



**Nuclear Fuel Services, Inc.** ERWIN, TENNESSEE 37650

A Subsidiary of Getty Oil Company

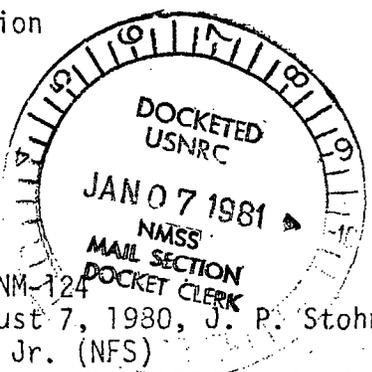
December 9, 1980

(615) 743-91

U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly  
Director

- Reference:
- (1) Docket 70-143, SNM-124
  - (2) Letter dated August 7, 1980, J. P. Stohr (NRC) to W. C. Manser, Jr. (NFS)
  - (3) Letter dated October 30, 1980, W. C. Manser, Jr. (NFS) to J. P. O'Reilly (NRC)
  - (4) Letter dated November 7, 1980, W. C. Manser, Jr. (NFS) to J. P. O'Reilly (NRC)
  - (5) Letter received November 24, 1980, J. P. O'Reilly (NRC) to W. C. Manser, Jr. (NFS)



U.S. NUCLEAR REG. COMMISSION  
MAIL SECTION

DEC 29 AM 11 55

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Gentlemen:

As required by Reference 2 above and in accordance with Condition 61, Amendment No. 6, SNM-124, we hereby report the status of investigative and/or corrective actions taken on the main process stacks of Buildings 302/303 and 233; also, updates the daily air concentrations from each stack are included as Attachments I and II.

Building 302/303 corrective actions taken or planned since the previous report of November 7 (Reference 4) are as follows:

- (1) A damper was installed in the stainless steel ductwork from the [redacted].
- (2) The demister pad in the [redacted] scrubber was replaced.
- (3) Sections of PVC ductwork were re-glued to increase the vacuum in the [redacted] ventilation system and to decrease [redacted] crystalline build-up.
- (4) Design of a new [redacted] box is presently underway.

Attachment I is an update of the Building 302/303 daily stack monitoring results since the previous report. The [redacted] process was shut down November 11 through November 20. During this time period the stack air activity decreased significantly; the 7-day average fell below the License Condition No. 61 reporting limits on November 16. Since the [redacted] restart on November 21, the stack concentrations have risen, but on only two occasions has the daily activity exceeded  $1 \times 10^{-10}$   $\mu\text{Ci/ml}$ . The 7-day average activity remained slightly below the License Condition No. 61 action point through December 1.

**FILE EXHIBIT**

*info*

The following actions have been taken or are planned for the near future in Building 233:

- (1) A filter was installed in the scrubber solution recirculating line to reduce nozzle plugging.
- (2) Selective in-duct sampling has been initiated to aid in identifying the process area contributing the largest concentration of radioactivity to the stack effluent.
- (3) During the next inventory shut-down (approximately December 11) a new damper will be installed in the [REDACTED] ductwork to replace the present orifice plate.
- (4) The necessary steps to meet the corrective actions discussed in Reference 5 have been initiated.
- (5) Improved sampling system as previously reported.

Attachment II is an update of the Building 233 daily stack monitoring results since the previous report of October 30 (Reference 3). The data indicate that the corrective actions taken thus far are lowering the concentrations released. Our investigation is continuing.

We will keep you informed of our progress and the results of further corrective action in both process areas.

Yours very truly,

  
W. C. Manser, Jr.  
General Manager

WCM/pts

cc: Mr. R. G. Page, Acting Chief ✓  
Uranium Fuel Licensing Branch  
Washington, D. C.

U. S. Nuclear Regulatory Commission  
c/o Document Management Branch  
Washington, D. C. 20555

## ATTACHMENT II

Summary of Building 233 Scrubber Stack Monitoring(Alpha Radioactivity -  $\mu\text{Ci/ml} \times 10^{-12}$ )

