### INSPECTORS REPORT WASTE LICENCE REGISTER NUMBER

W035

## (1) Summary:

Name of Applicant	Pipe and Drain Services Ltd.	
Facility Name (s)	Pipe and Drain Services Ltd.	
Facility Address	Upper Sheriff Street, Dublin 1	
Description of Principal Activity	Separation of oil, water and solid fractions of hydrocarbon sludges	
Quantity of waste (tpa)	16,702	
Environmental Impact Statement Required	No	
Number of Submissions Received	3	
INSPECTOR'S RECOMMENDATION	The proposed decision as submitted to the Board be approved	

Notices	Issue Date(s)	Reminder(s)	Response Date(s)
Article 14 (2) (b) (i)	Not applicable		
Article 14 (2) (b) (ii)	29 May 1998	Not applicable	24 June 1998
Article 14 (2) (a)			
Article 16	4 September 1998		2 October 1998
	22 October 1998		28 October 1998

Applicant Address	Murphystown Road, Sandyford, Dublin 18
Planning Permission status and date granted (if appropriate)	Granted on 5 July 1993, 6 July 1995 and 5 July 1997.
Planning Authority	Dublin Corporation
For Local Authority applicants, is the facility within its own functional area	Not applicable
Is the facility an existing facility:	Yes
Prescribed date for application:	Prior to 1st May 1998
Date Application received:	9 April 1998
For Certified Sites, have matters in the EIS relating to environmental pollution been considered as required by Article 21 of SI 133 of 1997	Not applicable
Location of Certificate in Application	Not applicable
Confidential Information Submitted	No
Location of Planning Documents in Application	Volume II - Attachment B4
Location of EIS in Application	Not applicable

## SITE VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
23/4/98	Check site notice and	B. Meaney	
	site visit		
4/11/98	Site visit	B. Meaney	Major changes in site layout noted.

#### (2) Class/Classes of Activity

The class(es) of activities for which the applicant has applied are marked below. The principal activity is indicated by (P).

THIRD SCHEDULE		FOURTH SCHEDULE	
1 Deposit on in or under land		1 Solvent reclamation or regeneration	v
2 Land treatment including biodegradation	v	2 Pocycling or reclamation of organic	
of liquid or sludge discards in soils.	Λ	substances which are not used as solvents.	Λ
<ol> <li>Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.</li> </ol>		<ol> <li>Recycling or reclamation of metals and metal compounds.</li> </ol>	Х
4. Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.	Х	4. Recycling or reclamation of other inorganic materials.	Х
5. Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.		5. Regeneration of acids or bases.	
6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in this Schedule.		6. Recovery of components used for pollution abatement.	Х
7. Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in this Schedule.	Р	7. Recovery of components from catalysts.	
8. Incineration on land or at sea.		8. Oil re-refining or other re-uses of oil.	Х
9. Permanent storage, including emplacement of containers in a mine.		9. Use of any waste principally as a fuel or other means to generate energy.	Х
10. Release of waste into a water body (including a seabed insertion).	X	10. Spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation processes.	
11. Blending or mixture prior to submission to any activity referred to in this Schedule.	Х	11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	Х
12. Repackaging prior to submission to any activity referred to in this Schedule.	X	12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.	
13. Storage prior to submission to any activity referred to in this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned	X	13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the	X

#### **Class Description:**

Activities proposed to be authorised by the licence shall be restricted to those described below.

WASTE MANAGEMENT ACT, 1996: THIRD SCHEDULE Note 1				
Class 4	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons:			
	This activity is limited to the storage of waste oil in the settlement tanks and the temporary storage of settled sludge and settled solids from the waste water treatment plant.			
Class 7	Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 10 of this Schedule (including evaporation, drying and calcination):			
	This is the principal activity and relates to the separation of hydrocarbon sludges into oil, water and sludge fractions and the subsequent disposal of segregated fractions. It also relates to the processing of other accepted waste and their subsequent disposal.			
Class 11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule:			
	This activity is limited to the mixing of waste oil from different sources in the settlement tanks.			
Class 12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule:			
	This activity refers to the pumping of treated waste from storage tanks to road tankers for transfer to other facilities.			
Class 13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste was produced:			
	This activity is limited to the storage of waste materials at the facility prior to on site disposal or consignment to off site disposal facilities.			

