

## OIL SALVAGE LIMITED BISHOP'S STORTFORD OIL STORAGE DEPOT BAT AND APPROPRAITE MEASURES ASSESSMENT

### Technical Standards

Oil Salvage Limited is a long-standing and well-established oil recovery and recycling Company which has operated from its main site on Merseyside since 1986. The main Company operation, located on Lyster Road in Bootle already holds an Environmental Permit (EPR/MP3734SC) for their operations and hence all Company staff whose activities could affect compliance with the Permit conditions are familiar with the requirements of the Permit and the procedures in place to ensure that the Company operations comply with Best Available Techniques (BAT).

Oil Salvage Limited already offers a nationwide waste collection and fuel delivery service, although in commissioning a new transfer station in Bishop's Stortford, Oil Salvage Limited will likely employ new and local drivers for waste collections. That said, the majority of the Company procedures and practices which are already in place and comply with the BAT requirements **and the relevant appropriate measures (AM) for the storage of chemical wastes**, will be suitable for application to the Bishop's Stortford Oil Storage Depot operations. The procedures are discussed in detail in this section.

### BAT 1, AM 2.1 and 2.3

Oil Salvage Limited maintains and adheres to an Environmental Management System (EMS).

OSL maintains an EMS which is certified to ISO14001 for their collection service for waste oil and hazardous wastes from garages, shipping and industrial sources, and associated reprocessing. The Company has held its' ISO14001 certification since June 2009. The current certificate reflects the 2015 standard requirements and is set to expire in March 2024. Procedures will be expanded as necessary to include the operations at the Bishop's Stortford Oil Storage Depot, and once the installation is operational, OSL will aim to extend their certification to formally include the Bishop's Stortford site.

BAT **and AM** requirements are different from those within ISO14001 and are detailed in the table below. References to relevant policies and procedures confirms OSL's compliance with BAT **and the AMs**.

### BAT 1, AM 2.1, 2.3, 2.5 and 2.6 OSL Compliance with the EMS Features

| Ref | Requirement   | Procedure  |
|-----|---|--|
| I   | Management commitment   | PO5 (Environmental Policy) and MP5 (Environmental Planning)                        |
| II  | Environmental policy, including commitment to continuous improvement  | PO5 (Environmental Policy)   |
| III | Established necessary procedures, objectives, targets and financial planning  | MP5 (Environmental Planning) and MP6 (Env. Implementation and Operational Control) |
| IV  | Implementing procedures which include consideration of and reference to: <ul style="list-style-type: none"> <li>a) structure and responsibility</li> <li>b) recruitment, training, awareness and competence</li> <li>c) communication</li> <li>d) employee involvement</li> <li>e) documentation</li> <li>f) effective process control</li> <li>g) maintenance programmes</li> <li>h) emergency preparedness and response <b>and contingency plans</b></li> <li>i) safeguarding compliance with legislation</li> <li>j) <b>change management</b></li> </ul> | MP6 (Env. Implementation and Operational Control)                                  |

| Ref  | Requirement   | Procedure  |
|------|---|--|
| V    | Checking performance and taking corrective action with particular attention to:<br>a) monitoring and measurement<br>b) corrective and preventative action and the development of processes and procedures through the experience of business operation and those of other organisations<br>c) maintenance of records<br>d) independent auditing | MP6 (Env. Implementation and Operational Control)  |
| VI   | Review by senior management of the EMS and its continuing suitability, adequacy and effectiveness   | MP5 (Environmental Planning)   |
| VII  | Following the development of cleaner technologies   | MP5 (Environmental Planning)   |
| VIII | Considering the condition of the site throughout the lifetime of the Permit and the environmental impacts from decommissioning when designing new plant   | PO5 (Environmental Policy) and MP5 (Environmental Planning)                                      |
| IX   | Regular sectoral benchmarking   | Membership of industry body, of which one OSL Director is currently the Chair                    |
| X    | Waste stream management   | MP6 (Env. Implementation and Operational Control)  |
| XI   | Inventory of waste-water and waste gas streams  | Permit application, and waste tracking   |
| XII  | Residues management plan  | Regular inspection and periodic emptying and cleaning of tanks and interceptors                  |
| XIII | Accident management plan  | OP23 (Spillage and Accidental Release Procedure)<br>OP38 (Bishops Stortford Operating Procedure) |
| XIV  | Odour management plan   | EA02 (Odour Management Plan)   |
| XV   | Noise management plan   | EA03 (Noise management Plan)   |
| XVI  | A site Climate Change Risk Assessment has been produced and will be reviewed and updated on a regular basis, as part of the site management system.   | Appendix 3 of the Environmental Permit application   |

### BAT 2, BAT 5, AM 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 4, 6.1, 6.2, 6.4 and 6.5

Oil Salvage Limited maintains suitable and sufficient waste pre-acceptance, acceptance, tracking, storage and rejection procedures which comply with the requirements of the BAT-Conclusions document, **Appropriate Measures** and other relevant guidance. Additionally, to reduce the environmental risk associated with the handling and transfer of waste, Oil Salvage Limited maintain and implement handling and transfer procedures.

