

## Leaks & Spills: 1992-2002

Sampling of Incidents at Shell Group Companies & Joint Ventures\*

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Feb 1992	by this date, at least 50 Shell gasoline stations in Washington state's northwest region have leaks from underground storage tanks then being cleaned up or under investigation. <sup>1</sup>
1 Feb 92	Shell pipeline rupture at or near Jeanerette, Louisiana spills 25,000 gallons of crude oil, some into Bayou Weeks. <sup>2</sup>
9 Feb 92	Shell oil tanker sinks off Mexico's Yucatan Peninsula. By February 18 <sup>th</sup> , some 20,000 barrels of oil on board leak from the tanker, sending a 9-by-15-mile oil slick to within 6 miles of Yucatan's Gulf of Mexico eastern shore, moving toward Rio Lagartos, endangering shallow-water fish species and several underwater wildlife reserves. <sup>3</sup>
19 Feb 92	Shell pipeline at or near Bakersfield, California spills/leaks 10,500 gallons of crude oil due to pressure surge. <sup>4</sup>
21 Feb 92	Shell pipeline in Terry County, Texas spills/leaks 48,300 gallons of crude oil. <sup>5</sup>
18 Mar 92	Shell Oil Co. leaks 4,370 bbls (183,540 gallons) of crude oil from tank at tank farm in Winkler County, Texas at Wheeler Station near Nortrees; "malfunction of control or relief equipment" cited as cause; \$4,500 in property damage. <sup>6</sup>
June 1992	Rhode Island's Attorney General files suit against Shell in US District court under the Rhode Island Clean Water, Oil Pollution Control, and Hazardous Waste Management acts for alleged hydrocarbon seepage under a roadway adjacent to a Shell gas station. In November 1993, a jury awards Rhode Island \$450,000 in damages. <sup>7</sup>
8 June 92	a passing motorist in Garyville, Louisiana discovers a gasoline leak which two days later is determined to be coming from a Shell-owned pipeline. The leak closed Airline Highway for at least 12 hours and contaminated a canal beneath the highway. At the time, the cleanup was estimated to take another two-to-six days, with Shell also taking responsibility for contaminated soil and groundwater. <sup>8</sup>
28 Nov 92	Shell Pipeline Co.'s McCamey-to-Houston, Texas pipeline ruptures, spilling a mixture of 357,000 gallons of oil and water. <sup>9</sup>
April 93	Shell UK's retail division general manager, David Pirret, states that nearly one-third of Shell's 1,100 gasoline station sites are contaminated – "to a greater or lesser extent" – by leaking underground gasoline tanks. <sup>10</sup>
June 1993	a pipeline leak at a Shell flow station in Korokoro, Ogoni, Nigeria spills crude oil for forty days, contaminating farmland and polluting water sources. Those living in Korokoro say Shell ignored calls for help. Shell said its response was hampered because its engineers feared they would be attacked by the community. <sup>11</sup>
19 Jul 93	about ten tons of crude oil spill into Sydney Harbor, Australia during a routine transfer between storage tanks at Shell's Cove Bay terminal. A long slick on the harbor followed. After months of investigation, Shell was found guilty, fined \$42,000, and ordered to pay \$7,682 in costs and conduct a \$160,000 clean up. <sup>12</sup>
August 93	Shell Oil is notified by the Santa Clara County, California District Attorney that the Santa Clara Valley Water District referred two former Shell service station sites for enforcement action. The District Attorney had begun investigating alleged soil and groundwater contamination at these sites. Shell at the time said it anticipated there would be a civil suit and penalties in excess of \$100,000. <sup>13</sup>

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\***Note:** This 1992-2002 listing breaks out separately "leaks and spills" from those covered under all incidents in Appendix A of *Riding the Dragon*, and also includes *additional incidents* not included in the book or its appendix.