WASTE MANAGEMENT ACT,1996: FOURTH SCHEDULE Note 2				
Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes):			
	This activity refers to the separation of ink, plastic and metal fractions from ink-jet printer cartridges and the subsequent recovery of segregated fractions.			
Class 3.	Recycling or reclamation of metals and metal compounds:			
	This activity refers to the crushing of metal drums and the subsequent removal of the drums for recovery and to the separation of ink, plastic and metal fractions from			

	ink-jet printer cartridges and the subsequent recovery of the segregated fractions.	
Class 4.	Recycling or reclamation of other inorganic materials:	
	This activity refers to the separation of ink, plastic and metal fractions from ink-jet printer cartridges and the subsequent recovery of the segregated fractions.	
Class 6.	Recovery of components used for pollution abatement:	
	This activity involves the cleaning of booms and other material used in pollution abatement.	
Class 8	Oil re-refining or other re-uses of oil:	
	This activity refers to the separation of hydrocarbon sludges into oil, water and sludge fractions and the subsequent recovery of segregated fractions.	
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste was produced:	
	This activity is limited to the storage of waste materials at the facility prior to on site recovery or consignment to off site recovery facilities.	

The following activities were included in the application but are not proposed to be authorised.

**Class 2 of the Third Schedule** refers to the treatment of hydrocarbon contaminated soils. This activity is carried out on a paved area of the facility and drains directly into the oil interceptor. Air emissions (the objective of the treatment is to volatilise the VOC's) are uncontrolled. This activity is not proposed to be authorised for the following reasons:

- (1) Volatilisation would not appear to be an efficacious method of treating soil contaminated with diesel range organics due to their low volatility. They are more likely to be leached out of the soil and, in the case of this facility, into the surface water drainage system.
- (2) Secondly, the applicant did not quantify the emissions to air (other than to state that the air emissions are less than those from the waste oil tanks) or liquid from the activity. A preliminary evaluation of potential air emissions from the activity indicates that 98kg of total petroleum hydrocarbon (TPH) would be generated every two weeks. Depending on the volatility of the compounds in question, this quantity could be emitted in the first 24 hours of treatment or evenly over the two weeks. In the former case, the emission becomes major but short term. In the latter case, the emission would appear to be just within mass flow rate limits for regulation as Class II TALuft organic compounds (excluding benzene). This quantity does not take into account the fact that some contaminants are likely to be lost through water leaching which, as stated above, is likely to be the

preferred route for the heavier petroleum fractions. In addition, this evaluation does not take into account the emission of BTEX compounds (benzene, toluene, ethylbenzene and xylenes) which are the compounds of greatest interest from a toxicity and carcinogenic point of view as, according to the literature, the test method used by the applicant in quantifying the soil contamination, total petroleum hydrocarbon, does not appear to accurately reflect the concentration of the BTEX compounds. The test method involves a solvent extraction technique which measures diesel range organics (that is, the heavier fractions) while BTEX are contained in the lighter petroleum fractions (gasoline range organics). In other words, where soils contaminated with gasoline range organics are accepted at the facility, the TPH analysis used is unlikely to accurately reflect the quantity of BTEX compounds emitted to the atmosphere.

(3) The area delineated on drawing no. 501001/18 for the treatment of hydrocarbon contaminated soils has been partly built upon as illustrated in a more recent drawing, 501001/26. No new contaminated soil treatment area has been delineated.

**Class 10 of the Third Schedule** reads "release of waste into a water body (including a seabed insertion)" and, in the application, refers to the discharge of processed waste water to sewer. As the discharge is to sewer and not a water body, this class of activity will be excluded from the scope of the licence.

**Class 1 of the Fourth Schedule** refers to the short term storage of waste solvent which cannot be treated at the facility prior to its being transported on to another facility. As no solvent recovery is to be carried out at the facility, this class of activity is to be excluded from the scope of the licence. The proposed storage of waste and subsequent removal for recovery is proposed to be authorised under Class 13 of the Fourth Schedule.