The BAT-Conclusions require the following techniques to be applied:

| Ref | Requirement  | Procedure  |
|-----|--|--|
| a   | Waste characterisation and pre-acceptance procedures   | WM01 Waste pre-acceptance, acceptance and rejection procedure-Oil  |
| b   | Waste acceptance procedures                            |  |
| c   | Waste tracking system and inventory                    |  |
| d   | Output quality management system                       | Company Quality Management System, oils are re-refined or treated to the Processed Fuel Oil (PFO) standard and laboratory is UKAS accredited (ISO/IEC 17025) |
| e   | Ensure waste segregation                               | WM01 Waste pre-acceptance, acceptance and rejection procedure-Oil  |
| f   | Ensure waste compatibility prior to mixing or blending |  |
| g   | Sort incoming solid waste                              | N/A  |

WM01 is the Company waste pre-acceptance, acceptance and rejection procedure for oils.

OSL ensures that, prior to arranging a collection of waste oils, they are satisfied that they have the following details: the type of process producing the waste, the specific process from which the waste derives, the quantity of waste, the form the waste takes, any known hazards associated with the waste including whether or not it might be radioactive, any compatibility issues, sample storage and preservation techniques.

Sales and technical staff roles within the Company operations are completely separate, with sales staff retaining a copy of the acceptable list of wastes, from which they must not deviate.

Routine collections of oils from garages / workshops, ships / harbours, commercial premises, industrial processes, civic amenity sites, scrap yards and farms have been historically assessed and are deemed to be low risk sources. As such, no pre-acceptance sampling is required for these wastes.

However, where the collection is a 'one-off' such as a factory shutdown or a collection of transformer oil, then these are deemed higher risk and a sample will be taken prior to collection from the customer. Where samples are obtained, the customer is responsible for providing these, and advice can be provided as to how the sample should be taken. Should there be any uncertainty over the representative nature of the sample delivered, OSL would collect a sample for themselves or would arrange for an appropriate third-party to collect one. On receipt, the sample is logged, tested and the results recorded, determining whether or not the waste can be accepted or should not be collected, by the Company analysts in the Company laboratory. Samples are clearly labelled and marked with any hazardous properties. The analysis and record of waste oil samples includes:

- all hazardous characteristics
- physical appearance
- colour
- pH
- presence, strength and description of odour assessment
- flashpoint
- presence of sulphide
- chlorine
- sulphur
- metals
- PCBs

The Company laboratory is ISO/IEC 17025 certified and operates to full testing and reporting procedures. Incoming pre-acceptance samples are retained on site at Lyster Road for at least one week, and for at least two days after processing and dispatch.

As a leading waste oil recovery Company, all of the oils entering the Bishop's Stortford Oil Storage Depot have a clear treatment and recovery route, via the Company processing facility in Bootle. Incoming oils are collected by trained Company drivers. All staff are fully trained in their roles, and the company has a technically competent manager who retains their WAMITAB Certificate of Technical Competence, providing cover at both the main storage and treatment site in Bootle, and the Bishop's Stortford Oil Storage Depot. Where new drivers are employed, they are fully trained prior to working a collection round and this involves receiving a full Company induction, including health, safety and environmental considerations, and training in all relevant policies and procedures. From that point, drivers would commence a round with a 'buddy' for a minimum of two weeks, and for as long as they require to gain the relevant experience, and their progress is assessed during the buddying-up period. Once Company management determine that a driver has sufficient experience and is capable of undertaking their role safely and effectively, they can commence their own round.

Waste inputs and outputs are monitored across the Company activities in order to ensure that efficiency and environmental performance is optimised.

Driver training includes full familiarisation with Standard Operating Procedure OP02, Road Tanker Deliveries and Collections. Amongst other things, this procedure includes information on daily vehicle checks and a detailed collection and delivery procedure. Personal Protective Equipment (PPE) must be worn and in order to protect the environment during any collection or delivery, the driver is responsible for covering any drains in the immediate vicinity of the connection point. During collections, they must also liaise with the site host to determine which tank is to be emptied and to identify the correct connection. Once connected, the driver is required to complete a final check, ensuring that everything is connected before starting the vehicle pump.

Only correctly sized couplings are used and the driver must stay with the vehicle at all times during the transfer to monitor for any leaks and fill levels. Should the coupling not fit the connection or should any leak or split in a hose occur, the transfer will not be made or will be stopped immediately, and a clean-up would be facilitated.

Once complete, the driver should shut of the tank discharge valve, or as appropriate, request that the site host does so. The transfer hose is allowed to empty before the driver shuts off the tanker valve and switches off the pump. Finally, the driver must dip the pot after each collection and record the amount collected on the consignment note.

Incoming oils to the Bishop's Stortford site are not analysed prior to collection, unless they are from a higher risk course, or on receipt at the Bishop's Stortford facility. The driver is responsible for accepting the waste oils from the customer based on an assessment undertaken at collection. The driver will confirm that the paperwork describing the waste oil is correctly completed and accurately describes the load in line with any available pre-acceptance information, and in doing so will confirm that the waste is acceptable under the terms of the Permit. They will also undertake a visual and olfactory assessment of the waste oil to confirm that the waste is not obviously contaminated. At that point, the waste oil will be pumped into the collection vehicle and may mix with other, similar wastes stored in the same vessel or chamber of the tanker, and the driver will continue his rounds.

Waste oils will not be collected by the driver, thereby effectively being rejected, if:

- there is evidence to suggest that it may have a flash point of less than 30 °C, usually detected by smell; or
- the waste carries an EWC code that is not included on and acceptable under the Bishop's Stortford Permit.

