Waste Management Plan

Janssen Sciences Ireland UC

Licence Reg. No. P0778-02

March 2021

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LIMITATIONS

This report presents details of the waste management plan for Janssen's licensed facility at Ringaskiddy, Co. Cork.

Details provided herein are reliant upon information provided by the Client. The Plan is intended to be regarded as a "live" document to be updated on an annual basis, to take into account any changes in waste management practices at the site and future changes in waste legislation and waste management planning.

1 Introduction

Verdé Environmental Consultants (Verdé) has been retained by Janssen Sciences Ireland UC (Janssen) to develop an initial Waste Management Plan (WMP) to comply with Schedule C.2 of the Industrial Emissions Licence for the facility (P0778-02). The Plan has been prepared to ensure that management of waste at the facility is undertaken in accordance with current legal and industry standards including the Waste Management Act 1996 – 2011 as amended and associated Regulations and national and regional plans. In particular, this Plan aims to provide a robust strategy for the storing, handling, collection and transport of the wastes generated at the facility site. This Plan describes current waste management practices at the facility and provides guidance on the appropriate storage, collection and transport of waste to prevent environmental pollution or compliance issues associated and promote good operational practice. . The Plan provides information on the type and quantity of waste currently generated at the facility and provides an overview of the strategy for managing the different waste streams. The Plan provides a snap shot in time of the Janssen's current waste management arrangements whereby waste is managed under terms of a Total Waste Management Contract with Veolia who has responsibility for the characterisation of wastes, update of the Waste Inventory and direction of environmentally correct and regulatory compliant disposal routings. Under provisions of a standard operating procedure for waste management, the total waste contractor is also assigned responsibility for the compliant management of all wastes requiring collection from the facility and for maintaining records of documentation relating to the tracking, consolidation, treatment, disposal and shipment of wastes generated at the Ringaskiddy development. This Plan re-iterates Janssen's commitment to maximising the recycling, reuse and recovery of waste with diversion from landfill, wherever possible.

The overall objective of the Plan will be to ensure that all waste generated at the site is managed in a manner that is consistent with best practice (in line with the waste management hierarchy) and conforms to Janssen Sciences current EHS Management System, Environmental, Health and Safety Manual (Doc. No.: TV-TEC-158101), and Best Available Techniques (BAT) conclusions set out in the BAT Reference Document (BREF) for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector (2016/902/EU).

The Plan is a standalone document that conforms to BAT 13 which states that a waste management plan should be set up and implemented as part of the site's EMS that, in order of priority, ensures that waste is prevented, prepared for reuse, recycled or otherwise recovered. This initial version of the Plan is reliant on the provision of specific information on current waste generation statistics and on-site management as provided by Janssen and Veolia, the Contractor responsible for total waste management at the facility. The Plan is a dynamic document with a commitment to continuous improvement and performance and will be reviewed on an annual basis. The plan includes details on current available waste management performance throughout the facility and a background on national waste management policy as updated in March 2020 with the publication of A Waste Action Plan for a Circular Economy Ireland's National Waste Policy 2020-2025. As well as defining company-wide policy and procedures relating to waste management, the Plan will

promote increased awareness and behavioural change among stakeholders in relation to waste management and will highlight initiates in relation to a range of waste materials

1.1 Objectives

There are several objectives to this Plan as follows:

- Provides summary of main waste management legislation and relevant policy
- Present an overview of waste management at the facility and ensure that practices at the site are compliant with relevant European, National and Regional Waste Management legislation
- Present a snap shot of waste generation and management trends from 2020
- Summarise waste types that are generated at the facility
- Outline responsibilities for waste management
- The Plan suggests waste management objectives going forward that can be considered as part of the EMS
- The Plan represents compliance with a requirement of IE Licence P0778-02

In preparing the waste management plan, Verde has sought details on current waste management practices at the site and has been provided with information from the latest reporting year (2020) in terms of waste generation and transfer from the facility. The Plan should be reviewed and updated on an annual basis.

1.2 Site Details

Janssen Sciences Ireland UC (Janssen) is a global leader in biopharmaceuticals and a wholly owned subsidiary of Johnson & Johnson, the worldwide manufacturer of healthcare products. The site is located on a 40.1 hectare site in Barnahely, approximately 0.5km west of the village of Ringaskiddy in County Cork. Operations on site involve the manufacture of a range of antibodies and/or therapeutic proteins derived from mammalian cell culture for the treatment of immune related diseases and new and innovative cancer treatments.

The facility is regulated by the EPA and was granted an Integrated Pollution Prevention Control (IPPC) License in December 2006. Planning was granted in 2017 (planning ref no. 17/05659) to expand the facility and a licence review application was lodged together with an environmental impact assessment report (EIAR).

The current Industrial Emissions Licence (IEL) Reg. No. P0778-02 was granted in February 2019. Schedule C.2 of the Licence requires that a Waste Management Plan is implemented and maintained at the site.

The activities at the facility relate to the manufacture of biopharmaceutical medicines that do not involve the use of major quantities of dangerous substances. Based on maximum anticipated material inventories, it has been established that the Seveso III Regulations are not applicable to the Janssen Sciences site under both current and future proposed operating conditions.

The production steps include using a recombinant cell culture expression system at the 1,000 litre fermentation scale and a subsequent purification process to produce a formulated bulk. Each of the biologically derived bulk products manufactured at this site are internationally distributed to sterile fill/finish sites for conversion into final drug products.

The manufacturing process is an aqueous based process and involves mainly non-volatile chemicals like sugars, salts and proteins apart from the use of a solvent based column preservative and storage solution primarily consisting of diluted ethanol and acetic acid. The process can be divided into two stages:

- Cell Culture in which cells from a specific working cell line are grown under controlled conditions and the protein from these is then harvested.
- Purification in which the product is taken through a series of purification steps before being filled and frozen as bulk product.

Due to the continuous operation of the bioreactors, the plant operates 24 hours, 7 days a week, 365 days a year. The manufacturing facility includes buildings for production, utilities, laboratories administration and warehousing. The site also operates a Wastewater Treatment Plant (WWTP) which is located at the south eastern corner of the site and provides full biological secondary treatment of onsite process and foul aqueous emissions prior to discharge to Cork Harbour. A site layout map is included in figure 1 attached.

2 Overview of Waste Management Policy and Legislation

2.1 Waste Management Policy

National waste management policy is governed primarily by the requirements of European law, particularly Directive 2008/98 on Waste also referred to as the Waste Framework Directive. How the EU law applies in Ireland is set down and embellished upon in a succession of national policy statements, which collectively determine how a wide range of major waste types should be handled both now and in the future. In this way, European legislation through directives has a significant bearing on our national legislation.

There have been several national waste management policy statement since the publication of an initial document, 'Changing Our Ways' in September 1998, which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland.

Waste policy in Ireland is set down in following documents issued by the Government:

- Waste Management – Changing our Ways (1998)
- Preventing and Recycling Waste – Delivering Change (2002)
- Waste Management – Taking Stock and Moving Forward (2004)
- A Resource Opportunity – Waste Management Policy in Ireland (2012).
- A Waste Action Plan for a Circular Economy (2020)

A National Hazardous Waste Management Plan is also in force. Published by the EPA, this describes how hazardous waste is to be handled.

This national framework is substantiated by Regional Waste Management Plans. These are drafted by local authorities and set out how the implementation of these policies is to take place on the ground. The number of local authority waste planning regions was reduced to three in 2013, with revised plans being finalised in 2015. Regional waste planning and associated policy actions are currently implemented through the three regional waste management plans. These were published in May 2015 and set out a regional framework to implement national and European Policy. There is particular emphasis on retaining the waste management hierarchy whereby

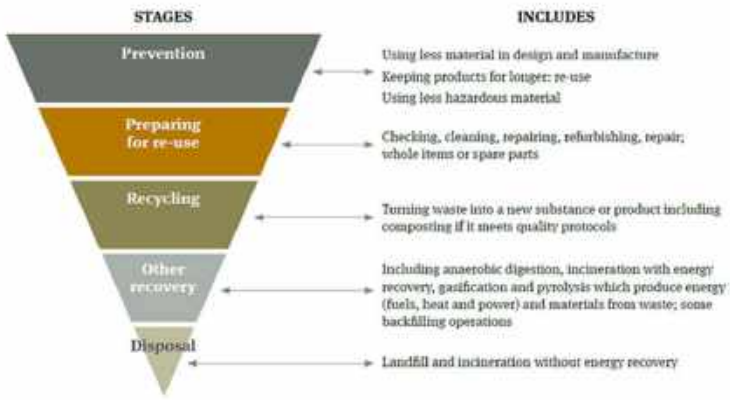


Figure 2.1: Waste Management Hierarchy

These plans incorporate the policy actions supporting the shift to a circular economy and set headline targets for recycling and prevention.

The current regional plans will be replaced in 2021 with a National Management Plan for a Circular Economy.

2.2 Action Plan for a Circular Economy

In September 2020 the government released a new policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan 'A Waste Action Plan for a Circular Economy' 12 was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities.

It aims to fulfil the commitment in the Programme for Government to publish and start implementing a new National Waste Action Plan. It is intended that this new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. It will be followed later this year by an All of Government Circular Economy Strategy. The policy document shifts focus away from waste disposal and moves it back up the production chain. To support the policy, regulation is already being used (Circular Economy Legislative Package) or in the pipeline (Single Use Plastics Directive). The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

The new waste management policy acknowledges the success of previous policy in moving away from disposal and increased use of recovery in helping Ireland to realise its EU waste management targets. The Policy also acknowledges

that we must now go further, moving up the waste hierarchy in reducing our reliance on recovery in the medium term. The aim of the Policy in this regard is therefore to first and foremost to reduce the quantity of waste generated in line with the pinnacle of the waste hierarchy (waste prevention). Waste policy can no longer be about the narrow consideration of how to treat the waste we produce, implicitly based on a linear or take-make waste consumption model that cannot be sustained. Our policy focus must be broader, looking first at how we consume materials and resources, how we design the products that households and businesses use, how we prevent waste generation and resource consumption and how we extend the productive life of all goods and products in our society and economy. In other words – a commitment to transitioning to a circular economy.

Figure 2.2: A Circular Economy

A 'Waste Action Plan for a Circular Economy' now sits at the top of the hierarchy of statutory plans and programmes for the waste area which also includes Waste Management Plan(s), the National Waste Prevention Programme and the National Hazardous Waste Management Plan. The new national policy will inform future versions of those plans and provide a coherent framework in which sectoral policies, targets and objectives can be realised.

2.3 Legislative Requirements

The primary legislative instrument that govern waste management in Ireland and applicable to the facility is the Waste Management Act. Most of Ireland's waste management legislation stems from the Waste Management Acts 1996-2011,

with the original 1996 legislation being amended a number of times - the Waste Management Act 1996 (No. 10 of 1996) as amended 2001 (No. 36 of 2001), 2003 (No. 27 of 2003) and 2011 (No 20 of 2011).

The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery. Sub-ordinate and associated legislation includes:

- European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended
- Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended
- Waste Management (Facility Permit and Registration) Regulation 2007 (S.I No. 821 of 2007) as amended
- Waste Management (Licensing) Regulations 2000 (S.I No. 185 of 2000) as amended
- European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended
- Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended
- Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
- European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
- Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
- Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended
- European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 191 of 2015)
- Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended
- Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended (All trans-frontier shipments of waste originating in any Local Authority area in the State that are subject to prior written notification procedures must be notified to and through the National TFS Office)
- European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)
- European Union (Properties of Waste Which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended.

Other relevant Acts include:

- Environmental Protection Act 1992 (S.I. No. 7 of 1992) as amended
- Litter Pollution Act 1997 (Act No. 12 of 1997) as amended and
- Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended
- These Acts (in particular, the Waste Management Act) and subordinate Regulations enable the transposition of relevant European Union Policy and Directives into Irish law.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the Waste Management Act 1996 - 2011 and subsequent Irish legislation, is the principle of “Duty of Care”. This implies that the

waste producer (Janssen) is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal.) As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final disposal area, waste contractors will be employed to physically transport waste to the final waste disposal site. In the case of the Ringaskiddy facility, Janssen has retained Veolia to act as Total Waste Contractor.

Despite the retention of a full-time specialist waste management contractor, Janssen retains overall responsibility as producer of the waste and it therefore remains imperative for Janssen to understand how the company undertake on-site management of waste in accordance with all legal requirements and employ suitably permitted/licenced contractors to undertake off-site management of their waste in accordance with all legal requirements.

This includes the requirement that a waste contactor handle, transport and reuse/recover/recycle/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities. A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the Waste Management (Facility Permit & Registration) Regulations 2007 as amended or a waste or IE (Industrial Emissions) or Waste Licence granted by the EPA. The COR/permit/licence held specifies the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

2.4 Waste Regulatory Bodies

There are several regulatory bodies that have a direct involvement in waste management regulation and enforcement:

- Environmental Protection Agency – The EPA carries out its waste enforcement functions through the Office of Environmental Enforcement (OEE). The OEE has a mandate to deliver enhanced environmental compliance through enforcement of EPA licences issued to waste, industrial and other activities. This includes enforcement relating to waste management activity relating to operations licensed by P0778-02.
- Local Authorities – Cork County Council and other local authorities have several objectives when it comes to waste management regulation and enforcement. In terms of regulation, the Council is the body responsible for issuing waste facility permits and certificates (generally associated with smaller waste management facilities or with facilities for acceptance of soil and stone). The primary objective of Las in terms of waste enforcement is to achieve regulatory compliance in relation to waste activities in the LA's functional area. This covers a wide range of roles, including regulatory enforcement; undertaking inspections and taking appropriate measures to bring relevant parties into compliance; addressing unauthorised waste activities and responding to environmental complaints. Local authorities are Las are assisted by three Waste Enforcement Regional Lead Authorities

(WERLAs), established in 2015 and covering the Southern, Eastern and Midlands, and Connacht/Ulster Regions. The WERLA offices have responsibility for coordinating waste enforcement actions within regions, setting priorities and common objectives for waste enforcement, and ensuring consistent enforcement of waste legislation while still leaving Local Authority personnel as first responders on the ground.

- National Trans-frontier Shipment Office – The National Trans-frontier Waste Shipment (TFS) Office was established in 2007 as part of Ireland's transposition of Regulation (EC) No. 1013/2006 of the European Parliament and of the Council (the waste shipment regulation). All trans-frontier shipments of waste originating in any Local Authority area in the State that are subject to prior written notification procedures must be notified to and through the National TFS Office.
- National Waste Collection Permit Office - The National Waste Collection Permit Office (NWCPO) processes waste collection permit applications and review applications for all LAs. It maintains the Waste Collection Permit register, revokes Waste Collection Permits as appropriate, and provides data reports to relevant stakeholders-including enforcement authorities where required. The current permit held by Veolia is NWCPO-09-04689-03, which was granted on 8th February 2021 and is valid for five years.

3 Roles & Responsibilities

Assigned waste management roles and responsibilities for relevant parties and personnel are described below, as set out in the site's Waste Management Procedure (*Doc. Ref.: TV-SOP-22418*), which is included in Appendix A:

Janssen (EHS&S Department)

The EHS&S Department are responsible for the following:

- Approval of waste disposal sites as per the J&J WW EHS&S guidelines and DS-FRM-39146 Waste Disposal Approval Form;
- Management of the total waste management contractor on site;
- The corporate and regulatory compliant management and disposal of wastes from the facility (in conjunction with the Facilities Department);
- Auditing of Waste Disposal Facilities so as to ensure regulatory and corporate compliance of waste management operations;
- Management of waste management documentation. This includes waste container tracking forms, waste inventory data and waste shipment documentation;
- Archiving of all documentation and records relating to statutory and corporate control of waste management on site;
- All wastes shipped from the site will be characterised by a suitably qualified Dangerous Goods Safety Advisor (DGSA).

Quality Control

Quality Control are responsible for the following:

- Completing the product destruction request form (DS-FRM-19638) and seeking approval, tracking product destruction and form archiving;
- Approving the product destruction request form (DS-FRM-19638).

Total Waste Contractor (Veolia)

Under terms and conditions of the Contract with Janssen, Veolia is responsible for the following:

- The characterisation of wastes, update of the Waste Inventory and direction of environmentally correct and regulatory compliant disposal routings;
- The compliant management of all wastes requiring collection from site areas, for the maintenance of documentation pertaining to the tracking, consolidation, treatment, disposal and shipment of wastes generated at Janssen Sciences;
- Signing the completion section of destruction request form (DS-FRM-19638);

- Monthly inspections of the waste segregation compound, waste collection points and storage areas, the focus of which will be to:
    - Detect signs of leaks and unsafe conditions;
    - Assess condition and labelling of containers;
    - Assess condition and availability of waste management equipment including earthing wires, pumps, clean-up materials and equipment, funnels and stored labels;
    - Assess tidiness and housekeeping of the waste segregation and storage area
    - Assess if any unsafe practices or practices liable to cause EHS&S incidents are being undertaken
    - Assess the level of competency of staff, supervision and training deficiencies
    - Review appropriateness of procedures to the activities and operations undertaken
- Corrective actions raised will be communicated to the Waste Management Contractor and the EHS&S Manager;
- Corrective actions raised will be inputted to the corrective action system.

All Staff

All Janssen staff will adhere to the following principal duties and responsibilities:

- Knowledge and implementation of the hierarchy of waste management favouring elimination of wastes over minimisation and disposal, as is practiced at Janssen Sciences;
- Due reference should be made by all personnel to the Design for Environmental, Health and Safety Procedure (DS-SOP-3411) and the EHS Impact Assessment Form (DS-FRM-5604) at the inception of any project;
- Ensuring that all wastes produced at the Janssen Sciences facility are disposed of in accordance with site waste management directions and corporate, statutory and regulatory requirements;
- The correct labelling and transferring of waste material from their area to a waste staging area (collection point);
- Awareness of, and have access to, the Site Waste Inventory on the site Intranet: **http://jsciecork.eu.jnj.com/sites/ehs/ehs2/SitePages/Home.aspx**
- Where a new waste arises which is not listed on the Waste Inventory the generator of the waste must complete the Waste Characterisation Form (DS-FRM-6057) and forward the form to the EHS&S Department;
- Ensuring that their waste storage areas are properly maintained and that wastes are transferred from their area to waste staging areas in a proper and compliant manner;
- Minimisation and elimination of wastes and for making suggestions as to this effect.

4 Current Waste Management Systems at Janssen

4.1 Current Waste Management Arrangements

It is understood that Veolia are the current main Waste Contractor operating at the Janssen site, with four Waste Operators employed on a full-time basis. A map detailing the location and layout of the waste storage yard on site is presented in figure 1 attached.

4.1.1. Handling and Storage of General Wastes on-Site

The general procedure in relation to the handling and storage of wastes at the Janssen site are outlined below, as per the Waste Management Procedure (*Doc Ref.: TV-SOP-22418*).

- Wastes may only be collected, stored and moved in waste compatible containers, UN approved where required, with the contents clearly identified and if applicable hazard signs applied to the container to indicate the highest level of hazard contained within. The site waste label should be affixed to all waste containers.
- Waste may only be stored in designated storage areas.
- Hazardous and non-hazardous waste collection and storage points will be clearly identified and locations will be risk assessed with regard to environmental, health and safety risks prior to use or if operations in their vicinity change.
- All hazardous liquid wastes must be stored on spill trays or within spill containment areas capable of containing 110% of the container contents and in the case of hazardous materials not giving rise to significant levels of occupational exposure should a spillage occur, or during filling / emptying operations.
- Area personnel (e.g. laboratory, warehouse) are responsible for wastes generated within their area and the transfer of waste materials to waste staging rooms.
- Waste management personnel (Site Waste Contractor) shall remove waste from the waste staging rooms to the waste segregation compound.
- Waste management personnel will transfer the waste material to storage units and label the waste packages with the following labelling requirements:
    - Facility name
    - Date that the waste was placed in storage
    - Name of the waste (chemical name)
    - Hazardous characteristics of the waste (e.g. flammable, corrosive as outlined in Council Directive 91/689/EEC), where applicable
    - Infectious component, if applicable
    - Radionuclide(s) or other specific hazardous characteristics of the waste e.g. reactive with water.
- The waste container shall be labelled with an appropriate approved United Nations hazard symbol.

- Labels will be durable and water resistant. Containers will be compatible with the waste type and maintained in good condition.
- Containers will be stored and handled in a manner that will not cause a rupture or a leak. Open containers or waste bins and cabinets are not permitted at any time, except when adding or removing waste.
- All wastes will be segregated according to hazard classes and potential incompatibilities should a spillage occur.
- A locked cabinet will be available in the Waste storage area for the holding of bonded materials for Inspection by Revenue.

4.1.2. Hazardous Waste Management

An overview of how hazardous waste is managed on site is illustrated in figure 4.1 below.

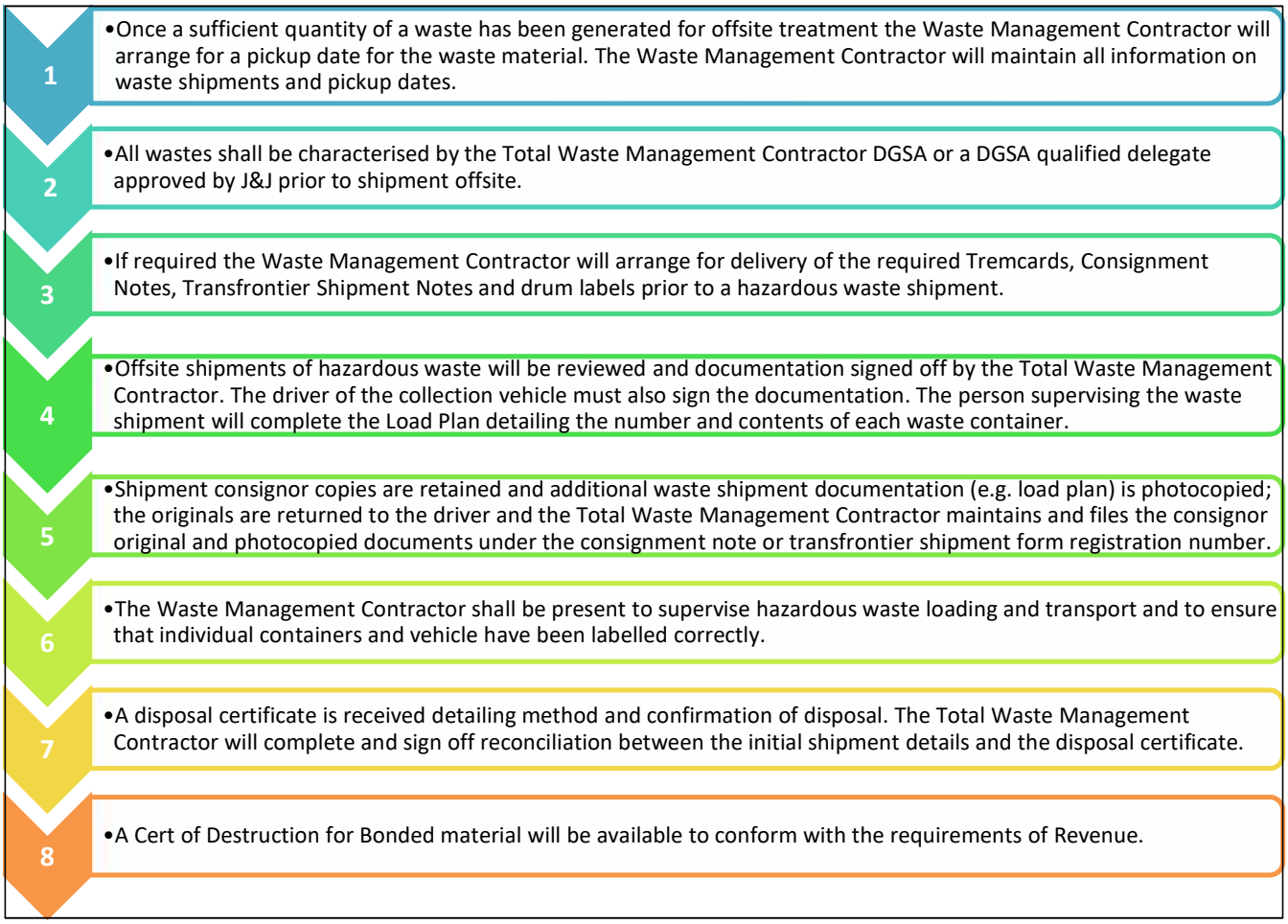


Figure 4.1: overview of the process for management of Hazardous waste at Janssen

4.1.3. Waste Vendor Due Diligence

The following procedure is in place with respect to the approval, review and management of Waste Disposal Facilities used by Janssen:

- Offsite recycling, treatment and disposal is only allowed to J&J approved Waste Disposal Facilities;
- All waste disposal facilities are to be approved as per the J&J Worldwide EHS&S Guidelines due diligence methodology and schedule;
- Approval will be sanctioned by the EHS&S department via DSFRM-39146 Waste Disposal Facilities Approval Form;
- EHS&S will maintain the file of approved sites and schedule Waste Disposal Facility Audits when required.