**Class 9 of the Fourth Schedule** refers to a proposed process involving the combustion of the recovered oil fraction and the utilisation of the heat in drying the sludge fraction thereby reducing the quantity going to landfill. This is potentially the most significant source of emissions at the facility. The applicant is still carrying out feasibility studies and has not yet reached a decision on whether to progress with this activity. It is therefore proposed that this activity be excluded from the scope of the licence. However, this does not preclude the applicant from applying for a revised licence when sufficient information is available.

**Class 11 of the Fourth Schedule** refers to a proposed process involving the combustion of the recovered oil fraction and the utilisation of the heat in drying the sludge fraction thereby reducing the quantity going to landfill. This class of activity is not considered further for the reasons stated above in relation to Class 9 of the Fourth Schedule.

#### (3) Site Location

# A location plan showing the site to which the application relates is provided in Appendix 1. The appendix also contains a drawing showing the layout of the facility and a flow diagram of the hydrocarbon waste separation process.

The facility is located on a 0.25 hectare site on Upper Sheriff Street in Dublin 1. It is surrounded on the west and south sides by Iarnród Eireann rail marshalling yards, on the east side by a disused rail yard and to the north by Sheriff Street. The general end use in the area is warehousing and offices. The nearest residential housing is located approximately 45 metres away from the facility's northern boundary on Abercorn Road. The next nearest residential housing is on New Wapping Road at a distance of approximately 93 metres from the facility's eastern boundary.

#### (4) Waste Types and Quantities

YEAR	NON-HAZARDOUS WASTE (tpa)	HAZARDOUS WASTE (tpa)	TOTAL QUANTITY OF WASTE (tpa)
1997	0	16,702	16,702
1998		up to 26,300 tonnes	up to 26,300 tonnes
1999		up to 26,300 tonnes	up to 26,300 tonnes

The total quantities and types of wastes accepted by the facility are shown below.

In 1997, 16,702 tonnes of waste were accepted at the facility. Of this, approximately 10,000 tonnes were made up of hydrocarbon sludges, 600 of ink cartridges and the remainder of contaminated soils. Processing capacity at the facility for hydrocarbon sludges is stated as being 25,000 m<sup>3</sup>. By the applicants reckoning, this equates to approximately 25,000 tonnes. The quantity of ink cartridges accepted is expected to increase to 1,300 tonnes per annum. This gives a maximum processing capacity of 26,300 tonnes per annum, not counting waste accepted for storage for which no data was submitted (see the activity described in item 4 on page 9). Any proposals for the development of waste storage capacity will be subject to agreement with the Agency under Condition 4.14 of the proposed decision (PD) which concerns Specified Engineering Works. The development of storage capacity at the facility will be subject to agreement with the Agency. Conditions 5.1 and 5.7 prohibit the acceptance of certain waste types for storage at the facility until the Agency is satisfied that the appropriate infrastructure is in place.

#### (5) Site Design

#### • Infrastructure;

The site is surrounded by a wall and fence which varies in height depending on the ground level of the site. The wall facing onto Sheriff Street is 2.5 m high with 1 m of knife edge security fencing retrofitted to the top. The only entrance is through the main entrance gate (2.5 m in height) which opens from Sheriff Street. There is a problem with intruders at the site and the applicant has concentrated on the security of individual components (shutters on windows, lock up chemical boxes, removal of valve wheels) rather than the site boundary. A security guard is on site at all times when the off-specification ink cartridges are being processed due to the value of the product.

The entire site is concreted and all surface water run-off drains to an interceptor before discharging to Dublin Corporation's sewer. All process emissions are prohibited from routinely entering the surface water drainage system by Conditions 4.8 and 4.9 of the PD.

The facility has a weighbridge.

Diesel for the company's fleet of tankers is stored in a tank inside a steel container. The tank is not independently bunded. Condition 4.12 of the PD requires that this tank be bunded. Gasoil for the boiler is stored in a tank located on top of the oil filtration container. This is within a bunded area.

