

2020 Annual Summary Tables

Technical Standards to Manage Air Pollution: Petroleum Refining - Industry Standard, O. Reg. 419/05

Part X - Complaints, Records and Reporting

Nanticoke Refinery, Imperial

March 31, 2021

Introduction

The annual summary tables included in this report were developed in accordance with the requirements of Section X, subsection 65(2)1. & 65(2)8. of the Technical Standards to Manage Air Pollution: Petroleum Refining - Industry Standard, O. Reg. 419/05.

Section 65(2) Paragraph 1 – Implementation Summary Table

Implementation Summary Table:

| Part | Title | Section Sub Part | | Date Required | Date Complete | |
|--|--|------------------|--------|---|------------------|--|
| PART II – PERFORMANCE | Flare | 5 | | 01-Jan-2020 | 01-Jan-2020 | |
| PART II – PERFORMANCE | Air pollution control device – Benzene heartcut loading rack | 6 | | 01-Jul-2019 | 01-Jul-2019 | |
| DADT II DEDECOMANICE | vapours | , | | Dataset | | |
| PART II – PERFORMANCE | Air pollution control device – Gasoline loading rack vapours | 6 | | Date of resumption of gasoline loading* | | |
| PART III – STORAGE VESSELS | Storage vessels – identification | 9 | 1 & 2 | 28-Jul-2017 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Storage vessels – identification | 9 | 3 & 4 | 28-Jul-2017 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Storage vessels – identification | 9 | 5(1-2) | 01-Jan-2018 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Storage vessels – identification | 9 | 5(3) | 01-Jan-2025 | | |
| PART III – STORAGE VESSELS | Storage vessels – identification | 9 | 7 | 01-Jan-2023 | | |
| PART III – STORAGE VESSELS | Storage vessels -application | 10 | 1 | 01-Jan-2018 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Floating roof -requirement to float | 11 | 1 | 28-Jul-2017 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Floating roof -requirement to float | 11 | 3 | 28-Jul-2017 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Storage vessels -OGI inspection | 17 | 1 | 01-Jan-2018 | 01-Jan-2018 | |
| PART III – STORAGE VESSELS | Storage vessels in benzene service – general record | 21 | 1 | 28-Jul-2017 | 28-Jul-2017 | |
| PART III – STORAGE VESSELS | Storage vessel inspection record | 22 | 1 | 28-Jul-2017 | 28-Jul-2017 | |
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Primary oil-water separators – requirement selection | 24 | 1.1 | 01-Mar-2018 | 01-Mar-2018 | |
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Primary oil-water separators – monitoring and control requirements | 25 | (1) | 01-Jul-2018 | 01-Jul-2018 | |
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Primary oil-water separators – monitoring and control requirements | 25 | (2) | 01-Jul-2018 | 29-Jun-2018 | |
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Primary oil-water separator record – general | 30 | | 01-Jul-2018 | 01-Jul-2018 | |

| Part | Title | Section Sub Part | | Date Required | Date Complete | |
|--|---|------------------|-------|--|--|--|
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Drains and maintenance access points – measurement and control requirements | 33 | | 01-Jul-2019 | 25-Jun-2019 | |
| PART IV – AIR EMISSIONS FROM INDUSTRIAL SEWAGE | Drain and maintenance access point record | 34 | | 01-Jul-2019 | 25-Jun-2019 | |
| PART V – PRODUCT LOADING | Benzene-containing product loading operations – application | 35 | 1 | 31-Mar-2018 | 31-Mar-2018 | |
| PART V – PRODUCT LOADING | Benzene-containing product loading operations – application | 35 | 2 | 01-Jul-2019 for Benzene heartcut loading rack; Date of resumption of gasoline loading for Gasoline loading rack | 01-Jul-2019 for benzene heartcut loading rack | |
| PART V – PRODUCT LOADING | Cargo tank loading operations – general operating requirements | 36 | | 28-Jul-2017 for Gasoline loading rack; Benzene heartcut loading rack n/a (closed system) | 28-Jul-2017 | |
| PART V – PRODUCT LOADING | Vapour-tight cargo tanks | 37 | | 01-Jan-2018 | 01-Jan2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component identification | 38 | 1-5 | 01-Jan-2018 | 01-Jan-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey – general | 39 | 1 | 01-Jan-2018 | 01-Jan-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey – general | 39 | 2-5 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey – general | 39 | 6 | 01-Mar-2018 | 26-Feb-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey – assessment and measurement of leaks | 40 | 5 | 01-Jan-2023 | | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey plan | 41 | (1) | 01-Mar-2018 | 01-Mar-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Component leak survey plan | 41 | (3) | 01-Mar-2018 | 19-Feb-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Additional leak measurements - pumps, compressors and pressure relief devices | 42 | | 01-Jan-2023 | | |
| PART VI – LEAK DETECTION AND REPAIR | Leaks -deviations and repair | 43 | (1) | 01-Jan-2018 | 01-Jan-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Leaks -deviations and repair | 43 | (2)1. | 01-Jan-2020 | 01-Jan-2020 | |
| PART VI – LEAK DETECTION AND REPAIR | Leaks -deviations and repair | 43 | (2)2. | 01-Jan-2023 | | |
| PART VI – LEAK | Delay of repair list | 44 | 1-3 | 01-Jan-2020 | 01-Jan-2020 | |
| DETECTION AND REPAIR PART VI – LEAK DETECTION AND REPAIR | Delay of repair list | 44 | 4 | 01-Jul-2018 31-Dec-2018 | 28-Jun-2018 17-Dec-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Delay of repair list | 44 | 9 | 01-Jan-2020 | 01-Jan-2020 | |

