# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 BEFORE THE ADMINISTRATOR



IN THE MATTER OF:	§ EPA DOCKET NO.
	§ CAA-06-2014-3304
CITGO Refining and Chemicals	§
Company L.P.	§
	§
CITGO East Plant Refinery	§
Corpus Christi, Nueces County,	§ AMENDED COMPLAINT AND NOTICE OF
State of Texas	§ OPPORTUNITY FOR A HEARING
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RESPONDENT	\$ \$
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#### **ADMINISTRATIVE COMPLAINT**

This amended Administrative Complaint and Notice of Opportunity for a Hearing ("Complaint") is issued pursuant to authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") by Section 113(a)(3)(A) and 113(d) of the Clean Air Act ("CAA"), 42 U.S.C. §§7413(a)(3)(A), 7413(d), delegated to the Regional Administrator for EPA Region 6, and redelegated to the Director of the Compliance Assurance and Enforcement Division of EPA Region 6. This Complaint is also being issued pursuant to the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits ("Consolidated Rules of Practice"), 40 C.F.R. Part 22. In support of this Complaint, EPA Region 6 ("Complainant") alleges the following:

#### NATURE OF THE ACTION

- 1. This is an administrative action brought against CITGO Refining and Chemicals Company, L.P. ("Respondent" or "CITGO" herein), as authorized by Sections 113(a)(3) and 113(d)(1)(B) of the CAA, as amended, 42 U.S.C. §§ 7413(a)(3) & 7413(d)(1)(B), and 40 C.F.R. §§ 22.13 & 22.34(b), seeking penalties against CITGO for violations of the CAA, 42 U.S.C. §§ 7401 to 7671q and the Risk Management Program ("RMP") regulations promulgated in accordance with CAA Section 112(r)(7), 42 U.S.C. § 7412(r)(7), see 40 C.F.R. Part 68.
- 2. The violations alleged in this Complaint occurred at CITGO's East Plant Refinery ("Facility"), located in Corpus Christi, Texas.
- 3. Hydrogen fluoride ("HF") is a regulated substance listed in the RMP regulations as a toxic substance. Upon contact with moisture, including tissue, HF immediately converts to hydrofluoric acid, which is highly corrosive and toxic. Breathing in HF at high levels or in combination with skin contact can cause death or major residual injuries to those exposed.
- 4. CITGO uses 250,000 lbs of HF at its facility as part of the processes, and if released, could affect 220,000 people within a fifteen (15) mile radius of the facility, according to CITGO's Risk Management Program submittals.
- 5. CITGO uses a water cannon system, which activates upon detection of HF vapor, to suppress releases of HF from the Alkylation/Mole Sieve unit.

- 6. On March 5, 2012, 300 to 400 lbs of HF were released from the Alkylation/Mole Sieve unit at the facility. The release occurred over the course of several hours until the HF vapor mitigation system activated.
- 7. On March 10 and 11, 2012, an unknown quantity of HF was released from the Alkylation/Mole Sieve unit at the facility. Although exact quantity is unknown, both releases were significant enough to activate the HF vapor mitigation system.
- 8. On April 23, 2012, EPA Region 6 issued a CAA Section 114 information request letter to CITGO, 42 U.S.C. § 7414, requesting information and data regarding the March 2012 HF releases. EPA received the response to this request on May 30, 2012.
- 9. On May 15, 2012, 330lbs of HF were released from two bleeder valves in the Alkylation/Mole Sieve unit while operators were introducing HF from the storage tank into the unit. The HF vapor water mitigation system activated as a result of the release. Despite the activation of the mitigation system, HF was detected downwind of the Alkylation/Mole Sieve unit within the perimeter of the facility.
- 10. As a result of these series of HF Releases, on May 21, 2012 the United States

  Chemical Safety and Hazard Investigation Board sent a letter to EPA Region 6 requesting that

  EPA perform a comprehensive RMP inspection at the Facility.

11. On June 11 through 15, 2012, EPA Region 6, along with EPA headquarters and contract investigators, conducted an unannounced RMP inspection at the facility. This investigation and subsequent requests for information pursuant to CAA Section 114 discovered the violations alleged in this Complaint.

#### STATUTORY AND REGULATORY BACKGROUND

- 12. The primary purpose of the CAA is to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of the population." 42 U.S.C. § 7401(b)(1).
- 13. The purpose of CAA Section 112(r) is to provide requirements and standards to help prevent and minimize accidental releases of air pollutants: "It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance." 42 U.S.C. § 7412(r)(1).
  - 14. CAA Section 112(r)(7), 42 U.S.C. § 7412(r)(7), provides in pertinent part:
    - (A) In order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements.

(B) (ii) The regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan to detect and prevent or

minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment. Such plan shall provide for compliance with the requirements of this subsection.

. . .

- (B) (iii) The owner or operator of each stationary source covered by clause (ii) shall register a risk management plan prepared under this subparagraph with the Administrator before the effective date of regulations under clause (i) in such form and manner as the Administrator shall, by rule, require.
- 15. In 1994, EPA promulgated the Risk Management Program ("RMP") regulations in accordance with CAA Section 112(r)(7), 42 U.S.C. § 7412(r)(7). See 40 C.F.R. Part 68, Chemical Accident Prevention Provisions.
- 16. A "regulated substance" includes any substance listed by EPA pursuant to CAA Section 112(r)(3). 42 U.S.C. § 7412(r)(2)(B). Lists of regulated substances and threshold quantities are provided in tables located at 40 C.F.R. § 68.130.
- 17. Pursuant to 40 C.F.R. § 68.10, the owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process must comply with the RMP regulations.
- 18. A "process" is defined broadly to mean "any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities" and includes "any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process." 40 C.F.R. § 68.3.