OSL provides their relevant waste oil customers with a mixed waste fuels drum in order to minimise the potential for contamination of the waste oils. However, on the limited occasions that a driver is unable to collect a load due to its unsuitability, the customer will be informed verbally by the driver and, where the customer does not immediately contact Head Office, a follow-up call or e-mail is facilitated to discuss the reason behind the failed collection and to advise on practices and procedures to avoid subsequent rejections.

On arrival at the Bishop's Stortford Oil Storage Depot, the driver will unlock the gates and deactivate the security system, before entering the yard and undertaking visual checks across the site, including the condition of the floor surface, any damage to the tanks, valves and pipework, bund, building or security measures, and confirming the availability of fire extinguishers and spill kits. Prior to initiating a transfer and as per the Bishop's Stortford Operating Procedure (see OP38 in Appendix 4) the penstock valve serving the interceptor releasing to W1 is closed, and the sump pumps from the interceptor and bund are activated.

Drivers are advised by the transport team which tank they should deposit their load into. The transport team in-turn receives instruction from a Company Director who has direct access to information on the tank contents, including previous deposits and the total quantity of oil / available ullage. This ensures that the Lyster Road treatment site maintains full control over the nature and quantities of oil in each tank. Drivers attending the Bishop's Stortford site check their own tanker content against the available ullage in the receiving tank before discharging.

Drivers load and unload from the tanks following the Company wide procedure for Road Tanker Deliveries and Collections (OP02), whilst adhering to the Bishop's Stortford Operating Procedure (OP38) when on site. Connection valves are contained within the bunded area and prior to the use of the site, tank valves will be replaced to ensure that each tank has at least two isolation points, in case of valve failure.

As the drivers' tip into their own dedicated tanks with waste oil being removed from site on a single tank per load basis, and each collected load is recorded using a consignment note, the waste oil can subsequently be tracked through to its delivery and receipt at the Lyster Road site. All site tanks and pipework are labelled with a unique numbering system to identify which load / off-load point serves which tank. Additionally, each of the tanks will be fitted with a level meter enabling the available capacity (ullage) to be assessed prior to any transfer.

Prior to the commissioning and use of the site for waste oil storage, the site infrastructure will be assessed and certified as suitable for use in accordance with 'CIRIA 736 Containment systems for the prevention of pollution, secondary, tertiary and other measures for industrial and commercial premises'.

The level meters to be employed on the tanks will be appropriate for the measurement of mixed waste oils and waste-water, with appropriate temperature and pressure ranges and employing a guided microwave and comprehensive diagnostic possibilities to enable maintenance-free operation and hence a high plant availability. They will have an on-site read-out and can also be viewed remotely from the Company Head Office in order to manage bulk collections. The site monitoring and labelling systems therefore enable the drivers to have full control over any transfer made, ensuring that the correct delivery goes to the correct tank and no tank is over-loaded.

Drivers carry spill kits on their vehicles and are trained in their use, and additional kits are located at the site. Standard Operating Procedure 'OP23 Spillage and Accidental Release Procedure' details the actions taken in the event of a spillage and is presented in Appendix 5. In the event of a spillage being caused or discovered, and where it is safe to do so, OP23 specifies that drivers should:

- Isolate the area do not let others pass through or near the substance.
- Switch off any equipment being used, isolate and remove any ignition sources.
- Apply any PPE required. This information will be present in the COSHH assessment.
- Contain the spill to as small an area as possible by using rags, absorbents or spill socks.
- Collect the spilled material by working from the outer edge inward.
- Collect materials used (including contaminated PPE) in an appropriate container.
- Ensure the container is disposed of in the correct manner.
- Report equipment used so items from the spill kit can be replenished, and record the use of any spill kits provided by the customer.

All spillages of hazardous wastes will be logged and where any spillage is of more than 200 litres, this will be reported to the Environment Agency. Reporting will be completed by the Compliance Manager in line with local regulations and Permit requirements.

Waste oil transfers are generally undertaken immediately, although oil may be left in the vehicle barrel, locked within the yard should the driver not have sufficient time in his working day to unload. Waste oil will not be stored in collection vehicles for longer than is necessary, and will always be transferred into bulk storage within 24-hours of arrival at the site.

