

# 1998 Human Factors Information System Report for Plant Docket 324

Combined IR/ER/LER Report  
Docket: 50-324 BRUNSWICK 2

Total Number of Hits in Date Range: 122  
From 01/01/1998 to 12/31/1998  
2x National Average: 255

| Details                | Department          | Work Type          | Docket/Report  |
|------------------------|---------------------|--------------------|----------------|
| Communications IR      |                     |                    |                |
| Number of items: 3     |                     |                    |                |
| Percent of total: 2.46 |                     |                    |                |
| 54-No communication    | O-Operations        | P-Procedure Dev    | 50-324/1998005 |
|                        | O-Operations        |                    |                |
| 53-Communication LT    | C-Chemistry         | B-Bal of Plant Ops | 50-324/1998006 |
|                        | C-Chemistry         |                    |                |
| 53-Communication LT    | W-Work Control / Sc | M-Maint / Repair   | 50-324/1998007 |
|                        | W-Work Control / Sc |                    |                |

Communications ER  
Number of items: 0  
Percent of total: 0

Communications LER  
Number of items: 0  
Percent of total: 0

Human-System Interface and Environm IR  
Number of items: 10  
Percent of total: 8.2

|                 |                     |                    |                |
|-----------------|---------------------|--------------------|----------------|
| 61-Labels LTA   | M-Mechanical        | T-Testing          | 50-324/1997015 |
| 61-Labels LTA   | O-Operations        | B-Bal of Plant Ops | 50-324/1998003 |
| 61-Labels LTA   | O-Operations        | B-Bal of Plant Ops | 50-324/1998003 |
| 61-Labels LTA   | O-Operations        | B-Bal of Plant Ops | 50-324/1998003 |
| 76-Postings LTA | H-Health Physics    | H-Health Physics   | 50-324/1998003 |
| 76-Postings LTA | H-Health Physics    | A-Administrative   | 50-324/1998003 |
| 61-Labels LTA   | I-Instrumentation & | S-Surveillance     | 50-324/1998007 |
| 76-Postings LTA | H-Health Physics    | H-Health Physics   | 50-324/1998007 |
| 76-Postings LTA | H-Health Physics    | H-Health Physics   | 50-324/1998007 |
| 76-Postings LTA | H-Health Physics    | H-Health Physics   | 50-324/1998007 |

Human-System Interface and Environm ER  
Number of items: 1  
Percent of total: .82

|                 |                  |                  |                |
|-----------------|------------------|------------------|----------------|
| 76-Postings LTA | H-Health Physics | H-Health Physics | 50-324/1998300 |
|-----------------|------------------|------------------|----------------|

Human-System Interface and Environm LER  
Number of items: 0  
Percent of total: 0

Management and Supervision IR

|                         |                     |                   |                |
|-------------------------|---------------------|-------------------|----------------|
| Number of items: 17     |                     |                   |                |
| Percent of total: 13.93 |                     |                   |                |
| 32-Supervision / co     | G-Engineering       | G-Design          | 50-324/1997013 |
| 32-Supervision / co     | Z-Other             | Q-Fire Protection | 50-324/1997013 |
| 40-Individual Corre     | I-Instrumentation & | Z-Other           | 50-324/1997015 |
| 33-Management expec     | H-Health Physics    | H-Health Physics  | 50-324/1997015 |
| 44-Corrective Actio     | G-Engineering       | G-Design          | 50-324/1998002 |
| 41-Action not begun     | M-Mechanical        | Z-Other           | 50-324/1998003 |
| 44-Corrective Actio     | M-Mechanical        | Z-Other           | 50-324/1998003 |

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|-------------------------------|--------------|-----------|----------------|
| Management and Supervision IR |              |           |                |
| Number of items: 17           |              |           |                |
| Percent of Total: 13.93       |              |           |                |
| 36-Scheduling and p           | T-Training   | Z-Other   | 50-324/1998003 |
| 48-Audits or proble           | M-Mechanical | Z-Other   | 50-324/1998005 |

## Human Factors Information System Report

|                     |                 |                   |                |
|---------------------|-----------------|-------------------|----------------|
| 40-Individual Corre | F-Fuel Handling | Z-Other           | 50-324/1998006 |
| 32-Supervision / co | O-Operations    | M-Maint / Repair  | 50-324/1998007 |
| 41-Action not begun | G-Engineering   | Z-Other           | 50-324/1998007 |
| 47-Root Cause LTA   | G-Engineering   | Z-Other           | 50-324/1998007 |
| 41-Action not begun | G-Engineering   | Z-Other           | 50-324/1998007 |
| 41-Action not begun | O-Operations    | Q-Fire Protection | 50-324/1998007 |
| 40-Individual Corre | O-Operations    | Q-Fire Protection | 50-324/1998007 |
| 48-Audits or proble | Z-Other         | Z-Other           | 50-324/1998012 |

