Shell U.K. Limited

Fife NGL Plant

[PPC/A/1013495]

2021 Waste Management Plan

Contents

1 INTRODUCTION

1.1 Scope

This document delivers the requirements of the waste minimisation plan as specified in the Fife NGL PPC Permit and the Shell Group Waste Management Standard.

1.2 Roles & Responsibilities

Role	Responsibility
Waste Focal Point	• Is contact for waste issues on-site • Supports on-site assurance (e.g. LOD1 Housekeeping) • Assesses Continuous Improvement opportunities • Undertakes performance analysis & publish results/feedback – including contractor waste returns • Engages environment specialist and/or Waste Subject Matter Expert as required • Lead update of this Waste Management Plan and the Waste Procedures
General Site Staff (e.g Operations, Maintenance, Office-staff)	• Owner of Waste Management Plan and Waste Procedures • Follows site procedures & Waste Focal Point guidance for waste disposal and ordering/positioning of waste containers • Carries out on-site assurance (e.g. LOD1 Housekeeping) • Provides Waste Focal Point with waste data as required • Escalate Waste Continuous Improvement opportunities to Waste Focal Point • Provides input to Waste Management Plan and Procedure updates as required by Waste Focal Point
Project Staff	• Adheres to Site Waste Procedures and Project-specific Waste Procedures as agreed
Environmental Specialist	• Provides Regulatory (SEPA) liaison as required • Provides Technical (environmental) input as required • Quality Assurance/Submission of PPC annual returns
Waste SME / Waste Contract Holder	• Carries out Contract Holder obligations • Carries out HSSE&SP Control Framework obligations as Waste Subject Matter Expert • Provides technical input as required • Manages wider assurance process (including contractor assurance) • Advise and propagate Continuous Improvement opportunities across business

1.3 Definitions

Covering wastes (solids and liquids) generated to be uplifted from site under the waste contract. Consented wastewater discharges from site are excluded from this definition.

2 WASTE REQUIREMENTS FOR FNGL

2.1 Legal Framework

The FNGL PPC Permit (PPC/A/1013495) requires a waste management plan with a focus on waste minimisation, to be reviewed every 4 years, from February 2010. Under the permit, the operator is required to:

- Characterise and quantify the significant waste for each activity undertaken at the installation (Ref procedure MGT/002: Waste Disposal Procedure)
- Segregate and appropriately store waste and keep records of quantity, nature, origin and destination of waste that is disposed or recovered should be kept (Ref procedure MGT/002: Waste Disposal Procedure)
- Characterise and quantify the significant waste for each activity undertaken at the installation (Ref procedure MGT/002: Waste Disposal Procedure).
- Audit of waste disposal/recovery routes to ensure that waste is properly handled (handled through central waste contract holder – Logistics)
- Sample and characterise waste at appropriate frequency to ensure that they will be accepted at the waste disposal facility and so that the relevant information can be made available to the next holder as required by the Duty of Care Regulations (handled through central waste contract holder – Logistics)
- Determine the use of raw materials, assess the opportunities for reductions and provide a plan for improvements (documented in this plan)

2.2 Shell Requirements

Furthermore, waste management is controlled by Shell's Internal Governance systems, in the form of the HSSE&SP Group Control Framework Manual for Waste, accessible here:

https://eu001-sp.shell.com/sites/AAAAA8432/CF/Web/Waste.aspx

The framework incorporates waste management controls following the Waste management hierarchy:

- **Reduce** waste streams at source (e.g. through planning & design)
- **Reuse** items unmodified
- **Recycle**, converting waste into new material before reuse
- **Energy Recovery** for space heating or electricity generation
- **Ultimate disposal** without negative impact on the environment.

These requirements are embedded in the Upstream International Operated Europe Waste Management Policy and Standards that can be accessed directly through the Corporate Management System.