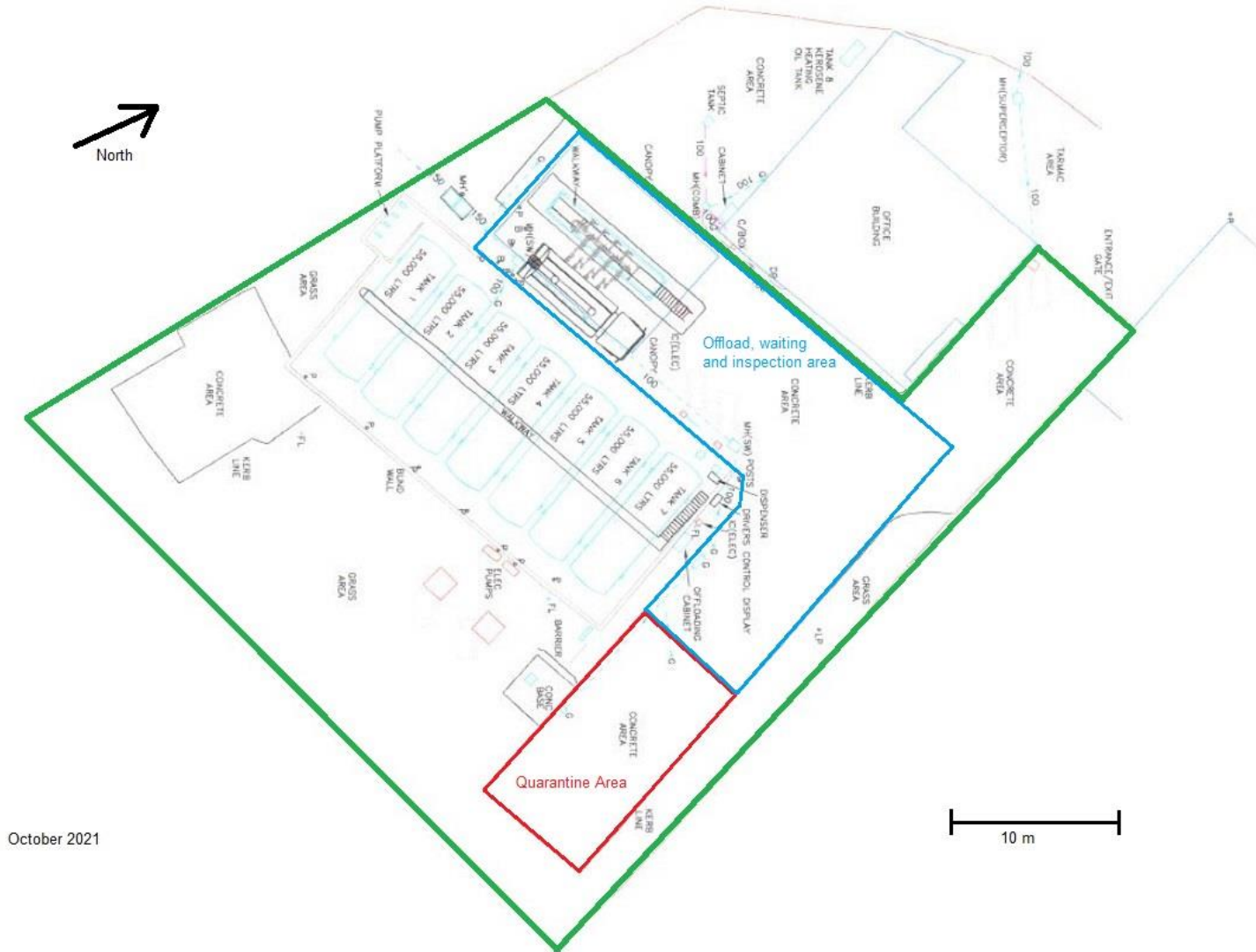
The operational area of the site comprises the off-load area and has an impervious surface with self-contained drainage, to prevent any spillage escaping off-site. The inspection, unloading and waiting area is shown in Figure 7. Drainage in this area passes to surface water via an interceptor which is shut-off from release during site operations, resulting in a sealed drainage system.

As the waste is effectively accepted at the point of collection, there should be no subsequent rejection from the Bishop's Stortford installation. However, a quarantine area will be designated at the site in the event that an oil collection vehicle cannot be un-loaded for any reason. This is shown on the site plan in Figure 7 and is located within the kerbed yard area. The quarantine area is sufficiently sized to retain a waste oil collection vehicle but will usually remain empty. Any quarantined waste will be removed from site within 5 working days of receipt.

Although no sampling or analysis is undertaken on the incoming waste oil, once collected from site the waste oil is transferred to the main OSL site in Bootle on Merseyside and is sampled and analysed there prior to acceptance at the storage and treatment facility. The laboratory is UKAS accredited to ISO/IEC 17025 and the Company analyst(s) are qualified to degree level. Should the waste collected by the drivers based at the Bishop's Stortford site be deemed to be unsuitable under the terms of the Bootle site's Permit, the waste will be rejected at that point.

The OSL Lyster Road treatment site can recover waste oils to the Processed Fuel Oil (PFO) standard, but can also re-refine incoming oils to recover and recycle the base oil in support of the Government's Circular Economy policies and objectives.

### Operational Areas Diagram – Bishop’s Stortford Oil Storage Depot



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The Consignment Note system applied by OSL is completely electronic and automatically ensures that the customers receive copies of the notes, as well as forming the basis of the waste tracking system. The driver's vehicle registration is included on the Consignment Note and each driver off-loads into a dedicated and specified tank. The Consignment Note is also automatically linked to the information generated during pre-acceptance, acceptance, storage, and subsequent treatment and / or removal off-site. All records are maintained on an ongoing basis to reflect deliveries, on-site treatment and despatches. The tracking system thereby effectively operates as a waste inventory / stock control system and includes:

- date of arrival on-site;
- producer's details;
- all previous holders;
- a unique reference number;
- any pre-acceptance and acceptance analysis results;
- intended treatment / disposal route;
- the nature and quantity of wastes held on site;
- where the waste is physically located in relation to a site plan;
- where the waste is in the designated disposal route;
- identification of staff who have taken any decisions regarding acceptance or rejection of waste streams and decided upon recovery or disposal options.

Incoming waste oils are all classified as hazardous waste. Oils will be stored at site only prior to transfer for treatment elsewhere. The tracking system can be interrogated to confirm the total quantity of waste present in each of the tanks on-site at any one time, the quantity of waste stored on site compared with the total permitted storage capacity and the time the waste has been on-site against the permitted limit.

All documented waste records are held for a minimum of two years after the waste has been treated or removed from the Company sites. Records are held electronically to ensure their accessibility during any emergency, and are backed-up remotely in 'the cloud'.

