

**Exeter Energy LLC**  
**Tire Incinerator in Sterling, CT**

**Incomplete Timeline of Operations/Violations:**

- September 19, 1991: a **complaint was filed of black soot falling on car and home.**
- October 1991: Connecticut Department of Environmental Protection (DEP) issued two incinerator/boiler conditional permits to Exeter. <sup>1</sup>
- November 1991: “**Non-compliant handling of both bottom and fly ash.**” <sup>2</sup>
- 1991 – 1992: a variety of **air quality complaints filed by people near the plant, citing “burning odors,” “very strange odor,” “sulfur,” and “smell of burning tires.”**
- April 1992: DEP issued Exeter **seven notices of violation** for carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and opacity exceedances, failure to meet the permitted combustion efficiency limits, and failure to submit emission exceedance reports. These notices of violation (NV’s) were referred to order. <sup>3</sup>
- October 1992: Consent Order #1309 was issued a year after the issuance of conditional permit, extending the permits’ expiration dates until November 23, 1992. <sup>4</sup>
- November 23, 1992: Consent Order #1272 was issued for **multi-media violations (air pollution, dam safety, water pollution)**, requiring Exeter to correct facility’s problems. They were also cited for failing to notify the DEP of these problems. <sup>5</sup>
- December 8, 1992: Exeter cited for failing to meet test specifications during the performance of a mandated relative accuracy test on the CO CEM (Continuous Emissions Monitoring) system. Test failure indicates that the data that was being collected by the CEM was unreliable and therefore could not be used to determine compliance. The CEM was determined by the DEP to be in need of repair or if not repaired, to be supplemented with an interim monitor if the data availability for the system fell below 75% during any 90 day period. Exeter was also cited for not keeping calibration records for a minimum of two years, as they were required to do by state and federal regulations. <sup>6</sup>
- December 1992: Consent Order #1272 was referred to Attorney General to collect penalties for past violations addressed in the order and the violations occurring on December 8<sup>th</sup>, 1992, because Consent Order #1272 did not contain penalties for past violations. <sup>7</sup>
- March 1993: Exeter fails to submit a completed DMR (Discharge Monitoring Report). <sup>8</sup>
- April 1993: a stipulated judgment is issued which requires Exeter to pay a **\$50,000 civil penalty**, dispose of as many as 75,000 automobile tires from states facilities, and comply with all of the provisions of Consent Order #1272. This Order required that Exeter operate their incinerators in accordance with the terms and conditions of their air permit. It also stipulated penalties for permit violations of \$10,000 per day for the first five days, \$15,000 per day for the next five days, and \$25,000 per day per violation for each day after. <sup>9</sup>
- May 1993: Exeter fails to submit a completed DMR. <sup>10</sup>
- September 1993: Exeter fails to submit a completed DMR. <sup>11</sup>
- November 8, 1993: DEP issued an NV (notice of violation) for violating 22a-6b for failure to maintain quality assurance records as specified by the CEM quality assurance plan. <sup>12</sup>
- December, 1993: the NV was referred to order. <sup>13</sup>
- January 1994: Exeter omits quality assurance information from CEM quarterly report. <sup>14</sup>
- March 1994: Exeter fails to submit a completed DMR. <sup>15</sup>
- April 1994: DEP engineering and enforcement CEM unit identified many violations of the facility permits including but not limited to: failure of the SO<sub>2</sub> monitoring system to meet relative accuracy requirements during the fourth quarter of 1993; CO data availability to be less than 50% for the fourth quarter of 1993; the relative accuracy test audit report for the fourth quarter of 1993 due on January 30, 1994 but was not received until April 22, 1994. <sup>16</sup>