- 15 Sep 93 catalytic cracking unit shut down at Shell's Norco, Louisiana refinery after a leak was discovered in the bellows. Unit shut down for about a week.<sup>14</sup>
- 15 Nov 93 Draugen offshore oil platform, off western Norway, shuts down after underwater storage tanks begins leaking crude oil. Shell is 21% owner, along with Statoil 65% and BP, 14%<sup>15</sup>.
- 17 Oct 93 oil spill occurs at Shell's KoroKoro oil field in Nigeria.<sup>16</sup>
- 28 Oct 93 crude distillation unit at Shell's Norco, Louisiana refinery operating at reduced levels due to unspecified problems with its crude oil pipeline intake.<sup>17</sup>
- 20 Nov 93 Shell Pipeline Corp. leaks 147 bbls of crude oil from 26-inch pipeline at Cushing, Oklahoma tank farm; corrosion cited as cause; \$9,500 in property damage.<sup>18</sup>
- 22 Dec 93 federal judge rules that Shell's Martinez, California refinery illegally discharged excessive amounts of selenium into San Francisco Bay in late 1991 and most of 1992.<sup>19</sup>
- 3 Jan 94 more than 71,000 gallons of gasoline spill from a storage tank at Shell's Carson, California refinery. The spill is contained within a dike system around the leaking tank.<sup>20</sup>
- 10 Jan 94 Shell Pipeline Corp. leaks 200 bbls of crude oil from tank at Baker pumping station in Fallon County, Montana; "malfunction of control or relief equipment" cited as cause; \$3,200 in property damage.<sup>21</sup>
- 19 Jan 94 the California Regional Water Quality Control Board, San Francisco Bay Region, adopts a cease and desist order for Shell's Martinez, California refinery and two other Bay area refineries regarding compliance with wastewater discharge permits (NPDES). The order is part of a tentative settlement of a lawsuit filed by Shell, other refiners, and an industry association challenging, among other things, certain discharge permit provisions. Under the settlement, Shell agrees, over a two-year period, to pay the state the sum of \$1,040,000, principally into a Selenium Mitigation Fund.<sup>22</sup>
- 31 Jan 94 Shell Pipeline Corp. leaks 47 bbls of crude oil from 14-inch pipeline in Kings County, California near Utica & hwy I-5; corrosion cited as cause; \$33,000 in property damage.<sup>23</sup>
- 10 Jun 94 Shell Pipeline Corp. leaks 1,890 bbls of fuel oil at Black River pumping station in Culberson County, Texas; "malfunction of control or relief equipment" cited as cause; \$73,000 in property damage.<sup>24</sup>
- 14 July 94 Shell Pipeline Corp. leaks 137 bbls of crude oil from 14-inch Bakersfield pipeline in Kern County, California; corrosion cited as cause; \$55,000 in property damage.<sup>25</sup>
- Oct 94 blowout of crude oil occurs at the Utapete flow station at Iko, Nigeria. According to one account, six villages, including Iko were affected, with water polluted and fish killed. Shell shut down the flow station for two weeks.<sup>26</sup>
- 27 Nov 94 Shell Pipeline Corp. leaks 210 bbls of crude oil from Rancho 24-inch line in Harris County, Texas; "failed pipe" cited as cause; \$420,000 in property damage.<sup>27</sup>
- 3 Mar 95 EPA fines Shell Western E&P Inc., \$101,500 for dumping sewage waste and oil and grease from offshore platforms in Alaska's Cook inlet in violation of pollution discharge permits. Shell was cited for 72 violations on two platforms and one onshore plant.<sup>28</sup>
- 5 Apr 95 Shell Petroleum Development Company of Nigeria, through its Environment Program, reports that since 1989 it had recorded an average of 190 spills per year, involving 7,600 barrels of oil each year. Forty-two percent of the spills were due to corrosion.<sup>29</sup>
- 24 Jun 95 Shell Pipeline Corp. leaks 300 bbls of crude oil at the Peetsville pumping station on the Capline system in Lincoln County, Mississippi; "corrosion" cited as cause; \$145,000 in property damage.<sup>30</sup>
- 27 July 95 Shell agrees to pay California EPA \$500,000 to settle 1991-1994 permit violations at the company's Martinez, California refinery.<sup>31</sup>
- 24 Oct 95 Shell Pipeline Corp. leaks 3,000 bbls of crude oil from 12-inch Wasson-Hobbs line in