5 Summary of Wastes Currently Generated on-site

An analysis was completed on waste management data for 2019 and 2020 from the Janssen site with respect to the following:

- Breakdown of total hazardous and non-hazardous wastes generated on site in 2019 and 2020;
- Top ten contributing waste streams to both hazardous and non-hazardous wastes generated in 2020;
- Breakdown of the different treatment options (recycle, energy recovery, biological/chemical treatment and incineration) that were used for both hazardous and non-hazardous wastes generated on site in 2020.

Figure 5.1 below summarises the total weights of both hazardous and non-hazardous wastes generated on site in 2019 and 2020 for comparison purposes. Key observations are summarised below:

- It can be seen that there was significantly more hazardous waste generated at the Janssen site in 2019 compared to 2020. The increase in hazardous waste in 2019 can be attributed to a lightning strike to the WWTP resulting in a number of tankers of aqueous waste being removed off site as hazardous waste for incineration.
- There was significantly more non-hazardous waste generated in 2019 compared with 2020, which can be attributed to construction waste associated with The BioCork2 project which comprises an expansion of the Biomedicines Manufacturing Facility, involving the construction of a new production building, expansion of the warehouse building, laboratory and administration building and site facilities.

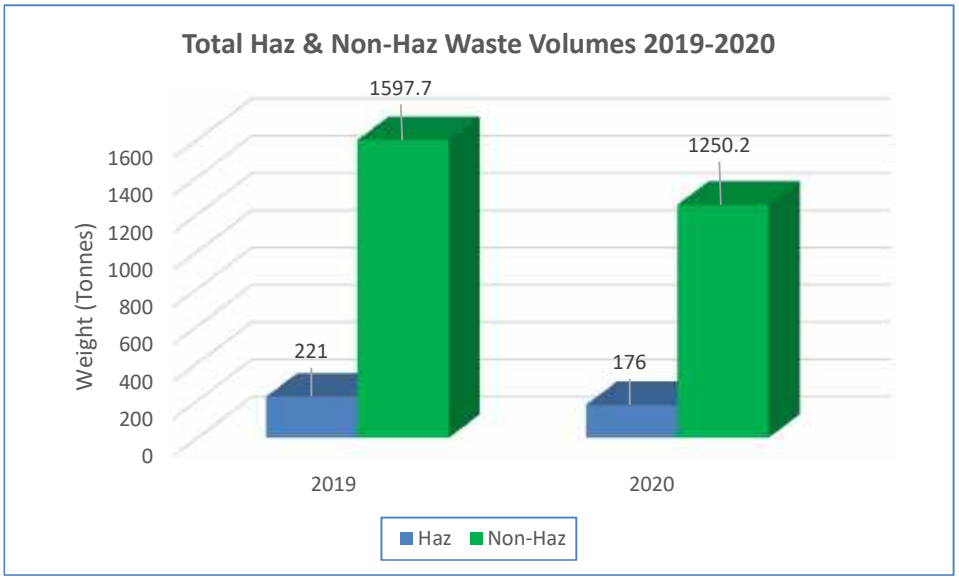


Figure 5.1: Total Hazardous & Non-Hazardous Waste Generated in 2019 & 202

5.1 Hazardous Waste

The top ten contributing hazardous waste streams were ranked in terms of weight (Tonnes) for 2020 and summarised in table 5.1 below and figure 5.2 overleaf. It can be seen that the total combined weights of the top ten contributing waste streams for hazardous waste account for 97.8% of the entire weight for that waste category in 2020. A complete and up-to-date waste Inventory (for all waste streams) is included in Appendix B.

Table 5.1: Top 10 contributing Hazardous Waste Streams in 2020

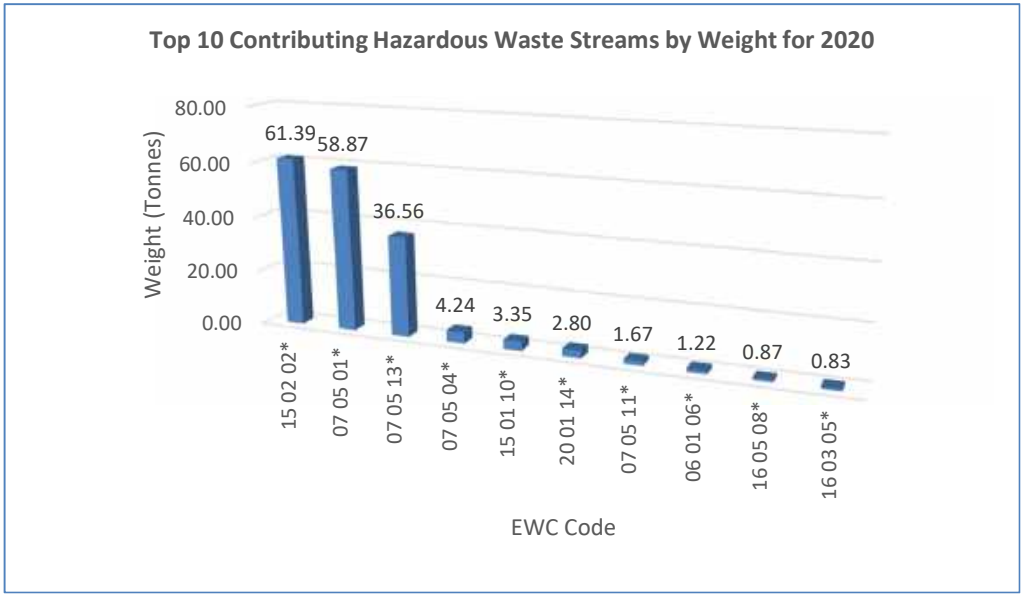
Rank	Waste Description	EWC Code	Source	Total Weight (Tonnes)
1	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	15 02 02*	Suite 3 operations	61.39
2	Aqueous washing liquids and mother liquors	07 05 01*	MFG – cell culture	58.87
3	Solid wastes containing dangerous substances	07 05 13*	QC microbiology	36.56
4	Other organic solvents, washing liquids and mother liquors	07 05 04*	All production areas	4.24
5	Packaging containing residues of or contaminated by dangerous substances	15 01 10*	All production areas	3.35
6	Acids	20 01 14*	QC chemistry	2.80
7	Sludges from on-site effluent treatment containing dangerous substances	07 05 11*	WWTP	1.67
8	Other acids	06 01 06*	QC labs	1.22
9	Discarded organic chemicals consisting of or containing dangerous substances	16 05 08*	All production areas	0.87
10	Organic wastes containing dangerous substances	16 03 05*	All production areas	0.83

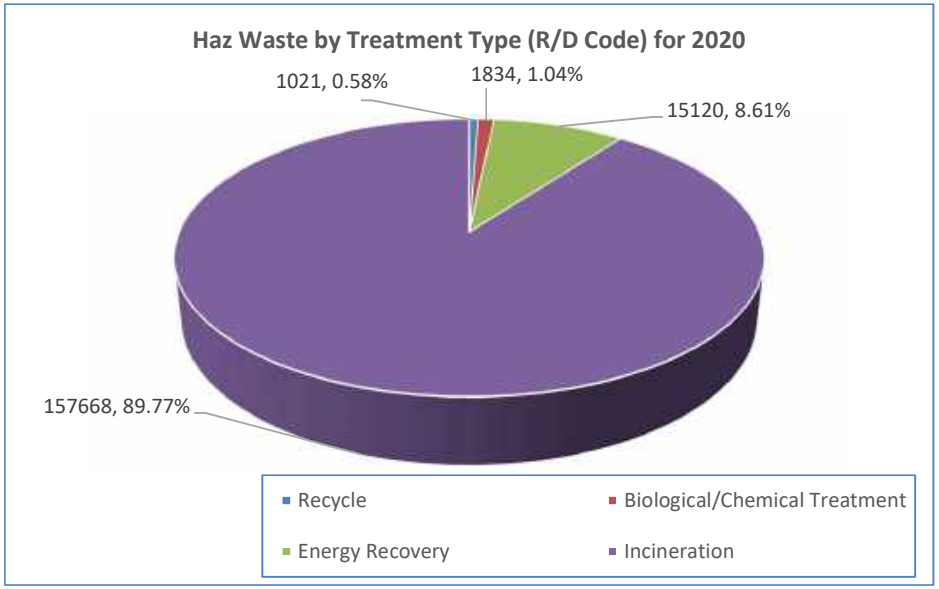
The R/D code categories (incineration, energy recovery, biological/chemical treatment, recycling) for hazardous wastes were summarized in terms of their percentage contribution to the total volume of hazardous wastes generated in 2020, as presented in table 5.2 below and figure 5.3 overleaf. Key observations are summarised below:

- Incineration accounted for 89.76% of the treatment of hazardous waste in 2020;
- Energy recovery accounted for 8.61% of the treatment of hazardous waste in 2020;
- Biological/chemical treatment accounted for 1.04% of the treatment of hazardous waste in 2020;
- Recycling accounted for 0.58% of the treatment of hazardous waste in 2020.

Table 5.2 – Contribution of Treatment Type (R/D Code Categories) for Hazardous Waste in 2020

R/D Code Category	2020	
	Weight (T)	%
Incineration	157.67	89.76
Energy Recovery	15.12	8.61
Biological/chemical Treatment	1.83	1.04
Recycling	1.02	0.58





Figures 5.2-5.3 (L-R): Top 10 contributing Hazardous Waste Streams in 2020; Weight & % contribution of the different treatment options (R/D code categories) to Hazardous waste generated in 2020

5.2 Non-Hazardous Waste

The top ten contributing non-hazardous waste streams were ranked in terms of weight (Tonnes) for 2020 and summarised in table 5.3 below and figure 5.4 overleaf. It can be seen that the total combined weights of the top ten contributing waste streams for non-hazardous waste account for 96.4% of the entire weight for that waste category in 2020. A complete and up-to-date waste Inventory (for all waste streams) is included in Appendix B.

Table 5.3: Top 10 contributing Non-Hazardous Waste Streams in 2020

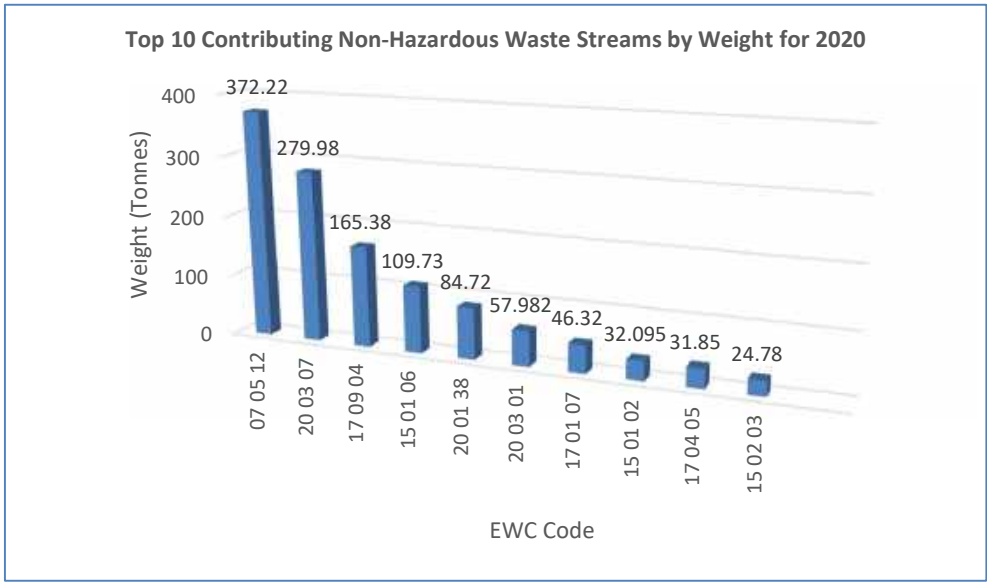
Rank	Waste Description	EWC Code	Source	Total Weight (Tonnes)
1	Sludges from on-site effluent treatment other than those mentioned in 07 05 11*	07 05 12	WWTP	372.22
2	Bulky municipal waste	20 03 07	Construction/upgrade project(s)	279.98
3	Mixed construction and demolition wastes	17 09 04	Construction project(s)	165.38
4	Mixed packaging	15 01 06	All site areas	109.73
5	Wood other than that mentioned in 20 01 37*	20 01 38	All site areas	84.72
6	Mixed municipal waste	20 03 01	All site areas	57.98
7	Mixtures of concrete, bricks, tiles and ceramics	17 01 07	Construction project(s)	46.32
8	Plastic packaging	15 01 02	All site areas	32.10
9	Iron and steel	17 04 05	All site areas	31.85
10	Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02*	15 02 03	Production areas	24.78

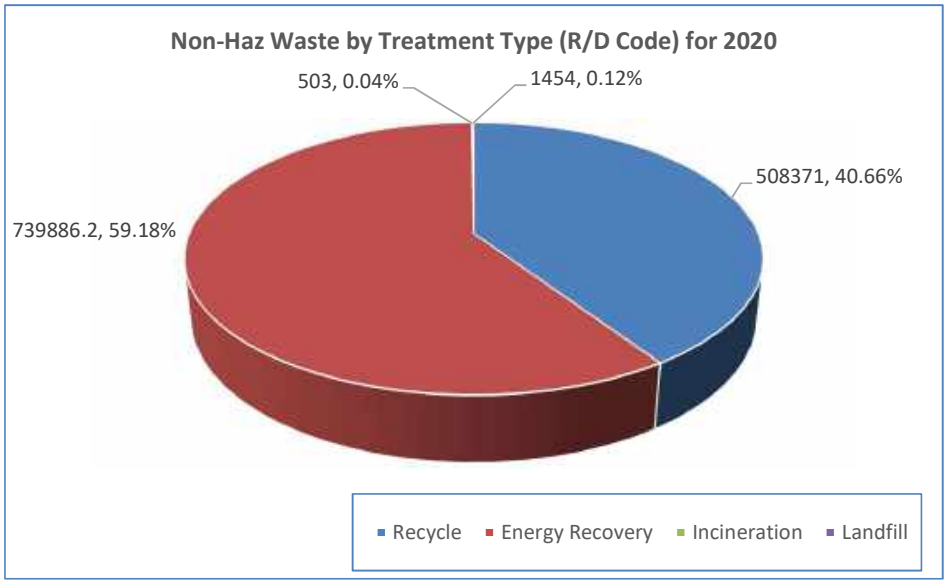
The R/D code categories (energy recovery, recycling & incineration) for non-hazardous wastes were summarized in terms of their percentage contribution to the total volume of non-hazardous wastes generated in 2020, as presented in table 5.4 below and figure 5.5 overleaf. Key observations are summarised below:

- Energy recovery accounted for 59.18% of the treatment of non-hazardous waste in 2020;
- Recycling accounted for 40.66% of the treatment of non-hazardous waste in 2020;
- Disposal to landfill accounted for 0.12% of the treatment of non-hazardous waste in 2020, which can be attributed to construction waste associated with the BioCork2 project. Janssen Sciences normally operate through a zero waste to landfill policy;
- Incineration accounted for 0.04% of the treatment of non-hazardous waste in 2020.

Table 5.4 – Contribution of Treatment Type (R/D Code Categories) for Non-Hazardous Waste in 2020

R/D Code Category	2020	
	Weight (T)	%
Energy Recovery	739.89	59.18
Recycle	508.371	40.66
Landfill	1.45	0.12
Incineration	0.503	0.04





Figures 5.4-5.5 (L-R): Top 10 contributing Non-Hazardous Waste Streams in 2020; Weight & % contribution of the different treatment options (R/D code categories) to Non-Hazardous waste generated in 2020

6 Annual Review of Waste Management Plan

6.1 Targets and Objectives

This WMP should be reviewed on an annual basis with respect to the following targets and objectives:

- Any updates to relevant legislative requirements;
- Improvements to waste segregation, awareness, and review of waste generation in an effort to reduce amounts of wastes produced, source new waste outlets closer to site to reduce CO_2 emissions from transport. On site Procedures to be updated to reflect required best practices;
- Reducing the percentage of waste going to general waste and increasing the percentage of waste going for recycling;
- Reducing the amount of hazardous waste produced per Kg of product, and reducing the CO_2 footprint of transporting waste from site;
- Review of the major contributing hazardous waste streams and their classification process to ensure they are being classified correctly;
- Any significant increases in certain hazardous waste streams should be investigated to identify the source of the increase and a review of the waste classification process if required (including a review of the process(es) that generated them, and sampling and testing, if needed).

6.2 Waste Audit Procedures

Janssen will be responsible for conducting regular waste audits at their facility. This will include spot checks of waste collections on site and a review of records for the waste generated and transported off-site. If waste movements are not accounted for, the reasons for this will be established in order to see if and why the record keeping system has not been maintained. Each waste stream will be examined in order to see where the largest percentage of waste generation is occurring. The waste management methods for each waste stream will then be reviewed in order to highlight how improvements can be achieved. Waste management costs will also be reviewed.

6.3 Communications/Training

As described above, the waste management plan will be adopted immediately and will be communicated to all site staff initially with the importance of managing waste being highlighted. All staff will be briefed on the contents of the waste management plan and made aware of the importance of compliance with the Plan. Furthermore, any updates or new waste management initiatives introduced through this plan will be communicated to all personnel, and implemented in an effective manner.

6.4 Review of Plan

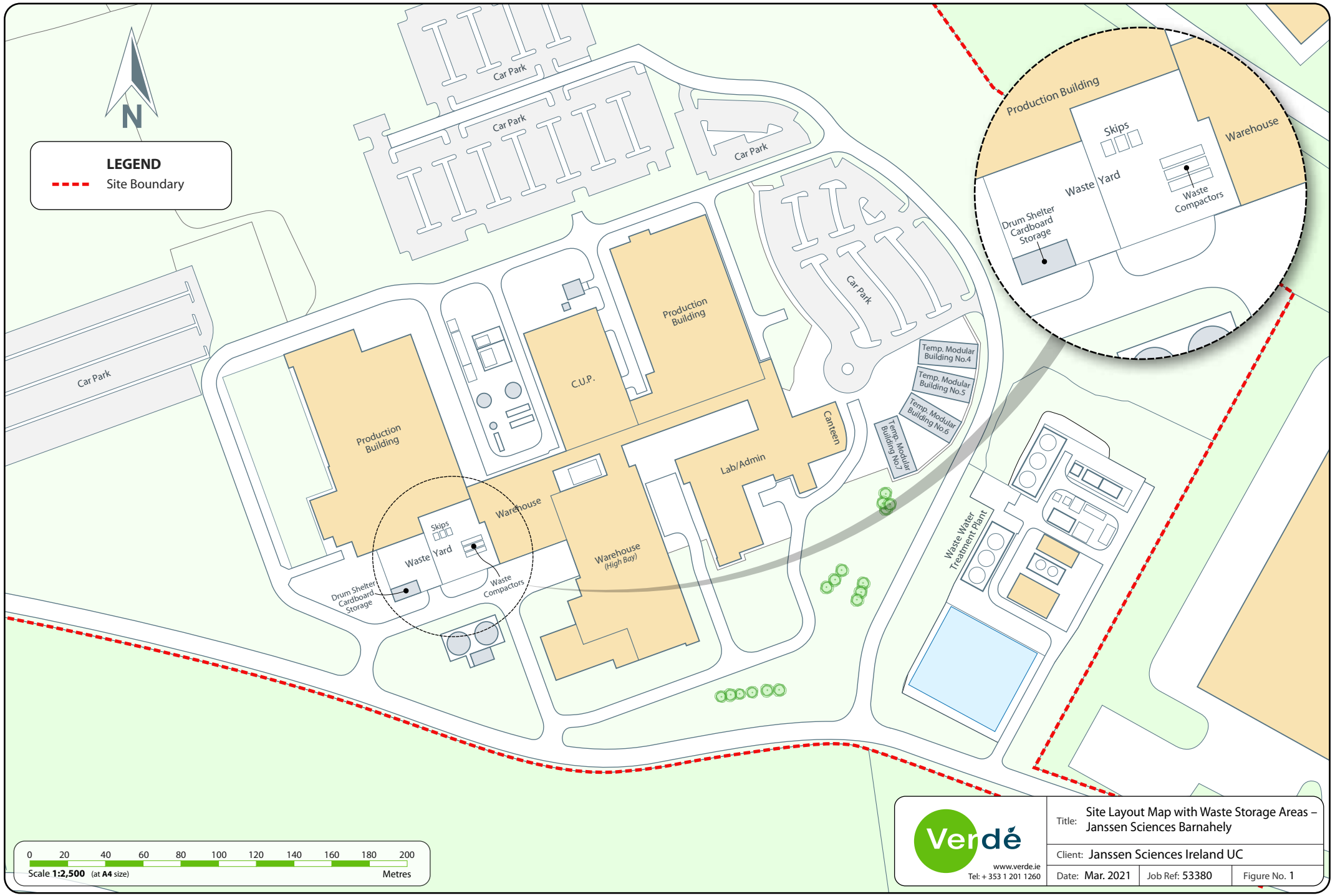
The effectiveness of the Plan will be strictly monitored, assessed and audited. The Plan will be reviewed by Janssen on an annual basis with respect to legislative requirements and improvements in waste management systems, with a focus on the following:

- Updates to relevant legislative requirements;
- Improvements to waste segregation and awareness by all site personnel;
- Potential improvements in the percentage of non-hazardous waste being used for recycling;
- Potential improvements in the amount of waste being classified as hazardous waste;
- Reduction in the amount of hazardous waste produced per Kg of product, and reduction of CO^2 footprint associated with transportation of waste from site;
- Review of the top ten hazardous waste streams and their classification processes to ensure they are being classified correctly;
- Any significant increases in certain hazardous waste streams should be investigated to identify the source of the increase and a review of the classification process if required (including a review of the process(es) that generated them, and sampling and testing, if needed).