| <u>Date (or week ending)</u> | <u>Sample Filter</u> | <u>Sample Impinger</u> | <u>7-Day Average</u> |
|------------------------------|----------------------|------------------------|----------------------|
| 10/24                        | 10,173               | 166                    | 1,747                |
| 10/25                        | 5,388                | (1)                    | 2,505                |
| 10/26                        | 4,721                | (1)                    | 3,167                |
| 10/27                        | 1,239                | 29                     | 3,337                |
| 10/28                        | 444                  | 16                     | 3,391                |
| 10/29                        | 1,046                | 312                    | 3,434                |
| 10/30                        | 840                  | 80                     | 3,493                |
| 10/31                        | 378                  | 42                     | 2,076                |
| 11/1                         | 413                  | 10                     | 1,367                |
| 11/2                         | 311                  | 25                     | 741                  |
| 11/3                         | 7                    | 7                      | 562                  |
| 11/4                         | 1,442                | 36                     | 707                  |
| 11/5                         | 2,828                | 70                     | 927                  |
| 11/6                         | 285                  | 91                     | 849                  |
| 11/7                         | 161                  | 28                     | 816                  |
| 11/8                         | 79                   | 8                      | 768                  |
| 11/9                         | 4                    | 11                     | 722                  |
| 11/10                        | 15                   | 5                      | 723                  |
| 11/11                        | 125                  | 64                     | 539                  |
| 11/12                        | 28                   | 21                     | 132                  |
| 11/13                        | 70                   | 28                     | 92                   |
| 11/14                        | 10                   | 19                     | 70                   |
| 11/15                        | 108                  | 20                     | 75                   |
| 11/16                        | 78                   | 18                     | 87                   |
| 11/17                        | 188                  | 55                     | 119                  |
| 11/18                        | 315                  | 7                      | 138                  |
| 11/19                        | 331                  | 10                     | 180                  |
| 11/20                        | 80                   | 10                     | 178                  |
| 11/21                        | 73                   | 14                     | 187                  |
| 11/22                        | 47                   | 12                     | 177                  |
| 11/23                        | 1                    | 12                     | 165                  |
| 11/24                        | 127                  | 12                     | 150                  |
| 11/25                        | 61                   | 10                     | 114                  |
| 11/26                        | 60                   | 14                     | 76                   |
| 11/27                        | 42                   | 13                     | 71                   |
| 11/28                        | 17                   | 79                     | 72                   |
| 11/29                        | 34                   | 71                     | 79                   |
| 11/30                        | 30                   | 105                    | 96                   |
| 12/1                         | 17                   | 31                     | 83                   |

(1) Impinger samples contaminated during clean-out of sampling probes and lines.

## ATTACHMENT I

Summary of Building 302/3 Stack Monitoring  
(Combined Two-Sampler Results)

Units: ( $\mu\text{Ci/ml} \times 10^{-12}$ )

| Sample<br>Collection<br>Date | <u>Membrane Filters</u>  |                          | <u>Impingers</u>         |                          | <u>Total</u>             |                          |
|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                              | <u>Daily<br/>Average</u> | <u>7-Day<br/>Average</u> | <u>Daily<br/>Average</u> | <u>7-Day<br/>Average</u> | <u>Daily<br/>Average</u> | <u>7-Day<br/>Average</u> |
| 11/5/80                      | 169                      | 205                      | 13                       | 10                       | 182                      | 215                      |
| 11/6/80                      | 80                       | 202                      | 7                        | 11                       | 87                       | 213                      |
| 11/7/80                      | 124                      | 187                      | 8                        | 12                       | 132                      | 199                      |
| 11/8/80                      | 81                       | 165                      | 9                        | 11                       | 90                       | 176                      |
| 11/9/80                      | 203                      | 165                      | 34                       | 13                       | 237                      | 178                      |
| 11/10/80                     | 109                      | 153                      | 11                       | 13                       | 120                      | 166                      |
| 11/11/80                     | 127                      | 128                      | 13                       | 14                       | 140                      | 142                      |
| 11/12/80                     | 89                       | 116                      | 8                        | 13                       | 97                       | 129                      |
| 11/13/80                     | 96                       | 119                      | 28                       | 16                       | 124                      | 135                      |
| 11/14/80                     | 81                       | 112                      | 9                        | 16                       | 90                       | 128                      |
| 11/15/80                     | 6                        | 102                      | 11                       | 16                       | 17                       | 118                      |
| 11/16/80                     | 13                       | 75                       | 22                       | 15                       | 35                       | 90                       |
| 11/17/80                     | 17                       | 61                       | 3                        | 13                       | 20                       | 74                       |
| 11/18/80                     | 10                       | 45                       | 5                        | 12                       | 15                       | 57                       |
| 11/19/80                     | 4                        | 32                       | 16                       | 13                       | 20                       | 45                       |
| 11/20/80                     | 2                        | 19                       | 2                        | 10                       | 4                        | 29                       |
| 11/21/80                     | 3                        | 8                        | 3                        | 9                        | 6                        | 17                       |
| 11/22/80                     | 22                       | 10                       | 7                        | 8                        | 29                       | 18                       |
| 11/23/80                     | 48                       | 15                       | 31                       | 10                       | 79                       | 25                       |
| 11/24/80                     | 20                       | 16                       | 15                       | 11                       | 35                       | 27                       |
| 11/25/80                     | 19                       | 17                       | 31                       | 15                       | 50                       | 32                       |
| 11/26/80                     | 69                       | 26                       | 13                       | 15                       | 82                       | 41                       |
| 11/27/80                     | 149                      | 47                       | 43                       | 20                       | 192                      | 67                       |
| 11/28/80                     | 53                       | 54                       | 12                       | 22                       | 65                       | 76                       |
| 11/29/80                     | 50                       | 58                       | 5                        | 21                       | 55                       | 79                       |
| 11/30/80                     | 153                      | 73                       | 11                       | 19                       | 164                      | 92                       |
| 12/1/80                      | 84                       | 82                       | 6                        | 17                       | 90                       | 99                       |