- 19. Pursuant to 40 C.F.R. § 68.12, the owner or operator of a stationary source with a process subject to the "Program 3" requirements of the RMP regulations must, among other things, comply with the prevention requirements of 40 C.F.R. §§ 68.65 68.87.
- 20. Pursuant CAA Section 112(r)(7)(E), it is unlawful for any person to operate any stationary source subject to the RMP requirements and regulations in violation of such requirements and regulations.
- 21. Under sections 113(a)(3) and 113(d)(1)(B) of the CAA, 42 U.S.C. §§ 7413(a)(3) and 7413(d)(1)(B), whenever the Administrator finds that any person has violated or is violating a requirement of the CAA including, but not limited to, a requirement or prohibition of any rule promulgated under the CAA, other than those requirements specified in sections 113(a)(1), 113(a)(2) or 113(d)(1)(A) of the CAA, 42 U.S.C. § 7413(a)(1), 7413(a)(2), or 7413(d)(1)(A), the Administrator may issue an order assessing a civil administrative penalty. As adjusted by the Civil Penalty Inflation Adjustment Rule, 40 C.F.R. § 19.4, the Administrator may assess a civil penalty of up to \$37,500 per day of violation for a violation occurring after January 12, 2009.
- 22. Section 113(d)(l) of the CAA, 42 U.S.C. § 7413(d), authorizes EPA to bring an administrative action for penalties that exceed \$295,000<sup>1</sup> and/or the first alleged date of

<sup>&</sup>lt;sup>1</sup> The maximum penalty that can be assessed (without a waiver) under Section 113 of the Clean Air Act was increased by the Civil Monetary Penalty Inflation Adjustment Rule codified at 40 C.F.R. Part 19 to \$220,000 for violations occurring between January 30, 1997 and March 15, 2004, to \$270,000 for violations occurring between March 15, 2004 and January 12, 2009, and to \$295,000 for violations occurring between January 12, 2009 and December 6, 2013.

violation occurred more than twelve (12) months prior to the initiation of the action, if the Administrator and the United States Attorney General jointly determine that the matter is appropriate for administrative action.

23. EPA and the U.S. Department of Justice have jointly determined that the Complainant can administratively assess a civil penalty even though the penalty might exceed the statutory amount and alleged violations have occurred more than twelve (12) months prior to the initiation of the administrative action.

#### **PRELIMINARY ALLEGATIONS**

- 24. As described by this Complaint, EPA has determined that Respondent has violated requirements of the CAA and implementing regulations.
- 25. EPA has jurisdiction over this action, which is authorized by sections 113(a)(3) and 113(d)(1)(B) of the CAA, 42 U.S.C. §§ 7413(a)(3) & 7413(d)(1)(B).
- 26. Respondent, CITGO Refining and Chemicals Company L.P., was formed in Delaware and does business in the State of Texas.
- 27. "Person" is defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e), as "an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency of the United States and any officer, agent, or employee thereof."
- 28. Respondent is a "person" as defined by Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

- 29. "Owner or operator" is defined in section 112(a)(9) of the CAA, 42 U.S.C. §7412(a)(9), as any person who owns, leases, operates, controls, or supervises a stationary source.
- 30. "Stationary source" is defined in section 112(r)(2)(C) of the CAA, 42 U.S.C. §7412(r)(2)(C), as any buildings, structures, equipment, installations or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur.
- 31. "Covered process" is defined in 40 C.F.R. § 68.3 as "a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115." and listed at 40 C.F.R. § 68.130.

#### FACTUAL BASIS OF VIOLATIONS

- 32. At all times relevant to this complaint, Respondent owned and operated a petroleum refining facility located at 1801 Nueces Bay Blvd, in Corpus Christi, Texas.
- 33. Respondent's facility, as identified in Paragraph 31 above, is a "stationary source" as that term is defined by Section 112(r)(2)(C) of the CAA, 42 U.S.C. §7412(r)(2)(C), and 40 C.F.R. § 68.3.
- 34. The facility has a throughput of approximately 165,000 barrels of crude oil per day.

- 35. At all times relevant to this complaint, the following processes were located at the Respondent's facility:
  - A. Alkylation/Mole Sieve
  - B. C4 SHP Unit
  - C. C5 Merox Unit
  - D. Crude/Vacuum Unit
  - E. Cumene Unit
  - F. FCCU No. 1
  - G. FCCU No. 2
  - H. Flare System
  - 1. Gasoline Hydrotreater
  - J. LPG Terminal
  - K. MTBE Unit No. 2
  - L. No. 4 Platformer
  - M. Saturated Gas Plant
  - N. Sulfur Recovery Unit
  - O. UDEX/ADP Units
  - P. Gas Oil Unibon Unit
- 36. At all times relevant to this complaint, 250,000 lbs of hydrogen fluoride ("HF"), a regulated substance listed at 40 C.F.R. § 68.130 Table 1, pursuant to 42 U.S.C. §7412(r)(7), were present in the Alkylation/Mole Sieve unit located at the facility.
  - 37. The RMP regulations specify the threshold quantity of HF to be 10,000lbs.
- 38. At all times relevant to this complaint, 13,000,000 lbs of butane, a regulated substance listed at 40 C.F.R. § 68.130 Table 3, pursuant to 42 U.S.C. §7412(r)(7), were present in the LPG Terminal process located at the facility.
  - 39. The RMP regulations specify the threshold quantity of butane to be 10,000lbs.
- 40. At all times relevant to this complaint, 4,000 lbs of chlorine, a regulated substance listed at 40 C.F.R. § 68.130 Table 2, pursuant to 42 U.S.C. §7412(r)(7), were present in each of

the following processes located at the facility: Alkylation/Mole Sieve, Cumene Unit, UDEX/ADP Units, FCCU No. 1, No. 4 Platformer, MTBE Unit No. 2, and the C4 SHP Unit.

- 41. At all times relevant to this complaint, 6,000 lbs of chlorine, a regulated substance listed at 40 C.F.R. § 68.130 Table 2, pursuant to 42 U.S.C. §7412(r)(7), were present in the Crude/Vacuum Unit process located at the facility.
  - 42. The RMP regulations specify the threshold quantity of chlorine to be 2,500lbs.
- 43. At all times relevant to this complaint, 120,000 lbs of hydrogen sulfide, a regulated substance listed at 40 C.F.R. § 68.130 Table 1, pursuant to 42 U.S.C. §7412(r)(7), were present in the Sulfur Recovery Unit process located at the facility.
- 44. The RMP regulations specify the threshold quantity of hydrogen sulfide to be 10,000lbs.
- 45. At all times relevant to this complaint, 12,000,000 lbs of isobutane [propane, 2-methyl], a regulated substance listed at 40 C.F.R. § 68.130 Table 3, pursuant to 42 U.S.C. §7412(r)(7), were present in the LPG Terminal process at the facility.
- 46. The RMP regulations specify the threshold quantity of isobutane [propane, 2-methyl] to be 10,000 lbs.
- 47. At all times relevant to this complaint, 1,100,000 lbs of propane, a regulated substance listed at 40 C.F.R. § 68.130 Table 3, pursuant to 42 U.S.C. §7412(r)(7), were present in the LPG Terminal process at the facility.