7 REFERENCES

- Standard Operating Procedure TV-SOP-22418 – Waste Management Procedure, Document Number: DS-SOP-5430, Version: 6.0
- INDUSTRIAL EMISSIONS LICENCE, Licence Register Number: P0778-02, Company Register Number: 472372, Licensee: Janssen Sciences Ireland UC, Location of Installation: Barnahely Ringaskiddy, County Cork
- Waste Management Act 1996 (S.I. No. 10 of 1996) as amended 2001 (S.I. No. 36 of 2001), 2003 (S.I. No. 27 of 2003) and 2011 (S.I. No. 20 of 2011)
- Environmental Protection Act 1992 (Act No. 7 of 1992) as amended
- Litter Pollution Act 1997 (Act No. 12 of 1997) as amended
- Department of Environment and Local Government (DoELG) Waste Management – Changing Our Ways, A Policy Statement (1998)
- Department of Environment, Heritage and Local Government (DoEHLG) Preventing and Recycling Waste - Delivering Change (2002)
- DoELG, Making Ireland's Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development) (2002)
- DoEHLG, Taking Stock and Moving Forward (2004)
- DoECLG, A Resource Opportunity - Waste Management Policy in Ireland (2012)
- Department of Communications, Climate Action and Environment (DCCAE), Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025 (2020).
- Environmental Protection Agency (EPA), National Waste Database Reports 1998 – 2012.
- European Waste Catalogue - Council Decision 94/3/EC (as per Council Directive 75/442/EC).
- Hazardous Waste List - Council Decision 94/904/EC (as per Council Directive 91/689/EEC).
- PA, European Waste Catalogue and Hazardous Waste List (2002)
- EPA, Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous (2015)

FIGURES


N
LEGEND
Site Boundary
Car Park
Car Park
Car Park
Car Park
Car Park
Production Building
C.U.P.
Production Building
Canteen
Lab/Admin
Warehouse
Warehouse (High Bay)
Temp. Modular Building No.4
Temp. Modular Building No.5
Temp. Modular Building No.6
Temp. Modular Building No.7
Waste Water Treatment Plant
Skips
Waste Yard
Warehouse
Drum Shelter Cardboard Storage
Waste Compactors
Production Building
Warehouse
Skips
Waste Yard
Waste Compactors
Drum Shelter Cardboard Storage
0 20 40 60 80 100 120 140 160 180 200
Scale 1:2,500 (at A4 size)
Metres
Verdé
www.verde.ie
Tel: + 353 1 201 1260
Title: Site Layout Map with Waste Storage Areas – Janssen Sciences Barnahely
Client: Janssen Sciences Ireland UC
Date: Mar. 2021
Job Ref: 53380
Figure No. 1

APPENDIX A

Janssen Sciences Waste Management Procedure

Standard Operating Procedure	
Owner Group: Cork	**Effective Date:** 15-Nov-2019 00:18:48 EST
Document Title: Waste Management Procedure	
Document Number: DS-SOP-5430	**Version:** 6.0

1.0 Purpose

1.1 The purpose of this procedure is to ensure correct management of wastes generated at Janssen Sciences.

2.0 Scope

2.1 This procedure applies to the waste management of all hazardous and non-hazardous wastes generated at Janssen Sciences.

3.0 Definitions

3.1 A waste - is defined in Irish legislation under the Waste Management Act 1996.

In the Waste Management Act, 1996 "waste" means any substance or object belonging to a category of waste specified in the First Schedule of the Act (Attachment 1) or for the time being included in the European Waste Catalogue which the holder discards or intends or is required to discard, and anything which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste until the contrary is proved.

3.2 Disposal - in relation to waste, includes any of the activities specified in the Third Schedule of the Waste Management Act 1996.

3.3 Recovery - in relation to waste, means any activity carried on for the purposes of reclaiming, recycling or re-using, in whole or in part, the waste and any activities related to such reclamation, recycling or re-use, including any of the activities specified in the *Fourth Schedule* of the Waste Management Act 1996.*These are outlined in Attachment 5.*

3.4 ADR regulations - apply to the shipment of hazardous waste materials from the site.

3.5 Dangerous Goods Safety Advisor (DGSA) – The role of the DGSA is to provide advice, monitor compliance with legal requirements and ensure the preparation of an annual report. The company may also delegate DGSA responsibilities to a competent Waste Management Company.

3.6 Batch Number/Lot Number: A unique combination of numbers, letters, and/or symbols from which the complete history of the manufacture, processing, packing, holding, and distribution of a batch or lot of drug product or other material can be determined.

3.7 Material Identification Number: The unique part number that identifies a raw material, part, component, intermediate product or unit, finished product or finished unit.

3.8 Product: Where the term 'product' is used, it also applies to labeling, raw materials, work in process, and outputs such as services, software, information and data, including that generated during research and development. Additionally, for products subject to installation and/or servicing, these processes are considered to be "products."

3.9 Returned Product: Any product returned to Johnson & Johnson from outside of the company.

4.0 Responsibilities

4.1 All Personnel

4.1.1 A hierarchy of waste management favouring elimination of wastes over minimisation and disposal is practiced at Janssen Sciences. Due reference should be made by all personnel to the Design for Environmental, Health and Safety DS-SOP-3411 and the EHS Impact Assessment Form DS-FRM-5604 at the inception of any project.

4.1.2 All site personnel are responsible for ensuring that all wastes produced at the Janssen Sciences facility are disposed of in accordance with site waste management directions and corporate, statutory and regulatory requirements. Site personnel are responsible for labeling and transferring a waste material from their area to a waste staging area (collection point).

4.1.3 All personnel on site should be aware of, and have access to, the site Waste Inventory on the site Intranet http://jsciecork.eu.jnj.com/sites/ehs/ehs2/SitePages/Home.aspx

4.1.4 Where a new waste arises which is not listed on the Waste Inventory the generator of the waste must complete the Waste

Characterisation Form (DS-FRM-6057) and forward the form to the EHS&S Department.

4.1.5 All personnel are responsible for ensuring that their waste storage areas are properly maintained and that wastes are transferred from their area to waste staging areas in a proper and compliant manner.

4.1.6 All personnel are responsible for the minimisation and elimination of wastes and for making suggestions as to this effect.

4.2 Quality Control

4.2.1 Quality Control personnel are responsible for completing the product destruction request form (DS-FRM-19638) and seeking approval, tracking product destruction and form archiving.

4.2.2 Quality Assurance personnel are responsible for approving the product destruction request form (DS-FRM-19638).

4.3 EHS&S Department

4.3.1 EHS&S are responsible for signing the completion section of destruction request form (DS-FRM-19638).

4.3.2 The EHS&S Department will approve waste disposal sites as per the J&J WW EHS&S guidelines and DS-FRM-39146 Waste Disposal Approval Form.

4.3.3 The EHS&S Department personnel are responsible for the management of the total waste management contractor on site.

4.3.4 The EHS&S Department is responsible, in conjunction with the Facilities Department, for the corporate and regulatory compliant management and disposal of wastes from the facility.

4.3.5 EHS&S personnel will liaise with other Johnson & Johnson companies in the auditing of Waste Disposal Facilities so as to ensure regulatory and corporate compliance of waste management operations.

4.3.6 The EHS&S Department is responsible for the management of waste management documentation. This includes waste container

tracking forms, waste inventory data and waste shipment documentation.

4.3.7 EHS&S personnel are responsible for the archiving of all documentation and records relating to statutory and corporate control of waste management on site.

4.3.8 All wastes shipped from the site will be characterised by a suitably qualified Dangerous Goods Safety Advisor (DGSA).

4.4 Total Waste Management Contractor

4.4.1 The total waste management contractor is responsible for the characterisation of wastes, update of the Waste Inventory and direction of environmentally correct and regulatory compliant disposal routings.

4.4.2 The Total Waste Management Contractor is responsible for the compliant management of all wastes requiring collection from site areas, for the maintenance of documentation pertaining to the tracking, consolidation, treatment, disposal and shipment of wastes generated at Janssen Sciences.

5.0 Procedure

5.1 General

5.1.1 Personnel should reference the Waste Inventory (http://jsciecork.eu.jnj.com/sites/ehs/ehs2/SitePages/Home.aspx) for directions on waste handling and disposal routing.

5.1.2 Where the waste stream is not listed on the Waste Inventory the generator of the stream is to complete a characterisation of the waste stream by completion of the Waste Characterization Form (DS-FRM-6057). The total Waste Management Contractor will classify the stream as a hazardous or non-hazardous waste and update the Waste Inventory.

5.1.3 If it is unclear whether a waste stream is to be classified as a hazardous or non-hazardous waste the precautionary principal will be applied and the waste identified as a hazardous waste.

5.1.4 Contractor waste, other than general office waste, will not be mixed with Janssen Sciences waste except with the permission of the EHS&S Specialist.

5.1.5 On an annual basis the Total Waste Management Contractor will complete a review of all plant operations in order to identify sources of waste generation. This review will be completed through an Environmental Aspects assessment of waste operations on site. The site review will include;

- Characterisation of any new waste streams and assignment of a hazard rating.
- A review of the potential for elimination, reduction or onsite treatment of the waste stream.
- An environmental aspect review of the environmental impact of the waste stream.

5.1.6 As a requirement to update the Waste Inventory arises EHS&S personnel will arrange for a read only updated Waste Inventory to be uploaded to the Intranet http://jsciecork.eu.jnj.com/sites/ehs/ehs2/SitePages/Home.aspx

5.1.7 The Waste Inventory Form will contain details of;

- European Waste Catalogue (EWC) code identifying the waste
- Origin of the waste (process, operation or activity that created the waste)
- Physical characteristics of the waste such as solid, liquid or gaseous.
- Hazardous characteristics (corrosive, infectious, radioactive, sharp, flammable etc.) of the waste. As outlined in Council Directive 91/689/EEC in Attachment 3.
- Significant risks – if applicable. Typical annual generation rate
- Elimination, minimization, treatment and disposal options for the waste. These options shall be detailed

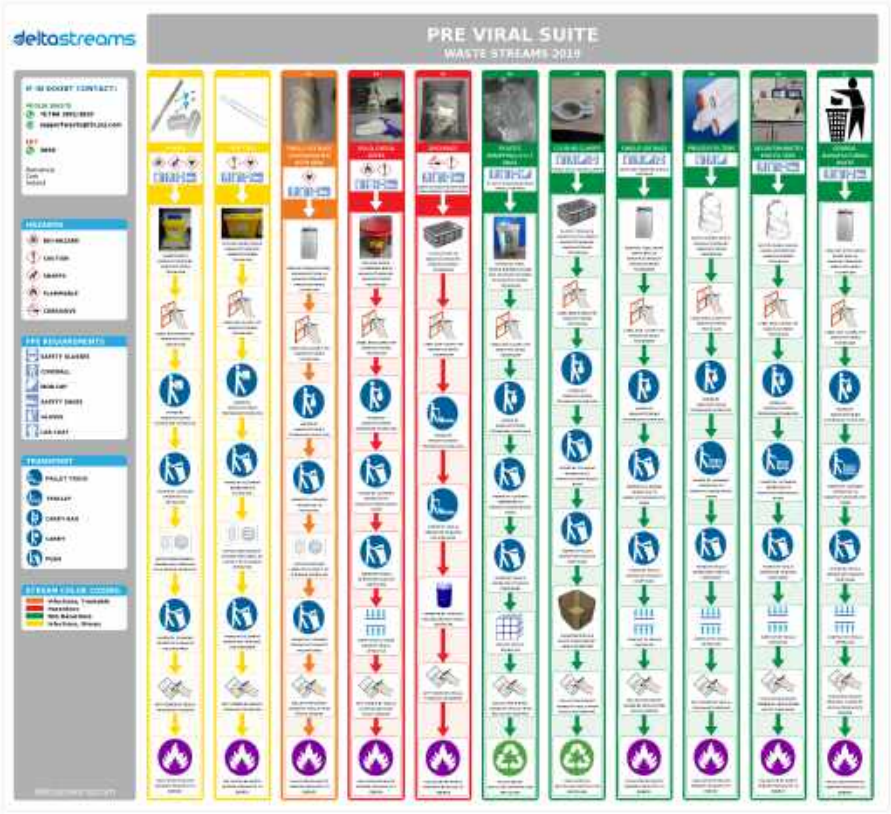
to provide guidance to the generator of the waste in the environmentally compliant waste management of the waste stream .

5.2 On-site handling and storage of wastes

5.2.1 Waste segregation

- Delta Waste Streams identifies the waste streams generated on site. It illustrates correct waste segregation steps and provides clarification on how to dispose of all waste generated in each specific area on site. It also highlights the hazards and PPE requirements for employee safety.

- Delta Waste Streams is now part of the site's waste management policy.



5.2.2 Wastes may only be collected, stored and moved in waste compatible UN approved containers with the contents clearly identified and if applicable hazard signs applied to the container to indicate the highest level of hazard contained within. The site waste label should be affixed to all waste containers.

5.2.3 Waste may only be stored in designated storage areas.

5.2.4 Hazardous and non-hazardous waste collection and storage points will be clearly identified and locations will be risk assessed with regard to environmental, health and safety risks prior to use or if operations in their vicinity change.

5.2.5 All hazardous liquid wastes must be stored on spill trays or within spill containment areas capable of containing 110% of the container contents and in the case of hazardous materials not giving rise to significant levels of occupational exposure should a spillage occur, or during filling / emptying operations.

5.2.6 Area personnel (e.g. laboratory, warehouse) are responsible for wastes generated within their area and the transfer of waste materials to waste staging rooms.

5.2.7 Waste management personnel (Site Waste Contractor) shall remove waste from the waste staging rooms to the waste segregation compound.

5.2.8 Waste management personnel will transfer the waste material to storage units and label the storage units with the following labeling requirements;

- Facility name
- Date that the waste was placed in storage
- Name of the waste (chemical name)
- Hazardous characteristics of the waste e.g. flammable, corrosive as outline in Council Directive 91/689/EEC
- Infectious component, if applicable

- Radionuclide(s) or other specific hazardous characteristics of the waste e.g. reactive with water.

- The waste container shall be labeled with an appropriate approved United Nations hazard symbol.

5.2.9 Labels will be durable and water resistant. Containers will be compatible with the waste type and maintained in good condition. Containers will be stored and handled in a manner that will not cause a rupture or a leak. Open containers or waste bins and cabinets are not permitted at any time, except when adding or removing waste.

5.2.10 All wastes will be segregated according to hazard classes and potential incompatibilities should a spillage occur.

5.2.11 A locked cabinet will be available in the Waste storage area for the holding of Bonded materials for Inspection By Revenue.

5.3 Destruction of Drug Product glass/polycarbonate vials and syringes

5.3.1 Destruction applies to;

- Product material e.g. Stability inventory disposed of due to termination of a campaign or reduction of a campaign

- Expired Drug Product Retain/Reserve Inventory

- Reject product

5.3.2 A Product destruction request form (DS-FRM-19638) must be completed by the generator, approved by QA and submitted to the EHS&S Department for completion sign off.

5.3.3 For investigational medicinal product, destruction shall include authorization from the sponsor of the clinical trial through the site Change Control process.

5.3.4 Products awaiting destruction shall be physically segregated by class e.g. plastic or glass appropriate to the treatment method and stored in a dedicated, well-identified, and secured area. The

physical location of products awaiting destruction in the warehouse shall be documented and maintained.

5.3.5 Destruction shall be performed in a timely manner. Destruction shall be documented at the time it is carried out. The destruction record shall include the following information;

- Name of product;
- Material identification number and batch/lot/unit number;
- Quantity to be destroyed;
- Quantity actually destroyed (if not 100%, an investigation shall be performed and documented);
- Method of destruction; shredding/crushing
- Name of individual who destroyed the product;
- Name of witness,
- Date of destruction; and,
- Notification to health authority if required.
- EHS&S signoff

5.3.6 Once destruction is completed, the Certificate of Destruction is stored on the total waste management contractor's portal.

5.4 Waste Vendor Due Diligence

5.4.1 Offsite recycling, treatment and disposal is only allowed to Johnson & Johnson approved Waste Disposal Facilities.

5.4.2 All waste disposal facilities are to be approved as per the Johnson and Johnson Worldwide EHS&S Guidelines due diligence methodology and schedule.

5.4.3 Approval will be sanctioned by the EHS&S department via DS-FRM-39146 Waste Disposal Facilities Approval Form.

5.4.4 EHS&S will maintain the file of approved sites and schedule Waste Disposal Facility Audits when required.

5.5 Hazardous Waste Management

5.5.1 Once a sufficient quantity of a waste has been generated for offsite treatment the Waste Management Contractor will arrange for a pickup date for the waste material. The Waste Management Contractor will maintain all information on waste shipments and pickup dates.

5.5.2 All wastes shall be characterised by the Total Waste Management Contractor DGSA or a DGSA qualified delegate approved by J & J prior to shipment offsite.

5.5.3 If required the Waste Management Contractor will arrange for delivery of the required Tremcards, Consignment Notes, Transfrontier Shipment Notes and drum labels prior to a hazardous waste shipment.

5.5.4 Offsite shipments of hazardous waste will be reviewed and documentation signed off by the Total Waste Management Contractor. The driver of the collection vehicle must also sign the documentation. The person supervising the waste shipment will complete the Load Plan detailing the number and contents of each waste container.

5.5.5 Shipment consignor copies are retained and additional waste shipment documentation (e.g. load plan) is photocopied; the originals are returned to the driver and the Total Waste Management Contractor maintains and files the consignor original and photocopied documents under the consignment note or transfrontier shipment form registration number.

5.5.6 The Waste Management Contractor shall be present to supervise hazardous waste loading and transport and to ensure that individual containers and vehicle have been labeled correctly.

5.5.7 A disposal certificate is received detailing method and confirmation of disposal. The Total Waste Management Contractor will complete and sign off reconciliation between the initial shipment details and the disposal certificate.

5.5.8 A Cert of Destruction for Bonded material will be available to conform with the requirements of Revenue.

5.6 Virus Waste Management

Viral waste generated as part of Viral Neutralization Assays (VNA) will be treated in the same manner as biohazard waste is treated. The only further points to note in relation to handling of viral waste are the following:

- 0.26% Sodium hypochlorite is used to inactivate liquid waste being generated from the plate washer used during the VNA assay. 0.26% sodium hypochlorite is to be placed in the aspirator bottle which the viral waste is being aspirated into. This waste can then be disposed of down the drain after 1 hour of contact time. The serological pipettes that come into contact with the virus are to be placed in a labeled biological waste container within the Biological Safety Cabinet. This box is to then be closed and brought down to the waste storage room and disposed of in the Biohazard waste area.

- Pipette tips from the liquid handling instrument are to be automatically returned to their original box, the box closed and placed directly into the Biohazard waste.

- At all times the active virus is to remain in a closed container while outside the Biological Safety Cabinet. The only time that the virus container can be opened is within the Biological Safety Cabinet.

5.7 Waste Storage Area Inspections

5.7.1 The waste segregation compound, waste collection points and storage areas will be inspected monthly by the Total Waste Management Contractor. Corrective actions raised will be communicated to the Waste Management Contractor and the EHS&S Manager.

5.7.2 The objective of the inspection shall be;

- Detect signs of leaks and unsafe conditions

- Assess condition and labeling of containers

- Assess condition and availability of waste management equipment including earthing wires, pumps, cleanup materials and equipment, funnels and stored labels.
- Assess tidiness and housekeeping of the waste segregation and storage area
- Assess if any unsafe practices or practices liable to cause EHS&S incidents are being undertaken
- Assess the level of competency of staff, supervision and training deficiencies
- Review appropriateness of procedures to the activities and operations undertaken

5.7.3 Corrective actions raised will be inputted to the corrective action system.

6.0 Content Reference

6.1 DS-SOP-3411 Design for EHS&S

6.2 Waste Inventory (http://jsciecork.eu.jnj.com/sites/ehs/ehs2/SitePages/Home.aspx)

6.3 DS-FRM-6057 Waste Characterisation Form

6.4 DS-FRM-19638 Product Destruction Request Form

6.5 DS-SOP-4189 Procedure for Review and Acceptance of New Materials and Chemicals

6.6 DS-FRM-39146 Waste Disposal Facility Approval Form

7.0 Attachments

N/A

Standard Operating Procedure	
Owner Group: Cork	**Effective Date:** 15-Nov-2019 00:18:48 EST
Document Title: Waste Management Procedure	
Document Number: DS-SOP-5430	**Version:** 6.0

*****END OF DOCUMENT*****

Standard Operating Procedure	
Owner Group: Cork	**Effective Date:** 15-Nov-2019 00:18:48 EST
Document Title: Waste Management Procedure	
Document Number: DS-SOP-5430	**Version:** 6.0

Document Revision History

Version Number	Section	Description of Change	Justification of Change
6.0	5.2.1	Include reference to Delta Waste Streams	Delta Streams being rolled out site wide
5.0	All	Include reference to new waste disposal facility approval form (DS-FRM-39146)	Documentation review as part of self assessment
5.0	5.3	Removal of reference to on site destruction/shredding of product.	Documentation review as part of self assessment
4.0	All	Updated to new docspace format. Inclusion of responsibilities for Total Waste Management Contractor. Updated to reflect current practice. Addition of saved location of Waste Inventory.	Periodic Review
3.0	2.0	Addition of responsibilities related to the destruction process and product destruction request form (DS-FRM-19638).	N/A
3.0	3.6-3.9	Update definitions to include batch number/lot number, material identification number, product, and returned product	N/A
3.0	4.2.14	Addition of Locked cabinet for the storage of Revenue Bonded material.	N/A
3.0	4.3	Addition of section on destruction of Drug Product glass/polycarbonate vials and syringes as not documented within this procedure	N/A
3.0	4.5.9	Updated to include reference to Certificates of Destruction requirements by Revenue.	N/A
3.0	All	Updated sections	N/A
2.0	4.5	Added this section to include handling of	N/A

Standard Operating Procedure	
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Document Revision History

Version Number	Section	Description of Change	Justification of Change
		waste associated with virus.	
2.0	Throughout	Updated CBIL to JBIL	N/A
2.0	Throughout	Updated edoc references to docspace references	N/A
2.0	4.5	Added this section to include handling of waste associated with virus.	N/A
1.0	All	New document	N/A

Standard Operating Procedure	
Owner Group: Cork	**Effective Date:** 15-Nov-2019 00:18:48 EST
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APPROVAL PAGE

Approver Name	Justification	Date
Caoimhe Aherne	Quality Approval	23-Oct-2019 07:50:24 EDT
Riona Coyne	Department Approval	23-Oct-2019 07:54:36 EDT
John Garrett	Department Approval	23-Oct-2019 14:21:34 EDT
Edgars Dedels	Department Approval	30-Oct-2019 09:25:13 EDT

