOH      |                       | 2            | 2      | 2      | 1     | 2     | 2      | 2      | 3     | 4      | 3     | 3     | 3     | 3     | 3            |
| FLASK                          | MG/30 CM <sup>2</sup> | (1           | 1      | 1      | 2     | 2     | 1      | 1      | 1     | 1      | 1     | 1     | 1     | 1     | 1            |
| SOXHLET                        | MG/30 CM <sup>2</sup> | 7            | 6      | 6      | 6     | 6     | 6      | 7      | 8     | 7      | 7     | 7     | 7     | 6     | 7            |
| CONDENSER                      | MG/30 CM <sup>2</sup> | 7            | 6      | 6      | 4     | 7     | 8      | 8      | 11    | 7      | 8     | 8     | 9     | 7     | 7            |
| CHLORIDES                      | PPM                   | 0.05         | 0.14   | 0.14   | (0.06 | 0.09  | 0.09   | 0.06   | 0.06  | 0.06   | 0.07  | (0.06 | 0.07  | 0.06  | 0.08         |

CONFIDENTIAL:

Subject to Protective Order  
of 4th Judicial District Court  
No. 91-1145

SL 013025

SL 013025

CONFIDENTIAL:  
Subject to Protective Order  
of 4th Judicial District Court  
No. 91-1145

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY PRODUCT REPORT**

| PERCHLOR<br>TYPE 203 SHIPMENTS  |           | 1965<br>AVG. | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP | OCT   | NOV   | DEC    | 1966<br>AVG. |
|---------------------------------|-----------|--------------|-----|-----|-----|-----|-----|------|------|-----|-----|-------|-------|--------|--------------|
| TRICHLOROETHYLENE               | %         |              |     |     |     |     |     |      |      |     |     | 0     | 0     | 0      | 0            |
| PERCHLOROETHYLENE               | %         |              |     |     |     |     |     |      |      |     |     | 99.94 | 99.88 | 99.94  | 99.92        |
| 1,1,2 TRICHLOROETHANE           | %         |              |     |     |     |     |     |      |      |     |     | 0     | (0.01 | (0.01  | (0.01        |
| U-TETRACHLOROETHANE             | %         |              |     |     |     |     |     |      |      |     |     | 0.02  | 0.06  | 0.02   | 0.03         |
| EPE                             | %         |              |     |     |     |     |     |      |      |     |     | 0     | (0.01 | 0      | (0.01        |
| APPEARANCE                      |           |              |     |     |     |     |     |      |      |     |     | Clear | Clear | Clear  | Clear        |
| SPOT                            |           |              |     |     |     |     |     |      |      |     |     | -     | None  | Non    | Non          |
| RESIDUAL ODOR                   |           |              |     |     |     |     |     |      |      |     |     | -     | None  | None   | None         |
| COLOR                           | APHA      |              |     |     |     |     |     |      |      |     |     | 8     | 9     | 8      | 8            |
| SPECIFIC GRAVITY 20/20°C        |           |              |     |     |     |     |     |      |      |     |     | -     | 1.624 | 1.626  | 1.625        |
| DISTILLATION RANGE              | °C        |              |     |     |     |     |     |      |      |     |     |       |       |        |              |
| LOW                             |           |              |     |     |     |     |     |      |      |     |     | -     | 120.7 | 120.6  | 120.6        |
| HIGH                            |           |              |     |     |     |     |     |      |      |     |     | -     | 121.2 | 121.4  | 121.3        |
| FREE CHLORINE                   |           |              |     |     |     |     |     |      |      |     |     | -     | None  | None   | Non          |
| WATER CONTENT, CLOUD POINT      | °C        |              |     |     |     |     |     |      |      |     |     | (0    | (0    | (0     | (0           |
| NON-VOLATILE                    | GM/100 ML |              |     |     |     |     |     |      |      |     |     | -     | .0011 | (.0010 | (.0010       |
| PH                              |           |              |     |     |     |     |     |      |      |     |     | 8.4   | 8.6   | 8.6    | 8.5          |
| HQME                            | %         |              |     |     |     |     |     |      |      |     |     | -     | -     | -      | -            |
| COPPER CORROSION                |           |              |     |     |     |     |     |      |      |     |     |       |       |        |              |
| ACIDITY ML OF 0.01 N NaOH       |           |              |     |     |     |     |     |      |      |     |     | -     | 2     | 2      | 2            |
| FLASK MG/30 CM <sup>2</sup>     |           |              |     |     |     |     |     |      |      |     |     | -     | 3     | 2      | 2            |
| SOXHLET MG/30 CM <sup>2</sup>   |           |              |     |     |     |     |     |      |      |     |     | -     | 10    | 6      | 8            |
| CONDENSER MG/30 CM <sup>2</sup> |           |              |     |     |     |     |     |      |      |     |     | -     | 8     | 7      | 8            |
| CHLORIDES                       | PPM       |              |     |     |     |     |     |      |      |     |     | -     | 0.30  | 0.06   | 0.18         |

SL 013026

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 of 14th Judicial District Court  
 No. 91-1145

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY PRODUCT REPORT**

| PERCHLOR<br>TYPE 207 SHIPMENTS  | 1965<br>AVG. | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP | OCT   | NOV | DEC | 1966<br>AVG. |
|---------------------------------|--------------|-----|-----|-----|-----|-----|------|------|-----|-----|-------|-----|-----|--------------|
| TRICHLOROETHYLENE %             |              |     |     |     |     |     |      |      |     |     | 0     | -   | -   | -            |
| PERCHLOROETHYLENE %             |              |     |     |     |     |     |      |      |     |     | 99.79 | -   | -   | 99.79        |
| 1,1,2 TRICHLOROETHANE %         |              |     |     |     |     |     |      |      |     |     | 0.01  | -   | -   | 0.01         |
| U-TETRACHLOROETHANE %           |              |     |     |     |     |     |      |      |     |     | 0.07  | -   | -   | 0.07         |
| EPE %                           |              |     |     |     |     |     |      |      |     |     | 0.04  | -   | -   | 0.04         |
| APPEARANCE                      |              |     |     |     |     |     |      |      |     |     | Clear | -   | -   | Clear        |
| SPOT                            |              |     |     |     |     |     |      |      |     |     | OK    | -   | -   | OK           |
| RESIDUAL ODOR                   |              |     |     |     |     |     |      |      |     |     | OK    | -   | -   | OK           |
| COLOR APHA                      |              |     |     |     |     |     |      |      |     |     | 6     | -   | -   | 6            |
| SPECIFIC GRAVITY 20/20°C        |              |     |     |     |     |     |      |      |     |     | 1.623 | -   | -   | 1.623        |
| DISTILLATION RANGE °C           |              |     |     |     |     |     |      |      |     |     |       |     |     |              |
| LOW                             |              |     |     |     |     |     |      |      |     |     | 120.5 | -   | -   | 120.5        |
| HIGH                            |              |     |     |     |     |     |      |      |     |     | 121.5 | -   | -   | 121.5        |
| FREE CHLORINE                   |              |     |     |     |     |     |      |      |     |     | None  | -   | -   | None         |
| WATER CONTENT, CLOUD POINT °C   |              |     |     |     |     |     |      |      |     |     | (0    | -   | -   | (0           |
| NON-VOLATILE GM/100 ML          |              |     |     |     |     |     |      |      |     |     | .0004 | -   | -   | .0004        |
| PH                              |              |     |     |     |     |     |      |      |     |     | 8.3   | -   | -   | 8.3          |
| HOME %                          |              |     |     |     |     |     |      |      |     |     | .009  | -   | -   | .009         |
| COPPER CORROSION                |              |     |     |     |     |     |      |      |     |     |       |     |     |              |
| ACIDITY ML OF 0.01 N NaOH       |              |     |     |     |     |     |      |      |     |     | 1.4   | -   | -   | 1.4          |
| FLASK MG/30 CM <sup>2</sup>     |              |     |     |     |     |     |      |      |     |     | (1    | -   | -   | (1           |
| SOXHLET MG/30 CM <sup>2</sup>   |              |     |     |     |     |     |      |      |     |     | 2     | -   | -   | 2            |
| CONDENSER MG/30 CM <sup>2</sup> |              |     |     |     |     |     |      |      |     |     | 4     | -   | -   | 4            |
| CHLORIDES PPM                   |              |     |     |     |     |     |      |      |     |     | 0.06  | -   | -   | 0.06         |