The waste accepted at the facility is typically in sludge form. Inspection of incoming waste takes place on the waste oil delivery vehicles and samples are taken as necessary.

Hydrocarbon sludge tankers are cleaned out at the truck desludging area shown on drawing no. 501001/26. The area is bounded on three sides by concrete walls and at the front by a drain to the facility's interceptor. Condition 4.11 of the PD restricts the waste that can be stored in this area and requires the licensee to ensure that any liquid run-off from the desludging area is contained - that is, to prevent liquid from running overground across the site, the drain must be kept clear of blockage.

The only non-process building is the control building which contains the process control equipment, laboratory, office and staff accommodation. Consideration is being given to extending this building to provide additional office space.

Members of the public have no access to the site for the deposition of waste oils or otherwise.

#### (6) Site Operation/Management

#### • Operation

 The principal activity is the separation of hydrocarbon sludges into oil, water and sludge fractions in two settlement tanks. Typical sources of the sludge are oil company filling station interceptors, oil spills and ships' bilge tanks. After separation, the oil fraction is further filtered on site prior to being transported to a waste oils recovery facility such as Atlas Oils. The water fraction is further treated in the waste water treatment facility where flocculating agents are added and solids precipitated before discharge to sewer. The sludge is returned to the settlement tanks. The sludge fraction is allowed to accumulate in the settlement tanks and is periodically pumped out and disposed of to Ballealy landfill site. Since the application was made, a sludge press has been installed at the facility which will reduce the quantity of sludge being disposed of to landfill. In addition, the applicant's reply to the article 16 notice of 4 September 1998 stated that a feasibility study into providing increased waste water treatment capacity at the facility was underway.

- 2) Off specification ink-jet printer cartridges that arise at Hewlett-Packard's Leixlip plant are processed at the facility. The fractions separated from the three principal cartridge types are a combination, depending on the batch being processed, of ink, plastic, sponge and metal. After separation, the ink is transported for further physico-chemical treatment and disposal. On site treatment of the ink fraction is proposed. The process would involve the precipitation of solids from the ink followed by pressing of the sludge in the on-site sludge press and further treatment of the liquid fraction in the waste water treatment plant. This activity does not represent a significant variation to existing operation as existing flocculation and pressing plant will be used. The section 52 consent from Dublin Corporation places emission limit values on the discharge of the two most significant heavy metals found in the ink, copper and zinc (see *Schedule G: Emission Limits* of the PD). The plastic is transported to the USA for recovery and the metal is transported to a metal merchant for recovery.
- 3) Waste drums are crushed in a purpose built drum crusher which has a liquid collecting sump attached. The liquid collected is pumped to the settlement tanks and the drums are sent for recovery to a metal merchants. Condition 5.12 of the PD requires that all drums are washed out prior to crushing.
- 4) Waste solvent and other non-solvent organic waste is stored at the facility prior to being consigned for recovery or disposal. The waste is stored in drums and/or IBC's (integrated bulk containers) in areas which are presently unbunded. No details of materials or quantities stored in the past were provided in the application. Condition 5.1 of the PD prohibits the acceptance of waste without prior approval of the Agency. The acceptance of waste that cannot be processed on site will not be approved until the necessary infrastructure is in place (see Conditions 5.5 and 5.7 of the PD). Condition 5.7 of the PD requires the licensee to classify each shipment of waste, other than those which are to be processed at the facility, according to the UN classification for hazardous goods. The use of this classification is intended to ensure that incompatible substances are isolated on storage.
- 5) Booms and other equipment used in oil clean up operations are washed to remove the oil.

It is not proposed that a cap be set on the quantity of waste to be processed or stored at the facility. The facility would appear to be under using its total capacity for the processing of waste oil and, as discussed in section 14 of this report, this capacity may be used in future as waste quantities increase. Throughput at the facility will be controlled by the following factors:

- the storage capacity for waste is finite and no storage of waste will be permitted except in dedicated and delineated areas (see Conditions 5.5, 5.7 and 5.8);
- the applicant is required under Condition 5.5 to submit proposals for the storage of waste; and
- the acceptance of waste that cannot be processed is prohibited until the necessary storage facilities are in place.