- 48. At all times relevant to this complaint, 11,000 lbs of propane, a regulated substance listed at 40 C.F.R. § 68.130 Table 3, pursuant to 42 U.S.C. §7412(r)(7), were present in the Saturated Gas Plant process at the facility.
  - 49. The RMP regulations specify the threshold quantity of propane to be 10,000 lbs.
- 50. At all times relevant to this complaint, 1,000,000 lbs of propylene [1-propene], a regulated substance listed at 40 C.F.R. § 68.130 Table 3, pursuant to 42 U.S.C. §7412(r)(7), were present in the LPG Terminal at the facility.
- 51. The RMP regulations specify the threshold quantity of propylene [1-propene] to be 10,000lbs.
- 52. At all times relevant to this complaint, Respondent exceeded the threshold quantity of hydrofluoric acid, butane, chlorine, hydrogen sulfide, isobutene [propane, 2-methyl], propane, and propylene [1-propene], all regulated substances, within the following process at the facility:
  - A. Alkylation/Mole Sieve
  - B. C4 SHP Unit
  - C. Crude/Vacuum Unit
  - D. Cumene Unit
  - E. FCCU No. 1
  - F. LPG Terminal
  - G. MTBE Unit No. 2
  - H. No. 4 Platformer
  - I. Saturated Gas Plant
  - J. Sulfur Recovery Unit
  - K. UDEX/ADP Units

- 53. Each of the processes identified in Paragraphs 52 is a "covered process" as defined by 40 C.F.R. § 68.3.
- 54. Each of the processes identified in Paragraphs 35 and 52 is subject to the "Program 3" requirements of the RMP Regulations and must, among other things, comply with the Program 3 Prevention Program of 40 C.F.R. Part 68, Subpart D.
- 55. On March 25, 2011, the Inlet Flange Set was leaking in the Alkylation/Mole Sieve process.
- 56. On May 11, 2011, a work order was issued to tighten the flange on the Inlet Flange Set.
  - 57. The 16 bolts on the Inlet Flange Set were torqued on May 19, 2011.
  - 58. An inspection of the Inlet Flange Set on September 7, 2011, revealed no leaks.
- 59. On September 8, 2011, the Inlet Flange was leaking and a work order was prepared to make appropriate repairs.
- 60. There was no report written to confirm that the repairs listed on the September 8, 2011, work order were ever completed.
  - 61. The work order was closed on December 30, 2011.
- 62. On January 30, 2012, it was reported that notification had been previously submitted for the Inlet Flange Set requesting information about the repair status.
- 63. A response received on February 1, 2012, was that all of the bolts were scheduled for replacement and torqueing according to specifications.

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- 64. On February 8, 2012, the bolts on the Inlet Flange Set were repaired by changing all bolts one at a time and torqueing the bolts to a minimum of 750 ft-lb.
- 65. On February 10, 2012, a management of change was initiated to install a repair clamp on the Inlet Flange Set.
- 66. Also on February 10, 2012, a request was made for drawings for a flange leak repair clamp with supports across the Inlet Flange Set.
  - 67. HF was released on March 5, 2012.
- 68. On March 5, 2012, at approximately 3:42 PM, a technician reported an entry to the electronic event log system (EELS) indicating a leak of HF at the inlet nozzle flange and associated piping flange to the Depropanizer Feed Settler vessel (Inlet Flange Set). EELS indicated that the Area Supervisor advised the technician that work was underway to provide an external clamp for the Inlet Flange Set.
- 69. At approximately 6:56 PM, a HF open path detector located on the south side of the Alkylation unit detected an HF concentration of 126.847 ppmm (parts per million by mass). As the concentration exceeded the 100 ppmm set point, the Alkylation unit water cannon mitigation system automatically activated. The source of the vapor release was identified on the west side of the Inlet Flange Set.
- 70. The total emissions were approximately 16lbs of HF, 1-lb of Ethane, 67lbs of Propane, 401 lbs of i-Butane, 42 lbs of n-Butane, and 10 lbs of 1-Pentane.

- 71. On March 10, 2012, an unknown amount of HF was released during the restart of the alkylation unit after the March 5, 2012, release.
  - 72. The March 10, 2012, release activated the water mitigation system.
- 73. On March 11, 2012, an unknown amount of HF was released during the restart of the Alkylation/Mole Sieve process after the March 5, 2012, release.
- 74. The March 11, 2012, release activated the Alkylation/Mole Sieve process' water mitigation system.
- 75. On May 15, 2012, CITGO reported 330 lbs of HF were released from two bleeder valves as the Alkylation/Mole Sieve process unit operators were introducing HF acid from a storage tank into the unit.
- 76. On June 11-15, 2012, EPA conducted an unannounced RMP inspection ("the inspection") at CITGO Refinery East.
- 77. During the inspection, EPA inspectors observed that an eight inch manual valve on the discharge of the Depropanizer Feed Container (083V015) shown on the Piping and Instrumentation Diagram ("P&ID") is not present in the field.
- 78. During the inspection, EPA inspectors observed that PSV-051A on the acid relief vent from the Depropanizer (083V015) shown on the P&ID is not present in the field.
- 79. The P&ID shows a pressure indication gauge on bottoms inlet to the No. 1 Alky Reactor (083R001), however during the inspection, EPA inspectors observed that this was not present in the field.

#### **VIOLATIONS**

#### Count 1. Violation of 40 C.F.R. § 68.65 (d)(1)(ii)

- 80. Complainant hereby restates and incorporates by reference Paragraphs 1 through 79, above.
- 81. 40 C.F.R. § 68.65(d)(1)(ii) requires, in relevant part, that owners' or operators' written process safety information for the equipment in process "include[s]... Piping and instrument diagrams (P&ID's)."
- 82. During the Risk Management Plan inspection that was conducted at CITGO Refinery East from June 11 through 15, 2012, EPA's P&ID field verification of randomly selected equipment and instruments identified inconsistencies between Respondent's P&ID and the actual field installation.
- 83. In the Alkylation/Mole Sieve process unit, an 8-inch manual valve on the discharge of the Depropanizer Feed Condenser that is shown on the P&ID as car-sealed open was not car-sealed open in the field.
- 84. The Pressure Safety Valve (PSV) 051A on the acid relief vent from the Depropanizer shown on the P&ID was not present in the field.
- 85. A Pressure Indicator gauge on the bottoms inlet to the No.1 Alky Reactor shown on the P&ID was not present in the field.
- 86. Through its failure to properly document its equipment and instruments actually installed in the field in Respondent's Piping and Instrumentation Diagram, as demonstrated by

the inconsistencies found during the Risk Management Plan inspection, Respondent failed to document information pertaining to the equipment in the process in Piping and Instrument Diagrams, in violation of 40 C.F.R. § 68.65 (d)(1)(ii).