- Gaines County, Texas; “failed pipe” cited as cause; \$20,000 in property damage.<sup>32</sup>
- 4 Nov 95 Shell Canada fined \$372,000 for pollution at Cobourg, Canada.<sup>33</sup>
- 17 Jun 96 Shell Pipeline Corp. leaks 24 bbls of crude oil from 14-inch Bakersfield line in Kern County, California; “corrosion” cited as cause; \$55,000 in property damage.<sup>34</sup>
- 23 Sep 96 Shell Pipeline Corp. leaks 50 bbls of crude oil at tank farm at Patoka station on 40-inch Capline system in Marion County, Illinois; corrosion of welding fitting cited as cause; \$66,285 in property damage.<sup>35</sup>
- 31 Dec 96 US Mineral Management reports about 62 barrels of hydraulic fluid spill into Gulf of Mexico at Shell Offshore Inc., Platform A in Garden Banks area block 128, after equipment failure: “burst hydraulic hose released hydraulic oil while driving pilings 400' below water during construction.”<sup>36</sup>
- 20 Jan 97 Environmental Rights Action (ERA) of Nigeria reports oil spill at Shell’s Awoba flow station (also known as Bille II), at Bille, Rivers State, Nigeria. Crude oil is spilled into the Emo-Pepelye Creek, damaging aquatic resources, mangrove forest and connecting creeks. “Shell’s contractors cleaned the spill, but no compensation was paid,” ERA reported. Negotiations were underway between Shell and the community, but broke down.<sup>37</sup>
- 7 Mar 97 Shell Pipeline Corp. leaks 320 bbls of crude oil at Caliola tank farm on Bakerfield 14-inch system in Fresno County, California; “incorrect operation” cited as cause; \$25,000 in property damage.<sup>38</sup>
- May 97 storage tank at Shell fuel depot at Alice Springs, Australia leaks petroleum products that reach groundwater. “Thousands of liters of fuel” had leaked, with an area of some 30,000 square meters of groundwater contaminated, according to one account “Fortunately,” reported Shell, “the land affected is not used for agriculture and water is not extracted there. . . .” Still, in February 1999, Shell was prosecuted for violating Australia’s Water Act, pled guilty to the charge of “causing material environmental harm,” and was fined \$A75,000. However, with a maximum possible penalty of \$A250,000, the magistrate was lenient, commending Shell for being its own whistleblower and for cooperating with authorities in the months-long cleanup of groundwater.<sup>39</sup>
- 12 May 97 Shell Pipeline Corp. has crude oil leak on Delta 20-inch line in Plaquemines Parish, Louisiana due to a failed longitudinal pipe weld; \$325,000 in property damage.<sup>40</sup>
- 11 July 97 Shell Offshore, Inc., fined \$10,000 by the US Department of the Interior for operational and/or environmental violations. “The PSHL (pressure safety high/low) sensors for the departing 6-inch pipeline were found by-passed.” Fine paid, June 10, 1999.<sup>41</sup>
- 20 Oct 97 Shell Pipeline Corp. leaks 500 bbls of crude oil on Kilgore-Houston 10-inch line in Rusk County, Texas; “corrosion” cited as cause; \$180,000 in property damage.<sup>42</sup>
- 19 Nov 97 Shell Offshore, Inc.’s 63-mile-long subsea 1-inch steel tubing line that transports methanol from WD 143A to subsea manifold/wells, leaks estimated 71-72 bbls of methanol into US Gulf of Mexico some 75 miles offshore at area block 686, Mississippi Canyon.<sup>43</sup>
- 9 Jan 98 the Shell/BP joint venture oil refinery in Durban, South Africa – the South African Petroleum Refineries (SAPREF) – has pipeline leak into Durban Harbor at harbor berth of about one ton of oil.<sup>44</sup>
- 10 Jan 98 Environmental Rights Action (ERA) of Nigeria reports oil spill at Well #9 at Shell’s Awoba flow station, at Bille, Rivers State, Nigeria. “Enormous amount” of crude oil is discharged into the environment, “. . .with the waters of the Combriero River conveying the sludge over a wide area.”<sup>45</sup>
- 27 Mar 98 a spill of 20,000 bbls of crude oil – more than 800,000 gallons– occurs at Shell’s Jones Creek flow station in Delta state because of a “pipeline failure.” The spill occurs in the