3 PERFORMANCE & ANALYSIS

3.1 Types of Waste Generated on Site

The types of waste generated at the Fife NGL Plant are listed in the site's waste management procedure MGT/002: Waste Disposal Procedure. These include:

- **Hazardous waste** - such as waste paint/thinner tins, waste oil and chemicals, aerosols, batteries.
- **Non-hazardous** waste such as scrap metal, wood, paper, cardboard, plastics, cans, and general waste.

A description of waste types and their location and method of storage is provided in Table 4.9 of the PPC permit.

3.2 Performance

Figure 1 Total Waste Generated

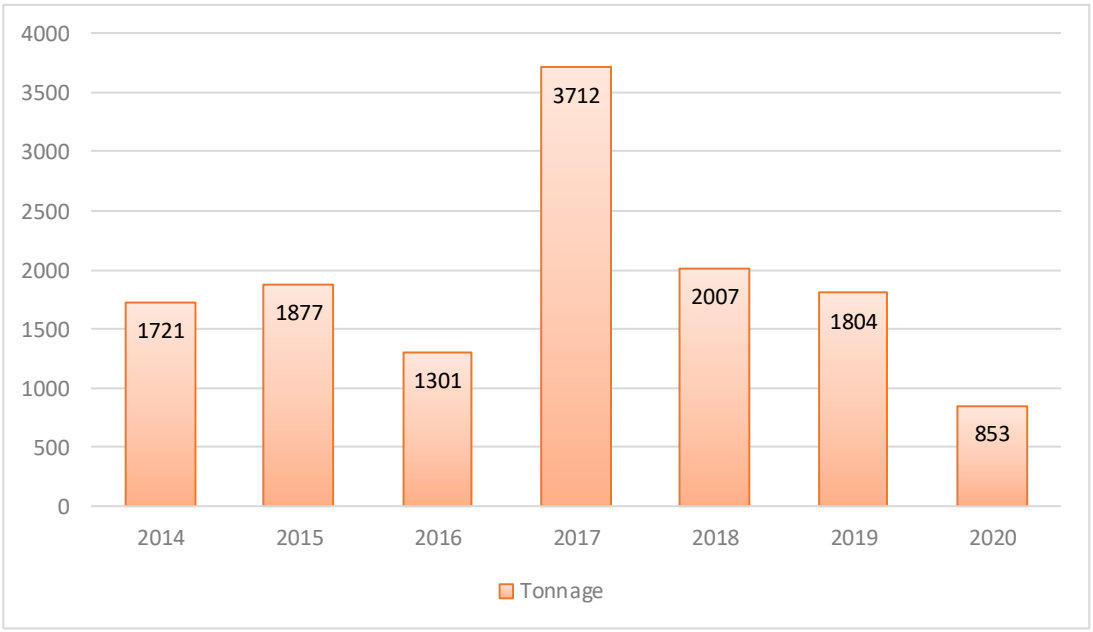
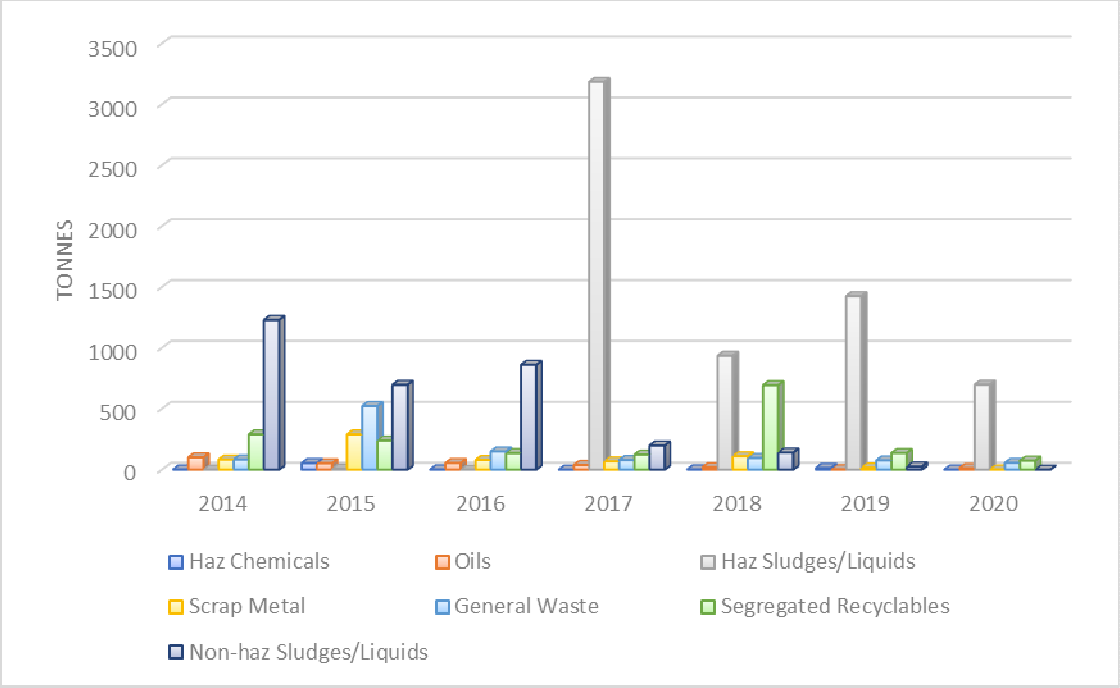