SL 013027

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 Subject to Protective Order  
 of 14th Judicial District Court  
 No. 91-1145

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY OPERATIONS REPORT**

| HEAVIES STILL BOTTOMS                    |     | 1965<br>AVG. | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|------------------------------------------|-----|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| TRICHLOROETHYLENE                        | %   | (0.01        | -     | -     | -     | (0.01 | (0.01 | (0.01 | (0.01 | -     | (0.01 | -     | -     | (0.01 | (0.01        |
| 1,1,2TRICHLOROETHANE                     | %   | (0.01        | -     | -     | -     | (0.01 | (0.01 | (0.01 | 0.02  | (0.01 | 0.01  | (0.01 | -     | 0.01  | (0.01        |
| PERCHLOROETHYLENE                        | %   | 18.73        | 12.56 | 14.44 | 13.49 | 8.02  | 10.52 | 12.76 | 19.94 | 18.34 | 22.96 | 17.71 | 11.06 | 13.93 | 14.64        |
| U-TETRACHLOROETHANE                      | %   | 5.01         | 3.96  | 3.14  | 2.54  | 2.40  | 3.19  | 3.26  | 3.15  | 3.75  | 3.56  | 4.09  | 4.68  | 3.65  | 3.45         |
| S-TETRACHLOROETHANE                      | %   | 38.80        | 38.12 | 34.87 | 29.67 | 40.14 | 38.07 | 32.55 | 25.19 | 22.72 | 20.55 | 25.83 | 28.20 | 31.16 | 30.59        |
| PENTACHLOROETHANE                        | %   | 27.22        | 32.62 | 34.35 | 35.42 | 34.21 | 36.03 | 37.37 | 34.71 | 36.00 | 32.99 | 32.74 | 39.26 | 33.64 | 34.94        |
| HEXACHLOROETHANE                         | %   | 2.39         | 3.19  | 2.74  | 3.21  | 2.42  | 2.34  | 2.76  | 3.90  | 4.95  | 4.92  | 5.58  | 5.56  | 4.15  | 3.81         |
| HEAVY UNKNOWN                            | %   | 1.85         | 1.80  | 1.76  | 2.16  | 1.70  | 1.59  | 1.94  | 2.63  | 3.53  | 3.74  | 3.41  | 2.67  | 2.83  | 2.48         |
| FeCl <sub>2</sub>                        | PPM | 54           | 29    | 51    | 46    | 64    | 58    | 62    | 52    | 57    | 89    | 186   | 50    | 70    | 68           |
| NON-VOLATILE                             | %   | 0.90         | 0.33  | 0.38  | 0.41  | 0.58  | 0.53  | 0.66  | 0.72  | 0.88  | 1.02  | 1.39  | 0.76  | 1.01  | 0.72         |
| HEAVIES STILL REFLUX<br>(PER STILL FEED) |     |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| TRICHLOROETHYLENE                        | %   | 1.31         | -     | -     | -     | -     | -     | -     | -     | -     | -     | 0.04  | -     | -     | 0.04         |
| 1,1,2 TRICHLOROETHANE                    | %   | 2.15         | -     | -     | -     | -     | -     | -     | -     | -     | -     | 3.43  | -     | -     | 3.43         |
| PERCHLOROETHYLENE                        | %   | 96.49        | -     | -     | -     | -     | -     | -     | -     | -     | -     | 96.42 | -     | -     | 96.42        |
| U-TETRACHLOROETHANE                      | %   | 0.03         | -     | -     | -     | -     | -     | -     | -     | -     | -     | 0.01  | -     | -     | 0.01         |
| S-TETRACHLOROETHANE                      | %   | 0.06         | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| DRIED UNSTAB. PERCHLOR                   |     |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| TRICHLOROETHYLENE                        | %   | (0.01        | -     | -     | -     | -     | (0.01 | -     | (0.01 | -     | -     | (0.01 | -     | -     | (0.01        |
| 1,1,2 TRICHLOROETHANE                    | %   | (0.01        | (0.01 | (0.01 | (0.01 | 0.01  | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01        |
| PERCHLOROETHYLENE                        | %   | 99.95        | 99.93 | 99.92 | 99.91 | 99.91 | 99.94 | 99.96 | 99.95 | 99.95 | 99.92 | 99.95 | 99.93 | 99.83 | 99.92        |
| U-TETRACHLOROETHANE                      | %   | 0.03         | 0.07  | 0.07  | 0.08  | 0.06  | 0.02  | (0.01 | (0.01 | (0.01 | 0.03  | 0.02  | 0.02  | 0.07  | 0.04         |
| H <sub>2</sub> O                         | PPM | 30           | 28    | 28    | 28    | 28    | 28    | 28    | 28    | 28    | (28   | 31    | 28    | 28    | (28          |
| PH                                       |     | 6.7          | 6.7   | 6.8   | 6.7   | 6.7   | 6.6   | 6.6   | 6.6   | 6.7   | 6.7   | 6.6   | 6.5   | 6.6   | 6.7          |
| NAI TEST - OXIDES                        | PPM | Neg.         | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.         |

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 of 14th Judicial District Court

SL 013028

**PITTSBURGH PLATE GLASS COMPANY**  
**CHEMICAL DIVISION**  
**LAKE CHARLES, LOUISIANA**  
**LABORATORY OPERATIONS REPORT**

| DRIED UNSTAB. TRICHLOR |     | 1965<br>AVG | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG |
|------------------------|-----|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|
| CARBON TETRACHLORIDE   | %   | (0.01       | -     | (0.01 | -     | -     | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | -     | -     | (0.01 | (0.01       |
| TRICHLOROETHYLENE      | %   | 99.99       | 99.98 | 99.97 | 99.96 | 99.99 | 99.99 | 99.99 | 99.99 | 99.94 | 99.97 | 99.98 | 99.97 | 99.98 | 99.98       |
| 1,1,2 TRICHLOROETHANE  | %   | (0.01       | -     | 0     | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01 | (0.01       |
| PERCHLOROETHYLENE      | %   | (0.01       | -     | 0     | (0.01 | (0.01 | (0.01 | -     | -     | -     | -     | -     | -     | 0.01  | (0.01       |
| H <sub>2</sub> O       | PPM | 42          | 50    | 51    | 51    | 51    | 50    | 50    | 50    | 52    | (50   | 55    | 51    | (50   | (50         |
| PH                     |     | 6.8         | 6.9   | 6.9   | 6.8   | 6.8   | 6.7   | 6.7   | 6.7   | 6.9   | 6.8   | 6.8   | 6.6   | 6.8   | 6.8         |
| NAI TEST - OXIDES      | PPM | Neg.        | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | Neg.  | N g.        |

SL 013029

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 of 14th Judicial District Court  
 No. 91-1145