APPENDIX B

Janssen Sciences Waste Inventory

Waste Material	Constituents1	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream Type	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segregation issues	Classification Source	Packaging Type on site	Transportation Drum	Query/Comments
Chemical Containers – Plastic and glass	Packaging containing residues or contaminated by dangerous substances	All production areas	150110*	Chemical and raw material packaging	Gloves, overall / lab coat and safety glasses	Place in the waste container bin / bag for collection	Dependant on the material the container held	Dependant on the material the container held	2000	Seal the container with its lid and place in the used plastic bag lined used container bin – specific bins are provided for used glass and plastic containers. Triple washed containers may be placed in recycling (glass & plastic bins) or refuse. Contaminated containers must be sealed / bagged and sent to the waste segregation compound	EMPTY/CLEANED	empty container ,washed	N/A	N/A	N/A	N/A	N/A	N/A	no	N/A	VARIOUS	VARIOUS	VARIES	
Citric Acid	Citric Acid 50%	All production areas	70105	Clear aqueous solution	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and mucous membrane contact pH 4.9	24	Dispose of to drain flushing well with water	LIQUID	LIQUID	NON REGULATED	N/A	N/A	N/A	N/A	N/A	no	N/A	SDS	DRAIN	15L JERRICAN	
GMM Liquid waste which contains potentially Biohazard and Genetically Modified Microorganism Waste – includes laboratory samples from the QC and OTS lab	Lab solutions, samples containing class 1 GMM	All production areas	180103*	Material may not appear contaminated	Nitrile / nitrile gloves, lab coat / gowns / safety glasses and safety shoes	Place in a container for autoclaving. Place the container in bags – double bag	CBIL GMM are class 1 and do not present an infectious risk. Avoid contact	No significant risk		Glassware and other containers containing liquid GMM waste should be autoclaved.	LIQUID	LIQUID	WASTE GENETICALLY MODIFIED MICROORGANISMS	3245	9	N/A	N/A	N/A	no	N/A	SDS	DOUBLE BAGGED, WHEELIE BIN OR COMPACTOR	N/A	
GMM Solid waste which potentially contains Biohazard and Genetically Modified Microorganism Waste	Containers, PPE, disposable lab equipment contaminated or potentially contaminated with class 1 GMM	All production areas	180103*	Material may not appear contaminated	Nitrile / nitrile gloves, lab coat / gowns / safety glasses and safety shoes	Place in autoclaving bags – double bag	CBIL GMM are class 1 and do not present an infectious risk. Avoid contact	No significant risk		The generator of a waste is to label and bag all materials and containers for autoclaving and post autoclaving the waste material is to be delivered to the waste staging area for collection by the waste contractor AS NON-HAZ WASTE	SOLID NON HAZ	AUTOCLAVED WASTE	NON REGULATED	N/A	N/A	N/A	N/A	N/A	no	N/A	SDS	DOUBLE BAGGED, WHEELIE BIN OR COMPACTOR	N/A	
Gowning materials	Tyvek suits, face masks, mop caps, gloves, shoe covers, sleeve covers - all disposal	All production areas	200111		Wear PPE relative to the hazard if handling contaminated materials	Plastic bags within bins	No significant hazard	No significant risks	3650	Place in refuse bins	SOLID NON HAZ	NON REGULATED PPE AMD GOWNING MATERIALS.	NON REGULATED	N/A	N/A	N/A	N/A	N/A	no	N/A	N/A	NON HAZ BAGS,WHEELIE BIN OR COMPACTOR	N/A	
Guanidine Hydrochloride 6M	Organic wastes containing water and Guanidine. Chromatography storage solution and laboratory wastewater	All production areas	161001*	Clear liquid	Gloves, splash suit / lab cost / overalls, safety boots and safety glasses if handling liquids	Plastic / metal containers	Harmful if swallowed. Irritating to eyes and skin	Do not breath dust	10000	Keep segregated from other wastes. Drum off and label for transfer to the Waste Segregation Compound.	LIQUID NON HAZ	Aqueous solution of Guanidine Hydrochloride	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	no	TBC	Sigma 177253 dor solid and G9284 for 8M solution	Plastic/metal containers	Black 200L T/H plastic Drum (Y Rated)	
IPA Wipes	Tissue saturated in Isopropyl Alcohol	All production areas	070504*	Tissues which slowly dry as IPA evaporates	Wear gloves when handling	To packaging in a see through plastic bag held within a steel open top drum.	Flammable	Dermatitis	200	Place in the metal solvent residue bin. Minimise use of wipes. Best practice is to drench the wipe in water and place wet into the refuse bin. - Eliminates solvent flammable hazard	SOLID HAZ	Wipes contaminated with isopropanol (in sealed liners)	Waste Solids containing Flammable liquid, N.O.S (Isopropanol)	3175	4.1	n/a	II	n/a	no	H3-A-Flammable	IMDG/ADR	Place into lined metal solvent residue bin	Blue 200L O/T Plastic Drum (Y rated)	These drums can only be used as long as all the wipes are in sealed liners and there is no free liquid present
Janitorial items – solid waste items from housekeeping and maintenance activities.	Absorbents filter cloths, wiping cloths, protective clothing	All production areas	150203	Janitorial supplies	Gloves, splash suit / lab cost / overalls, safety boots and safety glasses if handling liquids	Place in open drums / white non hazardous plastic bag lined bins provided	Possible irritants	Avoid skin contact and breathing solvent vapours		Bagged off waste will be removed as general waste	SOLID NON HAZ		NON REGULATED	N/A	N/A	N/A	N/A	N/A	no	N/A	N/A	NON HAZ BAGS,WHEELIE BIN OR COMPACTOR	N/A	
Microscope welders	Welder Wafers, Microscope glass slides, cover slips possible containing biohazard	All production areas	180103*		Safety shoes, lab coat, gloves and safety glasses	Place in a sharps container	GMM	sharps - puncture and cuts risk	100	Autoclave and then add to general refuse. EHS should be consulted with regard to unautoclavable materials and bulky items.	SOLID NON HAZ	Microscope welders	NON REGULATED	N/A	N/A	N/A	N/A	N/A	no	N/A	N/A	NON HAZ BAGS,WHEELIE BIN OR COMPACTOR	N/A	
Packaging material potentially contaminated with Genetically Modified Micro-organism	Packaging material potentially contaminated with Genetically Modified Micro-organism	All production areas	15 01 10	Plastic, paper, containers, cardboard packaging	Nitrile / rubber gloves, / gown, safety glasses / goggles / safety boots	Place in autoclaving bags and autoclave	GMM	GMM – wear designated PPE and follow GMM handling instructions		Autoclave and then add to general refuse. EHS should be consulted with regard to unautoclavable materials and bulky items. *Occasionally removed by Veolia and sent of site for incineration.	*solid haz/ solid non haz	Packaging material potentially contaminated with Genetically Modified Micro-organism	WASTE GENETICALLY MODIFIED MICROORGANISMS	3245	9	N/A	N/A	N/A	no	N/A		plastic double bagged/200l metal combi drum	200l metal combi drum	
Passivation wastewater	Caustic / citric acid / phosphoric acid in water	All production areas	110113*	Colourless water based liquid	Nitrile / rubber gloves, splash suit / acid suit, safety glasses / goggles / face shield/ safety boots	HDPE drums and IBCs	Corrosive	Corrosive – Causes burns - avoid contact and avoid breathing any vapours	20000	Generator to contact EHS who will provide directions on the disposal methodology.	haz liquid	Passivation wastewater	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS/ SDS	AS REQUIRED	AS REQUIRED	
Plastics including plastic packaging and non-hazardous constituent bottles	PET bottles and mixed plastic packaging,Closing clamps	All production areas	200139	Plastics including PET, PS, PC	None	Place in designated plastics recovery bins	None	None		If possible segregate and dispose of as recyclables, Q1 2019 IMPLEMENTATION OF DELTA STREAMS, EXTRA BINS IN MANUFACTURING	SOLID NON HAZ		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		RECYCLING BAGS ,WHEELIE BIN, COMPACTOR/BALER		
Spill cleanups	All site spills – GMM, acid, corrosives, toxics, carcinogens etc.	All production areas	Various EWC codes dependant on the material cleaned up- EHS to characterise	Dependant on the spill	Reference the spill cleanup procedure	Reference the spill cleanup procedure	Reference the spill cleanup procedure	Reference the spill cleanup procedure		Contact the waste management personnel and EHS.	SOLID NON HAZ/SOLID HAZ		VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS AS IDENTIFIED	VARIOUS/ SDS	AS REQUIRED	AS REQUIRED	

Waste Material	Constituents1	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream Type	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segregation Issues	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Batteries containing Mercury	Mercury	All site areas	160603*	Rechargeable batteries	None required if intact.Refer to the spill procedure if broken	Place in the hazardous Mercury batteries bin	Toxic constituents	Risk of heavy metal contamination if the batteries are broken		Place batteries in the battery recycling bin as directed by waste management contractor personnel	solid haz	Batteries containing Mercury	WASTE MERCURY	2809	8	6.1	III	N/A	No		IMDG/ADR		CORROSIVE,TOXIC	UN APPROVED DRUM DEPENDINING ON VOLUME	
Batteries containing Nickel and Cadmium	Nickel and Cadmium	All site areas	160602*	Rechargeable batteries	None required if intact.Refer to the spill procedure if broken	Place in the hazardous Ni/Cd batteries bin	Toxic constituents	Risk of heavy metal contamination if the batteries are broken		Place batteries in the battery recycling bin as directed by waste management contractor personnel	solid haz	Batteries containing heavy metals e.g. Nickel Cadmium Batteries	Waste Batteries, Wet, Filled with alkali	2795	8	n/a	n/a	n/a	No	H8-Corrosive. Separated from acids.	IMDG/ADR	Ni/Cd Batteries bin	Corrosive	Battery box	
Discarded / waste electrical and electronic equipment (WEEE)	All electronic and electrical equipment	All site areas	200136	All electronic and electrical equipment	Wear cotton gloves if moving equipment with sharp points / edges	Pack on pallets and cling wrap / make secure	Sharps edges / manual handling risk	Strains / sprains / abrasions / cuts		Consult with EHS through the obsolete equipment signoff procedure. Transfer to the waste segregation area.	SOLID NON HAZ	Discarded / waste electrical and electronic equipment (WEEE)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WEEE BOX	
Glass – Clean and uncontaminated	Uncontaminated Glass – Borosilicate and Pyrex	All site areas	200102	Green, brown and clear glass	Wear sharps resistant gloves when handling broken or chipped glass	All glass is to be placed in solid sided – preferably metal - bins	Abrasions, puncture wounds and cuts	Beware of broken or chipped glass with sharp edges	3000	Place in the glass waste bin specific to the colour of glass specified - sent for recycling	SOLID NON HAZ	Uncontaminated Glass – Borosilicate and Pyrex	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GLASS BIN	
Paper - Clean printer	Paper	All site areas	200101	Used non-confidential clean waste paper	None required	Clear plastic bags and baled in bulk	None	Paper cuts	3000	Place in paper bins. Reference the Paperless Office programme.	SOLID NON HAZ	Paper	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IF CONFIDENTIAL= CONFIDENTIAL BIN, IF NOT RECYCLING BIN.	
Paper and Cardboard	Dry paper and cardboard	All site areas	200101	Dry paper and cardboard	Wear cloth gloves if handling		Abrasions, puncture wounds and cuts	Beware of staples and sharp edges		Place all paper and cardboard in the recycling bins provided		Dry paper and cardboard	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RECYCLING BIN	
Plastic wrapping	Plastic from consumables, wave bags and miss packaging - non recyclable	All site areas	200139		Wear PPE relative to the hazard if handling contaminated materials	Place in refuse bins provided	No significant hazard	No significant risks		Place in recyclables bin (no foam allowed in the bins)		Plastic from consumables, wave bags and miss packaging - non recyclable	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RECYCLING BIN	
Printer toner cartridges	Paints, inks and resins	All site areas	200128	Cartridges and refill containers	For open cartridges avoid breathing dust	Place in original packaging box for return to supplier	Avoid contact with inks or breathing toner dust	Avoid contact and breathing dusts		Place in the cartridge box and transfer to the waste segregation compound.		Paints, inks and resins	NON REGULATED FOR TRANSPORT.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200l OT	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	**Waste Stream Type**	**Waste description**	**Proper Shipping Name (PSN)**	**UN no**	**Class**	**Subrisk**	**Packing Group**	**Flashpoint**	**Marine Pollutant**	**Hazard characteristics/Segregation issues**	**Classification Source**	**Packaging Type on site**	**Labels**	**Transportation Drum**	**Query/Comments**
Canteen food waste	Biodegradable kitchen and canteen waste		Canteen	200108	Food waste and scraps from food preparation	Hygiene gowns. Safety boots/ gloves when handling	Food waste bin	None	None		Place in bins provided	SOLID NON HAZ	Food waste and scraps from food preparation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	COMPOSTIBLE BAGS	N/A		
Waste Cooking Oil	Edible oil and fat		Canteen	200125	Used cooking oil and waste fat	Wear gloves, safety glasses, safety boots and cost / overalls when handling waste	Package in plastic or metal drums for collection to the waste segregation compound.	Flammable – keep away from heat	Avoid spillages which can cause slippery conditions		Note: Waste cooking oil is kept segregated from waste mineral oil.. Collected by frylite	LIQUID NON HAZ	Used cooking oil and waste fat	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	original packaging which is re-used	N/A		
Aluminum cans	Aluminum drinks cans		Canteen	150104	Drinks cans	None	Place in plastic bags for removal to the waste segregation area	None	Manual handling and cuts and abrasions		Place in bins provided	SOLID NON HAZ	Drinks cans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Recycling bags	N/A		

Waste Material	Constituents1	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	**Waste Stream Type**	**Proper Shipping Name (PSN)**	**UN no**	**Class**	**Subrisk**	**Packing Group**	**Flashpoint**	**Marine Pollutant**	**Hazard characteristics/Segregation issues**	**Classification Source**	**Labels**	**Transportation Drum**	**Query/Comments**
Mercury lamps (from projectors)	Projector lamps containing mercury	IT	200121*	Lamps	GLOVES, SLASSES, SAFETY SHOES.	Place in lamps box at waste yard	Contains trace Mercury – released if broken –	avoid breaking of lamps		Place in fluorescent lamp box in waste yard	SOLID CONTAINING HAZ LIQUID	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	H6-Toxic	WEEE information	Lamp storage cabinet	Lamp coffin	200121*