#### Count 2. Violation of 40 C.F.R. § 68.67(f)

- 87. Complainant hereby restates and incorporates by reference Paragraphs 1 through 86, above.
- 88. 40 C.F.R. § 68.67(f) requires, in relevant part, that "[a]t least every five (5) years after the completion of the initial process hazard analysis, the process hazard analysis...be updated and revalidated...."
  - 89. A PHA revision was completed for the Gas Oil Unibon unit in January 2007.
- 90. A PHA Revision was due to be completed in January 2012 for the Gas Oil Unibon unit.
- 91. As of June 15, 2012, the date of the Risk Management Plan inspection, the process hazard analysis (PHA) for the Gas Oil Unibon unit had not been completed, making it six months overdue.
- 92. The facility failed to update and revalidate the process hazard analysis ("PHA") as required.
- 93. Through its failure to properly update the PHA by January 2012, Respondent failed to update the PHA within the required five year timeframe, in violation of 40 C.F.R. § 68.67(f).

#### Count 3. Violation of 40 C.F.R. § 68.69(a)

- 94. Complainant hereby restates and incorporates by reference Paragraphs 1 through 93, above.
- 95. 40 C.F.R. § 68.69(a) requires, in relevant part, that "The owner or operator shall develop and *implement* written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements. (1) Steps for each operating phase: ... (ii) Normal operations." *Emphasis added*.
- 96. OPS-000-053 is an operating procedure that has been developed and implemented by respondent which covers loading operations in the Alkylation/Mole Sieve process unit.
- 97. Step 9 of OPS-000-053, requires operators, prior to start up, to ensure that vent or drain valves operated during the turnaround are properly closed, plugged and tags removed.
- 98. May 16, 2012, there was an HF release because two HF 3/4" bleeder valves were left open.
  - 99. Step 9 of OPS-000-053 was overlooked,
- 100. Through its failure to properly implement step 9 of OPS-000-053, i.e., to ensure the bleeder valves were closed, Respondent failed to implement written operating procedures in violation of section of 40 C.F.R. § 68.69(a).

#### **Count 4. Violation of 40 C.F.R. § 68.69(c)**

101. Complainant hereby restates and incorporates by reference Paragraphs 1 through 100, above.

102. 40 C.F.R. § 68.69(c) requires, in relevant part, that the owner or operator review the operating procedures "as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate."

103. During the Risk Management Plan inspection, EPA requested that respondent provide certified operating procedures for all covered processes. Respondent did not provide documentation of the facility's annually certified operating procedures.

104. Through its failure to properly maintain and document its annual certification of the facility's operating procedures, Respondent failed to annually certify that the facility's operating procedures are current and accurate, in violation of 40 C.F.R. § 68.69(c).

#### Count 5. Violation of 40 C.F.R. § 68.69(d)

105. Complainant hereby restates and incorporates by reference Paragraphs 1 through 104, above.

- 106. 40 C.F.R. § 68.69(d) requires, in relevant part, that the owner or operator "develop and implement safe work practices to provide for the control of hazards during operations such as . . . opening process equipment or piping . . . . These safe work practices . . . apply to employees and contractor employees."
- 107. API Recommended Practice 751 (Safe Operation of Hydrofluoric Acid Alkylation Units; 3rd Edition, June 2007), § 2.3.4.2.2 states in relevant part "Sampling systems for streams that contain HF should be designed to minimize exposure of personnel to acid."
- 108. Respondent's HF sampling process in the Alkylation/Mole Sieve process unit is complex and involves several manipulations of 33 valves in the correct sequence to obtain adequate purging and clean sampling.
  - 109. On June 15, 2012 an HF release occurred during sampling.
- 110. The procedure for HF Acid Sampling and the field sampling location do not include valve labeling for the manual operation.
- 111. Through its failure to properly label the valves for manual use in its HIF Acid Sampling procedure and in its field sampling location, Respondent failed to follow API Recommended Practice 751 though it's failure to develop and implement safe work practices to provide for the control of hazards during the opening of process equipment, in violation of 40 C.F.R. § 68.69(d).

#### Count 6. Violation of 40 C.F.R. § 68.71(a)

- 112. Complainant hereby restates and incorporates by reference Paragraphs 1 through 111, above.
- 113. 40 C.F.R. § 68.71(a) requires, in relevant part, that "[e]ach employee[,]... before being involved in operating a newly assigned process... be trained in an overview of the process and in the operating procedures... "Emphasis added.
- Alkylation/Mole Sieve process unit was involved in a release at the unit. Prior to the new assignment, the technician was not trained for the process of line breaking, which was the technician's required job in the Alky unit. According to CITGO documents, the "short lead time did not lend itself to an effective HF safety training program commensurate with his new duties."
- 115. Through its failure to properly train its technician in the process of line breaking before assigning the technician to the Alky unit to do line breaking, Respondent failed to train its employees before having the employees operate a newly assigned process, in violation of 40 C.F.R. § 68.71(a).

#### **Count 7.** Violation of 40 C.F.R. § 68.73(a)

116. Complainant hereby restates and incorporates by reference Paragraphs 1 through 115, above.

- 117. 40 C.F.R. § 68.73(a) states that the mechanical integrity requirements provided in Section 68.73(b) through (f), 40 C.F.R. § 68.73(b)-(f), "apply to the following equipment:

  (1) [p]ressure vessels and storage tanks; (2) [p]iping systems (including piping components such as valves); (3) [r]elief and vent systems and devices; (4) [e]mergency shutdown systems;

  (5) [e]ontrols (including monitoring devices and sensors, alarms, and intertocks) and,

  (6) [p]umps."
- 118. During the inspection, EPA inspectors asked representatives at the facility for inspection and test records for randomly selected equipment, including those for the Alkylation/Mole Sieve process unit.
- 119. Equipment ID Number 83HV09, an automatic by-pass, installed as safety critical interlock after a 2009 incident at the facility, falls within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.
- 120. Equipment ID Number 83HV09 was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 121. Facility records indicated that Equipment ID Number 83HV09 was missing one quarterly inspection/test for 2010 and 2011.
- 122. Equipment ID Number PI-1013 / 1012 on 083P008A, a high pressure alarm on double mechanical scals on isobutene recycle pump, falls within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.

- 123. Equipment ID Number PI-1013 / 1012 on 083P008A was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance program to ensure the ongoing mechanical integrity and reliability of the equipment.
- 124. Facility records indicated that Equipment ID Number PI-1013 / 1012 on 083P008A had no scheduled inspections/tests.
- 125. Equipment ID Number PI-1015 / 1014 on 083P008B, a high pressure alarm on double mechanical seals on an isobutene recycle pump, falls within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.
- 126. Equipment ID Number PI-1013 / 1012 on 083P008A was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 127. Facility records indicated that Equipment ID Number PI-1013 / 1012 on 083P008A had no scheduled inspections/tests.
- 128. Equipment ID Number PI-950, a pressure indicator with alarm, falls within the 40 C.F.R. §68.73(a) categories of emergency shutdown systems and controls.
- 129. Equipment ID Number PI-950 was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.