SL 013030

PITTSBURGH PLATE GLASS COMPANY  
CHEMICAL DIVISION  
LAKE CHARLES, LOUISIANA

## PERCHLORETHYLENE - TRICHOLORETHYLENE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:  
Subject to Protective Order  
of 14th Judicial District Court  
No. 91-1145

| GENERAL DEPARTMENT                      | 1965<br>AVG. | JAN    | FEB    | MAR    | APR    | MAY    | JUNE   | JULY   | AUG    | SEP    | OCT    | NOV    | DEC    | 1966<br>AVG. |
|-----------------------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| PERCHLOR (STAB.) PRODUCTION T/D         | 65.5         | 81.7   | 86.5   | 89.9   | 65.9   | 87.1   | 89.5   | 83.7   | 80.7   | 76.8   | 58.6   | 73.2   | 68.6   | 78.5         |
| SHIPMENTS T/D                           | 60.8         | 85.4   | 91.2   | 97.0   | 57.2   | 71.2   | 125.0  | 68.0   | 63.3   | 124.0  | 42.0   | 41.4   | 114.2  | 81.7         |
| INVENTORY TONS                          | 1693.2       | 2061.7 | 1928.0 | 1708.9 | 1970.0 | 2460.6 | 1394.6 | 1882.5 | 2421.9 | 1006.2 | 1519.2 | 2473.0 | 1059.0 | 1823.8       |
| TRICHLOR (STAB.) PRODUCTION T/D         | 69.5         | 83.2   | 88.0   | 79.9   | 72.3   | 85.9   | 93.9   | 68.6   | 60.3   | 62.6   | 57.2   | 45.6   | 59.8   | 71.4         |
| SHIPMENTS T/D                           | 66.0         | 84.9   | 67.2   | 92.4   | 79.4   | 88.7   | 76.3   | 96.4   | 71.1   | 65.1   | 62.2   | 141.8  | 49.4   | 81.2         |
| INVENTORY TONS                          | 1486.0       | 1518.2 | 2101.4 | 1713.8 | 1501.5 | 1414.0 | 1942.3 | 1080.3 | 1849.9 | 1777.9 | 5045.0 | 2157.5 | 2480.4 | 2047.7       |
| UNSTAB. PERCHLOR PRODUCTION T/D         | 65.7         | 83.4   | 88.0   | 90.7   | 66.3   | 87.3   | 90.3   | 84.3   | 82.6   | 78.9   | 60.2   | 71.5   | 69.8   | 79.4         |
| EDC T/T                                 | 0.737        | 0.728  | 0.727  | 0.717  | 0.776  | 0.742  | 0.732  | 0.759  | 0.746  | 0.781  | 0.872  | 0.814  | 0.794  | 0.766        |
| CL <sub>2</sub> T/T                     | 0.474        | 0.447  | 0.462  | 0.422  | 0.463  | 0.496  | 0.484  | 0.485  | 0.489  | 0.473  | 0.560  | 0.484  | 0.490  | 0.480        |
| TRI-ETH. BOT. T/T                       | -            | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -            |
| NH <sub>3</sub> LBS./T                  | 13.1         | 15.5   | 10.3   | 8.2    | 11.3   | 15.8   | 13.6   | 17.0   | 17.3   | 12.6   | 15.1   | 23.9   | 22.9   | 15.3         |
| UNSTAB. TRICHLOR PRODUCTION T/D         | 69.3         | 82.6   | 88.6   | 82.1   | 68.1   | 90.3   | 78.3   | 68.7   | 61.9   | 68.1   | 58.5   | 43.0   | 59.6   | 70.8         |
| EDC T/T                                 | 0.931        | 0.919  | 0.918  | 0.905  | 0.954  | 0.937  | 0.924  | 0.976  | 1.011  | 0.958  | 1.069  | 1.093  | 1.003  | 0.972        |
| CL <sub>2</sub> T/T                     | 0.301        | 0.282  | 0.292  | 0.267  | 0.285  | 0.313  | 0.305  | 0.306  | 0.331  | 0.290  | 0.343  | 0.325  | 0.310  | 0.304        |
| TRI-ETH. BOT. T/T                       | -            | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -            |
| NH <sub>3</sub> LBS./T                  | 15.2         | 9.3    | 10.6   | 15.9   | 10.0   | 7.7    | 7.6    | 6.3    | 4.4    | 10.2   | 11.3   | 21.6   | 13.7   | 10.7         |
| UNSTAB. PRODUCT O <sub>2</sub> T/T      | 0.269        | 0.267  | 0.265  | 0.271  | 0.274  | 0.264  | 0.261  | 0.292  | 0.298  | 0.309  | 0.314  | 0.343  | 0.315  | 0.289        |
| N <sub>2</sub> T/T                      | 0.149        | 0.183  | 0.177  | 0.192  | 0.333  | 0.223  | 0.240  | 0.303  | 0.295  | 0.271  | 0.627  | 0.598  | 0.468  | 0.325        |
| CATALYST LBS./T                         | 1.07         | 2.03   | 2.62   | 2.27   | 3.95   | 1.03   | 2.83   | 1.75   | 2.83   | 1.86   | 2.64   | 4.99   | 3.64   | 2.70         |
| 400# STM. (ACTUAL) LBS./T               | 3924         | 3146   | 2851   | 2830   | 3174   | 2795   | 2710   | 2574   | 2953   | 2600   | 3542   | 4259   | 4032   | 3122         |
| KWH/T                                   | 67.3         | 55.9   | 52.1   | 54.1   | 59.5   | 50.4   | 53.5   | 60.4   | 67.4   | 65.4   | 78.7   | 85.5   | 74.5   | 63.1         |
| MC HVY. STILL BOTTOMS T/T               | 0.017        | 0.023  | 0.002  | 0.028  | 0.002  | 0.025  | 0.028  | 0.006  | 0.029  | 0.025  | 0.018  | 0.041  | 0.032  | 0.022        |
| UNSTAB. PRODUCT CL <sub>2</sub> YIELD % | 82.8         | 85.4   | 85.8   | 87.5   | 83.1   | 80.6   | 81.2   | 30.6   | 77.9   | 73.7   | 69.3   | 67.8   | 73.4   | 78.9         |
| C YIELD %                               | 79.5         | 80.0   | 81.3   | 80.7   | 77.0   | 78.3   | 78.7   | 76.9   | 74.7   | 78.5   | 72.8   | 73.2   | 78.1   | 77.5         |
| MAN HOURS/T STAB. PRODUCT               |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| PRODUCTION                              | 0.662        | 0.469  | 0.435  | 0.450  | 0.621  | 0.440  | 0.542  | 0.543  | 0.573  | 0.612  | 0.879  | 1.061  | 0.672  | 0.608        |
| MAINTENANCE                             | 0.663        | 0.441  | 0.247  | 0.334  | 0.578  | 0.251  | 0.474  | 0.552  | 0.754  | 0.647  | 0.888  | 1.304  | 0.937  | 0.617        |
| SALARIED                                | 0.406        | 0.251  | 0.249  | 0.265  | 0.263  | 0.189  | 0.200  | 0.194  | 0.238  | 0.242  | 0.278  | 0.272  | 0.256  | 0.241        |
| TOTAL                                   | 1.731        | 1.161  | 0.931  | 1.049  | 1.462  | 0.880  | 1.216  | 1.289  | 1.565  | 1.501  | 2.045  | 2.637  | 1.865  | 1.466        |
| CONTRACT MAN HRS. INCLUDED              | 0.024        | 0.000  | 0.000  | 0.051  | 0.039  | 0.024  | 0.000  | 0.000  | 0.032  | 0.000  | 0.051  | 0.205  | 0.000  | 0.034        |
| MAN HOURS/T SHIPPED                     |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| BULK                                    | 0.058        | 0.053  | 0.049  | 0.047  | 0.055  | 0.053  | 0.077  | 0.070  | 0.086  | 0.077  | 0.113  | 0.073  | 0.059  | 0.068        |
| DRUM                                    | 0.916        | 0.788  | 0.644  | 0.627  | 0.958  | 1.388  | 1.316  | 1.199  | 1.016  | 1.292  | 1.501  | 0.959  | 1.144  | 1.069        |
| SALARIED                                | 0.031        | 0.029  | 0.021  | 0.023  | 0.028  | 0.026  | 0.025  | 0.018  | 0.032  | 0.024  | 0.042  | 0.022  | 0.021  | 0.026        |