- brackish water of the area's mangrove forest, and kills a large number of fish. Shell shut down production in the amount of 110,000 bbls per day from eight flow stations. Relief materials, including food and water were provided by Shell to affected communities, and a cleanup was begun. But as of September 1998, six months later, the Jones Creek flow station was still closed.<sup>46</sup>
- 18 Apr 98 operational problems on a tank fill line at the Capline tank farm owned by Shell Pipeline Corp. in St. James, Louisiana, result in crude oil spill of 17,806 bbls – or nearly 748,000 gallons – with \$200,000 in property damage.<sup>47</sup>
- 7 May 98 Shell Pipeline Corp.'s Manistee 12-inch crude oil pipeline in Kalkaska County, Michigan, has two leaks – one of 75 bbls and another of 28 bbls – in two different segments of the line (at Dorman Road and Wood Road), due to corrosion, with property damage at \$115,000 and \$70,000.<sup>48</sup>
- 29 May 98 Environmental Rights Action (ERA) of Nigeria reports major oil spill at Well # 9 at Shell's Awoba flow station, at Bille, Rivers State, Nigeria. A Shell pipeline "exploded" and a huge quantity of crude oil "rained into the eco-system." Shell cleaned up the spill, and repaired the line a day after the incident, and also paid some compensation.<sup>49</sup>
- 19 June 98 the Shell/BP joint venture, South African Petroleum Refinery (SAPREF) in Durban, South Africa, reports that a ton of oil was spilled as a consequence of cold weather; spill spreads across Bluff area from Reunion canal to harbor.<sup>50</sup>
- 24 Jun 98 Shell New Zealand is fined \$2,500 by the Timaru, New Zealand, District Court for polluting Timaru Harbor with diesel oil. The oil was being unloaded from the coastal tanker *Kotuku* at Shell's port-side tank farm. A flexible hose was being used to connect the ship to rigid Shell pipeline, which caused the spill after two valves failed to allow a backflow of oil. An estimated 40 to 50 liters of fuel spilled into the harbor. Canterbury Regional Council solicitor Tim Gresson suggested the failure of the two valves indicated they were not properly maintained. Shell's tank farm at the Timaru port was then receiving about 10 million liters of fuel every three weeks.<sup>51</sup>
- 29 Jun 98 Shell Deepwater Development, Inc., leaks 85 bbls of ethylene glycol into US Gulf of Mexico from flowline/wellhead at well A-1, Platform Mesa, area block Mississippi Canyon 686, about 75 miles from shore. "Equipment failure" cited as cause.<sup>52</sup>
- June 98 20-year-old, 16-inch underground Shell pipeline bursts near the Otuegwe 1 community in the Niger Delta, Nigeria, discharging an unknown amount of oil into the surrounding area. According to Michael Fleshman of the Africa Fund, who visited the area in June 1999, "without any investigation, Shell declared the cause of the spill was sabotage and refused to pay compensation." Fleshman reported passing a dead tree "whose trunk was stained with oil, fully ten feet over my head," the result of flooding which had spread the oil "over many hundreds of square miles." At the site of the rupture, Fleshman reported "a sheet of oil covered the water in all directions, extending out into the creek and spreading beyond into the region's waterways."<sup>53</sup>
- 7 July 98 US Office of Pipeline Safety (OPS) issues warning letter and notice of probable violations to Shell Pipeline Corporation in Houston, Texas for the Shell Ozark crude oil pipeline (and related facilities) running between Wood River, Illinois and Cushing, Oklahoma. Following a safety inspection of the line and a review of records, OPS noted probable violations in four areas: procedural manual for operations, maintenance, and emergencies; maps and records; communications; and external corrosion control. Inspectors found missing records, missing information on maps and pipeline system descriptions, and during one field inspection, "the telephone at the unmanned Grand Lake Station was not operable when we tried to use it."

