

| <p style="text-align: center;">Table 7</p> <p style="text-align: center;">Spills and Releases</p> <p style="text-align: center;">Shell Fall River Product Distribution Plant</p> <p style="text-align: center;">Fall River, Massachusetts</p> | | | |
|---|--------------------------|------------------------|--|
| DATE | AMOUNT (GALS) | TYPE | DESCRIPTION |
| 1/72 | unknown | unknown | possible release from tanks 117 and 118, separate-phase petroleum appeared in wells 1-W and 1-R |
| 4/73 | unknown | #6 fuel oil | rupture and ignition of tank 7, small amount lost to ground |
| 1974 | unknown | Shell Super Gasoline | accumulated in well 39; 500 pinholes (corrosion) found in tank 8 bottom; new bottom installed |
| 9/75 | unknown | kerosene | accumulated in well 39; leak in line (valve) to loading rack from tanks 12, 136, 137; line replaced with above ground line |
| 11/75 | 900 | gasoline | new tank bottom on Tank 8 leaked; tank bottom repaired |
| 1/76 | 4,500 | xylene | leaked from tank 96 while loading; adsorbed into soil |
| 3/03/76 | 5,187 | #2 fuel oil | product line break into sewer system; contained and cleaned up |
| 8/76 | unknown | jet A | pinholes discovered in tank 137; repaired |
| 12/7/76 | 6,315 | Solvent 340 | in plant yard/dike on frozen ground; cleaned up |
| 6/78 | unknown | Shell Regular Gasoline | leak in tank 10 bottom; repaired |
| 12/21/78 | 164 | gasoline | spill at loading rack into containment system |
| 1/79 | unknown | kerosene | leak in tank 136; repaired |
| 1/12/79 | 114 | gasoline | spill at loading rack into containment system |
| 2/3/79 | 158 | gasoline | spill at loading rack into containment system |
| 3/2/79 | unknown | gasoline | spill at loading rack into containment system |
| 3/4/79 | 129 | gasoline | spill at loading rack into containment system |
| 4/24/79 | 2 | naphtha | spill at marine dock; reported to U.S.C.G. |
| 5/9/79 | 30 | gasoline | spill at loading rack into containment system |
| 7/3/79 | 53 | gasoline | spill at loading rack into containment system |

(E)

| <p style="text-align: center;">Table 7</p> <p style="text-align: center;">Spills and Releases Shell Fall River Product Distribution Plant Fall River, Massachusetts</p> | | | |
|---|--------------------------|------------------------|---|
| DATE | AMOUNT (GALS) | TYPE | DESCRIPTION |
| 5/31/80 | 4,000 | gasoline | spill into tank 137 diked area; trench dug for recovery |
| 11/4/80 | 25 | gasoline | spill at loading rack into containment system |
| 1/25/82 | 10 | gasoline | spill at loading rack into containment system |
| 10/12/83 | 1/4 pint | unknown | spill at marine dock; reported to U.S.G.C. |
| 11/5/83 | 194 | additive | 180 gal. recovered |
| 11/14/83 | 25 | gasoline | spill at loading rack into containment system |
| 11/17/83 | 64 | gasoline | spill at loading rack into containment system |
| 10/9/84 | 5 | fuel oil | abandoned line leak |
| 9/29/85 | 375 | #2 fuel oil | leak in line under pipe line pump house; line repaired |
| 10/7/85 | 123 | #2 fuel oil | spill at loading rack into containment system |
| 12/17/85 | 25 | #2 fuel oil | line from tank 143 leaked; line replaced; cleaned up |
| 2/21/86 * | 3 | interface | discharge from oil/water separator due to excess sludge on separator plates |
| 4/29/86 | 68 | #2 fuel oil | spill at loading rack into containment system |
| 7/14/86 | 200 | interface | line to tank 10 leaked into diked area; replaced |
| 7/27/86 | 50 | Shell Regular gasoline | cargo line leak in tank 3 area; gasoline recovered |
| 8/22/86 | 5 | #2 fuel oil | spill at loading rack into containment system |
| 9/5/86 * | 15 | SU2000 gasoline | spill at marine dock; report to U.S.C.G.; dripping valve closed |
| 10/9/86 | 5 | #2 fuel oil | spill at loading rack into containment system |
| 10/16/86 | 2 | RU2000 gasoline | leak from pump in tank 9 diked area; pump seal replaced |
| 10/28/86 | 3 | Super gasoline | spill at loading rack into containment system |