#### • Waste Acceptance Procedures

The hydrocarbon sludges that are accepted are oil water mixtures with a range of contaminants present depending on the source of the waste. Typical sources of the waste are petrol stations (interceptor and storage tank cleaning), oil spillages and the bilge tanks of ships. This waste is typically but not exclusively delivered to the facility in the company's own fleet of tankers. Some waste is accepted in drums and IBC's. New shipments and once off loads are tested in advance of delivery. Routine deliveries are periodically spot checked. Loads are rejected on the basis of excessive odour or chemical oxygen demand greater than 30,000 mg/l. Chemical oxygen demand, biological oxygen demand, oils, fats and greases, suspended solids and surfactants analysis can be carried out at the facility's laboratory.

There are no waste acceptance procedures set out for any other waste type. The Environmental Management Programme required under Condition 2.3 (see also *Schedule B: Content of the Environmental Management Programme*) is required to contain waste acceptance procedures.

#### • Waste Handling

Tankers delivering hydrocarbon sludges discharge directly into the settlement tanks. There is no further manual handling of the waste until the oil and sludge fractions are tankered away. The site interceptor is pumped out using a tanker to the facility's settlement tanks.

Ink cartridges are delivered in wheeled carts and fed mechanically into the separation process. Waste ink is pumped to the ink storage tanks from where it is tankered off site for disposal. Waste ink washings drain overground to an underground storage tank before being pumped to the settlement tanks. The shredded plastic, sponge and metal is collected in bulk bags.

Waste awaiting export or other further transport is stored in unbunded and undelineated areas which drain to the site surface water system. However, no storage of waste other than that destined for processing at the facility has been observed during either of the site visits to date. As stated above, Conditions 5.5 and 5.7 of the PD prohibit the acceptance of waste that cannot be processed on site until the necessary infrastructure is in place.

#### Nuisance Control

A noise survey was carried out which concluded that the loudest emissions were from tanker pumps and the ink cartridge shredder but that these were drowned out by traffic and noise from the adjacent rail marshalling yard.

#### • Hours of Operation

Monday to Saturday 0700-1900

Sunday closed, except for emergencies (oil spillages and other client emergencies)

Public holidays 0700-1900

Any Sunday or other out of hours operation will be notified to the Agency by 10:00 the next working day (Condition 5.15 of the PD).

#### (7) Decommissioning and Aftercare

Proposals for decommissioning and aftercare plan are requested in Condition 8.1 of the PD.

#### (8) Emissions to Air

There are no major emissions to air. The minor ones are:

- 1. the gas oil boiler used to heat the oil fraction prior to filtering it; and
- 2. fugitive emissions associated with the settlement tanks and oil storage tanks.

The reply to the article 14 notice stated that a new boiler had been installed. Boiler efficiency testing will be required under Condition 7.3.2 of the PD.

Fugitive emissions were evaluated from the settlement and oil storage tanks. Condition 7.3.1 of the PD requires proposals to be made to the Agency for the measurement of fugitive emissions and the implementation of measures for their reduction.

One odour complaint was received in the twelve months up to October 1998. However, the odour was found to be from an adjoining site. Dublin Corporation made a submission in relation to odour complaints arising during 1996 and 1997.

#### (9) Emissions to Groundwater

No emissions to groundwater should occur as the site is fully surfaced with concrete and all surface run-off water drains to the site interceptor and from there to the foul sewer.

The site is constructed on reclaimed land, the infill material for which would appear to be predominantly dredged sediments, red brick, locomotive waste and other debris.

High heavy metal concentrations were found in this fill material during the site investigation. Relatively high heavy metal concentrations and particularly high petroleum hydrocarbon concentrations were detected in the undisturbed soil deposits beneath the fill material although none exceeded the Dutch I value which under Dutch law requires that a risk analysis be carried out.

Groundwater analyses did not reflect the high heavy metal concentrations in the fill material which would appear to indicate that the fill material is not leaching. The presence of high concentrations of total petroleum hydrocarbon and other inorganic compounds render the groundwater significantly polluted.