Waste is only accepted into the site where there is sufficient capacity for it. With a total storage capacity of 385 m<sup>3</sup>, and with all transfers and available storage monitored daily from OSL Head Office, the site will always have capacity to receive incoming loads from Company collection drivers. Bulk collections from the site will be arranged as required and no waste will be stored on site for more than 6 months.

**BAT 3, AM 2.3, 4, 6.1, 6.4, 7.1 and 7.2** In order to facilitate the reduction of emissions to water and air, an inventory of waste-water and waste gas streams is maintained.

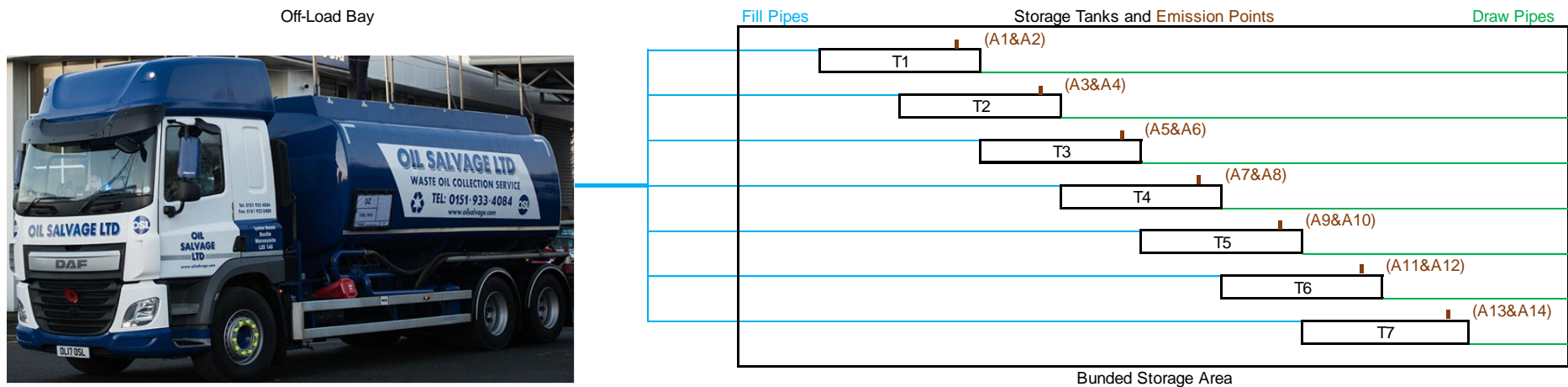
The Bishop's Stortford Oil Storage Depot receives and stores mixed waste oils only. The oils are transferred from the small oil collection vehicles into one of seven fully bunded storage tanks. Each tank has an over-flow, which discharges downwards into the bund. Tanks also include a breather vent to avoid the pressurisation of the tank during transfers. However, as the vapour pressure of mixed waste oil is lower than atmospheric pressure, vapour is only emitted from the tanks or from the manways of the road tankers, through displacement during the short periods of transfer.

Only discharges of clean, surface water run-off are released to watercourse, and there are no discharges to sewer, or land from the installation. A documented procedure is in place for site operations, specifically the transfer of oils, which includes the requirement to ensure that the W1 interceptor penstock valve is closed prior to transfer and remains closed until such time as the operation, including any clean-up, is complete. Any spillage is cleared away immediately or once the transfer is complete using spill kits, with used materials being appropriately bagged, labelled and stored for disposal. The penstock valve can also be closed remotely by OSL staff at Head Office in the event of an identified emergency or incident which might otherwise result in a release to the water course. Any water collected within the bund is pumped into a dedicated storage tank for removal from site, being transferred to the OSL site in Bootle for treatment prior to discharge.

The simplified process flow diagram and inventory over page summarises the activities at the site and the potential emissions from the process.



### Process Flow Diagram and Site Waste Inventory



Simplified Process Flow Diagram of Storage Area (above)  
Site Infrastructure and Characteristics (below)

|   |   |       |       |       |        |         |         |
|---|---|-------|-------|-------|--------|---------|---------|
| <b>Description of the Waste</b>           | Mixed Waste Oils (hazardous): 12 01 codes; 13 01 codes; 13 02 codes; 13 03 codes; 13 05 codes; 13 07 codes and 13 08 codes                    |       |       |       |        |         |         |
| <b>Characteristics of the Waste</b>       | Liquid  |       |       |       |        |         |         |
|   | Hazardous   |       |       |       |        |         |         |
|   | Typical Flash Point > 65 oC   |       |       |       |        |         |         |
|   | Auto-Ignition temperature > 220 oC  |       |       |       |        |         |         |
|   | Typical pH = 6 (slightly acidic)  |       |       |       |        |         |         |
|   | Practically insoluble in water and a typical specific gravity of 0.9 kg m <sup>-3</sup>   |       |       |       |        |         |         |
| <b>Storage Tank</b>                       | T1  | T2    | T3    | T4    | T5     | T6      | T7      |
| <b>Storage Capacity (m<sup>3</sup>)</b>   | 55  | 55    | 55    | 55    | 55     | 55      | 55      |
| <b>Potential Emissions to Air</b>         | Displaced vapour emissions to atmosphere during transfer. Emitted species may include VOCs, Ammonia and small quantities of Hydrogen Sulphide |       |       |       |        |         |         |
| <b>Emission Point to Air</b>              | A1&A2   | A3&A4 | A5&A6 | A7&A8 | A9&A10 | A11&A12 | A13&A14 |
| <b>Emission Pint to Water (W1 and W2)</b> | Clean surface water run-off only  |       |       |       |        |         |         |
| <b>Other Emissions</b>                    | No emissions to sewer, or land.   |       |       |       |        |         |         |

**BAT 4 and AM 2.1, 2.2, 4, 6.4 and 6.5**

Wastes will be stored in such a manner that reduces environmental risks.