- Under required regulations for cathodic testing of pipelines for control of corrosion, the OPS inspectors noted: “During the review of records of these tests we found many errors. Although we determined during our interviews. . . that these were ‘paper errors’, they must be taken seriously since they indicate carelessness and improper review of the data. Additionally, Shell does not have cathodic protection interference records to show that testing has been conducted. . . .” No penalties were assessed at the time as OPS found Shell moving to rectify the problems.<sup>54</sup>
- 7 July 98 US Office of Pipeline Safety (OPS) issues warning letter and notice of probable violation to Shell Pipeline Corporation in Houston, Texas for a propylene pipeline, and related electrical devices, operating in Houston and Texas and Louisiana. OPS: “. . . No records were found to demonstrate that the devices had been tested at the required intervals. Shell personnel explained that this was an oversight that had occurred because the pipeline was relatively new and that a procedure to delineate the responsibility between construction and operating personnel for calibrating the devices at the required intervals did not exist. Since then, Shell has prepared a procedure to alleviate this problem.”<sup>55</sup>
- Aug 1998 140 tons of refined oil leak into the Manchester Ship Canal from Shell’s Stanlow refinery at Ellesmere Port. The day after the leak, oil was found in the canal as far away as Eastham, five miles from the refinery. According to court proceedings, and UK’s Environment Agency – which called the spill a “major pollution incident” – Shell had no means of detecting any loss of material, nor an effective alarm system to detect a leak during pumping. The oil was being pumped in a pipeline at the refinery, but operators had failed to close a drain valve on the pipe after checking it for blockages. Pumping continued and oil leaked out into a sump pit that had a limited capacity of 42 tons. A seal on the sump pump was also leaking, and equipment failure prevented the sump from being emptied automatically. In addition, a high level alarm on the sump was not working properly and was not heard by workers. In court that October, Shell pled guilty to violating the Waster Resources Act of 1991 and was fined L20,000 by the court an ordered to pay L4,540.<sup>56</sup>
- 2 Oct 98 Equilon Pipeline Co. has a crude oil spill of unknown quantity into Adams Bay from Plaquemines Parish, Louisiana due to corrosion; \$150,000 in property damage.<sup>57</sup>
- 6 Nov 98 Equilon Pipeline Co. spills 160 bbls of diesel fuel due to “malfunction of equipment” – pump malfunction – at tank farm in Harris County, Texas.<sup>58</sup>
- 22 Dec 98 Equilon Pipeline Co. spills 415 bbls of crude oil due to “failed pipe” at tank farm in Scurry County, Texas, 12 miles north of Colorado City on Hwy 208, causing \$5,000 in property damage.<sup>59</sup>
- 31 Dec 98 Equilon’s 40-inch pipeline ( transporting 42 million gallons per day, Louisiana-to-Michigan) leaks crude into Wolf River wetlands of Fayette County, TN. Two hunters, smelling oil in the air, call phone number posted in the pipeline right-of-way. Local highway #196 closed for four days. US Office of Pipeline Safety cites “failed pipe” as cause, posting \$2 million in property damage.<sup>60</sup>
- January 99 Environmental Rights Action (ERA) of Nigeria reports a major blow-out at Shell’s “railway manifold” production site near the community of Amusia in Rivers State, Nigeria. According to ERA, a valve on the “ill-maintained facility could not withstand the high pressure of oil and gas” production. The resulting crude oil spill polluted farmland and wetlands in the area. “Though Shell officials accepted the fact that the spill was caused by equipment failure,” reported ERA, “the company failed to clean the spill site and refused to compensate victims. . . .” The spill, according to Shell, was minor, and the blow-out, also according to Shell, was caused by sabotage. A previous spill at the same manifold had

- occurred in September 1991, also without clean up.<sup>61</sup>
- 10 Jan 99 Environmental Rights Action (ERA) of Nigeria reports oil spill “from rusty, high-pressure pipes” at the Awoba manifold of Shell’s Awoba flow station, at Bille, Rivers State, Nigeria. Nearby mangroves were poisoned with the crude oil rising “up to 5 feet above ground level,” according to ERA. Shell reportedly paid some compensation but had difficulty cleaning up the spill.<sup>62</sup>
- 23 Mar 99 Equilon Pipeline Co. spills 200 bbls of crude oil at pumping station in Kings County, California near Highway 33 due to problems with an insulating gasket, causing \$25,000 in property damage.<sup>63</sup>
- 4 Apr 99 tanker *Helix* spills oily waste in Corio Bay, Victoria, Australia, while berthed at Shell’s Geelong refinery. The ship had been carrying bitumen and gas oil and was being washed. Shell was called for assistance after a cap was removed and 100 liters of oily waste discharged into the bay. Booms were deployed to deal with the spill. In November 2000, the ship’s master was prosecuted by the Environmental Protection Authority and fined in the Geelong Magistrate’s Court in Victoria.<sup>64</sup>
- 13 May 99 pipeline rupture occurs at Shell’s “well 17 pipeline” near Gana in Delta State, Nigeria, according to Environmental Rights Action of Nigeria (ERA), spewing crude oil into adjacent environment. Shell made minor repairs, according to ERA, but paid little attention to cleaning up the affected area. Subsequent leakage and release of poisonous gas also occurred from the same “well 17 pipeline,” with the leakage attributed to “corrosion on the product pipeline,” according to ERA.<sup>65</sup>
- 18 May 99 Environmental Rights Action (ERA) of Nigeria reports “a minor spill” at Well #12 at Shell’s Awoba flow station (Bille I) at Bille, Rivers State, Nigeria.<sup>66</sup>
- 26 May 99 blowout occurs at Shell’s 16-inch pipeline at “Ikavwe bush” near Gana in Delta State, Nigeria, according to Environmental Rights Action of Nigeria (ERA), spewing large quantity of crude oil into canals and swamps, affecting several nearby communities. As of January 2000, according to ERA, the spill had not been cleaned up, nor had compensation been paid.<sup>67</sup>
- 1 June 99 Equilon Pipeline Co. spills 300 bbls of crude oil from storage tank at Cushing, Oklahoma tank farm in Payne County due to malfunction of equipment, causing \$20,000 in property damage.<sup>68</sup>
- 5 June 99 seven small holes are discovered in an offshore crude oil pipeline 16.5 kilometers off Los Angeles, California operated at Aera Energy’s Beta field. Aera Energy, a Shell/Mobil joint venture at the time, was also one of several companies then seeking exploration permits off southern California. A small amount of oil spilled from the line, and dispersed, with some tarballs washing up on beaches south of Los Angeles. No environmental damage was reported, according to the US Coast Guard.<sup>69</sup>
- 8 June 99 nearly half the crew, roughly 42 workers, on Shell’s North Cormorant oil and gas platform 112 miles northeast of Sumburgh, Scotland in the North Sea, are evacuated after a gas leak is detected in a process module. Four helicopters, including one from Aberdeen, assisted in the evacuation. The North Cormorant natural gas field was also shut down.<sup>70</sup>
- 20 Jul 99 Equilon leaks 618 bbls of crude oil at Hendrick tank farm at Kermit, Texas due to corrosion of a fill line; \$20,000 in property damage.<sup>71</sup>
- 23 Jul 99 Equilon-owned Seashell Pipeline Co. line leaks 3,200 bbls of crude oil into the Gulf of Mexico after submerged pipeline is crushed when jackup rig/barge *Loop Davis* is set down on the line. Incident occurs 50 miles offshore at Platform A, Ship Shoal 241 area block.<sup>72</sup>
- Aug 1999 Italian-owned tanker, *Laura D’Amato* spills 300,000 liters of crude into Gore Bay of