PITTSBURGH PLATE GLASS COMPANY  
CHEMICAL DIVISION  
LAKE CHARLES, LOUISIANA

## PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

| MATERIAL BALANCE               | 1965<br>AVG. | JAN    | FEB    | MAR    | APR    | MAY    | JUNE   | JULY   | AUG    | SEP    | OCT    | NOV    | DEC    | 1966<br>AVG. |
|--------------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| CARBON - TONS                  |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| TOTAL CARBON IN FEED           | 851.1        | 1047.8 | 992.1  | 1075.0 | 853.9  | 1152.9 | 1044.0 | 997.8  | 955.8  | 948.8  | 891.6  | 798.1  | 898.0  | 971.3        |
| CARBON IN UNSTAB. PRODUCT      | 675.4        | 838.6  | 806.4  | 867.9  | 644.3  | 903.6  | 821.9  | 767.8  | 714.0  | 699.0  | 618.0  | 540.8  | 659.3  | 740.1        |
| PROCESS LOSS BY DIFFERENCE     | 175.7        | 209.2  | 185.7  | 207.1  | 209.6  | 249.3  | 222.1  | 230.0  | 241.8  | 249.8  | 273.6  | 257.3  | 238.7  | 231.2        |
| ACCOUNTABLE PROCESS LOSSES     |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| BLOWDOWN                       | 14.3         | 15.1   | 11.3   | 9.0    | 14.0   | 15.8   | 13.9   | 12.9   | 15.9   | 17.5   | 13.0   | 17.6   | 14.3   | 14.2         |
| REACTOR                        | 145.9        | 176.1  | 156.4  | 180.1  | 177.6  | 225.8  | 200.5  | 209.4  | 205.9  | 212.3  | 240.6  | 219.7  | 204.4  | 200.7        |
| MISCELLANEOUS                  | 9.8          | 18.0   | 18.0   | 18.0   | 18.0   | 7.7    | 7.7    | 7.7    | 20.0   | 20.0   | 20.0   | 20.0   | 20.0   | 16.3         |
| SUB TOTAL                      | 170.0        | 209.2  | 185.7  | 207.1  | 209.6  | 249.3  | 222.1  | 230.0  | 241.8  | 249.8  | 273.6  | 257.3  | 238.7  | 231.2        |
| UNACCOUNTABLE PROCESS LOSSES   | 5.7          | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0          |
| CARBON LOADING LOSS            | 9.3          | 3.3    | 6.4    | 22.5   | -20.4  | 29.1   | 12.3   | 12.5   | 11.6   | 36.7   | 16.6   | -23.0  | 14.9   | 10.2         |
| TOTAL CARBON LOSSES            | 185.0        | 212.5  | 192.1  | 229.6  | 189.2  | 278.4  | 234.4  | 242.5  | 253.4  | 286.5  | 290.2  | 234.3  | 253.6  | 241.4        |
| CHLORINE - TONS                |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| TOTAL CHLORINE IN FEED         | 4145.8       | 5044.0 | 4822.0 | 5128.5 | 4054.7 | 5679.4 | 5198.8 | 4905.8 | 4762.7 | 4578.0 | 4331.8 | 3877.4 | 4340.8 | 4727.0       |
| CHLORINE IN UNSTAB. PRODUCT    | 3449.6       | 4306.2 | 4136.5 | 4485.1 | 3309.0 | 4580.6 | 4219.5 | 3958.9 | 3709.2 | 3597.0 | 3152.6 | 2836.6 | 3388.5 | 3806.6       |
| PROCESS LOSS BY DIFFERENCE     | 696.2        | 737.8  | 685.5  | 643.4  | 745.7  | 1098.8 | 979.3  | 946.9  | 1053.5 | 981.0  | 1179.2 | 1040.8 | 952.3  | 920.4        |
| ACCOUNTABLE PROCESS LOSSES     |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| BLOWDOWN                       | 82.0         | 83.6   | 62.6   | 49.8   | 77.8   | 87.7   | 77.2   | 71.5   | 88.4   | 97.0   | 72.3   | 98.0   | 79.4   | 78.8         |
| REACTOR                        | 548.5        | 562.2  | 530.9  | 501.6  | 575.9  | 982.4  | 873.4  | 846.7  | 865.1  | 784.0  | 1006.9 | 842.8  | 772.9  | 762.1        |
| MISCELLANEOUS                  | 50.5         | 92.0   | 92.0   | 92.0   | 92.0   | 28.7   | 28.7   | 28.7   | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 79.5         |
| SUB TOTAL                      | 681.0        | 737.8  | 685.5  | 643.4  | 745.7  | 1098.8 | 979.3  | 946.9  | 1053.5 | 981.0  | 1179.2 | 1040.8 | 952.3  | 920.4        |
| UNACCOUNTABLE PROCESS LOSSES   | 15.2         | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0          |
| CHLORINE LOADING LOSS          | 47.0         | 23.5   | 33.3   | 108.3  | -87.6  | 132.8  | 60.9   | 60.2   | 60.3   | 175.5  | 87.5   | -115.0 | 71.4   | 50.9         |
| TOTAL CHLORINE LOSS            | 743.2        | 761.3  | 718.8  | 751.7  | 658.1  | 1231.6 | 1040.2 | 1007.1 | 1113.8 | 1156.5 | 1266.7 | 925.8  | 1023.7 | 971.3        |
| CONFIDENTIAL:                  |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| Subject to Protective Order    |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| of 4th Judicial District Court |              |        |        |        |        |        |        |        |        |        |        |        |        |              |
| No. 91-1145                    |              |        |        |        |        |        |        |        |        |        |        |        |        |              |

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PITTSBURGH PLATE GLASS COMPANY  
CHEMICAL DIVISION  
LAKE CHARLES, LOUISIANA

## PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL  
Subject to Protective Order  
of 14th Judicial District Court  
No. 91-1145