- 130. Facility records indicated that Equipment ID Number PI-950 had only one repair work order available for review.
- 131. Equipment ID Number PC-2, a pressure indicator with alarm, falls within the 40 C.F.R. §68.73(a) categories of emergency shutdown systems and controls.
- 132. Equipment ID Number PC-2 was listed as a "safeguard" in respondent's

  September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 133. Facility records indicated that Equipment ID Number PC-2 had no scheduled inspections/tests.
- 134. Further, facility records indicated that there were only 2 repair work orders available to review for Equipment ID Number PC-2.
- 135. Equipment ID Number LI-12, a level indicator with alarm falls within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.
- 136. Equipment ID Number LI-12 was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 137. Facility records indicated that Equipment ID Number LI-12 had no scheduled inspections/tests.

- 138. Equipment ID Numbers LSH-20B & LSH-22B, double mechanical seals with high level alarms, fall within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.
- 139. Equipment ID Numbers LSH-20B & LSH-22B, were both listed as "safeguards" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 140. Facility records indicated that inspections of Equipment ID Numbers LSH-20B & LSH-22B were scheduled to be performed during the scheduled turnarounds at the facility.
- 141. Further, facility records indicated that the last two tests of Equipment ID Numbers LSH-20B & LSH-22B, performed on May 15, 2005, and June 1, 2011, noted that the systems failed.
- 142. Equipment ID Number FI-119, a flow indication alarm, falls within the 40 C.F.R. §68.73(a) categories of emergency shutdown systems and controls.
- 143. Equipment ID Number Fl-119 was listed as a "safeguard" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 144. Facility records indicated that Equipment ID Number FI-119 had no scheduled inspections/tests.

- 145. Equipment ID Numbers MOV-4AS/MOV-4AD, the HF acid circulating pump's safety shutdown equipment, fall within the 40 C.F.R. § 68.73(a) categories of emergency shutdown systems and controls.
- 146. Equipment ID Numbers MOV-4AS/MOV-4AD, were both listed as "safeguards" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 147. Facility records indicated that Equipment ID Numbers MOV-4AS/MOV-4AD were to be tested every three months.
- 148. Further, facility records indicated that there were no tests in 2011, one test in 2010, and none in 2009.
- 149. Equipment ID Numbers MOC-4CS/MOV-4CD, the HF acid circulating pump's safety shutdown equipment, fall within the 40 C.F.R. § 68.73(a) category of emergency shutdown systems and controls.
- 150. Equipment ID Numbers MOC-4CS/MOV-4CD were both listed as "safeguards" in respondent's September 2011 PHA Revalidation, and should have been included in a scheduled preventive maintenance to ensure the ongoing mechanical integrity and reliability of the equipment.
- 151. Facility records indicated that Equipment ID Numbers MOC-4CS/MOV-4CD were scheduled for testing every three months.

- 152. Records at the facility indicated that there were no such tests in 2011, one test in 2010, and no tests in 2009.
- 153. Through its failure to put emergency shutdown systems and controls in a regularly scheduled preventative maintenance, Respondent failed to maintain the mechanical integrity of regulated equipment, in violation of 40 C.F.R. § 68.73(a).

#### Count 8. Violation of 40 C.F.R. § 68.73(b)

- 154. Complainant hereby restates and incorporates by reference Paragraphs 1 through 153, above.
- 155, 40 C.F.R. § 68.73(b) requires, in relevant part, that owners or operators "establish and implement written procedures to maintain the on-going integrity of process equipment."
- 156. The facility's maintenance and inspection procedure contains a deferral process plan for the repair of covered process items. This deferral process plan places equipment on a high to low priority level to be repaired.
- 157. Once the equipment is inspected, it is placed on a work order and maintenance receives a notice to repair. If the repair cannot be completed due to circumstances, a team is set up to analyze the situation and establish the priority status for the equipment.
- 158. No documentation of repairs being performed was found during the review of the facility's Alkylation/Mole Sieve process unit records at the time of inspection.
- 159. Through its failure to properly document work orders for the repair of process equipment, Respondent failed to implement its written procedures to maintain the mechanical integrity of process equipment, in violation of 40 C.F.R. § 68.73(b),

#### Count 9. Violation of 40 C.F.R. § 68.73(c)

- 160. Complainant hereby restates and incorporates by reference Paragraphs 1 through 159, above.
- 161. 40 C.F.R. § 68.73(c) requires "[t]he owner or operator [to] train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner." Emphasis added.
- 162. On February 3, 2011 a technician who was temporarily assigned to the Alkylation/Mole Sieve process unit was involved in a release in which the technician was exposed to HF at the unit.
- 163. The technician was transferred to the Alkylation/Mole Sieve for turnaround from the BTX and Hydrar unit without the proper training for unit entry and without hands-on training in Level B PPE, which was required for line breaking. Line breaking is the intentional opening of a pipe.
- 164. The root cause of this release was the technician's failure to follow "Safe 709.1" HF Safe Operating Procedure."

165. Through its failure to properly train its technician before assigning the technician to the Alky unit, Respondent failed to train the technician in an overview of that process and its hazards and in the procedures applicable to the technician's job tasks to assure that the technician would be able to perform the job tasks in a safe manner, in violation of 40 C.F.R. § 68.73(c).

#### Count 10. Violation of 40 C.F.R. § 68.73(e)

166. Complainant hereby restates and incorporates by reference Paragraphs 1 through 165, above.

167. 40 C.F.R. § 68.73(e) requires, in relevant part, that owners or operators "correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in [40 C.F.R.] § 68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation."

168. The March 5, 2012, incident report indicates almost sixty days lapsed between the leaking of HF in the Alkylation/Mole Sieve process unit and the building of scaffolding to address the leak. This lapse is documented in the "March 5, 2012, Flange Leak at the Alkylation Unit CITGO Refining and Chemicals Company, L.P. Report of the Investigation Team, April 3, 2012."

169. On September 8, 2011, the acid reactive paint had turned red, which indicated that there was HP leakage.

- 170. On February 10, 2012, a Management of Change was initiated to install a repair clamp on the inlet flange.
- 171. The release occurred on March 5, 2012, 24 days after the Management of Change had been initiated on February 10, 2012, and a total of 179 days after the acid reactive paint indicated HF leakage on September 8, 2011.
- 172. Through its failure to properly address and promptly correct the HF leakage that was initially indicated in September 2011, Respondent failed to correct the deficiencies in its equipment before the equipment was used further, and Respondent did not correct the

deficiencies in its equipment in a safe and timely manner, in violation of 40 C.F.R. § 68.73(e).