- Australia's Sydney Harbor after docking at the Shell Oil terminal at the Clyde Refinery in New South Wales. Sea valves inside the tanker were opened when it docked at Gore Bay. In hearings before a New South Wales parliamentary committee two years later, Shell's Clyde refinery manager Gary Smith, although pointing to improvements in spill response and detection, said he could not guarantee that no spills would occur in the harbor again.<sup>73</sup>
- 11 Sep 99 major oil spill occurs at "the Eriemu manifold," a Shell production area at Gana in Delta State, Nigeria, according to Environmental Rights Action of Nigeria (ERA). The spill is attributed to sabotage by Shell, but ERA reports a valve failure was responsible. The spill was abandoned, according to ERA, and apparently not cleaned up.<sup>74</sup>
- 30 Sep 99 Equilon Pipeline Co. spills 1,360 bbls of gasoline near Midland, Texas due to incorrect operation of equipment, causing \$1,500 in property damage.<sup>75</sup>
- 5 Oct 99 Equilon Pipeline Co. leaks 350 bbls of diesel fuel from pipeline in Harris County, Texas west of Deer Park Refinery due to failed weld, causing \$200,000 in property damage.<sup>76</sup>
- 31 Oct 99 Equilon Pipeline Co. operation near Tracy, California spills 4,917 bbls of crude oil due to flange gasket problems, causing \$100,000 in property damage.<sup>77</sup>
- 15 Nov 99 Environmental Rights Action (ERA) of Nigeria reports major oil spill at Well #7 at Shell's Awoba flow station at Bille, Rivers State, Nigeria. According to ERA, some seven local communities were affected, as the spilled oil made its way into connecting rivers and creeks, such as the Sombriero, Suosuku, Kalabille, and Bille. Although the immediate facility where the spill occurred was cleaned, the affected communities – subjected to continuing tidal action – were not. Said ERA: "The current spill is a major one, which even Shell admitted to the community, was caused by their facility failure and not sabotage. . . ."<sup>78</sup>
- 5 Dec 99 Equilon Pipeline Co. leaks 90 bbls of crude oil in Dyer County, Tennessee near Newbern and Highway 77, causing \$1.665 million in property damage. Failed pipe is listed as cause.<sup>79</sup>
- 27 Dec 99 Environmental Rights Action of Nigeria report notes: "most abandoned wells and flow-lines in Ogoniland spew crude oil continuously." Patches of fresh, floating crude oil reported on the Kpaadoo and Boobe Sibeate Rivers during October through December 1999. ERA also reported that during December 1999, "a large quantity of crude oil was spilled from the flow-line connected to Well 4 in the Bodo-West oilfield. The spill damaged a large expanse of wetlands in the area. Mangroves, mud-skippers, periwinkles, the mangrove oyster, the blood cockle, etc., were destroyed."<sup>80</sup>
- 21 Jan 00 Equilon Pipeline Co., rips undersea Gulf of Mexico crude oil pipeline while towing a drilling rig after a motor fails and an anchor cable catches 24" Poseidon pipeline, also operated by Equilon, causing it to spill 2,240 bbls of crude oil. Incident occurs 75 miles from shore near area block Ship Shoal 332.<sup>81</sup>
- 30 Jan 00 a Bolivian pipeline, operated by the Shell/Enron-owned Transredes Corp., leaks oil and gasoline into the Desaguadero River after a flash flood. The spill continues for more than 24 hours, and is later estimated to be 10,000 bbls, reaching two downstream lakes, Uru Uru and Poopo, used by hundreds of Indian farmers and also are breeding and feeding grounds for flamingos and other wildlife. Bolivia's acting Environment Minister Franz Ondarza criticized the company for its delay in reporting the spill, while others criticized the continued pumping on the line 20 hours into the incident. It was later revealed that a December 1999 audit of the pipeline had recommended urgent repair, finding some 40 sections that needed replacement. A cleanup of the spill was begun in March 2000. By July, Transredes had signed some 43 compensation agreements with 127 communities affected by the spill, as the Bolivian government began an audit of the incident. Transredes, meanwhile, had two more pipeline spills in July, one estimated at 300,000 liters. In August