| REACTOR NO. 1                   | 1965<br>AVG. | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|---------------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| ON STREAM TIME HRS.             | 6800*        | 669   | 672   | 744   | 610   | 744   | 720   | 744   | 672   | 720   | 744   | 662   | 733   | 8434*        |
| DISCH. PRESS. PSIG              | 9.3          | 10.0  | 13.0  | 13.9  | 12.4  | 13.1  | 13.3  | 14.0  | 13.0  | 12.6  | 13.1  | 12.4  | 12.6  | 12.8         |
| TEMP. °F VAPORIZER LIQUOR       | 248          | 268   | 288   | 312   | 285   | 282   | 287   | 288   | 275   | 280   | 286   | 280   | 260   | 283          |
| DOWTHERM OUT                    | 506          | 495   | 442   | 445   | 462   | 474   | 505   | 497   | 523   | 471   | 474   | 500   | 483   | 481          |
| HIGHEST TUBE                    | 825          | 828   | 827   | 828   | 824   | 826   | 826   | 824   | 823   | 818   | 822   | 817   | 821   | 824          |
| LOWEST TUBE                     | 796          | 785   | 797   | 802   | 800   | 803   | 793   | 788   | 778   | 791   | 780   | 780   | 784   | 790          |
| SEC. COND. DISCH                | 23           | 26    | 51    | 55    | -     | -     | 72    | 75    | 82    | 84    | 65    | 69    | 66    | 64           |
| CATALYST CHARGED LBS.           | 21208*       | 2331  | 1554  | 2501  | 2742  | 3747  | 1896  | 1773  | 6130  | 1129  | 2830  | 5710  | 2360  | 84703*       |
| CATALYST FROM CENTRIFIX LBS.    | 8720*        | 1675  | 1675  | 2500  | 2740  | 2430  | 1900  | 2080  | 6560  | 2000  | 3000  | 5700  | 2400  | 84660*       |
| FLOW GPM EDC                    | 5.2          | 4.4   | 5.0   | 5.9   | 6.0   | 4.8   | 4.9   | 4.6   | 4.8   | 5.4   | 5.3   | 5.7   | 5.0   | 5.2          |
| SCFH CL <sub>2</sub>            | 6399         | 6418  | 7561  | 6976  | 7017  | 7454  | 7142  | 6300  | 6184  | 6676  | 6098  | 6154  | 6006  | 6666         |
| AIR                             | 2207         | 1326  | 926   | 935   | 1250  | 564   | 1776  | 1879  | 1187  | 778   | 753   | 1455  | 1532  | 1197         |
| O <sub>2</sub>                  | 10303        | 10252 | 12220 | 13180 | 12086 | 11757 | 10514 | 10995 | 9499  | 11182 | 10540 | 10851 | 10623 | 11142        |
| VENT ANALYSIS CO <sub>2</sub> % | 40.0         | 34.3  | 53.0  | 58.5  | 50.9  | 43.6  | 23.5  | 14.2  | 10.9  | 41.9  | 33.9  | 38.8  | 49.8  | 37.8         |
| HCL %                           | 8.9          | 15.4  | 11.4  | 12.5  | 8.7   | 18.5  | 16.8  | 8.0   | 13.7  | 16.5  | 16.4  | 10.1  | 9.7   | 13.2         |
| PER-TRI RATIO                   | 1.01         | 1.31  | 1.02  | 1.05  | 0.97  | 1.02  | 1.12  | 1.51  | 1.23  | 1.31  | 1.28  | 1.63  | 1.30  | 1.23         |
| PFR + TRI IN CRUDE %            | 82.15        | 83.56 | 84.68 | 85.32 | 84.66 | 86.95 | 83.86 | 84.66 | 81.35 | 86.14 | 84.85 | 88.72 | 88.05 | 85.23        |
| REACTOR NO. 2                   |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| ON STREAM TIME HRS.             | 7721*        | 744   | 672   | 744   | 602   | 725   | 720   | 744   | 715   | 711   | 744   | 618   | 744   | 8483*        |
| DISCH. PRESS. PSIG              | 9.1          | 13.3  | 12.4  | 12.2  | 12.9  | 13.1  | 13.0  | 13.4  | 13.1  | 13.0  | 12.0  | 10.9  | 12.4  | 12.6         |
| TEMP. °F VAPORIZER LIQUOR       | 254          | 278   | 272   | 243   | 253   | 283   | 284   | 278   | 267   | 264   | 250   | -     | -     | 267          |
| DOWTHERM OUT                    | 506          | 439   | 471   | 436   | 443   | 468   | 497   | 493   | 510   | 339   | 567   | 517   | 478   | 472          |
| HIGHEST TUBE                    | 826          | 831   | 826   | 825   | 825   | 826   | 826   | 823   | 822   | 818   | 820   | 819   | 821   | 824          |
| LOWEST TUBE                     | 790          | 796   | 799   | 799   | 799   | 801   | 799   | 790   | 786   | 780   | 785   | 757   | 721   | 784          |
| SEC. COND. DISCH.               | 21           | 29    | 35    | 45    | -     | -     | 74    | 70    | 79    | 82    | 60    | 62    | 63    | 60           |
| CATALYST CHARGED LBS.           | 25350*       | 3059  | 2650  | 2478  | 4084  | 2174  | 1361  | 2908  | 2380  | 1481  | 1685  | 5430  | 2150  | 31840        |
| CATALYST FROM CENTRIFIX LBS.    | 8870*        | 1675  | 1675  | 2500  | 2815  | 2430  | 1400  | 2080  | 2000  | 2000  | 1500  | 5400  | 2200  | 27675*       |
| FLOW GPM EDC                    | 5.1          | 5.0   | 4.8   | 3.5   | 4.3   | 5.2   | 5.1   | 4.7   | 4.8   | 5.3   | 5.7   | 5.3   | 5.1   | 4.9          |
| SCFH CL <sub>2</sub>            | 6600         | 7664  | 7183  | 6785  | 7236  | 8221  | 7695  | 6957  | 7164  | 6343  | 5330  | 5324  | 5905  | 6818         |
| AIR                             | 2120         | 1316  | 1079  | 1756  | 1281  | 532   | 2817  | 3042  | 2208  | 1501  | 1519  | 1975  | 3003  | 1836         |
| O <sub>2</sub>                  | 9701         | 10846 | 10388 | 10303 | 10671 | 11786 | 11218 | 10964 | 10280 | 10004 | 8415  | 9784  | 8539  | 10266        |
| VENT ANALYSIS CO <sub>2</sub> % | 40.8         | -     | -     | -     | 52.7  | 54.3  | 44.4  | 27.7  | 18.8  | 20.2  | 15.1  | 29.4  | 24.9  | 31.9         |
| HCL %                           | 7.4          | -     | -     | -     | 4.8   | 11.7  | 9.1   | 4.8   | 6.5   | 16.1  | 12.9  | 6.7   | 6.1   | 8.7          |
| PER-TRI RATIO                   | 1.02         | 1.08  | 1.30  | 1.59  | 1.03  | 1.02  | 1.41  | 1.47  | 1.32  | 1.15  | 1.38  | 1.89  | 1.26  | 1.32         |
| PFR + TRI IN CRUDE %            | 80.60        | 81.80 | 84.47 | 86.63 | 85.52 | 84.94 | 86.76 | 85.73 | 85.02 | 83.04 | 83.38 | 85.37 | 80.05 | 84.39        |

\*Totals

FORM NO. 45A 210-4

CONFIDENTIAL:

Subject to Protective Order  
of 14th Judicial District Court  
No. 91-1145

PITTSBURGH PLATE GLASS COMPANY

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

SL 013033

PERCHLORETHYLENE - TRICHOLORETHYLENE DEPARTMENT OPERATIONS REPORT

| REACTOR NO. 3                 |       | 1965<br>AVG. | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|-------------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| ON STREAM TIME                | HRS.  | 8043*        | 744   | 672   | 744   | 573   | 744   | 720   | 667   | 735   | 711   | 665   | 720   | 638   | 8333*        |
| DISCH. PRESS.                 | PSIG. | 8.9          | 13.0  | 13.2  | 12.2  | 11.8  | 13.0  | 13.9  | 11.9  | 13.4  | 11.6  | 9.9   | 12.6  | 11.1  | 12.3         |
| TEMP. OF VAPORIZER LIQUOR     |       | 254          | 274   | 275   | 276   | 272   | 287   | 295   | 284   | 274   | 270   | 266   | 280   | 266   | 277          |
| DOWTHERM OUT                  |       | 511          | 442   | 452   | 456   | 452   | 435   | 462   | 482   | 493   | 511   | 544   | 482   | 506   | 476          |
| HIGHEST TUBE                  |       | 826          | 828   | 825   | 825   | 824   | 827   | 826   | 828   | 821   | 819   | 818   | 819   | 815   | 823          |
| LOWEST TUBE                   |       | 797          | 790   | 798   | 799   | 799   | 806   | 798   | 780   | 775   | 766   | 761   | 728   | 776   | 781          |
| SEC. COND. DISCH.             |       | 22           | 25    | 35    | 42    | -     | -     | 70    | 76    | 82    | 81    | 75    | 70    | 58    | 61           |
| CATALYST CHARGED              | LBS.  | 24361*       | 1537  | 2373  | 2271  | 2494  | 2057  | 1430  | 896   | 2440  | 2162  | 1400  | 2670  | 4090  | 25820*       |
| CATALYST FROM CENTRIFIX       | LBS.  | 9545*        | 1675  | 1675  | 2500  | 2940  | 2430  | 1400  | 2080  | 2000  | 2000  | 1500  | 2700  | 4000  | 26900*       |
| FLOW GPM EDC                  |       | 5.0          | 5.0   | 5.1   | 6.0   | 5.8   | 5.3   | 5.0   | 4.5   | 4.9   | 5.2   | 5.3   | 5.6   | 4.8   | 5.2          |
| SCFH CL <sub>2</sub>          |       | 6489         | 7429  | 7766  | 7103  | 7373  | 8364  | 7889  | 7143  | 7218  | 6364  | 6222  | 5606  | 5605  | 7008         |
| AIR                           |       | 2091         | 1532  | 1045  | 800   | 1422  | 427   | 1333  | 1441  | 1116  | 696   | 766   | 577   | 1119  | 1023         |
| O <sub>2</sub>                |       | 9707         | 11319 | 11596 | 11402 | 10938 | 12228 | 10963 | 10613 | 10808 | 10088 | 9019  | 9067  | 9761  | 10650        |
| VENT ANALYSIS CO <sub>2</sub> | %     | 40.2         | -     | -     | -     | 48.8  | 36.8  | 19.5  | 19.6  | 19.0  | 20.1  | 15.1  | 9.2   | 30.0  | 24.2         |
| HCL                           | %     | 8.0          | -     | -     | -     | 6.7   | 16.6  | 11.5  | 7.4   | 7.5   | 5.1   | 15.7  | 7.2   | 6.0   | 9.3          |
| PER-TRI RATIO                 |       | 0.99         | 1.07  | 1.11  | 1.16  | 1.17  | 1.03  | 1.43  | 1.41  | 1.29  | 1.44  | 1.70  | 1.61  | 1.51  | 1.33         |
| PER 1 TRI IN CRUDE            | %     | 81.12        | 80.55 | 82.87 | 84.00 | 82.46 | 81.73 | 81.61 | 80.75 | 84.04 | 83.15 | 79.15 | 74.81 | 85.71 | 81.74        |
| REACTOR NO. 4                 |       |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| ON STREAM TIME                | HRS.  | 8130*        | 744   | 672   | 708   | 555   | 731   | 668   | 729   | 709   | 720   | 702   | 686   | 671   | 8295*        |
| DISCH. PRESS.                 | PSIG. | 9.3          | 13.5  | 13.5  | 13.5  | 12.5  | 12.5  | 12.9  | 13.2  | 12.6  | 12.7  | 11.3  | 9.9   | 8.8   | 12.0         |
| TEMP. OF VAPORIZER LIQUOR     |       | 260          | 283   | 287   | 300   | 284   | 283   | 283   | 281   | 282   | 280   | 272   | 270   | 247   | 279          |
| DOWTHERM OUT                  |       | 510          | 422   | 442   | 460   | 469   | 477   | 467   | 448   | 469   | 474   | 481   | 525   | 498   | 469          |
| HIGHEST TUBE                  |       | 826          | 827   | 824   | 825   | 826   | 826   | 826   | 825   | 822   | 820   | 823   | 817   | 818   | 823          |
| LOWEST TUBE                   |       | 794          | 799   | 796   | 796   | 796   | 800   | 798   | 794   | 788   | 769   | 754   | 744   | 757   | 783          |
| SEC. COND. DISCH.             |       | 23           | 27    | 38    | 45    | -     | -     | 104   | 82    | 84    | 84    | 63    | 66    | 69    | 66           |
| CATALYST CHARGED              | LBS.  | 9110*        | 1548  | 1761  | 4911  | 2515  | 1758  | 9610  | 2754  | 1610  | 3266  | 4065  | 3100  | 6180  | 43078*       |
| CATALYST FROM CENTRIFIX       | LBS.  | 9145*        | 1675  | 1675  | 5500  | 3340  | 2430  | 9600  | 2080  | 2000  | 2000  | 3980  | 3110  | 6180  | 43570*       |
| FLOW GPM EDC                  |       | 4.9          | 4.4   | 4.7   | 5.1   | 5.6   | 4.6   | 4.7   | 4.4   | 4.4   | 5.8   | 5.4   | 5.3   | 4.1   | 4.9          |
| SCFH CL <sub>2</sub>          |       | 6048         | 7085  | 7109  | 6913  | 7260  | 7349  | 7353  | 7336  | 6765  | 5850  | 6330  | 5325  | 5157  | 6653         |
| AIR                           |       | 2016         | 1322  | 993   | 1296  | 912   | 545   | 1933  | 1657  | 1175  | 874   | 1178  | 1502  | 1431  | 1235         |
| O <sub>2</sub>                |       | 9934         | 11317 | 11495 | 11680 | 11483 | 10803 | 10721 | 10625 | 10956 | 10681 | 9046  | 8989  | 8529  | 10527        |
| VENT ANALYSIS CO <sub>2</sub> | %     | 40.9         | -     | -     | 57.8  | 54.6  | 26.1  | 37.9  | 19.7  | 27.4  | 17.2  | 18.7  | 20.7  | 32.5  | 31.3         |
| HCL                           | %     | 9.3          | -     | -     | 10.0  | 8.7   | 14.3  | 11.9  | 8.1   | 9.5   | 8.0   | 17.7  | 12.3  | 11.1  | 11.2         |
| PER-TRI RATIO                 |       | 1.03         | 1.15  | 1.09  | 1.24  | 0.96  | 1.14  | 1.33  | 1.45  | 1.35  | 1.33  | 1.59  | 1.38  | 1.96  | 1.33         |
| PER 1 TRI IN CRUDE            | %     | 81.66        | 85.63 | 85.79 | 87.80 | 85.16 | 85.74 | 88.96 | 86.47 | 87.47 | 82.45 | 82.12 | 81.64 | 84.96 | 85.35        |

\*Totals

FORM NO. 45A 210-5

SL 013034

## PITTSBURGH PLATE GLASS COMPANY

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

## PERCHLORETHYLENE - TRICHOLORETHYLENE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:  
Subject to Protective Order  
of 14th Judicial District Court  
No. 91-1145