## Management and Supervision ER

Number of items: 1  
Percent of total: .82  
36-Scheduling and p T-Training Z-Other 50-324/1998300

## Management and Supervision LER

Number of items: 0  
Percent of total: 0

## Organizational Issues IR

Number of items: 2  
Percent of total: 1.64  
21-Staffing LTA O-Operations B-Bal of Plant Ops 50-324/1998006  
21-Staffing LTA G-Engineering G-Design 50-324/1998007

## Organizational Issues ER

Number of items: 0  
Percent of total: 0

## Organizational Issues LER

Number of items: 0  
Percent of total: 0

## Procedures and Reference Document IR

Number of items: 22  
Percent of total: 18.03  
11-No procedure / r G-Engineering G-Design 50-324/1997013  
12-Procedure techni A-Administrative Su P-Procedure Dev 50-324/1997013  
12-Procedure techni G-Engineering G-Design 50-324/1997013  
14-Document develop G-Engineering G-Design 50-324/1997013  
14-Document develop G-Engineering G-Design 50-324/1997013  
14-Document develop G-Engineering G-Design 50-324/1997013  
12-Procedure techni G-Engineering G-Design 50-324/1997013  
12-Procedure techni G-Engineering G-Design 50-324/1997013  
12-Procedure techni G-Engineering G-Design 50-324/1997013  
13-Procedure has hu G-Engineering G-Design 50-324/1998002  
12-Procedure techni G-Engineering G-Design 50-324/1998004  
13-Procedure has hu G-Engineering G-Design 50-324/1998004  
13-Procedure has hu P-Procedure Writers P-Procedure Dev 50-324/1998005  
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|---------|------------|-----------|---------------|
|---------|------------|-----------|---------------|

## Procedures and Reference Document IR

Number of items: 22  
Percent of Total: 18.03  
12-Procedure techni G-Engineering G-Design 50-324/1998005  
12-Procedure techni P-Procedure Writers Q-Fire Protection 50-324/1998005  
13-Procedure has hu G-Engineering G-Design 50-324/1998006  
13-Procedure has hu G-Engineering G-Design 50-324/1998006  
13-Procedure has hu H-Health Physics H-Health Physics 50-324/1998006  
11-No procedure / r H-Health Physics H-Health Physics 50-324/1998006  
12-Procedure techni O-Operations Q-Fire Protection 50-324/1998006  
13-Procedure has hu G-Engineering G-Design 50-324/1998007  
14-Document develop G-Engineering P-Procedure Dev 50-324/1998007

## Procedures and Reference Document ER

Number of items: 0  
Percent of total: 0

## Procedures and Reference Document LER

Number of items: 1  
Percent of total: .82  
12-Procedure techni O-Operations O-Control Room Ops 50-324/199800300

## Training IR

Number of items: 4  
 Percent of total: 3.28  
 05-Individual knowl G-Engineering G-Design 50-324/1998002  
 05-Individual knowl I-Instrumentation & S-Surveillance 50-324/1998007  
 05-Individual knowl I-Instrumentation & S-Surveillance 50-324/1998007  
 03-Training process T-Training Q-Fire Protection 50-324/1998007

## Training ER

Number of items: 3  
 Percent of total: 2.46  
 05-Individual knowl O-Operations Z-Other 50-324/1998300  
 05-Individual knowl O-Operations Z-Other 50-324/1998300  
 05-Individual knowl T-Training Z-Other 50-324/1998300