The Bishop's Stortford Oil Storage Depot is located off Farnham Road to the north of Bishop's Stortford. The local area has limited development and the nearest residential receptors to site comprise 6 houses located approximately 340 m distant. The next nearest residential properties are more than 500 m away from the site and, although the area is undergoing substantial residential development, there is currently no plan for any residential areas to the north of the A120. The site is not therefore in an area expected to experience much in the way of opportunistic unauthorised entry or vandalism, although a footpath and a bridleway run alongside two of the site boundaries. The site is fully and securely fenced, and the gates remain locked at all times unless the site is in use and manned by staff.

The nearest sensitive environmental receptor is however, located in the immediate vicinity of the site, being the Bourne Brook which runs parallel to the western site boundary, and the OSL site releases surface water run-off, via two interceptors, into the brook. The process is carefully managed however, as the site operations include the transfer of hazardous waste oils. As such, all waste oil handling and storage areas are impermeable and are kerbed, directing surface water run-off to the full-retention, three-stage interceptors.

A documented procedure requires that drivers ensure that the interceptor penstock valve serving the main operational area is closed prior to any oil transfer, and remains closed until such time as the operation, including any clean-up, is complete. As such, the interceptor effectively becomes a sump during site operations and staff can ensure that the site surfaces are not contaminated with free product that might readily wash into the interceptor prior to opening the release. Drivers are instructed to run the interceptor pump when the penstock valve is closed in order that any spilled and captured oils and oily water are transferred into the dedicated oily water storage tank. In the event of no incident occurring during transfers, drivers switch the pump back to auto operation and open the penstock valve before leaving the site. The penstock valve can also be closed remotely as required by OSL staff located in Bootle.

Additionally, the interceptors will be cleaned and maintained at least once every six months, more frequently as required and, in the case of W1, prior to the re-opening of the penstock valve in the event of any significant spillage that might have impacted on the interceptor. When cleaning the interceptors, wastes will be added to the driver's waste oil tank for subsequent removal from site with other collected oils. Ensuring the integrity and efficacy of the interceptors, and their protection and use as a sump during oil transfers, as well as OSL's strict housekeeping requirements for site operations, results in a low loading on the interceptors during normal operations and the release of only clean, surface water run-off to the Bourne Brook at all times.

Surface waters which are collected within the bund which may be more heavily contaminated and may result in a more emulsified oil and water mixture are not discharged via either of the interceptors, instead being pumped out into the dedicated oily water storage tank for removal from site and treatment at the OSL Bootle facility. Following procedure OP38, the bund is checked by each driver attending the site and as required, the collected effluent is pumped out using the dedicated sump pump and is transferred into the waste-water storage tank prior to removal from site. Whilst this does result in the double handling of a small volume of effluent, it ensures that the bund capacity is always adequate and appropriate and also enables the efficient removal of waste from the site, with the collection drivers removing full loads of oil or water directly from the storage tanks, rather than collecting any unknown quantity from the bund during their visits to site.

Each of the tanks and the pipelines serving them are clearly labelled with their number, volume and contents, and the only requirement for any double handling of wastes occurs when emptying the bund.

The site storage infrastructure is as follows:

| Infrastructure                                | Size  |
|---|---|
| Storage tanks x 7                             | 55 m <sup>3</sup> each  |
| Total waste oil / oily water storage          | 385 m <sup>3</sup>  |
| Bund dimensions                               | 24 m x 13 m x 0.45 m  |
| Bund Capacity                                 | 140 m <sup>3</sup> total. Est. 20 % volume for cradles etc.<br><b>Assume 112 m<sup>3</sup> available capacity</b> |
| Capacity as a percentage of the total storage | 29 % of the total capacity of the tanks, and more than 200 % of the capacity of an individual tank                |
| Interceptor volume                            | 2 x 20 m <sup>3</sup>   |

Although the site has historically included underground storage vessels, these and their associated pipework are empty and are scheduled for removal. As such, these do not form part of the operational installation and will be removed completely in due course. OSL will inform the Environment Agency of the detail and timing of the removal project for the redundant infrastructure, which may occur once the site is operational. All necessary precautions will be taken to ensure to security of the site operations and the local environment during the project.

All of the installation storage tanks and transfer lines are above ground and, aside from the interceptors and drainage channels, there is no below-ground infrastructure associated with the operation of the Bishop's Stortford Oil Storage Depot. Each of the storage tanks will be fitted with a level meter enabling the ullage to be assessed by the delivery and collection drivers prior to any transfer. The level meters can also be viewed remotely from the Company Head Office in order to manage bulk collections, ensuring that the correct delivery goes to the correct tank, no tank is over-loaded, and waste is removed from site in a timely manner.