- July 1994: DEP staff calculated **penalties totaling \$5,630,000** for Exeter violations occurring from March 1994 through July 1994 based on stipulated judgments.<sup>17</sup>
- Between 1993 and 1994, Exeter failed to operate and maintain the storm water treatment system, **as well as continued an acutely toxic discharge**.<sup>18</sup>
- November 1994: **DEP commissioner recommended referring Exeter to the Attorney General to incur penalties** for its failure to maintain quality assurance data for its CEM systems; failure to meet the DEP's required data availability standards; omission of pertinent data from CEM quality assurance reports, all of which constitute violations of the Regulations of Connecticut State Agencies and the facility permits. Additionally, the facility was cited for its failure to submit completed DMRs, failure to maintain its storm water treatment system, and maintain its toxic discharge.<sup>19</sup>
- Between 1994 and 1995: Cited by DEP for excessive CO emissions, poor combustion efficiency and excess opacity emissions.<sup>20</sup>
- March 7, 1995: DEP issued an NV for a permit violation, Sec. 22a-6(a)(3), for failure to meet the minimum NOx CEM data availability standard.<sup>21</sup>
- April 18, 1995: an NV was written but not issued for violation of Sec. 22a-6(a)(3) of permits 176-0001 and 176-0002. **Exeter incinerator #1 exceeded their carbon monoxide (CO) limit 45 times and incinerator #2 exceeded the limit 69 times**. These exceedances were extrapolated for CEM quarterly reports from 4/30/94 to 1/30/95.<sup>22</sup>
- April 24, 1995: Cited for "poor housekeeping practices" observed in the tire receiving and loading area.
- July 24, 1995: facility failed to comply with a May 31, 1995 deadline for a NOx emission test.<sup>23</sup>
- 2001: Exeter contracted Air Pollution Control and Characterization (APCC) to perform its 2001 annual relative accuracy test audit (RATA) for its CEM systems. **Numerous deficiencies with the test procedures were found and data falsification was suspected**.<sup>24</sup>
- January 9, 2002: Exeter was issued four violations, for failing to properly monitor air emissions of SO<sub>2</sub>, CO, CO<sub>2</sub> and NOx.
- August 20, 2003: Exeter was issued an NV (#15024) for several offenses from the prior year: **exceeding their carbon monoxide (CO) and opacity limits twice each, their load limit 4 times, their combustion efficiency (CO/CO<sub>2</sub>) once, and their fuel firing rate 57 times**. Incinerator #2 was also found operating below the required 99.8% combustion efficiency.<sup>25</sup>
- June 11, 2005: Fire at the plant. Field report stated: ***"Upon inspection of the subject site; it was apparent that a fully involved tire fire was active in the rear tire pit. Thousands of tires were burning. A substantial amount of fire water was generated to put out the fire. Multiple non-point source run-off areas were observed. The facility retention pond held the fire water which was addressed by Clean Harbors."*** [Clean Harbors is a hazardous waste treatment and disposal company.] The Emergency Incident Report also stated that unknown quantities of smoke, vaporized fire fighting water and water runoff (of unknown chemical composition) escaped the property limits. The water detention pond overflowed into the Moosup River. The incident was reported at 5:22pm. The bulk of the blaze was out within two hours and was fully under control by 7pm, yet hot spots had to be cooled for the balance of the night. **Four firefighters were treated for smoke inhalation**.<sup>26</sup>
- January 31, 2006: Exeter was issued NV #15692 for failing to meet 90% data availability for their SO<sub>2</sub> CEMS during the third quarter of 2005.<sup>27</sup>
- January 31, 2006: Exeter was issued NV #15693 for: using an expired gas cylinder for a low SO<sub>2</sub> concentration audit point during a cylinder gas audit; failing to meet the cylinder gas audit accuracy standard of 15% on the low range for its carbon dioxide CEMS.<sup>28</sup>
- General: Over the years, numerous spills of petroleum hydraulic oil have occurred, most in the 30 to 100 gallon range. Most spills were reportedly contained and removed, but some admit groundwater contamination.

## Exeter's Allowable Emission Rates

Pollutant	Pounds per year
Arsenic	3.4
Aluminum Metal and Oxide	655.2
Cadmium Oxide	2.2
Calcium Hydroxide (CaOH <sub>2</sub> )	6,248.0
Chromium III Oxide (Cr <sub>2</sub> O <sub>3</sub> ) as Cr	1.5
Copper Oxide (CuO) as Cu	18.9
Iron II Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1,146.6
Lead Oxide (PbO) as Pb	32.2
Magnesium Oxide (MgO)	52.3
Mercury (Hg)	8.8
Nickel (Ni)	31.2
Polynuclear Aromatics (PAH)	73.2
Polychlorinated Biphenyls (PCBs)	0.4
Particulate Matter <10 microns (PM-10)	76,160.0
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	4,225.0
Hydrogen Chloride (HCl)	1,394.2
Zinc Oxide (ZnO)	12,090.0
Dioxins	0.000262
Ammonia	79,700.0
Total Suspended Particulates (TSP)	84,800.0
Sulfur Oxides (SO <sub>x</sub> )	307,000.0
Nitrogen Oxides (NO <sub>x</sub> )	343,200.0
Hydrocarbons (HC)	97,600.0
Carbon Monoxide (CO)	471,200.0

<sup>1</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>2</sup> Exeter Energy Premise Evaluation. 24 July 1995. CT DEP.

<sup>3</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Summary of Alleged Violations at Exeter Energy (1993-1994), CT DEP.

<sup>9</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>10</sup> Summary of Alleged Violations at Exeter Energy (1993-1994), CT DEP.

<sup>11</sup> Ibid.

<sup>12</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>13</sup> Ibid.

<sup>14</sup> Summary of Alleged Violations at Exeter Energy (1993-1994), CT DEP.

<sup>14</sup> Ibid.

<sup>16</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>17</sup> Ibid.

<sup>18</sup> Summary of Alleged Violations at Exeter Energy (1993-1994), CT DEP.

<sup>19</sup> DiBattista, Carmine N. Interoffice memorandum to Timothy R. E. Keeney, regarding "Referral to Attorney General- Exeter Energy Ltd. Partnership- Sterling, CT" November 1, 1994. CT DEP.

<sup>20</sup> Exeter Energy Premise Evaluation. 24 July 1995. CT DEP.

<sup>21</sup> Feroni, Carla: interoffice memorandum to Mike Powers, May 22, 1995. CT DEP.

<sup>22</sup> Ibid.

<sup>23</sup> Exeter Energy Premise Evaluation. 24 July 1995. CT DEP.

<sup>24</sup> Hill, Keith. NV #14806. Bureau of Air Management Notice of Violation Closure. 25 April 2005.

<sup>25</sup> Matta, Aileen. "Bureau of Air Management Notice of Violation Closure" NV #15024. 16 May 2006.

<sup>26</sup> Emergency Incidence Report, June 11, 2005. CT DEP.

<sup>27</sup> Bowe, Patrick. NV #15692. "Notice of Violation" Jan 1, 2006. CT DEP.

<sup>28</sup> Hill, Keith. NV #15693. "Bureau of Air Management Notice of Violation Closure". 18 May 2006.