Figure 2 Waste Types



3.3 Data Analysis

Figure 1 show that there were 853 tonnes of waste generated at FNGL in 2020. The total generated amount decreased in comparison to previous years. Global pandemic has also been contributing factor that affected total non-critical plant activities and number of people present on site was reduced throughout the year.

Figure 2 shows an evident trend in high recycling and treatment rates and only small percentage of waste to landfill – 3% in 2020.

The fit for purpose waste yard is helping with segregation and preventing cross contamination of waste streams. There was slight increase of totally recycled waste from 10 to 11% in 2020.

Overall, through the ongoing focus on waste management and segregation, the site has managed to deliver a good waste performance through 2020. Continued efforts to build on the current performance by decreasing the landfill waste and improving reuse, waste to energy and recycling opportunities on site will be the focus for 2022 as well as trying to reduce the amount of waste generated whilst trying to maximise the re-use opportunities following the waste hierarchy of control.

4 WASTE MINIMISATION PLAN

4.1 Activity Look Ahead / Forecast

The activity plan for FNGL over the next four years includes an array of scopes. Anticipated waste increases are expected for planed total plant shutdown and

module outages took place in 2021 in comparison with 2020 data. New contract now in place with ENVA to work on further waste minimasation. Focus will be on efficient waste disposal and compliance assurance of a new waste contract company for FNGL. All works will be monitored closely, and the waste generated will be disposed of in accordance with Shell's waste procedures.

4.2 Waste Minimization Actions

Table 4.2 summarises the ongoing waste minimisation program and lists the actions that will be carried out up to 2022:

No.	Action	Duty Holder	Time Frame
1	Look at reducing the amount of water being taken offsite from the bunded areas that are uncovered i.e. materials bund at Silverstone	Waste Focal Point	Q4
2	Follow the skip truck from ENVA that empties our general waste and carry out an audit for all the general waste skips on site to highlight performance.	Waste Focal Point	Q2
3	Ensure waste area is compliant and monitor cross contamination of the skips.	Waste Focal Point	Q4

Table 4.2 Waste Minimisation Actions

4.3 Performance Targets

Based on our current performance, and the activity forecast, FNGL waste targets for 2022 are as follows:

Reuse/Recycled target – 10% of Total Waste

Sustain Landfill target – 3% of Total Waste

Total Waste Generated – <1000 Tonnes

These targets are set to maintain current performance levels for recycling and waste to landfill, whilst considering the added waste generated from the TPS, projects and plant upsets.