The seven tanks are located on an impervious surface with sealed construction joints, that is resistant to oils, and within a bunded area with a capacity equating to more than 110 % of any individual container and more than 25 % of the total tankage volume. None of the tanks are connected to abatement systems to control of releases to air. However, due to the low vapour pressure of mixed waste oils, emissions of vapour will only occur through displacement during tank filling (through the breather vent and over-flow) or emptying (through the tanker manway). With limited emission potential, it is not considered that emissions to air require abating, and this has been confirmed by the results of the H1 Environmental Risk Assessment, which concludes that the emissions to atmosphere are insignificant and require no further assessment.

In addition to the checks made by each delivery and collection driver when attending site, a documented management visit and inspection will be performed monthly and will comprise a visual inspection of tanks, pavements and the site bund, as well as all other associated infrastructure. Inspections will pay particular attention to signs of damage, deterioration and leakage and thorough records will be maintained detailing any action taken, either during the visit or subsequently, to repair or replace faulty or damaged equipment. A copy of 'M150 Monthly Maintenance Checks Bishop Stortford' is provided in Appendix 6 for information.

Faults will be repaired as soon as practicable. Where containment capacity or the capability of bund, sump or pavement is compromised, and unless effecting a repair is more expedient, then the waste will be removed until the repair is completed. These regular inspections and maintenance visits ensure that all infrastructure and equipment is maintained in an undamaged state.

As all of the tanks are used for storing similar materials, that is, mixed waste oils and oily water, there is no requirement for pipework to be colour coded. However, all tanks, pipework and valves are provided with a unique identification number and the Maintenance Department retain full details of all plant including:

- capacity;
- construction including materials;
- maintenance schedules and inspection results;
- fittings (including joints and gaskets etc.);

- waste types that may be stored / treated in the vessel including flashpoint limit.

Vessels will not be used beyond the specified design life or used in a manner or for substances that they were not designed. Tanks are periodically (5 yearly) thickness tested by a suitably qualified engineer to the relevant EEMUA standard, with documented reports confirming the suitability (or otherwise) of the tank operation and the date before which the tanks should be re-tested. Tanks will also be periodically de-sludged, although no set regularity is proposed for de-sludging which is undertaken at the site as required.

The nature of the mixed waste oils collected is such that they are not sensitive to ambient heat, light, air or water, although activities that create a clear fire risk such as grinding, welding or brazing of metal-work will not generally be carried out within the installation. Where any such works are required, the necessary risk assessments and precautions will be undertaken first with storage facilities emptied as required, and Permits to Work being enforced. The entire site is a no smoking area.

**BAT 10, BAT 12, BAT 13, BAT 14 and AM 6.2** OSL maintains an Odour Management Plan (OMP) which includes consideration of the Bishop's Stortford Oil Storage Depot operations. The current version of the OMP, document EA02, is included in Appendix 7. Drivers are instructed to report unusual odours when attending any of the Company sites and a quarterly odour assessment (sniff test) will be performed and recorded when site EHS audits are completed. The results from sniff tests are recorded on form M122 located within the quality management system.

Additionally, high-integrity equipment is employed in order to minimise the potential for odour emissions to occur from fugitive sources and accidental releases. This includes the use of pumps fitted with mechanical seals instead of packing and the lining or coating of equipment and painting of pipes with corrosion inhibitors. Drivers are responsible for reporting any damage that they observe to the infrastructure during their visits to site and monthly maintenance audits will be undertaken by the Maintenance Manager or other delegated Company manager.

Waste oil has a specific but localised odour and it is not considered that the activities at the Bishop's Stortford Oil Storage Depot will likely result in any notable odour at any sensitive receptor locations. The nearest human receptor would be staff in the neighbouring industrial yard, with the animal rescue charity, Foxdells located 170 m away. The nearest residential receptors are all located more than 300 m distant from the site and, with the transfer and storage activities resulting in minimal potential for odours to occur, the potential for nuisance is limited. A footpath and a bridleway pass the site and the area is used by walkers, runners and riders. However, with vapours only being displaced from the tanks or tanker manways through displacement, any discharge and potential odour nuisance to these transient receptors would be minimal, if indeed any odour were to be observable. OSL limits the storage period for all wastes at the site to a maximum of six months, and as such, the stored mixed waste oil is unlikely to degrade in that time such that the potential for an odour nuisance to occur may increase.

**BAT 11 and AM 8** OSL does monitor the use of energy at the Bishop's Stortford Oil Storage Depot, albeit only through the consideration of electricity bills. The site has minimal electricity consumption, with electrical supplies only required for yard lighting, the bund and interceptor pumps, and the site security system. The office building is not part of the installation and is currently un-used and the only water consumption is for domestic purposes within the office.

**BAT 17, BAT 18 and AM 6.3** OSL maintains a Noise Management Plan (NMP) which includes consideration of the Bishop's Stortford Oil Storage Depot operations. The current version of the NMP, document EA03, is included in Appendix 8.

Sources of noise generated at the site are limited to heavy duty vehicle movements to and from the site, and the loading or unloading of materials. The site operations are generally intermittent and are associated with approximately 8 HGV visits (17 vehicle movements) per day between the hours of 06:00 and 22:00 Monday to Friday, although some occasional work on Saturdays may be required. Any noise produced will therefore also be intermittent depending on the delivery and collection schedules.

The nearest human receptor would be staff in the neighbouring industrial yard, with the animal rescue charity, Foxdells located 170 m away. The nearest residential receptors are all located more than 300 m distant from the site and, with the transfer and storage activities resulting in minimal potential for noise to occur, the potential for nuisance is limited. A footpath and a bridleway pass the site and the area is used by walkers, runners and riders. However, with intermittent vehicle movements and the operation of pumps being the only noise sources, any potential noise nuisance to these transient receptors would be minimal.