- 2001, Transredes was fined \$5.7 million for the Desaguadero River spill, and in October agreed to pay \$3.7 million to peasant communities affected by the spill. A spill-related, \$4 million class-action lawsuit, brought by another Bolivian farming community, was also pending against Transredes.<sup>82</sup>
- 2 Feb 00 Equilon Pipeline Co. leaks 18 bbls of crude oil from pipeline in Jefferson County, Texas, west of Highway 366, causing estimated \$75,000 in property damage. Corrosion listed as cause of leak.<sup>83</sup>
- 10 Jan 01 oil leak from underground oil pipeline owned and operated by Brunei Shell Petroleum Sendirian occurs in the vicinity of the Kaula Belait light industrial area of Brunei.<sup>84</sup>
- 23 Jan 01 the Shell/BP joint venture, South African Petroleum Refinery (SAPREF) in Durban, South Africa, spills 1,000 liters of bunker fuel oil into Durban Bay.<sup>85</sup>
- 9 Feb 01 US Office of Pipeline Safety issues final order and findings of violation for Shell Alaska Resources' A and C pipeline facilities in Nikiski, Alaska. The violations included: failing to have 57 specific required items in its procedural manuals for operations, maintenance and emergencies; failing to maintain complete records for the useful life of the pipe or repairs made to the pipeline along the shore of Cook Inlet during the summer of 1997; failing to maintain records for 2 years or until the next inspection is performed, whichever is longer, for three types of inspection; failing to maintain current pipeline facility maps which contain required information; failing to correct, within a reasonable time, conditions at a location where two pipelines cross in a manner which could adversely affect the safe operation of the pipeline system; failing to maintain a protective coating suitable for the prevention of atmospheric corrosion on a section of exposed pipeline; and failing to maintain a valve in good operating condition at all times.<sup>86</sup>
- 22 Mar 01 the Shell/BP joint venture, South African Petroleum Refinery (SAPREF) in Durban, South Africa, leaks 25 tons of tetra ethyl lead (TEL), a highly toxic substance and a known carcinogen from a storage tank at the Island View tank terminal on Durban Harbor. A rupture occurred in the tank while the lead was being pumped from a ship into the SAPREF tank at the terminal.<sup>87</sup>
- 14 May 01 Shell Canada fined \$240,000 (C\$) after pleading guilty to discharging pollutants into the environment from company's Sarnia Manufacturing Center in Corunna, Ontario.<sup>88</sup>
- 6 Jun 01 a Shell pipeline, which passes through the community of Baraale in Rivers State, Nigeria, spills crude oil into the community, forests, and on farmland. According to an Environmental Rights Action field report, local officials reported the leak to Shell and local police, but they were told the community should suffer because the lines were cut by saboteurs. Several months later, in October, the leaking oil caught fire. Again, local officials reported the fire to Shell officials, and they were again told they should pay the consequences of their actions. The fire continued to burn at least through January 2002. Burnt-over farmland is ruined, soot has contaminated drinking water, and some local residents fell ill from thick pall of smoke that hung over the area.<sup>89</sup>
- 25 Jun 01 at least 500,000 gallons of crude oil spill from a Shell Petroleum Development Co. of Nigeria (SPDC) pipeline at Igbodo, Nigeria in Rivers State. The spill spread some 20 kilometers downriver from its source, killing fish and contaminating drinking water for 150,000 people. Locals reported removing dead crocodiles from the river after the spill. A fire also occurred at the site, incinerating vegetation, fishing boats, and equipment. SPDC reported it was supplying water and some food to the area. A month after the spill, Shell reported it would take several more months to complete a clean-up. The cause of the spill was unknown, but some outsiders reported they didn't believe sabotage was to blame.<sup>90</sup>