The site has had its present concrete paving for the last 3 years. Prior to this, the site was paved to a lower standard. It cannot be concluded that contamination as a result of the applicant's activities did not take place prior to the new cover being installed. However, the current site surface should prevent any contamination from taking place in future. Given that the subsurface beneath the facility and the surrounding area is highly permeable, the rail marshalling activities surrounding the site are quoted in the application as being a possible source of hydrocarbon contamination

A groundwater monitoring programme is prescribed by Condition 9.1 of the PD which will detect any further deterioration in the subsurface water quality.

In addition, Condition 4.10 requires that the integrity of all underground pipes and tanks be verified at five yearly intervals, with the first report due within eighteen months from the date of grant of the licence.

#### (10) Noise Emissions

The ambient noise levels in the area are influenced mainly by the neighbouring rail yard activity and traffic on Sheriff Street. The principal daytime noise sources associated with the site are intermittently operated vehicle and other pumps, drum crushing and ink cartridge shredding equipment. The only measured noise level which was discernible as being associated with the site was 54dBA(L<sub>90</sub>). At all other times, noise at the site was masked by ambient noise. With the exception of Sunday and public holiday operation for which no ambient or effects data was submitted, the activity should have no significant noise impact on the area. Night time ambient noise levels (traffic and rail noise) taken at two locations between 22:00 and 22:30 were measured as being lower on the site than at the nearest residential locations. For this reason, it is not considered that public holiday and intermittent Sunday operation will have a significant noise impact on the area. Condition 9.2 of the PD requires annual noise monitoring.

#### (11) Emissions to Sewer

Three emissions are combined and discharge to Dublin Corporation's sewer which crosses the site in a north-south direction. These are:

- 1. the discharge from the waste water treatment plant. This is released on a batch basis directly from the waste water flocculation and settlement tanks and it is the only emission which is currently monitored;
- 2. the discharge from the oil interceptor. This is a continuous discharge, the volume of which depends on the amount of surface run-off water. The whole site is pressure washed daily into the interceptor; and
- 3. the domestic and laboratory discharge from the control building.

Conditions 4.8 and 4.9 of the PD prevent the interceptor being used as a process related pollution abatement device.

In the event of a spillage or fire at the site, all sewer emissions via the surface water run-off drainage system can be prevented by closing a valve on the interceptor discharge. The liquid can be either subsequently discharged to sewer or collected for appropriate processing. Condition 10.5 of the PD requires the applicant to complete a risk assessment to determine whether the requirements for fire water retention are being met. The applicant is required to consult with the Chief Fire Officer of Dublin Corporation.

Consent for a discharge to sewer has been obtained from the sanitary authority in accordance with Section 52 of the Waste Management Act 1996. Condition 7.7 of the PD requires monitoring of the waste water treatment plant discharge and the interceptor discharge (see also *Schedule E: Monitoring*).

#### (12) Emissions to Surface Water

None.

#### (13) Other Significant Environmental Impacts of the Development

None.

#### (14) Waste Management, Air Quality and Water Quality Plans

A draft **waste management plan** for the Dublin Region has been published by the four Dublin local authorities. The Waste Management (Planning) Regulations, 1997, S.I. No. 137 of 1997, require that waste management plans ensure that satisfactory arrangements exist for the collection of waste oils. Given that these regulations will be enforced, it may be expected that the quantity of hydrocarbon sludges will increase. It is therefore proposed not to restrict the capacity at the facility by imposing limits on waste throughput.

**Air quality plans** - none exist although a Dublin wide plan is being prepared and will be published in early 1999.

Water quality plans - not relevant, no surface water discharge.

Appendix 2 contains a list of all submissions received relating to the application. The dates received and the details of the individual, department, group or organisation making the submission are provided.

An overview of all submissions received in relation to the waste licence application is provided. This includes a summary of all issues raised in the submissions and shows how these issues are dealt with in the proposed decision.

#### 15.1 Summary of submissions/complaints

Submission 1: Thomas Ryan & Co. Solicitors made a submission in two parts dated 11/8/98.