| REFRIGERATED    |            | 1965<br>AVG. | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEP   | OCT   | NOV   | DEC   | 1966<br>AVG. |
|-----------------|------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| TEMP. °F        | WARM (OUT) | 6            | 12    | 25    | 30    | -     | -     | 58    | 60    | 67    | 70    | 47    | 50    | 51    | 47           |
|                 | COLD (IN)  | 3            | 6     | 18    | 23    | -     | -     | 39    | 52    | 60    | 62    | 40    | 43    | 41    | 38           |
| DRYING STILL    |            |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| TEMP. °F        | BOTTOM     | 203          | 207   | 211   | 213   | 212   | 210   | 211   | 212   | 211   | 208   | 208   | 211   | 210   | 210          |
|                 | TOP        | 139          | 138   | 143   | 150   | 162   | 178   | 173   | 176   | 172   | 162   | 153   | 156   | 164   | 161          |
| BOTTOM PRESSURE | PSIG       | 1.40         | 1.45  | 1.42  | 1.51  | 1.43  | 1.15  | 1.00  | 0.91  | 1.19  | 0.85  | 0.94  | 0.90  | 0.61  | 1.11         |
| PER-TRI STILL   |            |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| FEED            | GPM        | 19.8         | 21.7  | 22.0  | 21.6  | 20.7  | 21.6  | 20.7  | 19.4  | 19.7  | 20.0  | 17.3  | 17.2  | 17.4  | 19.9         |
| REFLUX          | GPM        | 37.1         | 34.7  | 34.6  | 34.6  | 34.0  | 34.7  | 35.3  | 34.5  | 32.1  | 29.7  | 32.5  | 33.9  | 38.1  | 34.1         |
| BOTTOM TEMP.    | °F         | 280          | 286   | 288   | 288   | 287   | 288   | 288   | 287   | 286   | 287   | 289   | 287   | 290   | 288          |
| OVERHEAD TEMP.  | °F         | 184          | 188   | 191   | 192   | 192   | 192   | 193   | 193   | 193   | 194   | 193   | 190   | 193   | 192          |
| HEAVIES STILL   |            |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| FEED            | GPM        | 9.6          | 9.5   | 10.1  | 9.6   | 8.8   | 9.3   | 9.7   | 9.9   | 8.9   | 8.7   | 10.5  | 8.7   | 8.2   | 9.3          |
| REFLUX          | GPM        | 96.3         | 97.9  | 96.6  | 89.9  | 79.3  | 86.8  | 88.3  | 86.8  | 93.0  | 69.7  | 78.3  | 84.2  | 97.1  | 87.3         |
| BOTTOM TEMP.    | °F         | 336          | 345   | 344   | 347   | 347   | 346   | 344   | 341   | 344   | 332   | 342   | 347   | 344   | 344          |
| OVERHEAD TEMP.  | °F         | 256          | 262   | 265   | 264   | 261   | 262   | 263   | 263   | 263   | 261   | 263   | 262   | 263   | 263          |
| PER STILL       |            |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| FEED            | GPM        | 8.35         | 10.31 | 10.67 | 10.32 | 9.19  | 9.63  | 9.86  | 9.26  | 8.45  | 8.74  | 10.44 | 8.89  | 8.74  | 9.54         |
| REFLUX          | GPM        | 20.35        | 17.15 | 17.71 | 19.48 | 18.19 | 16.87 | 16.25 | 15.98 | 19.17 | 19.17 | 18.09 | 19.07 | 18.06 | 17.93        |
| RECYCLE         | GPM        | .277         | .256  | .201  | .118  | .176  | .192  | .060  | .002  | -     | -     | -     | -     | -     | 0.144        |
| TO WASH COLUMN  | GPM        | 7.51         | 8.89  | 9.49  | 9.49  | 8.73  | 8.99  | 9.40  | 9.54  | 8.82  | 8.32  | 9.67  | 8.78  | 8.31  | 9.04         |
| BOTTOM TEMP.    | °F         | 275          | 278   | 281   | 283   | 281   | 279   | 279   | 279   | 283   | 283   | 282   | 282   | 281   | 281          |
| OVERHEAD TEMP.  | °F         | 237          | 246   | 249   | 246   | 244   | 245   | 246   | 247   | 247   | 236   | 250   | 245   | 245   | 246          |
| TRI-STILL       |            |              |       |       |       |       |       |       |       |       |       |       |       |       |              |
| FEED            | GPM        | 10.20        | 9.53  | 9.84  | 9.50  | 9.20  | 9.43  | 8.46  | 7.85  | 8.68  | 9.36  | 7.37  | 7.05  | 7.49  | 8.65         |
| REFLUX          | GPM        | 73.43        | 76.35 | 74.81 | 70.75 | 71.33 | 72.02 | 70.14 | 60.48 | 54.85 | 53.68 | 53.99 | 56.50 | 60.10 | 64.58        |
| BOTTOMS         | GPM        | 8.38         | 9.62  | 10.15 | 9.83  | 9.83  | 10.13 | 8.96  | 8.19  | 8.90  | 9.58  | 6.83  | 6.21  | 9.35  | 8.96         |
| RECYCLE         | GPM        | 1.482        | 1.499 | 1.249 | 1.369 | 1.349 | 1.320 | .779  | .818  | 1.190 | 1.507 | 1.531 | 1.480 | 1.253 | 1.304        |
| BOTTOM TEMP.    | °F         | 234          | 240   | 241   | 239   | 237   | 237   | 238   | 234   | 233   | 231   | 231   | 232   | 234   | 236          |
| OVERHEAD TEMP.  | °F         | 140          | 141   | 143   | 145   | 145   | 144   | 146   | 147   | 147   | 143   | 142   | 146   | 144   | 144          |

**PITTSBURGH PLATE GLASS COMPANY**

**CHEMICAL DIVISION**

LAKE CHARLES, LOUISIANA

## PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

| TRI TOPPING STILL                                                                                     |        | 1965<br>AVG. | JAN  | FEB   | MAR  | APR  | MAY  | JUNE | JULY | AUG  | SEP  | OCT  | NOV  | DEC  | 1966<br>AVG. |
|-------------------------------------------------------------------------------------------------------|--------|--------------|------|-------|------|------|------|------|------|------|------|------|------|------|--------------|
| BOTTOM TEMP.                                                                                          | °F     | 194          | 198  | 201   | 201  | 200  | 200  | 199  | 199  | 200  | 199  | 197  | 196  | 196  | 199          |
| OVERHEAD TEMP.                                                                                        | °F     | 190          | 193  | 196   | 197  | 195  | 195  | 196  | 196  | 196  | 195  | 194  | 194  | 194  | 195          |
| NEUTRALIZATION                                                                                        |        |              |      |       |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR                                                                                              |        |              |      |       |      |      |      |      |      |      |      |      |      |      |              |
| NH <sub>3</sub>                                                                                       | PSIG   | 10.5         | 10.8 | 10.6  | 10.2 | 9.8  | 9.8  | 8.8  | 11.9 | 13.2 | 13.4 | 12.2 | 14.0 | 13.8 | 11.5         |
| FLOW TO STG.                                                                                          | GPM    | 7.24         | 8.47 | 8.70  | 9.35 | 8.72 | 9.04 | 9.39 | 9.31 | 8.46 | 8.27 | 8.18 | 7.90 | 7.63 | 8.62         |
| TRICHLOR                                                                                              |        |              |      |       |      |      |      |      |      |      |      |      |      |      |              |
| NH <sub>3</sub>                                                                                       | PSIG   | 10.4         | 7.0  | 8.9   | 7.9  | 7.5  | 7.5  | 9.9  | 9.7  | 7.9  | 6.7  | 6.0  | 8.1  | 7.6  | 8.0          |
| FLOW TO STG.                                                                                          | GPM    | 7.55         | 9.92 | 10.49 | 9.17 | 8.74 | 9.15 | 7.97 | 7.63 | 9.87 | 7.85 | 5.59 | 5.72 | 6.39 | 8.21         |
| <b>CONFIDENTIAL:</b><br>Subject to Protective Order<br>of 14th Judicial District Court<br>No. 91-1145 |        |              |      |       |      |      |      |      |      |      |      |      |      |      |              |
| SL                                                                                                    | 013035 |              |      |       |      |      |      |      |      |      |      |      |      |      |              |