Drivers are responsible for undertaking daily checks on their vehicles prior to use and for reporting any unusual or increased operational noise that they observe during their visits to site. The use of trained drivers and the regular planned preventative maintenance of all vehicles, pumps and other plant ensure that equipment is operated correctly and is maintained in optimum condition.

**BAT 21, AM 2.3 and 2.4** OSL aims to prevent or limit the potential environmental consequences of accidents and incidents by maintaining an Accident Management Plan (AMP).

Whilst the Spillage and Accidental Release Procedure (see OP23 in Appendix 4) considers the actions to be taken in the event of a spillage and includes actions to, amongst other things, isolate the area, contain the spill, and report the equipment used in order that they can be replenished etc., the Bishop's Stortford Operating Procedure (OP38) considers additional incidents such as actions to be taken at the site in the event of a fire or a flood.

Although the site is only manned during relatively short and intermittent operational periods, the neighbouring site is manned and contact details have been shared for use in the event of an emergency.

The Bishop's Stortford Oil Storage Depot is securely fenced with gates that remain locked unless Company staff are attending site. The site also incorporates a CCTV system which can be monitored both from the Head Office in Bootle, and remotely by the Company Directors, and will be fitted with an alarm system with motion detectors. In the event of a break-in, an alert will be sent to the Company Directors. As noted previously, the site is not situated in any built-up area and is located a significant distance from any residential or frequented areas. Although a public footpath and a bridleway pass the site, it is not expected that the site will experience much in the way of opportunistic unauthorised entry or vandalism.

Foam fire extinguishers will be positioned in strategic locations around the site prior to commissioning and drivers will be trained on the actions they should take in the event of a fire. With storage areas limited to the bunded tanks and a penstock valve to close the main operational area interceptor release such that it effectively becomes a sump, any extinguisher foam or fire-waters would be retained within the bunded area or collected in the closed interceptor and across the yard. Collected effluent will be pumped into the oily water tank and / or bund as appropriate before being transferred to the Bootle site, using the OSL road tanker fleet, for treatment and recovery or disposal.

It is a Company requirement that all collection vehicles and road tankers are checked prior to use on the public road to ensure they are safe and legal to enter service, and that any check undertaken is both thorough and is documented. This includes any remedial repair work required following the discovery of a defect.

Should any items listed on the daily vehicle checks be found to be faulty then the driver is required to write the details of the fault on his / her daily defect sheet and bring it to the attention of the appointed person to allow for a decision to be made on the required action and for the fault to be rectified.

Any accident, incident or near miss must be reported to the driver's Manager, the Company Compliance Manager or a Company Director. HS03, the Accident and Safety Incident Reporting Procedure describes the nature of incidents and details the Company reporting and investigation procedure.

**BAT 22 and AM 8.1, 8.2, 8.3 and 8.4** The fundamental purpose of the Bishop's Stortford Oil Storage Depot is to collect mixed waste oils for treatment and recycling. OSL treats used waste oils into Processed Fuel Oil (PFO) or re-refined base oil, both of which meet the end of waste criteria and can therefore be used as new, non-waste oils once processed.

As a simple transfer station with no treatment facilities, the Bishop's Stortford Oil Storage Depot uses few raw materials. Electricity is used for yard lighting, security, the bund and interceptor pumps and office uses, and water is only used for domestic purposes within the office. Spill kits are available at the site for use by the drivers should any spillage occur, and these are the only consumable items required by the installation.

## 6. Resource Efficiency and Climate Change

### 6a. Basic Energy Efficiency Measures and Improvements

**BAT 23 and AM 8.1** Minimal electricity is required by the site operations, and uses are limited to yard lighting, security, the bund and interceptor pumps and office uses. Drivers use their vehicle pumps to load and unload their tankers. Energy use is however minimised with a regular and planned preventative maintenance regime ensuring that all plant remains in optimal working condition.

### 6c. Specific Measures for Improving Energy Efficiency

With minimal energy requirements and a regular planned preventative maintenance programme, there are limited opportunities and no specific measures proposed for improving energy efficiency. **Where replacements are required, Oil Salvage Limited will employ energy efficient pumps and energy efficient LED lighting at the installation. Fundamentally, the operation of the site will reduce the Carbon footprint of Company as a whole, drastically reducing the number of vehicle movements and therefore fuel use required to transport collected waste oils to the Company processing facility in Bootle.**

### 6d. Explain and Justify Raw Materials and Water Use

The only consumables used at the installation, other than small amounts of electricity for pumps and lighting etc, are spill kits which are available for use in the event of a spillage. These are used, disposed of, and replaced as required.

### 6e. Describe How the Site Avoids Producing Waste in Line with Council Directive 2008/98/EC on Waste

The fundamental purpose of the Bishop's Stortford Oil Storage Depot is to facilitate the recycling of mixed waste oils into non-waste products, either through re-refining the waste into base oil, or treatment to the PFO standard. Although the depot does not treat the incoming waste oils, the storage facility location in the south-east of England, enables wider and more efficient collections by Oil Salvage Limited, to support the Company treatment plant located in Bootle on Merseyside.

As such, and with minimal waste creation of its own, amounting to used spill kits in the event that clean-up is required, the Bishop's Stortford Oil Storage Depot fully supports the implementation of the waste hierarchy, promoting recycling or other recovery, over disposal options.