July 01	Shell's Durban, South African joint venture refinery, SAPREF, confirms major leak of nearly 1 million liters of petrol from underground pipeline near residential area and Bluff nature reserve. Five families leave their homes after high levels of benzene are detected. <sup>91</sup>
14 Oct 01	oil spills into Durban Harbor, South Africa during refueling of a ship at the Island View Tank Terminal, part of the Shell joint venture, SAPREF. Amount spilled is disputed by SAPREF, but one estimate by Portnet puts the amount at 2,000 liters. <sup>92</sup>
August 01	additional pipeline leaks are discovered in lines of Shell's Durban, South African joint venture refinery, SAPREF. <sup>93</sup>
27 Sep 01	Shell's Durban, South African joint venture refinery, SAPREF, reports a pipeline leak involving marine fuel oil at Lighthouse Road. <sup>94</sup>
30 Dec 01	15,000 liters of oil spills into Durban Harbor, South Africa during refueling of a ship at the Island View Tank Terminal, part of the Shell joint venture, SAPREF. Oil spills from a SAPREF line. <sup>95</sup>
11 Jan 02	leak of diesel and gasoline from Shell pipeline flows into ditch along US highway route 90 near Mobile, Alabama. <sup>96</sup>
14 Jan 02	3,000 liters of oil spills inside the Island View Tank Terminal, at Durban Harbor, South Africa, part of the Shell/BP joint-venture refinery, SAPREF. <sup>97</sup>
16 Jan 02	more than 100 workers are airlifted by helicopters from Shell's Brent Charlie North Sea oil rig after a gas-leak scare. Two helicopters scrambled to evacuate 102 personnel from the platform about 100 miles east of the Shetland Isles off northern Scotland. A third helicopter from a neighboring Norwegian rig also helped. The workers were taken to six other Shell rigs in the North Sea, while 53 essential personnel remained on the platform awaiting the arrival of engineers. It took about 3 hours to complete the evacuation, which ended about 2a.m. on Jan. 16 <sup>th</sup> following a gas alarm at about 11p.m. on Jan. 15 <sup>th</sup> . <sup>98</sup>
April 02	water-pressure testing reveals another corroded pipeline at the Island View Tank Terminal, at Durban Harbor, South Africa, part of the Shell joint venture refinery, SAPREF. <sup>99</sup>
11 Jun 02	Shell-chartered Singapore bunker oil tanker, <i>Neptank VII</i> , spills about 450 tons of oil into port waters about 4.5km south of Singapore after a collision with the <i>MV Hermion</i> , a Thai-registered freighter. The accident ruptured one of the Shell tanker's cargo tanks, dumping marine fuel oil into the sea. No one was injured. Oil booms were placed off nearby Marina Bay and Sentosa Island theme park as a precaution. <sup>100</sup>
8 July 02	Shell Pipeline Co. shuts down 250,000 barrels-per-day crude oil line that runs between Jal, New Mexico and Cushing, Oklahoma after small leak is discovered near Haskell, Texas. "It was seeping out of somewhere," reported Tim O'Leary, a Shell spokesman. Company experts said the leak was due to corrosion. <sup>101</sup>
24 Oct 02	Shell pipeline in Delta State, Nigeria – running between Batan facility and Forcados export terminal – ruptures and spills 300 bbls of crude oil. At least 5 communities are affected, including Batan, Deibiri, Ajuju, Ewerigbene, and Kumusi. Booms were placed in rivers and creeks to contain the spread of the spill, according to local Shell officials. Shell also indicated a joint investigation team had been set up to determine the cause of the spill. <sup>102</sup>

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*Compiled by Jack Doyle for the Environmental Health Fund, November 2002. The incidents listed above are taken from the available public record, government reports, court records, company documents, and third-party reports. It is not a complete and comprehensive listing of all such incidents at Shell companies or joint ventures for the indicated period, or their resolution in every instance. Sources cited are believed to be reliable and accurate.*

## Endnotes - Addenda #2 - Leaks & Spills

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