#### Count 11. Violation of 40 C.F.R. § 68.73(f)(2)

- 173. Complainant hereby restates and incorporates by reference Paragraphs 1 through 172, above.
- 174. 40 C.F.R. § 68.73(f)(2) requires, in relevant part, that "[a]ppropriate checks and inspections . . . be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions."
- 175. After the March 5, 2012, HF release in the Alkylation/Mole Sieve process unit, an examination revealed that a work order completed in March 2011 resulted in the misalignment of the bolt and flanges. The misalignment allowed HF to be released causing the bolt and the vessel flange to corrode.

176. Through its failure to properly assemble the bolts and flanges, Respondent failed to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions, in violation of section 40 C.F.R. § 68.73(f)(2).

#### Count 12. Violation of 40 C.F.R. § 68.75(b)(4)

- 177. Complainant hereby restates and incorporates by reference Paragraphs 1 through 176, above.
- 178. 40 C.F.R. § 68.75(b)(4) requires, in relevant part, that the procedure that is used for a Management of Change ("MOC") ensures that the "necessary time period for the change" is addressed prior to any change.
- 179. Respondent's MOCs fall into three categories: (1) Emergency, for changes that require immediate attention; (2) Temporary, for changes that are not to exceed six months; and (3) Permanent, for changes that exceed six months.
- 180. On February 10, 2012, an MOC was initiated to install a repair clamp on the inlet flange in the Alkylation/Mole Sieve unit because a color change in the HF reactive paint indicated that hydrofluoric acid (HF) was leaking. This MOC did not have a deadline by which it had to be approved.
  - 181. On March 5, 2012, a release of HF occurred.
- 182. In the twenty-four days that had passed since the MOC was initiated on February 10, 2012 and the HF release on March 5, 2012, the MOC had not been approved and no action had been taken to install the repair clamp.

- 183. Respondent's MOC # 11-0160 from March 2011 addresses the installation of a reinforced sleeve over a 1.5" seal pan drain line located below the reboiler on the Depropanizer. MOC # 11-0160 states that an x-ray revealed a thin section of pipe wall on the 1.5" seal pan drain and that the pipe sleeve was installed to maintain integrity of the drain line. The change is described as "Permanent," yet the MOC implies that the change is temporary by using the description "Update Temporary Clamp List." A photo in the MOC of the installed pipe sleeve shows that it was installed despite the fact that the MOC has inconsistent timing descriptions.
- 184. Through its failure to properly set timeframes or to use consistent timing descriptions in its MOCs before changes are made, Respondent failed to ensure that the procedures used for MOCs addressed the "necessary time period for the change" prior to any change, in violation of 40 C.F.R. § 68.75(b)(4).

#### Count 13. Violation of 40 CFR § 68.77(b)(1)

- 185. Complainant hereby restates and incorporates by reference Paragraphs 1 through 184, above.
- 186. 40 C.F.R. § 68.77(b)(1) requires, in relevant part, that "[t]he pre-startup safety review ... confirm that[,] prior to the introduction of regulated substances to a process[,] ... equipment is in accordance with design specifications."
- 187. On May 15, 2012, there was an HF release in the Alkylation/Mole Sieve process unit.

- 188. The release occurred because two HF ¾" bleeder valves were left open during loading.
- 189. The pre-Startup Safety Review, SAFE-710.7 Rev. 5 includes Level 3 MOC/Level 3 PSSR Checklist.
  - 190. Step 30 of the level 3 PSSR checklist asks "Valve positions checked?"
  - 191. Proper use and implementation of this procedure could have prevented the release.
- 192. Through its failure to properly use and follow its Level 3 MOC/Level 3 PSSR checklist to ensure the bleeder valves were closed, Respondent did not satisfy its duty to conduct a pre-startup safety review prior to the introduction of a regulated substance to a process to confirm that equipment is in accordance with design specifications, in violation of section of 40 C.F.R. § 68.77(b)(1).

#### Count 14. Violation of 40 C.F.R. § 68.79(a)

- 193. Complainant hereby restates and incorporates by reference Paragraphs 1 through 192, above.
- 194. 40 C.F.R. § 68.79(a) requires, in relevant part, that owners or operators "certify that they have evaluated compliance with the provisions of this subpart at least every three years to verify that procedures and practices developed under this subpart are adequate and are being followed."
- 195. The facility completed a compliance audit in March 2012, more than three years after the facility's last compliance audit in December 2008.

196. Through its failure to properly complete a compliance audit every three years, Respondent failed to evaluate compliance with the provisions of 40 C.F.R. § 68.79 at least every three years, in violation of section of 40 C.F.R. § 68.79(a).

#### Count 15. Violation of 40 C.F.R. § 68.79(d)

- 197. Complainant hereby restates and incorporates by reference Paragraphs 1 through 196, above.
- 198. 40 C.F.R. § 68.79(d) requires, in relevant part, that the owner or operator "promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected."
- 199. The compliance audits that were conducted in 2012 had the same findings as the compliance audits that were conducted in 2008.
- 200. Through its failure to properly address the findings in the 2008 compliance audit so that those same findings would not appear in the 2012 compliance audit, Respondent failed to promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that the deficiencies have been corrected, in violation of 40 C.F.R. § 68.79(d).

#### PROPOSED PENALTY

201. The proposed civil penalty has been determined in accordance with Section 113(d) of the Act, 42 U.S.C. § 7413(d), together with 40 C.F.R. Part 19, which authorize EPA to

assess a civil administrative penalty of up to \$37,500 per day of violation of Section 112(r) of the Act that occurs after January 12, 2009<sup>2</sup>.

202. For purposes of determining the amount of any civil penalty to be assessed,
Section 113(e) of the Act, 42 U.S.C. § 7413(e), requires EPA to take into consideration (in
addition to such other factors as justice may require) the size of the business, the economic
impact of the penalty on the business, the violator's full compliance history and good faith
efforts to comply, the duration of the violation as established by any credible evidence
(including evidence other than the applicable test method), payment by the violator of penalties
previously assessed for the same violation, the economic benefit of noncompliance, and the
seriousness of the violation.

203. To develop the proposed penalty in this Complaint, Complainant has taken into account the particular facts and circumstances of this case with specific reference to EPA's "Combined Enforcement Policy for Clean Air Act Sections 112(r)(1), 112(r)(7), and 40 C.F.R. Part 68," dated June 2012, together with its relevant appendices. This policy provides for a rational, consistent, and equitable calculation methodology for applying the statutory penalty factors enumerated above to particular cases. Attached to this Complaint are Penalty Calculation Worksheets which explain the reasoning behind the proposed penalty, as required

<sup>&</sup>lt;sup>2</sup> The Civil Penalty Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701 authorizes the United States to commence an action to assess civil penalties of not more than \$27,500 per day for each violation that occurs January 30, 1997 through March 15, 2004; \$32,500 per day for each violation that occurs March 15, 2004 through January 12, 2009; and up to \$37,500 per day for each violation occurring after January 12, 2009.

by 40 C.F.R. § 22.14(a)(4)(i). As indicated on the attached Worksheets, Complainant proposes to assess a civil penalty in the amount of five hundred twenty-four thousand six hundred and twenty five dollars, USD (\$524,625.00) for the violations alleged in this Complaint.