- 1. Part 1 questioned the validity of the application given that the applicant did not submit any information to the local authority concerning their application and that the information was not publicly available for inspection at the offices of Dublin Corporation.
  - **Response** The applicant complied with article 9(1) of the licensing regulations requiring them to submit written notice to the planning authority. There is no statutory requirement on the local authority to display a copy of the application at its offices. A copy of the application was forwarded to the offices of the local authority on 24 August 1998 requesting that it be made available for public inspection.
- 2. Part 2 made 37 itemised points based on a reading of the revised nontechnical summary submitted with the article 14 reply received 24 June 1998. The following are the points made or questions posed:
  - (2) The submission considers that the storage of waste which cannot be treated at the facility is in breach of both the proximity principle and the polluter pays principle.
  - **Response** Conditions 5.1 and 5.2 of the PD specify the waste types that may be accepted at the facility. In addition, Condition 5.7 sets out the requirements for the storage of waste. In relation to the proximity principle, it is common practice for waste contractors to act as agents and arrange the storage and onward transport of waste.
  - (3) Similar point to item 1 stating that the practice should be regulated or halted.

**Response** See response to item 1.

(4) The submission questioned whether the area is monitored for ink based solvents.

- **Response** No ambient air monitoring was carried out in the ink cartridge shredding area. Condition 7.3.1 of the PD requires that a programme for the measurement of fugitive emissions be agreed with the Agency.
- (5) The submission queried who are the third parties to whom separated waste fractions is transported by the applicant, whether they are licensed and whether their records tally with those of the applicant.
- **Response** Condition 5.13 of the PD requires the applicant to provide a complete list of all waste contractors used. Condition 3.14 requires that records relating to the removal of waste be maintained. This information was not requested in processing the application as it was not considered "necessary to enable [the Agency] make a decision in respect of the application" (article 16, S.I. No. 133 of 1997).
- (6) There is no item 5 in the submission.
- (7) The submission questioned whether the release of effluent is controlled and monitored and whether oily sludge is permitted to be landfilled.
- **Response** Each batch of effluent discharged to sewer is to be monitored per the conditions specified by Dublin Corporation. The acceptance of sludge at a landfill is dependent on the waste acceptance criteria of the particular landfill. The applicant has installed a press to reduce the quantity of sludge going to landfill.
- (8) The submission questioned how the waste is used as a fuel and whether emissions are controlled and monitored.
- **Response** The application contained provision for a proposed thermal contact drying process whereby waste oil was to be burned to provide heat in drying the sludge taken from the settlement tanks. The applicant stated in reply to the Agency's article 16 notice of 4 September 1998 that a feasibility study was ongoing into the proposed activity. In the absence of technical information relating to the process, it is proposed that the activity be excluded from the PD. Condition 5.16 states that no waste may be burned or otherwise combusted at the facility.
- (9) The submission considered that class 13 of the fourth schedule is irrelevant in terms of the licence application as short term storage is temporary storage.
- **Response** Conditions for the storage of waste have been made in the PD. See the response to item 1 on page 15.
- (10) The submission questioned whether the waste acceptance procedures are enforced and practised.
- **Response** Waste acceptance procedures are specified in Condition 5.3 of the PD and they will be enforced in the context of the waste licence.

- (11) The submission questioned how much oil is received in the oil/water mixture accepted at the facility.
- **Response** The breakdown was not considered necessary in considering the application. Conditions 3.13 and 3.14 of the PD require records to be kept of all incoming and outgoing shipments of waste and will provide a complete breakdown of the quantities of oil and water generated at the facility.
- (12) The submission questioned the rise in ink cartridge waste accepted from 450 tpa to 1,3000 [sic] tpa, the quantity of ink currently treated and how much extra liquid will be added to the process.
- **Response** "1,3000" is deemed to be a misprint and the increase is considered to be to 1,300 tpa. The ink extracted from the ink cartridges is consigned for disposal off site. While ink washings from the separation process are currently passed through the main process, Dublin Corporation have imposed limits for heavy metals in the sewer discharge and theses are included in the PD (see *Schedule G: Emission Limits*). This will minimise the quantity of ink washings being processed by this route.
- (13) The submission states that the toxic and dangerous waste regulations of 1982 are obsolete. The statement is made in the context of the requirement of a C1 form for the transport of toxic and dangerous waste within Ireland.
- Response The toxic and dangerous waste regulations of 1982 have been revoked by the Waste Management Act 1996. The C1 consignment note system is now implemented by the Waste Management (Movement of Hazardous Waste) Regulations, 1998, S.I. No. 147 of 1998.
- (14) The submission questioned the size of boiler in use.
- **Response** The input rating of the boiler is 1.75MW. The annual environmental report (AER) required under Condition 2.9 the PD will in future summarise fuel use.
- (15) *The submission questioned whether all tanks are bunded.*