## Training LER

Number of items: 0  
 Percent of total: 0

## Work Factors IR

Number of items: 54  
 Percent of total: 44.26  
 93-Awareness or att G-Engineering G-Design 50-324/1997013  
 81-Work Package Qua G-Engineering G-Design 50-324/1997013  
 87-Non-conservative G-Engineering A-Administrative 50-324/1997013  
 83-Work practice or G-Engineering A-Administrative 50-324/1997013  
 83-Work practice or G-Engineering A-Administrative 50-324/1997013  
 83-Work practice or G-Engineering G-Design 50-324/1997013  
 83-Work practice or H-Health Physics H-Health Physics 50-324/1997013  
 83-Work practice or H-Health Physics H-Health Physics 50-324/1997013  
 83-Work practice or M-Mechanical H-Health Physics 50-324/1997015  
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|-------------------------|---------------------|--------------------|----------------|
| Work Factors IR         |                     |                    |                |
| Number of items: 54     |                     |                    |                |
| Percent of Total: 44.26 |                     |                    |                |
| 83-Work practice or     | G-Engineering       | T-Testing          | 50-324/1997015 |
| 83-Work practice or     | G-Engineering       | T-Testing          | 50-324/1997015 |
| 83-Work practice or     | G-Engineering       | T-Testing          | 50-324/1997015 |
| 81-Work Package Qua     | G-Engineering       | Z-Other            | 50-324/1997015 |
| 86-Work untimely        | G-Engineering       | P-Procedure Dev    | 50-324/1997015 |
| 83-Work practice or     | G-Engineering       | A-Administrative   | 50-324/1997015 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998002 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998002 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998002 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998002 |
| 91-Verification / p     | O-Operations        | K-Housekeeping     | 50-324/1998002 |
| 93-Awareness or att     | G-Engineering       | G-Design           | 50-324/1998002 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998003 |
| 89-Housekeeping LTA     | H-Health Physics    | H-Health Physics   | 50-324/1998003 |
| 83-Work practice or     | U-Unknown           | H-Health Physics   | 50-324/1998003 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998004 |
| 83-Work practice or     | G-Engineering       | A-Administrative   | 50-324/1998004 |
| 83-Work practice or     | G-Engineering       | A-Administrative   | 50-324/1998004 |
| 83-Work practice or     | G-Engineering       | G-Design           | 50-324/1998004 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998004 |
| 84-Non-conserv. dec     | O-Operations        | M-Maint / Repair   | 50-324/1998005 |
| 93-Awareness or att     | G-Engineering       | G-Design           | 50-324/1998005 |
| 92-Self check LTA       | I-Instrumentation & | S-Surveillance     | 50-324/1998005 |
| 91-Verification / p     | I-Instrumentation & | S-Surveillance     | 50-324/1998005 |
| 93-Awareness or att     | P-Procedure Writers | P-Procedure Dev    | 50-324/1998005 |
| 83-Work practice or     | M-Mechanical        | A-Administrative   | 50-324/1998005 |
| 83-Work practice or     | O-Operations        | T-Testing          | 50-324/1998005 |
| 83-Work practice or     | O-Operations        | A-Administrative   | 50-324/1998005 |
| 84-Non-conserv. dec     | M-Mechanical        | F-Modification     | 50-324/1998005 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998005 |
| 81-Work Package Qua     | G-Engineering       | F-Modification     | 50-324/1998005 |
| 93-Awareness or att     | Z-Other             | Z-Other            | 50-324/1998005 |
| 87-Non-conservative     | O-Operations        | B-Bal of Plant Ops | 50-324/1998006 |
| 81-Work Package Qua     | G-Engineering       | G-Design           | 50-324/1998006 |
| 84-Non-conserv. dec     | O-Operations        | S-Surveillance     | 50-324/1998006 |
| 83-Work practice or     | H-Health Physics    | H-Health Physics   | 50-324/1998006 |
| 83-Work practice or     | H-Health Physics    | H-Health Physics   | 50-324/1998006 |
| 83-Work practice or     | H-Health Physics    | H-Health Physics   | 50-324/1998006 |

|                     |                     |                  |                |
|---------------------|---------------------|------------------|----------------|
| 93-Awareness or att | A-Administrative Su | A-Administrative | 50-324/1998006 |
| 93-Awareness or att | Z-Other             | Z-Other          | 50-324/1998006 |
| 84-Non-conserv. dec | I-Instrumentation & | S-Surveillance   | 50-324/1998007 |
| 84-Non-conserv. dec | W-Work Control / Sc | M-Maint / Repair | 50-324/1998007 |
| 83-Work practice or | U-Unknown           | H-Health Physics | 50-324/1998007 |
| 93-Awareness or att | Z-Other             | A-Administrative | 50-324/1998012 |
| 93-Awareness or att | Z-Other             | A-Administrative | 50-324/1998012 |

## Work Factors ER

Number of items: 4

Percent of total: 3.28

|                     |                 |         |                |
|---------------------|-----------------|---------|----------------|
| 81-Work Package Qua | T-Training      | Z-Other | 50-324/1998300 |
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## Work Factors ER

Number of items: 4

Percent of Total: 3.28

|                     |              |         |                |
|---------------------|--------------|---------|----------------|
| 81-Work Package Qua | T-Training   | Z-Other | 50-324/1998300 |
| 83-Work practice or | T-Training   | Z-Other | 50-324/1998300 |
| 93-Awareness or att | O-Operations | Z-Other | 50-324/1998300 |

## Work Factors LER

Number of items: 0

Percent of total: 0

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**[End of File for Plant Docket 324 (1998)]**

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