#### NOTICE OF OPPORTUNITY TO REQUEST A HEARING

204. By the issuance of this amended Complaint, Respondent is hereby notified of its opportunity to answer and request a hearing on the record in this matter.

205. If Respondent contests any material fact upon which this Complaint is based, contends that the amount of the proposed penalty is inappropriate, or contends that it is entitled to judgment as a matter of law, Respondent must file a written Answer to this amended Complaint with the Regional Hearing Clerk for EPA Region 6 not later than twenty (20) days after being served with this amended Complaint or by November 17, 2014, pursuant to an earlier granted extension by the Regional Judicial Officer, whichever is later.

206. Respondent's Answer shall clearly and directly admit, deny, or explain each of the factual allegations set forth in this Complaint with regard to which Respondent has knowledge. If Respondent has no knowledge of a particular factual allegation and states so in its Answer, the allegation will be deemed denied. The failure of Respondent to admit, deny or explain any material factual allegation in the Complaint constitutes an admission of the allegation.

207. Respondent's Answer also shall state (a) the circumstances or arguments which are alleged to constitute the grounds of defense, (b) the facts which Respondent disputes, (c) the basis for opposing any proposed relief, and (d) whether a hearing is requested. A

hearing on the issues raised by this Complaint and Respondent's Answer shall be held upon request of the Respondent in its Answer. Any hearing requested will be conducted in accordance with the Administrative Procedure Act, 5 U.S.C. §§ 554 and 556, and the Consolidated Rules of Practice, 40 CFR Part 22, a copy of which is included.

208. The Answer must be sent to:

Regional Hearing Clerk (6RC-D)
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

In addition, Respondent is requested to send a copy of the Answer and all other documents that it files in this action to:

Mr. Brian Tomasovic
Assistant Regional Counsel (6RC-EW)
U.S. Environnemental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733
tomasovic.brian@epa.gov

209. As provided in 40 CFR § 22.17, if Respondent fails to file a written Answer within twenty (20) days of service of this amended Complaint or by November 17, 2014, as applicable, Respondent may be deemed to have admitted all allegations made in this Complaint and waived its right to a hearing. A Default Order may thereafter be issued, and the civil penalty assessed shall become due and payable without further proceedings thirty (30) days after a Default Order becomes final.

210. Respondent is further informed that 40 CFR Part 22 prohibits any ex parte (unilateral) discussion of the merits of this action with the Regional Administrator, Regional Judicial Officer, Administrative Law Judge, or any person likely to advise these officials in the decision of the case, after the Complaint is issued.

#### SETTLEMENT CONFERENCE

- 211. Whether or not Respondent requests a formal hearing or responds with an Answer, Respondent may request an informal conference in order to discuss the facts of this case and to arrive at settlement. To request a settlement conference, Respondent may contact Mr. Brian Tomasovic, Assistant Regional Counsel, at the address or e-mail in paragraph 208 of this Complaint.
- 212. Please note that a request for an informal settlement conference does not extend the 20-day period during which Respondent must submit a written Answer and, if desired, a request for a hearing. The informal conference procedure may be pursued as an alternative to, and simultaneously with, the adjudicatory hearing procedure.
- 213. The EPA encourages all parties against whom a civil penalty is proposed to pursue the possibilities of settlement as a result of an informal conference. Respondent is advised that no penalty reduction will be made simply because such a conference is held. As set forth in 40 CFR § 22.18, any settlement which may be reached as a result of such a conference shall be embodied in a written Consent Agreement signed by the parties and their representatives and a

Complaint and Notice of Opportunity for Hearing CITGO Refining and Chemicals Company L.P. Docket Number CAA-06-2014-3304

Final Order issued by the Regional Administrator, EPA Region 6. The issuance of such Consent Agreement and Final Order shall constitute a waiver of Respondent's right to request a hearing on any matter stipulated to therein.

Date: 11.6.14

hn Blevins

Compliance Assurance and Enforcement Division

#### CERTIFICATE OF SERVICE

I hereby certify that the original and a copy of the foregoing amended Complaint and Notice of Opportunity for Hearing (Complaint) was hand-delivered to the Regional Hearing Clerk, U.S. EPA - Region 6, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733, and that a true and correct copy of the amended Complaint and the Consolidated Rules of Practice were placed in the United States Mail, to the following by the method indicated:

CERTIFIED MAIL, RETURN RECEIPT REQUESTED: #10010360000366744119

Jean M. Flores
Representative authorized to receive service on Respondent's behalf
Guida, Slavich & Flores, P.C.
750 N. St. Paul Street, Suite 200
Dallas, Texas 75201

Date: 1 - 16-2014

U.S. EPA, Region 6 Dallas, Texas

EPA Docket No.: CAA-06-2014-3304

#### PENALTY CALCULATION

DATE: November 6, 2014

FACILITY: CITGO Corpus Christi Refinery East Plant

1801 Nueces Bay Blvd. Corpus Christi, TX 78407

Based on the "Combined Enforcement Policy for Clean Air Act Section 112(r)(1), the General Duty Clause, Clean Air Act Section 112(r)(7,) and 40 C.F.R. Part 68, Chemical Accident Prevention Provisions June 2012"

Economic Benefit: The economic benefit incurred from the cost of these 40 CFR Part 68 violations is limited. \$0.00

# Count 1. Violation of 40 C.F.R. § 68.65 (d)(1)(ii): Process safety information (ii) Piping and instrument diagrams (P&ID's)

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. Inaccuracies in Process safety information has an effect on the process hazard analysis resulting in potential hazards being unidentified and thereby increasing the potential for releases.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. The Facility maintained P&ID, but there was inaccurate information identified on these P&IDs during the inspection.

\$15,000.00

### Count 2. Violation of 40 CFR § 68.67(f): Process hazard analysis five years update and revalidation

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. An overdue process hazard analysis has the potential to affect the facilities ability to prevent or respond to releases by lack of review of any new hazards and old data being relied on.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. The Gas Oil Unibon Process Hazard Analysis was last done in January 2007. It was due in January 2012. It had not been done as of June 15, 2012 during an EPA inspection. Five months overdue.

\$12,000.00

### Count 3. Violation of 40 CFR § 68.69(a): Operating procedures develop and implement written operating procedures

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. The failure to implement operating procedure OPS-000-053 led to the release of hydrofluoric acid form two open bleeder valves.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. The facility developed operating procedures, but failed to implement them in this one identified instance.