PITTSBURGH PLATE GLASS COMPANY  
 CHEMICAL DIVISION  
 LAKE CHARLES, LOUISIANA  
 SUPPLEMENTARY REPORT

CONFIDENTIAL:  
 Subject to Protective Order  
 of 14th Judicial District Court  
 No. 91-1145

| TERMINAL DATA       | 1965<br>AVG. | JAN  | FEB  | MAR  | APR  | MAY  | JUNE | JULY | AUG  | SEP  | OCT  | NOV  | DEC  | 1966<br>AVG. |
|---------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|
| CHICAGO             |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| SHIPMENTS TO TONS   |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 321          | 0    | 1290 | 0    | 1356 | 0    | 0    | 0    | 0    | 1403 | 0    | 0    | 0    | 337          |
| TRICHLOR            | 288          | 1301 | 62   | 0    | 420  | 379  | 371  | 1675 | 0    | 0    | 591  | 1672 | 0    | 539          |
| "TRI-ETHANE" (B)    | 264          | 1424 | 133  | 0    | 286  | 276  | 611  | 1042 | 684  | 628  | 502  | 489  | 334  | 534          |
| SHIPMENTS FROM TONS |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 504          | 816  | 352  | 710  | 298  | 189  | 479  | 219  | 349  | 312  | 475  | 539  | 262  | 417          |
| TRICHLOR            | 696          | 1226 | 563  | 1048 | 356  | 471  | 644  | 392  | 553  | 701  | 653  | 522  | 826  | 663          |
| "TRI-ETHANE" (B)    | 451          | 606  | 440  | 1077 | 566  | 466  | 670  | 559  | 888  | 731  | 718  | 419  | 427  | 631          |
| EOM INVENTORY TONS  |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 510          | 682  | 354  | 931  | 1992 | 1798 | 1316 | 1097 | 746  | 435  | 1372 | 834  | 575  | 1011         |
| TRICHLOR            | 826          | 139  | 932  | 308  | 166  | 92   | 120  | 1400 | 839  | 135  | 108  | 1573 | 733  | 545          |
| "TRI-ETHANE" (B)    | 826          | 354  | 1444 | 487  | 49   | 94   | 125  | 330  | 270  | 117  | 43   | 44   | 68   | 285          |
| MC KEES ROCKS       |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| SHIPMENTS TO TONS   |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 790          | 1395 | 941  | 1432 | 0    | 898  | 0    | 1439 | 470  | 543  | 0    | 500  | 0    | 635          |
| TRICHLOR            | 1368         | 0    | 878  | 1498 | 873  | 1232 | 474  | 0    | 1404 | 768  | 0    | 1594 | 0    | 727          |
| "TRI-ETHANE" (B)    | 552          | 0    | 1007 | 1309 | 556  | 525  | 923  | 0    | 883  | 0    | 0    | 378  | 0    | 465          |
| "VAPOR CHLOR" (FM)  | 21           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0            |
| SHIPMENTS FROM TONS |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 626          | 386  | 516  | 1607 | 732  | 848  | 843  | 629  | 670  | 578  | 425  | 586  | 194  | 668          |
| TRICHLOR            | 738          | 1005 | 1133 | 1224 | 1133 | 672  | 1812 | 481  | 491  | 822  | 662  | 499  | 664  | 883          |
| "TRI-ETHANE" (B)    | 579          | 482  | 726  | 1080 | 592  | 736  | 737  | 696  | 392  | 505  | 341  | 160  | 326  | 564          |
| "VAPOR CHLOR" (FM)  | 27           | 8    | 21   | 43   | 6    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6            |
| EOM INVENTORY TONS  |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR            | 454          | 101  | 856  | 594  | 1308 | 459  | 756  | 126  | 1740 | 1159 | 1276 | 687  | 1001 | 839          |
| TRICHLOR            | 455          | 1234 | 103  | 1256 | 119  | 317  | 724  | 716  | 592  | 666  | 768  | 266  | 1193 | 663          |
| "TRI-ETHANE" (B)    | 590          | 980  | 252  | 150  | 880  | 698  | 484  | 703  | 574  | 513  | 171  | 10   | 60   | 456          |
| "VAPOR CHLOR" (FM)  | 40           | 34   | 14   | 29   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6            |

SL 013036

PITTSBURGH PLATE GLASS COMPANY  
 CHEMICAL DIVISION  
 LAKE CHARLES, LOUISIANA  
 SUPPLEMENTARY REPORT

| TERMINAL DATA                                                                                  | 1965<br>AVG. | JAN  | FEB  | MAR  | APR  | MAY  | JUNE | JULY | AUG  | SEP  | OCT  | NOV  | DEC  | 1966<br>AVG. |
|------------------------------------------------------------------------------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|
| PITTSBURG                                                                                      |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| SHIPMENTS TO TONS                                                                              |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| E-50                                                                                           | 1861         | 2497 | 0    | 3300 | 0    | 1703 | 3355 | 0    | 3400 | 1726 | 2592 | 0    | 2355 | 1744         |
| SHIPMENTS FROM TONS                                                                            |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| E-50                                                                                           | 1734         | 1857 | 1732 | 2143 | 2040 | 2087 | 2005 | 2149 | 2681 | 2227 | 2297 | 2087 | 3028 | 2194         |
| EOM INVENTORY TONS                                                                             |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| E-50                                                                                           | 1398         | 1055 | 2342 | 257  | 1448 | 2662 | 697  | 1806 | 405  | 1067 | 3080 | 2350 | 1640 | 1567         |
| SAN PEDRO                                                                                      |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| SHIPMENTS TO TONS                                                                              |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR                                                                                       | 432          | 743  | 0    | 1115 | 0    | 753  | 769  | 0    | 756  | 0    | 631  | 0    | 1184 | 496          |
| TRICHLOR                                                                                       | 154          | 656  | 0    | 0    | 153  | 0    | 57   | 0    | 47   | 98   | 507  | 49   | 0    | 131          |
| "TRI-ETHANE" ®                                                                                 | 222          | 479  | 0    | 0    | 0    | 498  | 0    | 0    | 481  | 14   | 0    | 0    | 370  | 154          |
| E-50                                                                                           | 699          | 2000 | 0    | 2153 | 0    | 3155 | 2364 | 0    | 1243 | 0    | 3152 | 0    | 2400 | 1372         |
| SHIPMENTS FROM TONS                                                                            |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR                                                                                       | 518          | 542  | 286  | 726  | 766  | 292  | 424  | 347  | 424  | 385  | 560  | 321  | 433  | 459          |
| TRICHLOR                                                                                       | 234          | 226  | 451  | 732  | 255  | 334  | 421  | 434  | 577  | 477  | 464  | 631  | 341  | 445          |
| "TRI-ETHANE" ®                                                                                 | 151          | 162  | 67   | 365  | 287  | 131  | 235  | 163  | 189  | 187  | 147  | 155  | 234  | 194          |
| E-50                                                                                           | 964          | 960  | 2625 | 575  | 2226 | 862  | 1142 | 1166 | 1841 | 3669 | 1174 | 1142 | 994  | 1615         |
| EOM INVENTORY TONS                                                                             |              |      |      |      |      |      |      |      |      |      |      |      |      |              |
| PERCHLOR                                                                                       | 829          | 354  | 817  | 91   | 418  | 964  | 545  | 959  | 533  | 898  | 963  | 641  | 1383 | 714          |
| TRICHLOR                                                                                       | 776          | 542  | 740  | 203  | 335  | 179  | 96   | 111  | 235  | 263  | 773  | 314  | 611  | 367          |
| "TRI-ETHANE" ®                                                                                 | 699          | 625  | 1030 | 664  | 407  | 773  | 536  | 146  | 176  | 465  | 315  | 158  | 287  | 465          |
| E-50                                                                                           | 943          | 1204 | 580  | 1174 | 1133 | 1847 | 742  | 1930 | 337  | 547  | 3296 | 2432 | 3801 | 1585         |
| CONFIDENTIAL:<br>Subject to Protective Order<br>of 14th Judicial District Court<br>No. 91-1145 |              |      |      |      |      |      |      |      |      |      |      |      |      |              |

SL 013037