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segregation issues	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Fluorescent Lamps	Fluorescent Lamps		Maintenance and Facilities	200121*	Lamps	Wear oil rubber or nitrile gloves.Safety glasses and overalls. Safety boots	Place in lamps box at waste yard	Contains trace Mercury – released if broken –	avoid breaking of lamps		Place in fluorescent lamp box in waste yard	SOLID CONTAINING TRACE LIQUID	Fluorescent Lamps	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	H6-Toxic	WEEE information	Lamp storage cabinet	N/A	Lamp coffin	
Waste Mineral Oil including mineral oil contaminated filters	Mineral based non-chlorinated engine, gear and lubricating oils		Maintenance and Facilities	130205*	Oil and oil contaminated materials	Wear oil rubber or nitrile gloves.Safety glasses and overalls. Safety boots	Filters to be placed in bags and then drummed.Waste oil to be drummed off	Dermatitis agent, flammable – keep away from heat	Avoid contact		Note: waste mineral oil is segregated from waste cooking oil. Contact the waste management personnel to arrange collection.Waste oils and filters are sent offsite for treatment	LIQUID	Waste Mineral Oil including mineral oil contaminated filters	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	REFER TO SDS	SDS	AS REQUIRED	NON REG	AS REQUIRED	
Batteries - Acid e.g. from electrically powered trucks	Lead and acid		Maintenance and Facilities	160601*	Lead acid batteries	Wear splash suit, safety boots and face shield / goggles and rubber elbow gloves when moving	Self contained packaging				Contact waste management personnel – to be transferred to a Civic Amenity site / waste vendor	Lead Acid Batteries	Acid batteries e.g. from electrically powered trucks	Waste Batteries, Wet, Filled with acid	2794	8	n/a	n/a	n/a	no	H8-Corrosive. Acidic	IMDG/ADR	Self contained packaging	Corrosive	Battery box	**There are two types of lead acid batteries, wet and sealed. Sealed lead acid batteries are generally used in alarms, UPS back ups, emergency lighting and medical devices. So if you think you have a sealed lead acid battery please let us know before moving, as it has a different classification.**
Ferrous Metal waste	Scrap Iron, includes galvanized iron		Maintenance and facilities	191202	Check equipment specification	Cotton gloves for sharp edges and safety boots / overalls	Place on pallets for removal to the waste segregation area	None	Manual handling and cuts and abrasions		Place waste metal in the waste metal bin at the waste segregation area.	SOLID	Ferrous Metal waste	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	METAL SKIP	N/A	METAL SKIP	
Fuel / oil interceptor sludges	Sludge / water / oil mixtures from the site oil / fuel interceptors		Maintenance and facilities	130503*	Sludge / odorous / generally dark in colour	Nitrile / rubber gloves, splash suit / acid suit, safety glasses / goggles / face shield/ safety boots	Collected by vacuum tanker	Unsanitary / odourous material	Avoid contact		EHS/FACILITIES to arrange a cleanout of the petrol / oil interceptor should the need arise.	LIQUID	Fuel / oil interceptor sludges	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	VACUM TRUCK	N/A	VACUM TRUCK	
Fuel interceptor wastewater	Wastewater potentially containing petroleum products from the site fuel interceptors		Maintenance and Facilities	130507*	Water, grit and oil / fuel residues	Gloves, safety boots, overalls and safety glasses	Taken offsite by vacuum tanker	Fuel interceptors are confined spaces	No significant risk	40000	Removed to offsite oil / water treatment facility approved by J & J	LIQUID	Fuel / oil interceptor WASTEWATER	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	VACUM TRUCK	N/A	VACUM TRUCK	
Garden cuttings and landscape waste	Compost able materials		Maintenance and facilities	70105	Grass and cuttings	Overalls, safety glasses / goggles / safety boots / cotton gloves	Bin / transfer o the site composting area	None	Manual handling / cuts, abrasions, puncture wounds		Garden cuttings and landscape waste are to be composted on site or removed for offsite composting	SOLID	Garden cuttings and landscape waste	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	N/A	N/A	N/A	
Non-ferrous metal	Scrap copper, lead, tin includes galvanized tin.		Maintenance and facilities	191203	Check equipment specification	Cotton gloves for sharp edges and safety boots / overalls	Place on pallets for removal to the waste segregation area	None	Manual handling and cuts and abrasions		Place waste metal in the waste metal bin at the waste segregation area.	SOLID	Non-ferrous metal	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	METAL SKIP	N/A	METAL SKIP	
Pallets	Pallets		Maintenance and facilities	200138	Timber	Safety glasses, cotton gloves for sharp edges / splinters / nails and safety boots / overalls	Place in the waste timber skip	Physical wounds from splinters / nails / sharp edges	Manual handling and cuts and abrasions		Leave in waste staging area , Removed off site for re-use/recycling.	SOLID	timber	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	TIMBER SKIP	N/A	TIMBER SKIP	
Spent activated carbon from water treatment	Spent activated carbon		Maintenance and facilities	190904	Dark wet powder	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Place in plastic bags, bin and transfer to the waste segregation area.	Do not allow to dry out as respiratory dust may be generated	None	200	Bag while wet and place in general waste. the waste management operator is to be informed beforehand.	LIQUID	carbon	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	GEN WASTE BIN	N/A	GEN WASTE BIN	
Spent HEPA filters from biological safety cabinets	HEPA and other process filters potentially contaminated with Genetically Modified Micro-organism		Maintenance and facilities	15 02 03	Plastic, paper, containers, cardboard packaging	Nitrile / rubber gloves, / gown, safety glasses / goggles / safety boots	Place in autoclaving bags and autoclave	GMM	GMM – wear designated PPE and follow GMM handling instructions		Contact EHS if special requirements arise.	SOLID AUTOCLAVED WASTE	SOLID AUTOCLAVED WASTE	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	GEN WASTE BIN	N/A	GEN WASTE BIN	
Spent water treatment ion exchange resins	Spent ion exchange resins		Maintenance and facilities	190905	Gel beads	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Place in plastic bags, bin and transfer to the waste segregation area.	None	None		Bag while wet and place in general waste. the waste management operator is to be informed beforehand.	SOLID	Spent ion exchange resins	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	GEN WASTE BIN	N/A	GEN WASTE BIN	
Timber waste	Pallets, boards, timber hoarding		Maintenance and facilities	200138	Timber	Safety glasses, cotton gloves for sharp edges / splinters / nails and safety boots / overalls	Place in the waste timber skip	Physical wounds from splinters / nails / sharp edges	Manual handling and cuts and abrasions. Beware of puncture wounds from nails		Place in the timber skip or other designated skip as directed by waste management personnel	SOLID	TIMBER	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	NO	N/A	TIMBER SKIP	N/A	TIMBER SKIP	
Waste paint and thinners	Paints, inks, resins and adhesives		Maintenance and Facilities	20 01 27* Hazardous 200128 nonhazardous	Tins of Paints, inks, resins and adhesives	Wear gloves, safety glasses, safety boots and overalls when handling	Transfer containers to the waste segregation area and pack into 200 litre open top drums	Flammable and possible irritants	Avoid skin contact and breathing solvent vapours		Arrange transfer to the Waste Segregation Compound for off site incineration	LIQUID/SOLID	PAINTS	VARIOUS CHECK MSDS	AS REQUIRED	AS REQUIRED	AS REQUIRED	AS REQUIRED	AS REQUIRED	AS REQUIRED	AS REQUIRED	SDS	AS REQUIRED	AS REQUIRED	AS REQUIRED	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	**Waste Stream Type**	**Waste Stream**	**Waste description**	**Proper Shipping Name (PSN)**	**UN no**	**Class**	**Subrisk**	**Packing Group**	**Flashpoint**	**Marine Pollutant**	**Hazard characteristics/Segregation issues**	**Classification Source**	**Packaging Type on site**	**Labels**	**EWC Code**	**Transportation Drum**	**Query/Comments**
Medical waste – Biohazardous materials	Medical centre and 1st aid – including blood spill cleanups.		Medical centre	180103*	Materials contaminated with Blood and other potentially infectious human originating materials	Nitrile / nitrile gloves, lab coat / gowns / safety glasses and safety shoes	Place in the medical waste container	Avoid contact	Potentially infectious materials		Medical waste from first aid and the medical centre is to be placed in medical waste containers and transferred to the Waste Staging Room. The in use medical waste container shall be kept in the medical centre.	E	Medical waste - Biohazardous materials	Medical centre and first aid waste including blood spill cleanups.	Waste Clinical Waste, Unspecified, N.O.S	3291	6.2	n/a	II	n/a	No	H9-Infectious	IMDG/ADR	Yellow Sharps container	Infectious Substances	180103*	UN 4H2 Wheelie bin	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream Type	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segregation	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Air Filters	Millipore air filters from Pall 5 inch filters including overlay, sparge, vent and air filter		MFG - Cell culture	200139	SOLID	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	No significant hazard	No significant risks		Place in refuse bins	SOLID NON HAZ	Air Filters	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Base Bag	Bioprocess 50 litre bag with residual 0.2m Sodium Carbonate		MFG - Cell culture	200139	SOLID	Wear PPE relative to the hazard if handling contaminated materials Safety shoes, lab coat, latex gloves and safety glasses	Remove residual liquids by allowing to drain or by pumping out to drain	No significant hazard	No significant risks		Flush residual media to drain and place the bag in white refuse bag	SOLID NON HAZ	Base Bag	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Biophox - Calibration Pack	Compound EKS (Proprietry) 50%		MFG - Cell culture	200139	Solid	Safety shoes, lab coat, gloves and safety glasses	Self contained container	GMM waste prior to being autoclaved. No other significant hazardous properties	No significant risks	20	Autoclave Biophox packs and dispose of intact into the refuse bin	SOLID NON HAZ(AUTOCLAVED)	Biophox - Calibration Pack	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Media (AGT, MACH-1, BRX)	Liquid media with AGT, MACH-1 or BRX, mixtures of sugars, vitamins, proteins and salts		MFG - Cell culture	70105	liquid	glasses, tyvex suit, boots	Dispose of to drain	Avoid contact with eyes	No significant hazards	2000	Dispose of to drain	LIQUID NON-HAZ	Media (AGT, MACH-1, BRX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
Media powders (AGT, MACH-1, BRX)	media powder of AGT, MACH-1 or BRX, mixtures of sugars, vitamins, proteins and salts		MFG - Cell culture	70105	powder	glasses, tyvex suit, boots	Dispose of to drain flushing well with water		No significant hazards	100	Dispose of to drain flushing well with water	LIQUID NON-HAZ	Media powders (AGT, MACH-1, BRX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
CEDEX Agar Density Reference Stamdard Beads	Agar 0.5%, Ethanol 20%, water 80%		MFG - Cell culture	70105	LIQUID	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Avoid contact with eyes	No significant risks	6	Dispose of to drain flushing well with water	LIQUID NON-HAZ	CEDEX Agar Density Reference Stamdard Beads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
CEDEX Detergent	Tripotassium Phosphates <1%		MFG - Cell culture	70105	LIQUID	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Avoid contact with eyes	No significant risks	6	Dispose of to drain flushing well with water	LIQUID NON-HAZ	CEDEX Detergent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
CEDEX Polystyrene Density Reference Stamdard Beads	Polystyrene polymer particles 0.5% in water 99.5%		MFG - Cell culture	70105	White aqueous suspension of plastic particles	Safety shoes, lab coat, gloves and safety glasses	PLACE IN LAB SMALLS CABINET	Avoid contact with eyes	No significant risks	6	LAB SMALLS CABINET	LIQUID NON-HAZ	CEDEX Polystyrene Density Reference Stamdard Beads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
CEDEX Reagent Kit Cleaning Solution	Ethanol 22% v/w, Tripotassium Phosphates Tribasic <1%, Water approx 75%		MFG - Cell culture	70105	Light green liquid	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Avoid contact with eyes	No significant risks	6	Dispose of to drain flushing well with water	LIQUID NON-HAZ	CEDEX Reagent Kit Cleaning Solution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
CEDEX Waste solutions	**GMM Material** - Trypan Blue, Cleaning Solution (ethanol), Detergent		MFG - Cell culture	70105	Clear liquid	Safety shoes, lab coat, gloves and safety glasses	inavctivate GMMs in glass / plastic container. Add to the Toxic Waste Cannister	Contains Trypan Blue - carcinogen	Avoid contact. Handle wastes only in a fume hood / extracted area	6	Neutralise GMMs by adding Versphene to a final concentration of 1% and mix gently	LIQUID NON-HAZ	CEDEX Waste solutions	WASTE ALCOHOL, N.O.S (ETHANOL)	1987	3	n/a	II	12	No	H6-Toxic HP 7 CARCINOGEN	Sigma T8154 for trypan blue solution (Not reg but H6)	Non halogenated solvent canister	Flammable Liquid	Black 200L T/H Steel Drum (Y Rated)	
Elastomers	Rubber gaskets and diaphrams		MFG - Cell culture	200139	SOLID	Wear PPE relative to the hazard if handling contaminated materials Safety shoes, lab coat, latex gloves and safety glasses	RECYCLING TOTES/ RE-USE TOTES	No significant hazard	No significant risks		Wash gaskets and diaphrams and place RECYCLING TOTES/ RE-USE TOTES	SOLID NON HAZ	Elastomers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	GREEN RECYCLING BINS	N/A	BOX FOR HARD PLASTIC RECYCLING	
Incubator water and water from waterbath	Water containing one Aqua San tablet per 2 litre of water		MFG - Cell culture	70105	LIQUID	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Avoid contact with eyes	No significant risks	1000	Dispose of to drain flushing well with water	LIQUID NON-HAZ	Incubator water and water from waterbath	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
Liquid Balanced Salts	Inorganic salts		MFG - Cell culture	70105	LIQUID	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazardous properties	No significant risks	6	Dispose of to drain flushing well with water	LIQUID NON-HAZ	Liquid Balanced Salts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
MHX solution and media	MHX		MFG - Cell culture		LIQUID	safety shoes, gloves	dispose of to process drain	None	No significant risks		Dispose of to process drain	LIQUID NON-HAZ	MHX solution and media	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	N/A	N/A	N/A	
Personal gowns potentially contaminated with Genetically Modified Micro-organism	Personal gowns potentially and associated PPE contaminated with Genetically Modified Micro-organism		MFG - Cell culture	07 05 14	SOLID	Nitrile / rubber gloves, / gown, safety glasses / goggles / safety boots	Place in autoclaving bags and autoclave	GMM	GMM – wear designated PPE and follow GMM handling instructions		Autoclave and then add to general refuse. EHS should be consulted with regard to unautoclavable materials and bulky items.	SOLID NON HAZ(AUTOCLAVED)	Personal gowns potentially contaminated with Genetically Modified Micro-organism	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Pipettes	All pipettes used for media preparation and transfer operations		MFG - Cell culture	200139	SOLID SHARPS	Safety shoes, lab coat, gloves and safety glasses	Remove residual liquids and place the pipette in a pipette washer if available - rinse and place in the SHARPS bin.	No significant hazard	No significant risks		Flush residual media to drain and place pipettes in the SHARPS bin	SOLID NON HAZ	Pipettes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	YELLOW SHARPS BINS.	N/A	YELLOW SHARPS BINS.	
Plastic bottles and Flasks	125ml, 250ml, 500ml, 1 litre plastic flasks and bottles used with sterile media		MFG - Cell culture	200139	SOLID	Safety shoes, lab coat, gloves and safety glasses	Remove all residual liquids and place in a plastic bag. Place bag within contained bin	No significant hazard	No significant risks	365	Wash and dispose of to refuse. Review with the waste contractor if the plastic is recycleable. rinse 3 times with water and place in the refuse bin. Alternatively where wash facilities are not available transfer to the waste segregation area for washing by the waste contractor	SOLID NON HAZ	Plastic bottles and Flasks	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	GREEN RECYCLING BINS	N/A	BOX FOR HARD PLASTIC RECYCLING	
Process filters potentially contaminated with Genetically Modified Micro-organism	HEPA and other process filters potentially contaminated with Genetically Modified Micro-organism		MFG - Cell culture	15 02 03	SOLID	Nitrile / rubber gloves, / gown, safety glasses / goggles / safety boots	Place in autoclaving bags and autoclave	GMM	GMM – wear designated PPE and follow GMM handling instructions		Autoclave and then add to general refuse. EHS should be consulted with regard to unautoclavable materials and bulky items. Autoclaved filters may be disposed in general refuse	SOLID NON HAZ(AUTOCLAVED)	Process filters potentially contaminated with Genetically Modified Micro-organism	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Production liner bags potentially contaminated with Genetically Modified Micro-organism	Production liner bags - GMM		MFG - Cell culture	07 05 14	SOLID	Nitrile / rubber gloves, / gown, safety glasses / goggles / safety boots	Place in autoclaving bags and autoclave	GMM	GMM – wear designated PPE and follow GMM handling instructions		Autoclave and then add to general refuse (white bags). EHS should be consulted with regard to unautoclavable materials and bulky items.	SOLID NON HAZ(AUTOCLAVED)	Production liner bags potentially contaminated with Genetically Modified Micro-organism	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Sanitation Fluid Containers	Empty containers which contained IPA 70%, KlericideVesphene and LPH		MFG - Cell culture	200139	SOLID	Safety shoes, lab coat, gloves and safety glasses	wash containers - triple risnse	Disinfectant	Disinfectant - avoid contact	365 kg	Triple wash containers and recycle	SOLID NON HAZ	Sanitation Fluid Containers													
Trypan Blue Solution	**GMM Material** - Trypan Blue 0.4%, Sodium Chloride 0.81%, Potassium Phosphate Dibasic 0.06%, Waterapprox 98%		MFG - Cell culture	70105	LIQUID	Safety shoes, lab coat, gloves and safety glasses	inavctivate GMMs in glass / plastic container. Add to the Flammable Waste Cannister	Contains Trypan Blue - carcinogen	Avoid contact. Handle wastes only in a fume hood / extracted area	6	Neutralise GMMs by adding Versphene to a final concentration of 1% and mix gently	B	Trypan Blue Solution	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	HP6-Toxic	Sigma T8154, S7653, P3786	PLASTIC HDPE BOTTLE LABELLED	N/A	Black 200L T/H Steel Drum (Y Rated)	
Tubing C Flex and Pharmed	C-Flex sizes 16 & 24, Pharmed size 88		MFG - Cell culture	200139	SOLID	Wear PPE relative to the hazard if handling contaminated materials Safety shoes, lab coat, latex gloves and safety glasses	Remove residual liquids by allowing to drain or by pumping out to drain	No significant hazard	No significant risks		Flush residual media to drain and place tubing in the refuse bin	SOLID NON HAZ	Tubing C Flex and Pharmed	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	n/a	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	
Wave bags	Empty wave bags , 2 l, 20 l and 50 l with traces of sterile media		MFG - Cell culture	200139	SOLID	Safety shoes, lab coat, gloves and safety glasses	Place in refuse bin for collection and landfill	No significant hazard	No significant risks	1000	Autoclave the wave bags and dispose of as general waste	SOLID NON HAZ	Wave bags	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	n/a	Tech document	BLACK GENERAL WASTE BINS	N/A	BLACK GENERAL WASTE BINS	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream Type	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Marine Pollutant	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Ethanol Waste - Purification Chromatography ethanol waste	70% Ethanol, 30% water		MFG - Purification	070504*	Clear, liquid	Nitrile / rubber gloves, splash suit, respirator may be required	Drain, flush with water	Highly Flammable	Highly Flammable, avoid contact	10000	Drain, flush with water	B	Purification Chromatography ethanol waste	Ethanol 70%, Water 30%	Waste Ethanol Solution	1170	3	n/a	II	No	IMDG/ADR	Non halogenated solvent canister	Flammable	Black 200L T/H Steel Drum (Y Rated)	
Production liner bags contaminated with >0.25M NaOH or 6M Guanidine	Production liner bags contaminated with >0.25M NaOH or 6M Guanidine	300022 300023 300024 300026 306286	MFG - Purification	15 01 10	Plastic, paper, containers, cardboard packaging	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Place in a red bag	Hazards associated with the contaminating chemical	Avoid contact and breathing dusts etc. – review the MSDS for the material which the packaging contained and wear PPE and handle in accordance with this risk		Transfer red bag to red wheelie outside airlocks		Production liner bags contaminated with >0.25M NaOH or 6M Guanidine	SOLID CONT WITH SODIUM HYDROXIDE	WASTE SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S. (Sodium Hydroxide)	3244	8	N/A	II		IMDG/ADR	200L METAL COMBI DRUM	CORROSIVE	200L METAL COMBI DRUM	
Production liner bags contaminated with non-hazardous buffer solutions	non hazardous buffer solutions eg sodium chloride, sodium carbonate, media, sodium bicarbonate, etc	other buffer MM's	MFG - Purification	200139	plastic bags	nitrile gloves, gown, glasses, boots	Place in white bag	none	none		Transfer white bag to black wheelie outside airlocks		non hazardous buffer solutions eg sodium chloride, sodium carbonate, media, sodium bicarbonate, etc	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WHITE BAG, BLACK BIN	GENERAL WASTE	BLACK DRUM/COMPACTER	
Purification column media with ethanol solution	Ethanol, water and column media		MFG - Purification	070504*	Clear, liquid and column media	Nitrile / rubber gloves, goggles / safety glasses, splash suit, respirator may be required	Solvent canisters and UN approved open head steel drums	Highly Flammable, avoid contact	Avoid contact. Do not breath vapours		Transfer to the Waste Staging Room. Drummed material is sent offsite for treatment	B	Purification column media with ethanol solution	Ethanol, water and column media	Waste Ethanol Solution	1170	3	n/a	II	No	IMDG/ADR	Non halogenated solvent canister	Flammable	Black 200L T/H Steel Drum (Y Rated)	
Spent chromatograph resin	Chromatograph resins from purification		MFG - Purification	70599	Gel beads	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Place in plastic bags, bin and transfer to the waste segregation area.	None	None		Incineration - bag and place in open top steel drums		Spent chromatograph resin	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200L PLASTIC OPEN TOP	GENERAL WASTE	200L PLASTIC OPEN TOP	
acetic acid buffer solution	2% acetic acid in WFI		MFG - Purification	070101	liquid	nitrile gloves, gown, glasses, boots	flush to drain, wash bags and tubing, bags to non haz waste	none	Avoid potential for eye contact, skin and mucous membrane contact		flush to drain, wash bags and tubing to be shipped of as non-haz waste after washing		acetic acid buffer solution	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	
glacial acetic acid	glacial acetic acid 80%	100008	MFG - Purification	070101	liquid	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	collect in chemical canister for non-halogenated organic solvent. Treat spill as hazardous waste	corrosive	Causes severe burns.Avoid eye, skin and mucous membrane contact		15L JERRICAN		glacial acetic acid 80%	glacial acetic acid 80%	WASTE ACETIC ACID, GLACIAL	2789	8	3	II	NO	SDS	15L JERRICAN	FLAMMABLE, CORROSIVE		
weigh out raw materials	several materials eg L-Histidine, sodium bicarbonate, sodium chloride, etc		MFG - Purification		powder	nitrile gloves, gown, glasses, boots	Place plastic bags or buckets in waste area for collection to waste yard	none	none	100	Place plastic bags or buckets in waste area for collection to waste yard		weigh out raw materials	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	plastic buckets			
Colloidal Gold particle solution	gold particles (0.5g/l); sodium citrate, sodium lauryl sulphate, polyvinylpyrrolidone, water	108558	MFG - Purification		liquid	nitrile gloves, gown, glasses, boots	flush to drain	none	none		flush to drain			WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Waste Material	Constituents1	Main Source / collection	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Sodium Hydroxide 0.1M	4 g/L Sodium Hydroxide	PD Lab	200115*	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.Avoid eye, skin and mucous membrane contact	240	Dispose of to drain flushing well with water	Sodium Hydroxide 0.1M	liquid	WASTE SODIUM HYDROXIDE	1824	8	N	II	MSDS	15L JERRICAN	8	15L JERRICAN	
Bioprofile400 Reagent (RMS) pack	Compound EKS (Proprietry) 50%	PD Lab	200139	Solid	Lab coat, gloves and safety glasses	Self contained container	GMM waste prior to being autoclaved. No other significant hazardous properties	No significant risks	20	Autoclave Biophox packs and dispose of intact into the refuse bin	AUTOCLAVED WASTE	SOLID	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	WHITE BAG NON HAZ	GEN WASTE	BLACK BIN	
Citrate wastewater	0.1 M (8.5 g/L) Sodium Citrate,14.45 g/L Citric Acid	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and mucous membrane contact, pH 3.5	24	Dispose of to drain flushing well with water	Citrate wastewater	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	15L JERRICAN	NON REG	15L JERRICAN	
Citric Acid 1M	210 g/L Citric Acid	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and mucous membrane contact pH 4.9	24	Dispose of to drain flushing well with water	Citric Acid 1M	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	15L JERRICAN	NON REG	15L JERRICAN	
Citric Acid & Citrate Solution	20 g/L Sodium Citrate, 6.72 g/L Citric Acid	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and mucous membrane contact pH 4.9	24	Dispose of to drain flushing well with water	Citric Acid & Citrate Solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	15L JERRICAN	NON REG	15L JERRICAN	
Citric Acid 0.1 M	21 g/L Citric Acid	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and mucous membrane contact pH 4.9	24	Dispose of to drain flushing well with water	Citric Acid 0.1 M	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	15L JERRICAN	NON REG	15L JERRICAN	
Deproteinising Solution for biophox	Sodium Hypochlorite 3%	PD Lab		solution	Lab coat or mfg suit, gloves and safety glasses	plastic containers	slightly caustic	No significant risks	1	Flush to drain to the WWTP, rinse plastic container to be dispose of into the refuse bin	Deproteinising Solution for biophox	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ethanol – Lab waste	20 % Ethanol in water	PD Lab	070504*	Clear aqueous based solution	lab coat, gloves and safety glasses	Dilute 1 in 4 parts with water and dispose of to drain flushing well with water	Flammable if undiluted to less than 15% ethanol in water	Avoid contact with skin and eyes. Avoid breathing vapours.Dilute 1:4 with water prior to flushing to drain	240	Dilute 1:4 with water prior to flushing to drain	Ethanol – Lab waste	liquid	WASTE ETHANOL	1170	3	N/A	III	N/A	N/A	N/A	N/A	
Ethanol 20%	Ethanol 20% and water 80%	PD Lab	070504*	Clear liquid with a sweet odour	lab coat, gloves and safety glasses	Plastic or glass sealable containers	Non-Flammable	Non-Flammable	250	Dispose of to drain flushing well with water. Less than 15% ethanol in water may be disposed of directly to drain. Dilute at least 1:4 and flush to drain with water	Ethanol 20%	liquid	WASTE ETHANOL	1170	3	N/A	III	N/A	N/A	N/A	N/A	
Histidine and Sorbitol solution	1.8 g/L Histidine HCL, 0.22 g/L Histidine, 45 g/L Sorbitol	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	12	Dispose of to drain flushing well with water	Histidine and Sorbitol solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Histidine, Sorbitol & Polysorb 80 solution	Polysorb 80 10 g/L, 1.8 g/L Histidine HCL, 0.22 g/L Histidine, 45 g/L Sorbitol,	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	12	Dispose of to drain flushing well with water	Histidine, Sorbitol & Polysorb 80 solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
pH Electrode Conditioning solution (23397)	Ammonium hydrogenfluoride (0.57%) and Ammonium BiFluoride	PD Lab		solution	Lab coat or mfg suit, gloves and safety glasses	plastic containers	Slightly acidid.	No significant risks	1	Flush to drain to the WWTP, rinse plastic container to be dispose of into the refuse bin	pH Electrode Conditioning solution (23397)	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Polysorb 80 Solution	Sodium Phosphate Monobasic monohydrate 1.14%, Sodium Phosphate Dibasic Deihydrate 7.43%, Sodium Chloride 8.8%, Polysorb 80 10%	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	24	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	Polysorb 80 Solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Potassium Chloride solution	3M - 224 g/L Potassium Chloride	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.	12	Dispose of to drain flushing well with water	Potassium Chloride solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Pre heater cleaning agent for Biophox (11802)	Hypochlorous acid, sodium salt; sodium hypochlorite (0.07 mol/l)	PD Lab		solution	Lab coat or mfg suit, gloves and safety glasses	plastic containers	Slightly corrosive	No significant risks	1	Flush to drain to the WWTP, rinse plastic contained to be dispose of into the refuse bin	Pre heater cleaning agent for Biophox (11802)	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Sodium Chloride	0.9% solution of Sodium Chloride	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain	No significant hazardous properties	No significant risks in handling	500	Dispose of to drain flushing well with water	Sodium Chloride	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Sodium Hydroxide 1 M	40 g/L Sodium Hydroxide	PD Lab	200115*	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.Avoid eye, skin and mucous membrane contact	60	Dispose of to drain flushing well with water	Sodium Hydroxide 1 M	liquid	WASTE SODIUM HYDROXIDE	1824	8	N	II	MSDS	15L JERRICAN	8	15L JERRICAN	
Sodium Hydroxide 2 M	80 g/L Sodium Hydroxide	PD Lab	200115*	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.	120	Dispose of to drain flushing well with water	Sodium Hydroxide 2 M	liquid	WASTE SODIUM HYDROXIDE	1824	8	N	II	MSDS	15L JERRICAN	8	15L JERRICAN	
Sodium Phosphate	0.2 M Sodium Phosphate monobasic and Sodium Phosphate dibasic mixture	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	24	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	Sodium Phosphate	liquid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sodium Phosphate wastewater	1.1 g/L Sodium Phosphate Monobasic, 7.4 g/L Sodium Phosphate Dibasic, 8.8 g/L Sodium Chloride, 10 g/L Polysorbate 80	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes	Avoid potential for eye contact	24	Dispose of to drain flushing well with water	Sodium Phosphate wastewater	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sodium Phosphate wastewater	0.03 M Sodium Phosphate 2.88 g/L Sodium Phosphate monobasic and 1.62 g/L Sodium Phosphate dibasic mixture	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	24	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	Sodium Phosphate wastewater	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TBNP and Polysorb 80 solution	20 g/L Tri-N-Butyl Phosphate, 100g/L Polysorbate 80	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	6	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	TBNP and Polysorb 80 solution	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris wastewater	0.05 (2.32 g/L) M Tris HCl, 4.4 % 2-Amino-2-hydroxymethylpropane-1,3 diol	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	12	Dispose of to drain flushing well with water	Tris wastewater	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris Wastewater 0.05M	Tris HCl. 4.5 g/L , 2-Amino-2-hydroxymethylpropane-1,3 diol 2.3 g/l	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	24	Dispose of to drain flushing well with water	Tris Wastewater 0.05M	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris Wastewater 0.1 M	Tris HCl. 8.9 g/L , 2-Amino-2-hydroxymethylpropane-1,3 diol 4.6 g/l	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	24	Dispose of to drain flushing well with water	Tris Wastewater 0.1 M	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris wastewater 1M	1 (8.96 g/L) M Tris HCl, 4.64 g/L 2-Amino-2-hydroxymethylpropane-1,3 diol	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	36	Dispose of to drain flushing well with water	Tris wastewater 1M	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris wastewater with 0.05M Sodium Chloride	0.05 (4.8 g/L) M Tris HCl. 2.9 g/L Sodium Chloride, 2.4 g/L 2-Amino-2-hydroxymethylpropane-1,3 diol	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	24	Dispose of to drain flushing well with water	Tris wastewater with 0.05M Sodium Chloride	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris wastewater with 1 M Sodium Chloride	Tris HCl. 5.37 g/L , 2-Amino-2-hydroxymethylpropane-1,3 diol 1.94 g/l, Sodium Chloride 58.4 g/l	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	24	Dispose of to drain flushing well with water	Tris wastewater with 1 M Sodium Chloride	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tris wastewater with 1M Sodium Chloride	0.05 (5.4 g/L) M Tris HCl.58.4 g/L Sodium Chloride, 1.9 g/L 2-Amino-2-hydroxymethylpropane-1,3 diol	PD Lab	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	24	Dispose of to drain flushing well with water	Tris wastewater with 1M Sodium Chloride	liquid	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Deuterium lamps	Deuterium lamps	M&F, Labs	200121*	Lamps		Place in lamps box at waste yard	Contains deuterium	avoid breaking of lamps		Place in fluorescent lamp box in waste yard	Deuterium lamps	SOLID	WEEE WASTE	N/A	N/A	N/A	N/A	N/A	N/A	COFFIN	N/A	N/A
Ethanol spray cans	70% ethanol in spray cans	Laboratories		Cans	Safety shoes, lab coat, gloves and safety glasses	dispose separate in cans box	Flammable			dispose separate in cans box	Ethanol spray cans	LIQUID	WASTE ETHANOL	1170	3	N/A	III	N/A	N/A	VENTED DRUM	N/A	VENTED DRUM
Gloves – used	Waste sterile gloves	Laboratories	180104	Latex and other gloves	Wear safety glasses when spraying IPA		Flammable	Dermatitis	200	Depending on type of contamination. Most gloves will be non-hazardous	Gloves – used	SOLID	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Klericide bottles	Klericide A and B	Laboratories		bottles	Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Flammable			place in hazardous waste bin with red liner	Klericide bottles	SOLID	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI
Pipet tips clean or water only	water	Laboratories		clean tips	None	in recycling bin (DMR)	None	None		If possible segregate and dispose of as recyclables	Pipet tips clean or water only	SOLID	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	DMR	N/A	PACKER
Pipet tips used	chemicals contaminated tips	Laboratories		contaminated tips with chemicals	gloves	place in hazardous waste bin with red liner	avoid contact	Avoid contact		Place in hazardous waste bin with red liner	Pipet tips used	SOLID	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Pipet tips with GMM material	GMM	Laboratories		contaminated tips with GMM	gloves	in sharps container	avoid contact	Avoid contact		Dispose of in sharps container	Pipet tips with GMM material	SOLID	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Vials	plastic vials, small glass vials, syringes, etc	Laboratories	180103*		Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Avoid contact		100	Place in hazardous waste bin with red liner	Vials	SOLID	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Activap / Biotal 7	Wipes soaked with > 10% IPA , > 10% Cinnamic aldehyde , Eugenol 1-10%	Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Activap / Biotal 7	SOLID	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI
Wipes	Wipes soaked with 70% IPA, 1% Vesphene, 1% LPH, Klericide A and Klericide B	Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Wipes	SOLID	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI

Waste Material	Constituents1	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
1,4 Benzoquinone (BQ) Solution	P-BENZOQUINONE <0.0012	lab smalls cabinet		liquid	Safety glasses Protective gloves (Plastic, impervious) In case of insufficient ventilation, use a breathing mask with filter type: A2-P2	original packaging	none	May be irritating to the skin. May be irritating to eyes.	tbc	Move to lab small cabinet, Misc section, collected by veolia	1,4 Benzoquinone (BQ) Solution	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
1,4 Benzoquinone (BQ) Solution Acidified	Water >99% Phosphoric acid< 0.1% P-BENZOQUINONE < 0.000075%	lab smalls cabinet		liquid	Safety glasses Protective gloves (Plastic, impervious) In case of insufficient ventilation, use a breathing mask with filter type: A2-P3	original packaging	none	May be irritating to the skin. May be irritating to eyes.	tbc	Move to lab small cabinet, Misc section, collected by veolia	1,4 Benzoquinone (BQ) Solution Acidified	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Buffered Ammonium Persulfate Reagent	Water 80.5% Ammonium persulphate 15% Disodium phosphate(sodium - phosphate, dibasic 2.8% SODIUM PHOSPHATE, - MONOBASIC 1.7%	lab smalls cabinet		liquid	Safety goggles Neoprene gloves Protective clothing.	original packaging	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	Irritant, sensitizer	tbc	Move to lab small cabinet, Acid section, collected by veolia	Buffered Ammonium Persulfate Reagent	lab chemical (liquid) Acid section	WASTE Corrosive liquid, n.o.s. (15% Ammonium persulphate and Water)	UN1760	8	N/A	III	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Ethanolamine	Ethanolamine	lab smalls cabinet	TBC	liquid	Tightly fitting safety goggles, full contact: natural latex gloves, splash contact Nitrile gloves. Flame retardant antistatic protective clothing	original packaging	Acute toxicity, Category 4, Oral, H302 Acute toxicity, Category 4, Inhalation, H332 Acute toxicity, Category 4, Dermal, H312 Skin corrosion, Category 1B, H314 Specific target organ toxicity - single exposure, Category 3, Respiratory system, H335 Long-term (chronic) aquatic hazard, Category 3, H412	Observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.	tbc	Move to lab small cabinet, Acid section, collected by veolia	Ethanolamine	lab chemical (liquid) Acid section	WASTE ETHANOLAMINE	UN2491	8	N/A	III	Janssen sds	Original packaging	CLASS 8 WASTE LABEL	Veolia lab small package, determined by VEOLIA TSR	
HEPES	4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid 100%	lab smalls cabinet		liquid	Safety goggles gloves Protective clothing.	original packaging	NONE	Provide appropriate exhaust ventilation at places where dust is formed	tbc	Move to lab small cabinet, Misc section, collected by veolia	HEPES	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Methanol Solution Acidified	Water >99% Phosphoric acid <0.01% Methanol <0.00014%	lab smalls cabinet		liquid	Safety goggles. Gloves	original packaging	NONE	NONE	tbc	Move to lab small cabinet, Misc section, collected by veolia	Methanol Solution Acidified	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Nicotinamide Solution Acidified	Water >99% Phosphoric acid <0.01% Nicotinamide <0.000085%	lab smalls cabinet		liquid	Safety goggles.	original packaging	NONE	NONE	tbc	Move to lab small cabinet, Misc section, collected by veolia	Nicotinamide Solution Acidified	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Phosphoric acid Reagent 45%	Water 55% Phosphoric acid 45%	lab smalls cabinet		liquid	Splash proof chemical goggles Gauntlet type neoprene gloves In case of insufficient ventilation, use a breathing mask with filter type: P2	original packaging	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.	Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety procedures. Wash thoroughly immediately after use.	tbc	Move to lab small cabinet, ACID section, collected by veolia	Phosphoric acid Reagent 45%	lab chemical (liquid) Acid section	WASTE Phosphoric acid, solution	UN1805	8	N/A	III	Janssen SDS	original container	CLASS 8 WASTE LABEL	lab smalls package determined by Veolia TSR	
Potassium Hydrogen Phthalate (KHP) Solution Acidified	Water >99% Phosphoric acid <0.01% Potassium hydrogen phthalate < 0.00032%	lab smalls cabinet		liquid	Safety goggles.	original packaging	none	NONE	tbc	Move to lab small cabinet, Misc section, collected by veolia	Potassium Hydrogen Phthalate (KHP) Solution Acidified	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	
Sucrose Solution Acidified	Water >99% Phosphoric acid <0.01% SUCROSE< < 0,00012%	lab smalls cabinet		liquid	Safety goggles.	original packaging	none	NONE	tbc	Move to lab small cabinet, Misc section, collected by veolia	Sucrose Solution Acidified	lab chemical (liquid) Misc section	Not regulated	N/A	N/A	N/A	N/A	Janssen SDS	original container	non regulated lab smalls label	lab smalls package determined by Veolia TSR	