\$15,000.00

# Count 4. Violation of 40 CFR § 68.69(c): Operating procedures certify annually that these operating procedures are current and accurate

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. The facility did not maintain records indicating their operating procedures had be annual certified. This introduces the potential to affect the ability of the facility to prevent or respond to releases, as evidenced in other cases where there has been confusion over which is the current operating procedure that led to releases and losses of life.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. The facility was unable to provide operating procedures during the inspection of June 15, 2012. Records were later provided with name procedures with dates of certifications. Per these records some procedures were not certified in on a 365 day annual basis.

.....\$12,000.00

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### Count 5. Violation of 40 CFR § 68.69(d): Develop and implement safe work practices

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. The hydrofluoric acid sampling procedure and field sampling location does not include valve labeling for the manual operation.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. On June 15, 2012 a hydrofluoric acid release occurred during hydrofluoric acid sampling.

#### Count 6. Violation of 40 CFR § 68.71(a): Initial Training

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. The event describe below lead to a potential hydrofluoric acid exposure.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. On February 3, 2011 a technician who was temporarily assigned to the Alky unit was involved in an incident at the Alky unit. Prior to the new assignment, the technician was not trained for the process of line breaking, which was the technician's required job in the Alky unit. According to CITGO documents the "short lead time did not lend itself to an effective hydrofluoric acid safety training program commensurate with his new duties."

\$12,000.00

### Count 7. Violation of 40 CFR § 68.73(a): Mechanical integrity (a) Application. Paragraphs (b) through (f) of this section apply to the following process equipment

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. Equipment identified as controls to hazards in CITGO's process hazard analysis were not having regular tests or inspections being performed.

Extent of Deviation: Minor: The violator deviates somewhat from the regulatory or statutory requirements but most (or all important) aspects of the requirements are met. While several pieces of equipment were identified as missing inspections or tests they represent a small percentage of the equipment at the facility.

\$3,000.00

#### Count 8. Violation of 40 CFR § 68.73(b): Mechanical integrity Written procedures

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. Through its failure to properly document work orders for the repair of process equipment, Respondent failed to implement its written procedures to maintain the mechanical integrity of process equipment

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. This is one example of the process CITGO has established not being followed.

\$15,000.00

### Count 9. Violation of 40 CFR § 68.73(c): Mechanical integrity Training for process maintenance activities

Potential for Harm: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. Through its failure to properly train its technician before assigning the technician to the Alky unit, Respondent failed to train the technician in an overview of that process and its hazards and in the procedures applicable to the technician's job tasks to assure that the technician would be able to perform the job tasks in a safe manner.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. CITGO has a program in place to train maintenance workers prior to their entering a RMP process. This is one example of the program falling short identified during EPA inspection.

### Count 10. Violation of 40 CFR § 68.73(e): Mechanical integrity Equipment deficiencies

<u>Potential for Harm</u>: Major: The violation has the potential to undermine, or has undermined, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. This violation lead to the release of hydrofluoric acid.

Extent of Deviation: Major: The violator deviates from the requirements of the regulations or statute to such an extent that most (or important aspects) of the requirements are not met, resulting in substantial noncompliance. The delay in addressing the identified mechanical integrity issue represents important aspects of the requirements.

### Count 11. Violation of 40 CFR § 68.73(f)(2): Mechanical integrity Quality assurance Appropriate checks and inspections shall be performed

<u>Potential for Harm</u>: Major: The violation has the potential to undermine, or has undermined, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. This violation contributed to the release of hydrofluoric acid.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. Through its failure to properly assemble the bolts and flanges, Respondent failed to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions.

\$20,000.00

# Count 12. Violation of 40 CFR § 68.75(b)(4): Management of change procedures Necessary time period

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. This volition contributed to the release of hydrofluoric acid.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. On February 10, 2012 an MOC was initiated to install a repair clamp on the inlet flange because a color change in the hydrofluoric acid reactive paint indicated that hydrofluoric acid was leaking. This MOC did not have a deadline by which it had to be approved.

\$15,000.00

# Count 13. Violation of 40 CFR § 68.77(b)(1): Pre-startup review Construction and equipment is in accordance with design specifications

<u>Potential for Harm</u>: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. This volition contributed to the release of hydrofluoric acid.

Extent of Deviation: Moderate: The violator significantly deviates from the requirements of the regulations or statute but some of the requirements are implemented as intended. Use of a pre-startup review process could have prevented this hydrofluoric acid release. \$15,000.00 Count 14. Violation of 40 CFR § 68.79(a): Compliance audits least every three years Potential for Harm: Minor: The violation has little potential to affect, or has had little effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. The compliance audit was done just more than three years apart. Extent of Deviation: Minor: The violator deviates somewhat from the regulatory or statutory requirements but most (or all important) aspects of the requirements are met. The facility completed a compliance audit in March 2012, more than three years after the facility's last compliance audit in December 2008. Compliance audits are being done just more than three years apart. \$1,000.00 Count 15. Violation of 40 CFR § 68.79(d): promptly determine and document an appropriate response to each of the findings of the compliance audit Potential for Harm: Moderate: The violation has the potential to affect, or has had significant effect on, the ability of the facility to prevent or respond to releases through the development and implementation of the Part 68 requirements. Not correcting identified compliance audit finding has the potential to affect the facilities ability to prevent or respond to releases. Extent of Deviation: Major: The violator deviates from the requirements of the regulations or statute to such an extent that most (or important aspects) of the requirements are not met, resulting in substantial noncompliance. The compliance audits that were conducted in 2012 had the some of the same findings as the compliance audits that were conducted in 2008. Duration of Violation: The duration of time selected for the penalty calculation will be 03/25/2011 to 03/05/2012 the duration of the issues with a flange in hydrofluoric acid service which is eleven months \$8,250.00

<u>Size of the Violator</u>: Estimated net worth of the violator well exceeds \$1,000,000,000 and therefore also well exceeds the threshold for the highest size category for a size of the violator adjustment. CITGO's refining operations reportedly have annual earnings before interest, taxes, depreciation and amortization of around \$1.5 billion. The size of the violator penalty was calculated as \$1,250,000.00 using this value of the company. This penalty amount will lead to an inequitable result of a large penalty due to the size of

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Total Proposed Penalty:	
***************************************	\$57,375.00
by EPA that was settled for \$225,000.	
assessed due to a prior CAA Section 112(r)(7) case issued to this facili	ty, on July 9, 2010,
Adjustment Factor: An adjustment factor for history of noncompliant	
\$229	9,500.00
figure included. The size of the violator will be reduced to	
will be reduced to an amount equal to rest of the penalty without the si	ze of the violator
violator component is more than 50% of the gravity component, the size	
violator component and a comparatively small gravity component. Sir	