| <p style="text-align: center;">Table 7</p> <p style="text-align: center;">Spills and Releases</p> <p style="text-align: center;">Shell Fall River Product Distribution Plant</p> <p style="text-align: center;">Fall River, Massachusetts</p> | | | |
|---|--------------------------|-----------------|---|
| DATE | AMOUNT (GALS) | TYPE | DESCRIPTION |
| 10/30/86 | 5 | Super gasoline | spill at loading rack into containment system |
| 11/21/86 | 5 | RU2000 gasoline | leak from pump in tank 9 diked area; pump seal replaced |
| 11/22/86 | 1 | #2 fuel oil | leak from hole in barge gunnel; reported to U.S.C.G.; boom deployed |
| 1/31/87 | 210 | RU2000 gasoline | line leak 200 feet N.W. of office; 160 gallons recovered; replaced pipe section |
| 2/4/87 | 10-15 | RU2000 | pipeline pump leak at tank 136; all recovered |
| 4/1/87 | 1 | interface | overflow of oil/water separator during rain; boom placed around outfall point |
| 5/19/87 * | 5 | thermia oil | leak from abandoned hot oil line to Taunton River; reported to U.S.C.G.; 1 gallon recovered |
| 7/8/87 | 2 | SU2000 gasoline | spill at loading rack into containment system |
| 9/24/87 | 126 | RU2000 gasoline | leak from valve at tank 6; valve closed; sorbent pads deployed |
| 12/10/87 | 5 | #2 fuel oil | spill at loading rack into containment system |
| 3/16/88 | 2 | Nap-87 Additive | valve left open during pumping to storage tank; cleaned up |
| 4/19/88 | 4 | #2 fuel oil | spill at loading rack into containment system |
| 5/4/88 | 10-15 | Super gasoline | leak in dead end underground pipe; soil removed |
| 6/2/88 | 5-10 | NAP-87 Additive | overfilling of tank 31; spedi-dry used to contain spill |
| 6/10/88 | 1000 | RU2000 | break in line to tank 136; 100 gals. recovered |
| 10/21/88 | 25 | interface | overflow of Hell oil/water separator; sorbent pads used to adsorb spill |
| 10/24/88 | 2 | #2 fuel oil | spill at loading rack into containment system |
| 11/4/88 | 0.5 | #2 fuel oil | spill from overflow pipe on truck; cleaned up |

| <p align="center">Table 7</p> <p align="center">Spills and Releases</p> <p align="center">Shell Fall River Product Distribution Plant</p> <p align="center">Fall River, Massachusetts</p> | | | |
|---|--------------------------|------------------|---|
| DATE | AMOUNT (GALS) | TYPE | DESCRIPTION |
| 11/4/88 * | 5 | Thermia oil | leak from abandoned line into Taunton River; reported to U.S.C.G. remaining fluid removed and valve closed |
| 11/29/88 | 2 | #2 fuel oil | spill at loading rack into containment system |
| 12/6/88 | 7 | #2 fuel oil | spill at loading rack into containment system |
| 2/12/89 | 20 | Super gasoline | spill at loading rack into containment system |
| 7/28/89 | 25 | #2 fuel oil | spill from top loading arm at rack into containment system |
| 8/2/89 | 5 | Transformer oil | transformer exploded; cleaned up |
| 8/15/89 | 5 | Regular gasoline | spill at loading rack into containment system |
| 1/5/90 | 5 | SU2000 gasoline | spill at loading rack into containment system |
| 1/17/90 | unknown | Super gasoline | leak in cargo line; cleaned up |
| 1/19/90 | 3 | #2 fuel oil | spill at loading rack into containment system |
| 1/23/90 | 7 | SU2000 gasoline | spill at loading rack into containment system |
| 2/12/90 | 2,500 | RU2000 gasoline | accidental valve left open; spill into tank 9 dike area; 1,900 gals. recovered |
| 10/11/90 | 10 | lean oil | overflow of Vapor Recovery Unit; sorbent pads deployed |
| 10/30/90 | 10 | #2 fuel oil | line on barge broke; 2 gals. released to Taunton River; reported to U.S.C.G. |
| 11/20/90 | 1 | gasoline | spilled during treatment of tank water bottom; sorbent pads collected most of gasoline off surface of spilled water |
| 12/21/90 | 40 | RU2000 | seepage from tank 6; sorbent pads deployed; gasoline removed from tank |

| <p align="center">Table 7</p> <p align="center">Spills and Releases</p> <p align="center">Shell Fall River Product Distribution Plant</p> <p align="center">Fall River, Massachusetts</p> | | | |
|---|--------------------------|--------------------|---|
| DATE | AMOUNT (GALS) | TYPE | DESCRIPTION |
| 1/3/91 | 4 | #2 fuel oil | spill at loading rack into containment system |
| 2/8/91 | 10 | #2 fuel oil | spill at loading rack into containment system |
| 3/20/91 | 18-20 | SU2000 gasoline | spill at loading rack into containment system |
| 6/24/91 | 2 | SU2000 gasoline | spill at loading rack into containment system |
| 7/17/91 | 2 | # 6 Fuel Oil | leaked from tank 72 during tank dismantling |
| * = releases which resulted in fines assessed by U.S.C.G. | | | |

Aff/MX - 27,000 "known" Gals: 8/6 1991

In addition to the above releases, the Shepherd Report describes petroleum seeps, discovered in 1971, from the Plant into the Taunton River. One seep was from the outside wall and inside the City Sewer Outlet (CSO #014). Another seep was from gravel beds located in the middle section of the plant shoreline. A sealant was put on the inside walls of the sewer to prevent seepage into the sewer outlet. Installation of the recovery well system in 1972, described in Section 2.5.3, decreased the seeps. The installation of recovery wells 8-W and 8-R, in 1978, stopped observable seeps into the river.

The Shepherd Report also details minor seeps at the Taunton River Shoreline at T-15/Lot 3 (North Lots). Investigations in 1972 and 1976 revealed old, biodegraded petroleum seeps from the groundwater intersection with the beach slope at low tide. Shell reported the seeps to the U.S. Coast Guard during the investigations and in 1981 with no action indicated. The petroleum is believed to have come from former tank # 140.

2.7 Environmental Permits and Licenses

Environmental permits and licenses for the plant are summarized in Table 8. Groundwater Technology is currently preparing the reapplication of the NPDES Permit for Shell. The reapplication