Waste Material	Constituents1	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
10% ADCF Antifoam Solution (Antifoam Q)	Siloxanes and Silicones,di-Me <3.65%	Warehouse(Expired)		liquid	Chemical-resistant, impervious gloves	original container	H412	None	TBC	Contact Veolia, Bring to waste staging area.	10% ADCF Antifoam Solution (Antifoam Q)	Liquid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	As per volume	
Benzyl alcohol	Benzyl alcohol	Weigh and dispense	16 03 05*	liquid	Gloves, Safety glasses, Masks where vapours are generated.	original container	H302 + H332 Harmful if swallowed or if inhaled.H319 Causes serious eye irritation	avoid vapours and contact with eyes, and ingestion.	TBC	Contact Veolia, Bring to waste staging area.	Benzyl alcohol	Liquid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	original 200l metal tighthead	
Dextrose (Dextrose Anhydrose)	Dextrose 100%	Weigh and dispense		solid	Wear safety glasses with side shields (or goggles). Use tight fitting goggles if dust is generated, Wear respirator if there is dust formation, Wear appropriate clothing to prevent repeated or prolonged skin contact.	original container	None	Avoid generation and spreading of dust. Dust may form explosive mixture with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Wash thoroughly after handling.	TBC	Contact Veolia, Bring to waste staging area.	Dextrose (Dextrose Anhydrose)	solid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	plastic bucket with lid	
Ethanolamine	Ethanolamine	TBC		liquid	Tightly fitting safety goggles, full contact: natural latex gloves, splash contact Nitrile gloves. Flame retardant antistatic protective clothing	original container	Acute toxicity, Category 4, Oral, H302 Acute toxicity, Category 4, Inhalation, H332 Acute toxicity, Category 4, Dermal, H312 Skin corrosion, Category 1B, H314 Specific target organ toxicity - single exposure, Category 3, Respiratory system, H335 Long-term (chronic) aquatic hazard, Category 3, H412	Observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.	TBC	Contact Veolia, Bring to waste staging area.	Ethanolamine	liquid	WASTE ETHANOLAMINE	UN2491	8	N/A	III	Janssen sds	Original packaging	CLASS 8 WASTE LABEL	Veolia lab small package, determined by VEOLIA TSR	
Fabricator	NOT DECLARED	TBC	20 01 99	solid	Use dust protection glasses during strongly dust generating work.	original container	NONE	Avoid handling in a manner which will raise dust. Avoid spillage, inhalation and contact with eyes and skin. Do not eat, drink or smoke in premises where this product is handled. Treat the substance as potentially harmful to health. Handle in premises which have modern ventilation standards. Wash your hands after using the product.	TBC	Contact Veolia, Bring to waste staging area.	Fabricator	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	N/A	TBC	
HT-5P Powder	Glutamic acid 5-10% L-Tyrosine disodium salt dihydrate 1-5% Zinc sulfate heptahydrate 1-5%	Warehouse(Expired)		solid	Face shield and safety glasses. Handle with gloves Respirator as per risk assessment	original container	H318 Causes serious eye damage. H402 Harmful to aquatic life.	Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	HT-5P Powder	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	N/A	TBC	
Hypoxanthine, Monosodium salt	C5H3N4ONa	Warehouse(Expired)		solid	Face shield or safety glasses. Handle with gloves	original container	NONE	Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	Hypoxanthine, Monosodium salt	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
IgGZERO	SODIUM CHLORIDE <60% DI-SODIUM HYDROGEN PHOSPHATE <25% SODIUM DIHYDROGEN PHOSPHATE < 25% IgGZERO®1-10	Warehouse(Expired)		solid	Use dust protective glasses when handling may create dust Use proper protective breathing equipment in case of insufficient ventilation.	original container	NONE	Do not inhale dust and avoid contact with skin and eyes. Avoid handling in a manner which will raise dust.	TBC	Contact Veolia, Bring to waste staging area.	IgGZERO	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
Iron (iii)- Chloride-Hexahydrate Emprove® Essential Ph Eur, JPE	iron(III) chloride hexahydrate (<= 100 %)	Warehouse(Expired)		solid	Tightly fitting safety goggles, full contact: natural latex gloves, splash contact Nitrile gloves. Respiratory protection required when dusts are generated.	original container	Acute Toxicity, Category 4, Oral Skin Irritation, Category 2 Serious eye damaae Cateaory 1	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.	TBC	Contact Veolia, Bring to waste staging area.	iron(III) chloride hexahydrate (<= 100 %)	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
IMB8 [CR60219]	L-Tyrosine salt dihydrate	Warehouse(Expired)		solid	Gloves, Safety glasses, Masks where dust is generated.	original container	H319-serious eye irritation	n/a	TBC	Contact Veolia, Bring to waste staging area.	IMB8	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
IMF8 [CR60299]	L-Cysteine 1-10%	Warehouse(Expired)		solid	Gloves, Safety glasses, Masks where dust is generated.	original container	Acute Tox. 4; H302	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	IMF8 [CR60299]	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L-(+)-Arginine Monohydrochloride	L-(+)-Arginine monohydrochloride 100%	Warehouse(Expired)		solid	Use tight fitting goggles if dust is generated. Wear protective gloves.	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L-(+)-Arginine Monohydrochloride	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L-Aspartic acid, Monosodion salt Monohydrate	C4H6ND4Na*H2O	Warehouse(Expired)		solid	Use tight fitting goggles if dust is generated. Wear protective gloves.	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L-Aspartic acid, Monosodion salt Monohydrate	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L-Cystine	R,R)-3,3'-Dithiobis(2-aminopropionicacid), L-Cystine 100%	Warehouse(Expired)		solid	Use tight fitting goggles if dust is generated. Wear protective gloves.	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L-Cystine	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L-Glutamate Monohydrate. (Monosodium L-Glutamate Monohydrate)	L-Glutamic acid monosodium salt monohydrate 100%	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes,	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L-Glutamate Monohydrate. (Monosodium L-Glutamate Monohydrate)	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L- Glutamic Acid, Monona, Low Endo	L- Glutamic Acid, Monona, Low Endo, 100%	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes,	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L- Glutamic Acid, Monona, Low Endo	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L- Glutamic Acid, sodium salt.	L-Glutamic acid, sodium salt monohydrate 50-100%	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes.	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L- Glutamic Acid, sodium salt.	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
L-Tyrosine	(S)-2-Amino-3-(4-hydroxyphenyl)propionic acid, USP3-(4-Hydroxyphenyl)-L-alanine, USP	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes,	original container	None	Provide appropriate exhaust ventilation at places where dust is formed.	TBC	Contact Veolia, Bring to waste staging area.	L-Tyrosine	SOLID	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
Manganese (ii) Chloride Tetrahydrate	Manganese dichloride tetrahydrate 100%	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes,	original container	Acute toxicity, Oral (Category 3), H301 Serious eye damage (Category 1), H318 Specific target organ toxicity - repeated exposure (Category 2), H373 Long-term (chronic) aquatic hazard (Category 2), H411	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	Manganese (ii) Chloride Tetrahydrate	SOLID	WASTE TOXIC SOLID, INORGANIC, N.O.S. (Manganese dichloride tetrahydrate)	3288	6.1	N/A	III	Janssen sds	Original packaging	Class 6.1 label, Environmentally hazardous mark	Veolia lab small package, determined by VEOLIA TSR	
GMM POD FILTERS	GMM POD FILTERS	OPERATIONS	15 02 02*	SOLID	TYVEK SUIT Glasses Gloves		None	Use caution when placing in FIBC Use pallet truck to move full trolley Beware of moving plant	1500kg per batch	Collect trolleys and Fibcs from waste room.Bring them to airlock and place 27 pod filters in each trolley. Return trolleys to waste staging	gmm pod filters	SOLID	WASTE GENETICALLY MODIFIED MICRO ORGANISMS	3244	9	N/A	n/a	Janssen sds	FIBC	Class 9 label un 3245 mark	LINED PALLET BOX	
Resin Capto™ Butyl ImpRes, 5 L	ethanol 14-19%	Warehouse(Expired)		liquid	Chemical-resistant, impervious gloves Safety eyewear	original container	Flam. Liq. 2, H225	Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated	TBC	Contact Veolia, Bring to waste staging area.	Resin Capto™ Butyl ImpRes, 5 L	Liquid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
Resin Capto™ S ImpAct, 5 L	ethanol 14-19%	Warehouse(Expired)		liquid	Chemical-resistant, impervious gloves Safety eyewear	original container	Flam. Liq. 2, H226	Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated	TBC	Contact Veolia, Bring to waste staging area.	Resin Capto™ S ImpAct, 5 L	Liquid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
Resin MabSelect SuRe™LX,10L	ethanol 14-19%	Warehouse(Expired)		liquid	Chemical-resistant, impervious gloves Safety eyewear	original container	Flam. Liq. 2, H227	Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated	TBC	Contact Veolia, Bring to waste staging area.	Resin MabSelect SuRe™LX,10L	Liquid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
SupAA-1 [CR60234]	SupAA	Warehouse(Expired)		solid	Dust mask, gloves, protective eyeglasses or chemical safety goggles, Long-sleeved work clothes,	original container	None	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	SupAA	solid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
Synperonic PE/F 68-PA-(SG) [Croda / Poloxamer)	SYNPERONIC PE/F 68-PA-(SG)	Warehouse(Expired)		solid	Safety glasses with side-shields For prolonged or repeated contact use protective gloves Impervious clothing	original container	None	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	SupAA	solid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	
TE-1 [CR40118]	TE-1	Warehouse(Expired)		solid	Safety glasses with side-shields For prolonged or repeated contact use protective gloves Impervious clothing	original container	None	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed	TBC	Contact Veolia, Bring to waste staging area.	TE-1	solid	N/A	N/A	N/A	N/A	N/A	Janssen sds	Original packaging	Non regulated label	Original packaging	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segreg	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Bromophenol Blue	Bromophenol Blue 0.2% (200mg in 100ml Deionised Water)		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	2	Flush to drain to the WWTP	Bromophenol Blue	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
cIEF - iCE 280 chemical test kit	phosphoric acid (1%), NaOH (0.5%), MC-solution (0.5%), hemoglobine, several bottles resulting in 1 makeup solution		QC Biochemistry		Solution	lab coat, gloves and safety glasses	plastic bottles	biological waste	avoid contact with acid, NaOH and hemoglobine	<1	flush liquid to drain, rinse kits and dispose of as general waste	cIEF - iCE 280 chemical test kit	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
cIEF - TEMED solution	10uL TEMED in 1L water		QC Biochemistry		solution	lab coat, gloves and safety glasses	flush to drain, vials in hazardous waste				flush liquid to drain, vials in hazardous waste bin with red liner	cIEF - TEMED solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
DRID Destaining Solution	Aqueous soln of 43% Ethanol, 10 % Acetic Acid		QC Biochemistry	070504*	Clear solution with a pungent vinegar smell	lab coat, gloves and safety glasses	Store in plastic or glass containers resistant to acid attack	Corrosive	Avoid contact and breathing vapours, Contact with skin. Complete waste management operations within a fumehood or with a respirator	24	Flush waste to drain with running water in a fume hood	DRID Destaining Solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
DRID Gels	10% Saline phosphate Buffer, 30% polyethylene glycol, 0.01% Sodium Azide, 1% Agarose powder. Gel bond film used as a base		QC Biochemistry	161001*	Gel	lab coat, gloves and safety glasses	Place gels in plastic bags or plastic containers for disposal	No significant hazardous properties with clean / non-TCAA contaminated gels. Gels contaminated with Trichloroacetic acid should be treated as a hazardous halogenated solid waste and sent for incineration – handling of these gels should be completed with regard to PPE and occupational health requirements of handling TCAA (Please see DRIB staining solution for handling instructions of TCAA gels)	No significant risks with clean / non-TCAA gels.Treat potentially TCAA contaminated gels as corrosive / toxic solid – avoid contact, breathing vapours	6	Non-hazardous gels not contaminated with DRID staining soln may be added to the micro media autoclave runs and disposed of as micro media.Gels potentially contaminated with Trichloroacetic Acid from staining solutions may be placed in a plastic box and forwarded to waste management for disposal offsite as a halogenated solvent waste	DRID Gels	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
DRID Staining Solution	0.25 % Crocein Scarlet 7B, 0.15% Coomassie Brilliant Blue R250, 3% Trichloroacetic Acid, 5% Glacial Acetic Acid		QC Biochemistry	200114*	Coloured solution with a pungent vinegar smell	lab coat, gloves and safety glasses	Add to the halogenated solvent canister	Irritant, Toxic and corrosive material	Avoid contact and breathing vapours, contact with skin or mucous membranes. Complete waste management operations within a fumehood or with a respirator	24	Add to the halogenated solvent canister.Dispose of by incineration	0.25% Crocein Scarlet 7B, 0.15% Coomassie brilliant blue R250, 3% Trichloroacetic acid, 5% Glacial acetic acid	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	H4- Irritant. Acidic	TCAA is an irritant at <5% and glacial acetic acid is not corrosive at <10%	Halogenated solvent canister	N/A	Black 200L T/H Steel Drum (Y Rated)	
DRID agarose	Agarose		QC Biochemistry	070109	white powder	lab coat, gloves and safety glasses	general waste	N/A	No significant risk		General waste	DRID agarose	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
DRID PEG 800	PEG 800		QC Biochemistry	070109	white powder	lab coat, gloves and safety glasses	general waste	N/A	No significant risk		General waste	DRID PEG 800	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA - 2M TRIS Buffer	Tris		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA - 2M TRIS Buffer	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA Biotinylated Anti-Protein A Antibody (100X soln)	Biotinylated Anti-Protein A Antibody (100X soln), Sodium Acid (Preservative)		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA Biotinylated Anti-Protein A Antibody (100X soln)	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA HRP Conjugate (100X soln)	Streptavidin Horseradish Peroxidase, Sodium Acid 0.025%		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA HRP Conjugate (100X soln)	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA PBS-Tween Concentrate (20X Soln)	Tween 20, Sodium Acid (Preservative)		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA PBS-Tween Concentrate (20X Soln)	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA precoated Microtitre Well	Wells coated with Chicken anti-SpA antibodies		QC Biochemistry	200139	Plastic wells	Lab coat, gloves and safety glasses	Plastic wells	No significant hazard	No sgnificant risk	100	Flush to drain to the WWTP, vials in chemicals sharps container	ELISA precoated Microtitre Well	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA Protein A Reference Standard (0.5mg/ml soln)	Protein A, Sodium Acid		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA Protein A Reference Standard (0.5mg/ml soln)	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA Stop Solution	Hydrochloric Acid 1M		QC Biochemistry	70105	Clear liquid with acid vapours	Lab coat, gloves and safety glasses	Plastic or glass containers	Corrosive	Causes severe burns – avoid contact and breathing vapours	125	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA Stop Solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA Substrate Solution	3,3,5,5 Tetramethylbenzidine (TMB), Hydrogen Peroxide, Sodium Acid (Preservative)		QC Biochemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Plastic or glass containers	Reactive with oxidising agents, metals and acids. Photo degradation and reaction. Corriosive	Avoid inhallation, contact with skin or mucous membranes.	100	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA Substrate Solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
ELISA Tween 20	Tween 20		QC Biochemistry	70105	Clear solution with an amber colour liquid	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	1	Flush to drain to the WWTP, vials in hazardous waste bin with red liner	ELISA Tween 20	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Goat Anti-Human IgG (Fc specific) Antibody	Antibody		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Goat Anti-Human IgG (Fc specific) Antibody	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Goat Anti-Human IgG (H+L specific) Antibody	Antibody		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Goat Anti-Human IgG (H+L specific) Antibody	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Goat Anti-mouse IgG (H+L specific) Antibody	Antibody		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Goat Anti-mouse IgG (H+L specific) Antibody	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC - Methanol Waste	Methanol 10%-90% in water 30%		QC Biochemistry	070504*	Clear, liquid	Nitrile / rubber gloves, splash suit, respirator may be required	Dispose of to drain flushing well with water	Highly Flammable	Flammable, avoid contact	10000	Dispose of to drain flushing well with water	HPLC - Methanol Waste	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC Column Storage Solution	Sodium Azide 0.02% in water		QC Biochemistry	70105	Clear liquid	lab coat, gloves and safety glasses	Glass or plastic containers ONLY	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.			Dispose of to drain flushing well with water. The concentration of Sodium Azide is low and dilution will prevent significant risks arising.. DILUTE WELL TO DRAIN	HPLC Column Storage Solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC Columns	HPLC Columns		QC Biochemistry	200104	Stainless steel columns	lab coat, gloves and safety glasses	NA	Make sure that all hazardous chemicals have been flushed from the column	NA	1	Flush the columns with deionised water on the HPLC and place in the metal waste bin.	HPLC Columns	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC Glass Vials	Glass Vials - 5ml volume closed with PTFE / Plastic top containing approx 200ul of active product soln		QC Biochemistry	200102	Clear liquid	lab coat, gloves and safety glasses	Glass vials - place vials in autoclave bags	No significant hazards	No significant risk	3	dispose of vials in chemicals sharps container	HPLC Glass Vials	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC Mobile Phase	Sodium Phosphate Monobasic Monohydrate 11.5g/l, Sodium Phosphate Dibasic Hepahydrate 31g/l		QC Biochemistry	70105	Clear liquid	lab coat, gloves and safety glasses	Glass or plastic containers	No significant hazards	No significant risks	75	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	HPLC Mobile Phase	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
HPLC Waste	Sodium {Phosphate Monobasic Monohydrate 11.5g/l, Sodium Phosphate Dibasic 31g/l, Methanol 500mls/l, Water 500mls/l, Sodium Azide 0.2g/l,		QC Biochemistry	200103*	Clear liquid	lab coat, gloves and safety glasses	Glass or plastic containers ONLY	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.			Dispose of to drain flushing well with water. Please note a maximum of 8kg Phosphorus is allowed to be discharged to the WWTP per day. The concentration of Sodium Azide is low and dilution of this and Methanol will prevent significant risks arising.. DILUTE WELL TO DRAIN	HPLC Waste	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Human IgG Control Antibody	Antibody Control		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Human IgG Control Antibody	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Molecular Weight Marker	BIO Rad Gel Filtration Standard		QC Biochemistry	70105	Purple liquid	lab coat, gloves and safety glasses		No significant hazards	No significant risk	1	Dispose of to drain flushing well with water	Molecular Weight Marker	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Mouse IgG Control Antibody	Antibody Control		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Mouse IgG Control Antibody	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer Wash Soln	Containing HCl		QC Biochemistry	70105	Solid white crystals hydrophilic pellets	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.	60	Dispose of to drain flushing well with water	Nephelometer Wash Soln	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer Buffer 1 soln	Contains <0.1% sodium azide		QC Biochemistry	70105	Clear slightly viscous liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		4	Dispose of to drain flushing well with water	Nephelometer Buffer 1 soln	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer Calibrator 1 soln	Contains <0.1% sodium azide		QC Biochemistry	70105	Yellow translucent liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		0.4	Dispose of to drain flushing well with water	Nephelometer Calibrator 1 soln	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer Diluent 1 soln	Contains <0.1% sodium azide		QC Biochemistry	70105	Clear slightly viscous liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		36	Dispose of to drain flushing well with water	Nephelometer Diluent 1 soln	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer IgG Reagent Waste	Contains <0.1% sodium azide		QC Biochemistry	70105	Clear slightly viscous liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		0.4	Dispose of to drain flushing well with water	Nephelometer IgG Reagent Waste	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Nephelometer Waste solution	Proprietry Reagents with no specific concentrations available on the MSDS sheets. wash soln, diluent, buffer, calibrant, IgG Reagent, CBIL bioreactor and harvest products **- Contains trace Sodium Azide @ 0.1% in the Calibrator, Diluent 1, Immunoglobulin G Reagent & Buffer soln. Buffer 1 contains ethulene oxide and ethylene glycol**		QC Biochemistry	70105	Colourless and odourless liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		12	Dispose of to drain flushing well with water	Nephelometer Waste solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Phosphate buffered saline solution	Sodium Chloride 0.1 - 1.5%, Sodium Phosphate dibasic 0.1 - 1.5%, Potassium Chloride <0.1%, Potassium Phosphate Monobasic Anhydrous <0.1%		QC Biochemistry	70105	Clear odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1	Dispose of to drain flushing well with water	Phosphate buffered saline solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
SDS Page - Staining Developing	Silver Carbonate 2.5%, Formaldehyde 100ul in 250ml		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	12	Flush to drain in a fumehood. Trace formaldehyde is biodegradable and levels do not present an industrial hygiene hazard	SDS Page - Staining Developing	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
SDS Page - Staining Silver	Silver nitrate <0.1%, Formaldehyde 50ul in 250ml DI		QC Biochemistry	70105	Clear solution	Lab coat, gloves and safety glasses	Plastic or glass containers	No significant hazard	No sgnificant risk	12	Flush to drain in a fumehood. Trace formaldehyde is biodegradable and levels do not present an industrial hygiene hazard	SDS Page - Staining Silver	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
SDS Page Fixing solution	Ethanol (40%) and acetic acid (10%) in water		QC Biochemistry			lab coat, gloves and safety glasses	non halogenated solvent container				non halogenated solvent container	SDS Page Fixing solution	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Sodium Azide	10% aqueous solution of Sodium Azide		QC Biochemistry	161001*	Clear slightly viscous liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Treat as a highly toxic chemical. In particular, work with sodium Azide should be conducted in a fume hood to prevent exposure by inhalation, and appropriate impermeable gloves and splash goggles should be worn at all times to prevent skin and eye contact. Containers of Sodium Azide should be stored in secondary containers in a cool, dry secured storage separated from acids. Store Sodium Azide in Glass or Plastic containers ONLY - avoid metal containers or contact with metal solutions, salts and solids e.g pipes	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		12	Neutralisation or offsite disposal to be agree upon. Contact EHS if you have generated Sodium Azide waste	Sodium Azide	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Sodium Phosphate Dibasic Heptahydrate	Sodium Phosphate Dibasic Heptahydrate >99%		QC Biochemistry	70105	White Crystalline Solid	lab coat, gloves and safety glasses	Glass or plastic containers	No significant hazards	No significant risks	75	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	Sodium Phosphate Dibasic Heptahydrate	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Sodium Phosphate Dibasic Monohydrate	Sodium Phosphate Dibasic Monohydrate >99%	100013	QC Biochemistry	70105	White Crystalline Solid	lab coat, gloves and safety glasses	Glass or plastic containers	No significant hazards	No significant risks	75	Dispose of to drain flushing well with water. Please note a maximum of 0.5kg Phosphorus is allowed to be discharged to the WWTP per day	Sodium Phosphate Dibasic Monohydrate	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
cSDS essay - 2-mercapto-ethanol	2-mercapto-ethanol		QC Biochemistry	070504*	clear odourous solution	lab coat, gloves and safety glasses	Solvent waste canister	Highly Flammable Irritating to the respiratory system, skin and may damage eyes	Avoid contact and breathing vapours	10	Add to the non-halogenated solvent container	cSDS essay - 2-mercapto-ethanol	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
acetonitrile 80%	Acetonitrile 80%, water 20%		QC Biochemistry	070504*	clear odourous solution	lab coat, gloves and safety glasses	non halogenated solvent container	flammable, harmfull	Avoid contact and breathing vapours	15	Add to the non-halogenated solvent container	acetonitrile 80%	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Acetonitrile 20%	Acetonitrile 20%, water 80%		QC Biochemistry		clear solution	lab coat, gloves and safety glasses	flush to drain	N/A	N/A	15	Flush to drain to the WWTP	Acetonitrile 20%		LIQUID											
Deuterium lamps	Deuterium lamps		M&F, Labs	200121*	Lamps		Place in lamps box at waste yard	Contains deuterium	avoid breaking of lamps		Place in fluorescent lamp box in waste yard	Deuterium lamps	WEE WASTE	SOLID											
Ethanol spray cans	70% ethanol in spray cans		Laboratories		Cans	Safety shoes, lab coat, gloves and safety glasses	dispose separate in cans box				dispose separate in cans box	Ethanol spray cans	WASTE ETHANOL	1170	3			N/A	III	N/A	N/A	VENTED DRUM	N/A	VENTED DRUM	
Gloves – used	Waste sterile gloves		Laboratories	180104	Latex and other gloves	Wear safety glasses when spraying IPA		Flammable	Dermatitis	200	Depending on type of contamination. Most gloves will be non-hazardous	Gloves – used	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Klericide bottles	Klericide A and B		Laboratories		bottles	Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner				place in hazardous waste bin with red liner	Klericide bottles	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1			N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI	
Pipet tips clean or water only	water		Laboratories		clean tips	None	in recycling bin (DMR)	None	None		If possible segregate and dispose of as recyclables	Pipet tips clean or water only	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1			N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI	
Pipet tips used	chemicals contaminated tips		Laboratories		contaminated tips with chemicals	gloves	place in hazardous waste bin with red liner	avoid contact	Avoid contact		Place in hazardous waste bin with red liner	Pipet tips used	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Pipet tips with GMM material	GMM		Laboratories		contaminated tips with GMM	gloves	in sharps container	avoid contact	Avoid contact		Dispose of in sharps container	Pipet tips with GMM material	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Vials	plastic vials, small glass vials, syringes, etc		Laboratories	180103*		Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Avoid contact		100	Place in hazardous waste bin with red liner	Vials	LAB SMALLS VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS
Activap / Biotal 7	Wipes soaked with > 10% IPA , > 10% Cinnamic aldehyde , Eugenol 1-10%		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Activap / Biotal 7	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1			N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI	
Wipes	Wipes soaked with 70% IPA, 1% Vesphene, 1% LPH, Klericide A and Klericide B		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Wipes	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1			N/A	II	SDS	N/A	METAL COMBI	N/A	METAL COMBI	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal
Acetone	Acetone		QC Chemistry	070504*	Clear solvent with nail varnish remover odour	Safety shoes, lab coat, latex gloves and safety glasses.. Respirator may be required	Solvent waste canister	Highly Flammable Irritating to the respiratory system, skin and may damage eyes	Avoid contact and breathing vapours	10	Add to the non-halogenated solvent container
Actinomycin D-Mannitol	Actinomycin D-Mannitol, DPBS (Buffer soln)		QC Chemistry	070504*	Yellow liquid	Lab coat, gloves and safety glasses	Add to the nonhalogenated solvent waste	Antibiotic solution - Toxic, irritant	Avoid contact. Handle wastes only in a fume hood / extracted area	6	Place in the nonhalogenated solvent container
Amino Acids 100x (non-essential)	L-asparagine monohydrate, L-Glutamic Acid, L-Aspartic acid, L-Proline, L-Serine, L-Alanine, Glycine free acid in Water (90-100%)		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	No significant hazard	No significant risks	1	Flush to drain to the WWTP
Ammonium Persulphate 15%	Ammonium Persulphate 15%, Sodium Phosphate Dibasic 2.8%, Sodium Phosphate monobasic 1.7%, Water approx 80%		QC Chemistry	160904*	Clear liquid	Nitrile / rubber gloves, splash suit or lab coat, safety glasses / goggles and safety shoes / boots	Store in plastic or glass containers.	Oxidiser - Contact with combustible material may cause fire.Corrosive.	Corrosive, harmful, irritant avoid contact	2.5	Dispose of to drain flushing well with water
Bovine Serum Albumin	Serum Albumin 0-35%, Sodium Azide 0.05%, Sodium Chloride 1%, Water 99%		QC Chemistry	070105*	Clear liquid	Use only in a fume hood. Safety shoes, lab coat, latex or nitrile gloves and safety glasses / goggles	Dispose of to drain flushing well with water	Dilute sodium azide is less hazardous than the raw material. Avoid contact with heavy metals or their salts as this may react to form explosive heavy metal Azides. Sodium Azide reacts violently with Bromine, Nitric Acid, Dimethyl Sulfate. Reaction with water and acids liberates highly toxic Hydrazoic acid, which is a dangerous explosive.		12	Dispose of to drain flushing well with water
CNTO95 Karl-Fisher titration moisture determination waste	Hydranal-composite 5 (Hydranal, Imidazole 6%, sulphur oxide 5-15%, Iodine 5-15%, 2-methylimidazole 5-15%)		QC Chemistry	070504*	liquid	lab coat, gloves and safety glasses	halogenated solvent container	Avoid strong oxidizing agents	avoid contact	52	halogenated solvent container
CNTO95 Karl-Fisher titration moisture determination waste	Hydranal-composite 5 and 60% methanol		QC Chemistry	070504*	liquid	lab coat, gloves and safety glasses	halogenated solvent container	Avoid strong oxidizing agents	avoid contact	40	Non-halogenated solvent container
CNTO95 Karl-Fisher calibration material	Hydranal water standard (>60% anisole, <10% propylene carbonate)		QC Chemistry	070504*	liquid	lab coat, gloves and safety glasses	non halogenated solvent container	avoid strong oxidizing agents, flammable	avoid contact, inhalation	0.1	non halogenated solvent container
Colloidal Gold Protein	Colloidal Gold Protein 5%, Water 95%		QC Chemistry	070105*	Violet – Purple odourless solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	1.2	Dispose of to drain flushing well with water
Complete Media	RPMI media 87%, LC Sodium Pyruvate 1%, LC nonessetial Amino Acids, L-Glutamine 1%, Fetal Bovine serum 10%		QC Chemistry	070105*	Clear solution with an amber colour liquid	Lab coat, gloves and safety glasses	Plastic or glass containers	Harmful by inhalation or if swallowed	Microbial / cell culture media - non hazarous - Avoid inhalation of dust	100	Material may be added to the wastewater treatmnent plant.
Ethanol 10%	Ethanol 10% and water 90%		QC Chemistry	070504*	Clear liquid with a sweet odour	lab coat, gloves and safety glasses	Plastic or glass sealable containers	Non-Flammable	Non-Flammable	250	Less than 15% ethanol in water may be disposed of directly to drain
Ethanol 96%	Ethanol 96%, Water 4%		QC Chemistry	070504*	Clear liquid with a sweet odour	lab coat, gloves and safety glasses	Solvent Canister and UN approved flammable solvent drums	Highly Flammable	Highly Flammable Avoid contact or breathing vapours	250	Flush to drain with large amount of water
Ethanol test - liquid waste	0.1N iodine, 1.0 N sodium hydroxide, ethanol		QC Chemistry		liquid	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water				Dispose of to drain flushing well with water
Glutamine 0.2 M	L-Glutamine 3%, water 97%		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	No significant hazard	No significant risks	4	Flush to drain to the WWTP
Heavy Metal Buffer	25g Ammonium Acetate in 38ml HCl and 25ml water		QC Chemistry	161001*	Clear corrosive liquid	lab coat, gloves and safety glasses	Sealed plastic container	Toxic by inhalation Corrosive	Avoid breathing vapours. Avoid contact – causes burns Handle wastes only in a fume hood / extracted area	4	Flush < 15ml quantities to wastewater treatment drain in a fume hood with large volume of water
Heavy metal - long pipettes	long pipettes		QC Chemistry		long pipettes		rinse in water, place in hazardous waste bin with red liner for heavy metal test	biohazardous	biohazardous, sharps		rinse in water, place in hazardous waste bin with red liner for heavy metal test
Heavy metal - tips, pipettes, gloves	pipette tips, gloves, etc		QC Chemistry	161001*	tips, etc	lab coat, gloves and safety glasses	Place in hazardous waste bin with red liner for heavy metal test	Flammable			Place in hazardous waste bin with red liner for heavy metal test
Heavy metal - liquid nitrates and thioacetemide	4% Thioacetamide solution		QC Chemistry	161001*	Clear aqueous solution - Corrosive	lab coat, gloves and safety glasses	Toxic Solvent Canister and HDPE closed head plastic drum	Contains Thioacetamide a Class 2B carcinogen	Avoid contact, Handle wastes only in a fume hood / extracted area	1	Place in hazardous waste bin with red liner for heavy metal test
Heavy Metal Diphenylamine Solution	10mg Diphenylamine 10ml Sulphuric Acid		QC Chemistry	161001*	Clear aqueous solution - Corrosive	lab coat, gloves and safety glasses	Toxic Solvent Canister and HDPE closed head plastic drum	Toxic by inhalation. Toxic in contact with skin Toxic if swallowed Danger of cumulative effects Corrosive	Avoid contact, Use only in an extracted fumehood	0.4	Place in hazardous waste bin with red liner for heavy metal test
Heavy metal Lead Standard	Up to 100ppm Lead		QC Chemistry	161001*	Clear aqueous based metal solution	lab coat, gloves and safety glasses	Heavy metal waste canister and transfer. Use plastic containers	Harmful by inhalation, Harmful If swallowed, Danger of cumulative effects	Avoid contact	50	Place in hazardous waste bin with red liner for heavy metal test
HI-Fetal Bovine Serum	HI-FBS		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazardous properties	No significant risks	6	Dispose of to drain flushing well with water
Hydrochloric Acid	Hydrochloric Acid 37% - 6 N	100040	QC Chemistry	200114*	Clear liquid with acid vapours	lab coat, gloves and safety glasses	Place in an acid resistant canister.	Corrosive	Causes severe burns – avoid contact and breathing vapours	125	Large quantities must be stored in acid resistant plastic e.g. HDPE drums or IBCs. May be disposed of to drain flushing IN A FUMEHOOD with copius quantities of water.
IEF - Anode solution cardbboard strips	cardboard strip		QC Chemistry		cardboard strips	lab coat, gloves and safety glasses	Place in hazardous waste bin with red liner				Place in hazardous waste bin with red liner
IEF - Coomassie Blue	Coomassie Blue		QC Chemistry		blue liquid	lab coat, gloves and safety glasses	non halogenated solvent container				Place in non halogenated solvent container
IEF - Destain solution			QC Chemistry		liquid	lab coat, gloves and safety glasses	non halogenated solvent container				Place in non halogenated solvent container
IEF - Filter paper	kersosene and SDS		QC Chemistry		filter paper	lab coat, gloves and safety glasses	Place in hazardous waste bin with red liner				Place in hazardous waste bin with red liner
IEF - Fixing Solution	10% trichloro-acetic acid, 6% sulfosalicyclic acid and methanol in water		QC Chemistry		liquid	lab coat, gloves and safety glasses	halogenated solvent container				halogenated solvent container
Nitrate Standard Solution 2ppm	Nitrate		QC Chemistry	70599	Clear water based standard solution	lab coat, gloves and safety glasses	Put to drain	Very low nitrate concentration Harmful if ingested	Avoid contact	26	Dispose of to drain
PBS – Phosphate Buffered solution	Sodium Phosphate Dibasic 25-45%, Sodium Chloride 25-45%, Sodium Phosphate Monobasic 10-20%		QC Chemistry	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	No significant hazards	No significant risks	250	Dispose of to drain flushing well with water
Phosphoric acid	45% to 85% (6M) Phosphoric Acid in Water		QC Chemistry	200114*	Clear liquid	Nitrile / rubber gloves, splash suit, lab coat, safety glasses / goggles and safety shoes / boots	Acid canister or small quantities to wastewater drain	Corrosive	Corrosive, avoid contact and breathing vapours		Place in the acid waste container or alternatively run to drain diluting at least 1:10 with water in fumehood.Maximum allowable to the WWTP per day is 0.5kg H3PO4 = 0.158 g/l P
pipette tips with water			QC Chemistry		tips with water	none	place in recycble/plastic bin				place in recycble/plastic bin
Pipette tips, wipes etc contaminated with Hydrochloric Acid	Sulphuric Acid		QC Chemistry	200114*	Laboratory disposables contaminated with Hydrochloric Acid	lab coat, gloves and safety glasses	Place materials double plastic bags. Place bags in an open top HDPE Mouser (Bin) or a small plastic sealable container for transfer to the waste compound	Corrosive, Do not add water May cause tissue and combustibles to catch light	Causes severe burns – avoid contact and breathing vapours	50	Place in hazardous waste bin with red liner
Pipette tips, wipes etc contaminated with Sulphuric Acid	Sulphuric Acid		QC Chemistry	200114*	Laboratory disposables contaminated with Sulphuric Acid	Safety shoes, lab coat, latex gloves and safety glasses.Respirator may be req.	Place materials double plastic bags. Place bags in an open top HDPE Mouser (Bin) or a small plastic sealable container for transfer to the waste compound	Corrosive. Do not add waterMay cause tissue and combustibles to catch light	Causes severe burns – avoid contact and breathing vapours	50	dispose of tips in chemicals sharps container
PMS	0.96mg/ml of 5-Methylphenazonium Methyl Sulphate (PMS) and DPBS (Buffer soln)		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	Irritant	Avoid eye contact, skin contact and inhalation	1	Flush to drain to the WWTP
RPMI Media	Amino Acids, Vitamins, Inorganic salts, D-Glucose, Glutathione, HEPES, Phenol Red		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	Irritant	Avoid eye contact, skin contact and inhalation	1	Flush to drain to the WWTP
Sodium Doedecyl Sulphate 10%	Sodium Doedecyl Sulphate (Sodium Lauryl Sulphate) 10% solution in water		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	Irritant, allergen,	Harmful if swalloweed, inhaled, prolonged skin contact may cause dermititis or allergic reaction. Irritant to skin, eyes and respiratory tract	1	Flush to drain to the WWTP
Sodium Hydroxide	Sodium Hydroxide 10% (2.5 M solution)		QC Chemistry	200115*	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.Avoid eye, skin and mucous membrane contact	250	Dispose of to drain flushing well with water
Sodium Pyruvate	Sodium Pyruvate 100mM		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	No significant hazard	No significant risks		Flush to drain to the WWTP
Sucrose	Sucrose (Sugar)	100152	QC Chemistry	70105		Wear gloves, lab coat and safeyglasses	Plastic or glass containers	No significant hazardous properties	No significant risks associated with handling		Dispose of to drain flushing well with water
Sucrose System Suitability Standard Solution	Sucrose 0.1%, Phosphoric acid <0.01%,		QC Chemistry	70105	Clear liquid	lab coat, gloves and safety glasses	Glass or plastic containers	Slightly acidid.	Avoid contact	1	Dispose of to drain flushing well with water
TNF Alpha	BALL -1 cell derived human TNF alpha, Human Serum Albumin 0.6%		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	No significant hazard	No significant risks		Flush to drain to the WWTP
TOC - Benzoquinone	P-Benzoquinone		QC Chemistry	161001*		lab coat, gloves and safety glasses	Keep open containers in a fume hood Add waste to the toxic waste canister	Toxic. Irritating to eyes, skin and respiratory system	Avoid contact	1	Place in the nonhalogenated solvent container
TOC - Benzoquinone 1,4 in water	0.1% Benzoquinone in water		QC Chemistry	161001*	Clear liquid	lab coat, gloves and safety glasses	Keep open containers in a fume hood. Add waste to the toxic waste canister	Toxic, Irritating to eyes, skin and respiratory system	Avoid contact	1	Dispose of to drain flushing well with water. 1,4 Benzoquinone is readily biodegraded in wastewater treatment plants and is not likely to bioconcentrate. Dilute concentrations may be flushed to drain with water. LC 50 approx 0.1mg/l.
TOC - Waste	Ammonium Persulphate and standard solutions of up to 2mg/l of Sucrose and 1,4, Benzoquinone		QC Chemistry	160904*	Clear solution	lab coat, gloves and safety glasses	Strong oxidiser. Contact with organic materials may cause fire	Oxidising solution. Store only in compatible plastic or glass containers	Harmful (causes burns) if swallowed, inhaled or in contact with the skin or mucous membranes. Avoid contact, irritant may cause burns and allergic skin or respiratory reaction	60	Flush to drain with water Please note a maximum of 0.5 kg Phosphorus is allowed to be discharged to the WWTP per day
Trypan Blue 0.4%	Trypan Blue 0.4%, Sodium Chloride <1%, Water >90%		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	In separate trypan blue/Cedex container	Contains Trypan Blue - carcinogen	Avoid contact. Handle wastes only in a fume hood / extracted area	6	Place in the nonhalogenated solvent container
Trypsin - EDTA	Water 90-99%, Sodium Chloride 0.1-1.5%, D Dextrose anhydrous 0.1-1.5%, Sodium bicarbonate 0.1%, Trypsin 1-250 0.1%, Potassium Chloride 0.1%, EDTA Solution 0.1%, Phenol Red Sodium Salt < 0.1%		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	Store in vessels / containers provided	Irritant	Avoid eye contact, skin contact and inhalation	1	Flush to drain to the WWTP
TTBS – Tween Tris Buffered Saline	Tween 20 1%, TRIS 1%, Sodium Chloride 3%, Deionised water 95%		QC Chemistry	70105	Clear aqueous solution	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	8	Dispose of to drain flushing well with water
Turbity test (CNTO95) - Formazin	Formazin, water		QC Chemistry	070101*	turbid milky suspension (non-diluted form)	lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Sensitation by inhalation and skin contact	Avoid potential for eye contact, skin and inhalation	2	Dispose of to drain flushing well with water
WEHI - MTS	MTS - 3-4,5 dimethylthiazol-2-yl-5-3 carboxymethoxyphenol -2 - (4-sulphophenyl -2H tetrazolium innersalt.		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	non halogenated solvent container	Irritant	irritating to eyesrespiratory system and eyes	1	Place in non halogenated solvent container
WEHI - PMS	PMS - 5-methylphenazonium methyl sulfate		QC Chemistry	70105	Clear liquid	Lab coat, gloves and safety glasses	non halogenated solvent container	Irritant	irritating to eyesrespiratory system and eyes	1	Place in non halogenated solvent container
WEHI - waste	tips, vials containing GMM		QC Chemistry		tips, etc	lab coat, gloves and safety glasses	sharps container				sharps container
Deuterium lamps	Deuterium lamps		M&F, Labs	200121*	Lamps		Place in lamps box at waste yard	Contains deuterium	avoid breaking of lamps		Place in fluorescent lamp box in waste yard
Ethanol spray cans	70% ethanol in spray cans		Laboratories		Cans	Safety shoes, lab coat, gloves and safety glasses	dispose separate in cans box				dispose separate in cans box
Gloves – used	Waste sterile gloves		Laboratories	180104	Latex and other gloves	Wear safety glasses when spraying IPA		Flammable	Dermatitis	200	Depending on type of contamination. Most gloves will be non-hazardous
Klericide bottles	Klericide A and B		Laboratories		bottles	Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner				place in hazardous waste bin with red liner
Pipet tips clean or water only	water		Laboratories		clean tips	None	in recycling bin (DMR)	None	None		If possible segregate and dispose of as recyclables
Pipet tips used	chemicals contaminated tips		Laboratories		contaminated tips with chemicals	gloves	place in hazardous waste bin with red liner	avoid contact	Avoid contact		Place in hazardous waste bin with red liner
Pipet tips with GMM material	GMM		Laboratories		contaminated tips with GMM	gloves	in sharps container	avoid contact	Avoid contact		Dispose of in sharps container
Vials	plastic vials, small glass vials, syringes, etc		Laboratories	180103*		Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Avoid contact		100	Place in hazardous waste bin with red liner
Activap / Biotal 7	Wipes soaked with > 10% IPA , > 10% Cinnamic aldehyde , Eugenol 1-10%		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner
Wipes	Wipes soaked with 70% IPA, 1% Vesphene, 1% LPH, Klericide A and Klericide B		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner

Waste Material	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
Acetone	Waste Acetone Solution	1090	3	n/a	II	-20	No	IMDG/ADR	PLASTIC CONTAINER	Flammable	Black 200L T/H Steel Drum (Y Rated)	
Actinomycin D-Mannitol	Waste Toxic Liquid, Organic, N.O.S.	2810	6.1	n/a	II	n/a	No	Sigma A5156 & D8662	PLASTIC CONTAINER	Toxic	Black 200L T/H Steel Drum (Y Rated)	
Amino Acids 100x (non-essential)	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Ammonium Persulphate 15%	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Bovine Serum Albumin	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
CNTO95 Karl-Fisher titration moisture determination waste	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
CNTO95 Karl-Fisher titration moisture determination waste	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
CNTO95 Karl-Fisher calibration material	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Colloidal Gold Protein	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Complete Media	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Ethanol 10%	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Ethanol 96%	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Ethanol test - liquid waste	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Glutamine 0.2 M	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Heavy Metal Buffer	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Heavy metal - long pipettes	Waste Corrosive Solid, Acidic, Inorganic, N.O.S (Sulphuric acid)	3260	8	n/a	II	n/a	No	http://www.jtbaker.com/msds/englishhtml/t2639.htm, Sigma 265934, Talked to the customer and he confirmed that the substance was acidic. (Rke)	Corrosive resistant container-Place in the Toxic waste canister	Corrosive	Blue 200L O/T Plastic Drum (Y rated)	
Heavy metal - tips, pipettes, gloves	Waste Corrosive Solid, Acidic, Inorganic, N.O.S (Sulphuric acid)	3260	8	n/a	II	n/a	No	http://www.jtbaker.com/msds/englishhtml/t2639.htm, Sigma 265934, Talked to the customer and he confirmed that the substance was acidic. (Rke)	Corrosive resistant container-Place in the Toxic waste canister	Corrosive	Blue 200L O/T Plastic Drum (Y rated)	
Heavy metal - liquid nitrates and thioacetemide	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	Sigma 163678	Corrosive resistant container-Place in the Toxic waste canister	N/A	Black 200L T/H Steel Drum (Y Rated)	
Heavy Metal Diphenylamine Solution	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Heavy metal Lead Standard	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
HI-Fetal Bovine Serum	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Hydrochloric Acid	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
IEF - Anode solution cardbboard strips	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
IEF - Coomassie Blue	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
IEF - Destain solution	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
IEF - Filter paper	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
IEF - Fixing Solution	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Nitrate Standard Solution 2ppm	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
PBS – Phosphate Buffered solution	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
Phosphoric acid	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
pipette tips with water	Waste Not Regulated for Transport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	DMR BIN	N/A	DMR COMPACTOR	N/A
Pipette tips, wipes etc contaminated with Hydrochloric Acid	WASTE SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S (Hydrochloric acid)	3244	8	NONE	II	SDS	NO	SDS	200L METAL COMBI DRUM	8	200L METAL COMBI DRUM	
Pipette tips, wipes etc contaminated with Sulphuric Acid	WASTE SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S (Sulphuric acid)	3244	8	NONE	II	SDS	NO	SDS	200L METAL COMBI DRUM	9	200L METAL COMBI DRUM	
PMS	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
RPMI Media	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Sodium Doedecyl Sulphate 10%	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Sodium Hydroxide	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Sodium Pyruvate	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Sucrose	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Sucrose System Suitability Standard Solution	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
TNF Alpha	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
TOC - Benzoquinone	Waste Flammable Liquid, Toxic N.O.S (Ethanol and Benzoquinone)	1992	3	6.1	II	13	No	IMDG/ADR	Non halogenated Solvent Canisters	Flammable, Toxic	Black 200L T/H Steel Drum (Y Rated)	
TOC - Benzoquinone 1.4 in water	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
TOC - Waste	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Trypan Blue 0.4%	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	n/a	n/a	120L O/T PLASTIC DRUM		120L O/T PLASTIC DRUM	
Trypsin - EDTA	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
TTBS – Tween Tris Buffered Saline	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
Turbity test (CNTO95) - Formazin	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN	DISPOSE TO DRAIN
WEHI - MTS	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
WEHI - PMS	LAB SMALLS VARIOUS	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE	AS APPLICABLE
WEHI - waste	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II		no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1.6	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	
Deuterium lamps								SDS				
Ethanol spray cans	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II		no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1.	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	
Gloves – used	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II		no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	
Klericide bottles	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II		no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	
WASTE AUTOCLAVED SHARPSCONTAMINATED WITH ORGANIC CHEMICALS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylene diamine)	2926	4.1	6	II		no	SDS	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	4.1.6	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	
WASTE AUTOCLAVED SHARPSCONTAMINATED WITH ORGANIC CHEMICALS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylene diamine)	2926	4.1	6	II		no	SDS	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	4.1.6	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	
WASTE AUTOCLAVED SHARPSCONTAMINATED WITH ORGANIC CHEMICALS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylene diamine)	2926	4.1	6	II		no	SDS	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	4.1.6	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	
WASTE AUTOCLAVED SHARPSCONTAMINATED WITH ORGANIC CHEMICALS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylenediamine)	2926	4.1	6	II		no	SDS	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	4.1.6	1H2/X320/S/...*/D/BAM11469 200 l o/t plastic	
Wipes	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II	N/A	no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	
Wipes	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID N.O.S (Isopropanol, Ethanol)	3175	4.1	n/a	II	N/A	no	SDS	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	4.1	1A2/Y1.4/120/NL/TCPI-GEF130550 & 1A2/Y300/S/NL/GEF2932 200l metal combi	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	**Waste description**	**Proper Shipping Name (PSN)**	**UN no**	**Class**	**Subrisk**	**Packing Group**	**Flashpoint**	**Marine Pollutant**	**Hazard characteristics/Segregation issues**	**Classification Source**	**Packaging Type on site**	**Labels**	**Transportation Drum**	**Query/Comments**
Chlorine tablets for Mili-Q water testing	Chlorine tablets		QC Labs	060106*	white tablets	Lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Avoid potential for eye contact, skin and inhalation	10	Dispose of to drain flushing well with water														
Deuterium lamps	Deuterium lamps		M&F, Labs	200121*	Lamps		Place in lamps box at waste yard	Contains deuterium	avoid breaking of lamps		Place in fluorescent lamp box in waste yard		WEEE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	sds	COFFIN		COFFIN	
Ethanol spray cans	70% ethanol in spray cans		Laboratories		Cans	Safety shoes, lab coat, gloves and safety glasses	dispose separate in cans box				dispose separate in cans box	WASTE ETHANOL CANS	WASTE ETHANOL	1170	3	NONE	III	SDS	NO	FLAMMABLE	N/A	VENTED DRUM	3	VENTED DRUM	
Gloves – used	Waste sterile gloves		Laboratories	180104	Latex and other gloves	Wear safety glasses when spraying IPA		Flammable	Dermatitis	200	Depending on type of contamination. Most gloves will be non-hazardous	Gloves – used	WASTE NON REGULATED FOR TRANSPORT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	SDS	GENERAL WASTE BIN		COMPACTOR/ BLACK BIN	
Klericide bottles	Klericide A and B		Laboratories		bottles	Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner				place in hazardous waste bin with red liner		WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	SDS	METAL COMBI	4.1	METAL COMBI	
Pipet tips clean or water only	water		Laboratories		clean tips	None	in recycling bin (DMR)	None	None		If possible segregate and dispose of as recyclables	Pipet tips clean or water only	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	DMR BIN	N/A	DMR COMPACTOR	
Pipet tips used	chemicals contaminated tips		Laboratories		contaminated tips with chemicals	gloves	place in hazardous waste bin with red liner	avoid contact	Avoid contact		Place in hazardous waste bin with red liner, AUTOCLAVED	WASTE AUTOCLAVED SHARPS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylene diamine)	2926	4.1	-6.1	II	SDS	NO	SDS	SDS	20OL PLASTIC O/T DRUM	4.1,6.1	20OL PLASTIC O/T DRUM	
Pipet tips with GMM material	GMM		Laboratories		contaminated tips with GMM	gloves	in sharps container	avoid contact	Avoid contact		Dispose of in sharps container, MOVE TO AUTOCLAVE	WASTE AUTOCLAVED SHARPS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylene diamine)	2926	4.1	-6.1	II	SDS	NO	SDS	SDS	20OL PLASTIC O/T DRUM	4.1,6.1	20OL PLASTIC O/T DRUM	
Vials	plastic vials, small glass vials, syringes, etc		Laboratories	180103*		Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Avoid contact		100	Place in hazardous waste bin with red liner	WASTE VIALS	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SDS	200L O/T PLASTIC DRUM	NON REG	200L O/T PLASTIC DRUM	
Activap / Biotal 7	Wipes soaked with > 10% IPA , > 10% Cinnamic aldehyde , Eugenol 1-10%		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermitis from prolonged contact	600	Place in hazardous waste bin with red liner	Activap / Biotal 7	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	SDS	METAL COMBI	4.1	METAL COMBI	
Wipes	Wipes soaked with 70% IPA, 1% Vesphene, 1% LPH, Klericide A and Klericide B		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermitis from prolonged contact	600	Place in hazardous waste bin with red liner	Wipes	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	SDS	METAL COMBI	4.1	METAL COMBI	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Classification Source	Packaging Type on site	Labels	Transportation Drum	Query/Comments
cSDS - solution	0.1N HCl, iodo-acetemide, 5% 2-mercapto-ethanol		QC Microbiology		liquid in vials	flush liquid to drain, vials in hazardous waste	place in hazardous waste bin with red liner	TOXIC			flush liquid to drain, vials in hazardous waste	cSDS - solution												
Dichlorotoluene	100% Dichlorotoluene (Halogenated solvent)		QC Microbiology	070503*	Clear solution	lab coat, gloves and safety glasses	Dispose of to the Halogenated Solvent Waste Canister.Store or use only in compatible containers	Combustible liquid and vapor.	Causes respiratory tract irritation. Causes eye and skin irritation. May cause central nervous system depression.Avoid contact and breathing vapours. Use only in a fume hood	0.2	Dispose of to the Halogenated Solvent Waste Canister	Dichlorotoluene	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	Sigma	Halogenated solvent canister	N/A	Black 200L T/H Steel Drum (Y Rated)	
Micro ID - EDTA solution	10% EDTA solution in water		QC Microbiology		liquid	Safety shoes, lab coat, gloves and safety glasses	flush to drain				flush to drain	Micro ID - EDTA solution	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	SDS	N/A	N/A	N/A	
Micro ID - polymer	polymer in urea		QC Microbiology		liquid	Safety shoes, lab coat, gloves and safety glasses	flush to drain				flush to drain	Micro ID - polymer	Waste Not Regulated for Transport	n/a	n/a	n/a	n/a	n/a	No	SDS	N/A	N/A	N/A	
Deuterium lamps	Deuterium lamps		M&F, Labs	200121*	Lamps		Place in lamps box at waste yard	Contains deuterium	avoid breaking of lamps		Place in fluorescent lamp box in waste yard	Deuterium lamps	WEEE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	COFFIN		COFFIN	
Ethanol spray cans	70% ethanol in spray cans		Laboratories		Cans	Safety shoes, lab coat, gloves and safety glasses	dispose separate in cans box				dispose separate in cans box	Ethanol spray cans	WASTE ETHANOL	1170	3	N/A	III	N/A	N/A	n/a	VENTED DRUM	N/A	VENTED DRUM	
Gloves – used	Waste sterile gloves		Laboratories	180104	Latex and other gloves	Wear safety glasses when spraying IPA		Flammable	Dermatitis	200	Depending on type of contamination. Most gloves will be non-hazardous	Gloves – used	WASTE NON-REGULATED FOR TRANSPORT	n/a	n/a	n/a	n/a	n/a	n/a		GENERAL WASTE BIN		BLACK BIN/ COMPACTOR	
Klericide bottles	Klericide A and B		Laboratories		bottles	Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner				place in hazardous waste bin with red liner	Klericide bottles	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	METAL COMBI	4.1	METAL COMBI	
Pipet tips clean or water only	water		Laboratories		clean tips	None	in recycling bin (DMR)	None	None		If possible segregate and dispose of as recyclables	Pipet tips clean or water only	WASTE NON-REGULATED FOR TRANSPORT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	GREEN BIN		GREEN BIN	
Pipet tips used	chemicals contaminated tips		Laboratories		contaminated tips with chemicals	gloves	place in hazardous waste bin with red liner	avoid contact	Avoid contact		Place in hazardous waste bin with red liner	Pipet tips used	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	METAL COMBI	4.1	METAL COMBI	
Pipet tips with GMM material	GMM		Laboratories		contaminated tips with GMM	gloves	in sharps container	avoid contact	Avoid contact		Dispose of in sharps container, moved to autoclave	WASTE AUTOCLAVED SHARPS	WASTE FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Mercaptoethanol, Tetramethylethylenediamine)	2926	4.1	-6.1	II	SDS	NO	SDS	20OL PLASTIC O/T DRUM	4.1,6.1	20OL PLASTIC O/T DRUM	
Vials	plastic vials, small glass vials, syringes, etc		Laboratories	180103*		Safety shoes, lab coat, gloves and safety glasses	place in hazardous waste bin with red liner	Avoid contact		100	Place in hazardous waste bin with red liner	Vials	WASTE NON-REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	SDS	NO	SDS	20OL PLASTIC O/T DRUM	NONE	200L PLASTIC O/T DRUM	
Activap / Biotal 7	Wipes soaked with > 10% IPA , > 10% Cinnamic aldehyde , Eugenol 1-10%		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Activap / Biotal 7	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	METAL COMBI	4.1	METAL COMBI	
Wipes	Wipes soaked with 70% IPA, 1% Vesphene, 1% LPH, Klericide A and Klericide B		Laboratories	200111	Paper and cloths	Wear PPE relative to the hazard if handling contaminated materials. Gloves, safety glasses should be worn when handling wipes	Place in refuse bins provided	Avoid direct contact with the skin and eyes	avoid contact with skin - possible risk of dermititis from prolonged contact	600	Place in hazardous waste bin with red liner	Wipes	WASTE SOLIDS CONTAINING FLAMMABLE LIQUID	3175	4.1	N/A	II	SDS	N/A	SDS	METAL COMBI	4.1	METAL COMBI	

Waste Material	Constituents1	MM#	Main Source / collection areas	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	**Waste Stream Type**	**Waste description**	**Proper Shipping Name (PSN)**	**UN no**	**Class**	**Subrisk**	**Packing Group**	**Flashpoint**	**Marine Pollutant**	**Hazard characteristics/Segregation issues**	**Classification Source**	**Packaging Type on site**	**Labels**	**Transportation Drum**	**QueryComments**
Drager Tubes	Impregnated indicator media		WWTP		Glass tubes containing packed indicator media	Wear thick rubber sharps gloves if handling waste	Close the ends of used drager tubes with tape	Sharps	Cuts	2	Place in the sharps bin designated for Drager tubes. Tubes will be sent for incineration	SOLID	Drager Tubes	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	MSDS	SHARPS BIN	NON REG	SHARPS BIN	
Mono Shell from the Bord Na Mona odour treatment system	Bio-abatement treatment of wwtp off gases / air		WWTP	190199	Packed shell media	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Place in plastic bags, bin and transfer to the waste segregation area.	Potential biohazardous material	Avoid contact		Utilise UN compliant and EHS approved packaging for return. EHS to supervise extraction of the material and shipment to Bord Na Mona.	SOLID	Mono Shell from the Bord Na Mona odour treatment system	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	MSDS	200L OT PLASTIC DRUM	NON REG	200L OT PLASTIC DRUM	
Wastewater treatment plant screenings.	Primary wastewater / sanitary screenings		WWTP	190801	Primary sludge and screenings	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Placed in open top steel or HDPE drums for shipment offsite	Biohazardous	Avoid contact – wear PPE when handling		Offsite biological treatment (extended aeration , composting and landfill)	SOLID	Wastewater treatment plant screenings.	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	MSDS	VARIOUS	NON REG	VARIOUS	
Wastewater treatment plant sludge	Stabilised and dewatered activated sludge		WWTP	190812	Organic sludge of approximately 30% solids	Nitrile / rubber gloves, splash suit / acid suit / gown, safety glasses / goggles / face shield/ safety boots	Skip – covered when in transit	Potential pathogens from sanitary waste	Avoid contact	60000	Composting and then landfill. Waste management contractor to arrange and track disposal	SOLID	Wastewater treatment plant sludge	WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ANALYSIS	SKIP	NON REG	SKIP	

Waste Material	Constituents1	MM#	Main Source / collection	EWC Code2	Physical characteristics	PPE	Waste Packaging	Hazardous Properties4	Significant Risks in handling	Annual Generation kg/annum	Elimination, minimization, treatment and disposal directions	Waste Stream	Waste description	Proper Shipping Name (PSN)	UN no	Class	Subrisk	Packing Group	Flashpoint	Marine Pollutant	Hazard characteristics/Segregati	Classification Source	Packaging Type on site	Labels	EWC Code	Transportation Drum	Query/Comments
AGT A Media	AGT media 1.6 w/w, Mycophenolic Acid 0.005w/w, Xanthine 0.025w/w, Hypoxanthine 0.05w/w, L-Glutamine 0.06w/w.		Warehouse	70105	Clear solution with an amber colour liquid	Safety glasses and gloves	plastic or metal drums and mousers	Harmful by inhalation or if swallowed	Microbial / cell culture media - non hazarous - Avoid inhalation of dust	Excipient materials as they arise	Material may be added to the wastewater treatmnent plant.			WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AGT Media	AGT Media		Warehouse	70105	Clear solution with an amber colour liquid	Safety glasses and gloves	plastic or metal drums and mousers	Harmful by inhalation or if swallowed	Microbial / cell culture media - non hazarous - Avoid inhalation of dust	Excipient materials as they arise	Material may be added to the wastewater treatmnent plant.			WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sodium Hydroxide 25% to 50%	Sodium Hydroxide 25% to 50%		Warehouse	200115*	Solid white crystals hydrophilic pellets	Safety shoes, lab coat, gloves and safety glasses	Dispose of to drain flushing well with water	Possibly irritating to the eyes, skin and mucous membranes	Causes severe burns.	60	Dispose of to drain flushing well with water			WASTE NON REGULATED FOR TRANSPORT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A