| Part | Title | Section | Sub Part | Date Required | Date Complete | |
|---|---|---------|----------|---|---|--|
| PART VI – LEAK DETECTION AND REPAIR | Leaking components -annual calculations | 47 | | 31-Mar-2019 | 31-Mar-2019 | |
| PART VI – LEAK DETECTION AND REPAIR | Records -component leak survey | 48 | (1) 1-5 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Records -component leak survey | 48 | (1) 6-13 | 29-Aug-2018 21-Nov-2018 27-Feb-2019 | 29-Aug-2018 21-Nov-2018 27-Feb-2019 | |
| PART VI – LEAK DETECTION AND REPAIR | Records -component leak survey | 48 | (2) 1-5 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Records -component leak survey | 48 | (2) 6 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | 30-Jun-2018 30-Sep-2018 31-Dec-2018 | |
| PART VI – LEAK DETECTION AND REPAIR | Records – additional leak measurements | 49 | 1-7 | 01-Jan-2023 | | |
| PART VI – LEAK DETECTION AND REPAIR | Records – additional leak measurements | 49 | 8-13 | 01-Jan-2023 | | |
| PART VII – OPERATION | Technology requirements – open- ended valves | 50 | | 01-Jan-2018 | 01-Jan-2018 | |
| PART VII – OPERATION | Technology requirements – surge control vessels and bottoms receivers | 51 | | 01-Jan-2020 | 01-Jan-2020 | |
| PART VII – OPERATION | Operating parameter summary table | 52 | | 01-Jan-2018 | 01-Jan-2018 | |
| PART VIII – REQUIREMENT TO CONTINUE THE USE OF METHODS TO MANAGE EMISSIONS | Identifying managed sources | 55 | | 01-Jan-2018 | 01-Jan-2018 | |
| PART IX – AMBIENT MONITORING | Ambient monitoring -benzene | 60 | | 01-Jan-2018 | 01-Jan-2018 | |
| PART IX – AMBIENT MONITORING | Benzene measurements baseline | 61 | | 31-Mar-2021 | 31-Mar-2021 | |
| PART IX – AMBIENT MONITORING | Statistical analysis of benzene measurements | 62 | | 31-Mar-2022 | | |
| PART X – COMPLAINTS, RECORDS AND REPORTING | Complaints procedure | 64 | (1)1-3 | 01-Jan-2018 | 01-Jan-2018 | |
| PART X – COMPLAINTS, RECORDS AND REPORTING | Annual summary reports | 65 | | 31-Mar-2019 | 31-Mar-2019 | |
| PART X – COMPLAINTS, RECORDS AND REPORTING | Public reporting – ambient monitoring | 66 | (1) | 01-Jan-2018 | 01-Jan-2018 | |
| PART X – COMPLAINTS, RECORDS AND REPORTING | Public reporting – ambient monitoring | 66 | (2) | 12-Mar-2018 | 09-Mar-2018 | |

Section 65(2) Paragraph 8 – Performance Summary Table

| Requirement | | | Summary | | |
|---------------------------------|-------------|-------|--|--|--|
| 2020 subsections 8 (1) no | otification | ns | One – At approximately 9am on December 9 th , 2020, a pressure safety valve (PSV) opened on a truck during loading of the benzene concentrate stream (BCS) at the loading rack. The PSV was open for approximately two seconds. The release was confirmed to be nitrogen (N2) from the headspace of the truck containing less than 1.5% benzene. The total release from the opening was calculated as 3.09 ft3. The local MECP Officer was immediately notified as per the requirements of Section 8. | | |
| 2020 subsections contraventions | 11 | (1) | None | | |
| 2020 subsections | 26 | (1) | None | | |
| contraventions | | (' / | | | |
| 2020 subsection 52 (5) orders | | | None | | |
| 2020 subsection 58 orders | | | None | | |