Response Conditions 4.7 and 4.13 of the PD require all tanks to be bunded.

- (16) Inconsistencies in the wash water balance in the application were noted in the submission.
- **Response** The AER requires the future annual reporting of resource and energy consumption.
- (17) The submission queried whether all incoming materials would be tested.

- **Response** Waste acceptance procedures are described earlier in this report. Waste from consistent sources does not require stringent monitoring, spot checks are deemed to be adequate. Waste from new sources is monitored.
- (18) The submission questioned whether the oily sludge residue is allowed to be landfilled and whether it was hazardous due to its oil content.
- **Response** See item 6 above for a response to the first part. For the second part, the sludge settled out in the settlement tanks is considered to be a hazardous waste.
- (19) The submission questioned whether boiler emissions are monitored and pointed out the relative height of the boiler emission point to the adjoining road.
- **Response** Condition 7.3.2 of the PD specifies the required height of the boiler stack and also requires that boiler efficiency be tested annually. A report on the boiler efficiency was received with the article 16 reply. The emissions were found to be within guideline limits for CO and NO<sub>x</sub>.
- (20) The submission queried what was the sewer discharge volume limit as inconsistencies were noted in the application.
- **Response** The previously held permit to discharge to sewer issued by Dublin Corporation did not specify a volume limit. The section 52 consent from the Corporation contains discharge volume limits which are set out in *Schedule G: Emission Limits* of the PD.
- (21) The submission queried whether computer modelling of fugitive emissions was going to be carried out.
- **Response** Condition 7.3.1 of the PD requires that a programme for the measurement of fugitive emissions be agreed with the Agency. The applicant is also required to make recommendations and a programme of implementation based on the findings of the assessment.
- (22) The submission questioned whether noise was assessed.
- **Response** A noise survey was carried out. An assessment is made in section 10 of this report.
- (23) The submission questioned the following statement contained in the application on the basis that no data was provided to support it: "it is not envisaged that any of the emissions from the site will have a significant impact on any environmental media".
- **Response** The emissions from the facility were considered by the Agency. There are no major air emissions from the facility. Boiler efficiency testing is required to be carried out annually. An assessment of fugitive emissions is required to be carried out. Sewer emissions are

conditioned by Dublin Corporation. Only waste contractors shall be used where agreement has been reached with the Agency.

- (24) The submission questioned whether monitoring points should be established by the Agency.
- **Response** Monitoring points for the assessment of fugitive emissions and noise will be established with the agreement of the Agency. The noise survey made as part of the application considered the facility's impact at the two nearest residential receptors. Boiler and sewer discharges are fixed and no further consideration is required.
- (25) The submission questioned whether the waste contractors downstream are properly licensed.
- **Response** Condition 5.13 of the PD requires the agreement of the Agency prior to the applicant using waste contractors to process waste generated on site.
- (26) The submission questioned what are the emergency provisions for spills.
- **Response** An emergency response procedure is required to be completed and agreed with the Agency. All significant spills are to be treated as an emergency.
- (27) The submission questioned how the interceptor is controlled given that it is not monitored.
- **Response** There is no monitoring point on the interceptor. To prevent oil discharging from the interceptor, it must be emptied on a regular basis to be established empirically. Condition 4.9 of the PD requires that a record be kept of the maintenance of the interceptor.
- (28) The submission queried whether the site should have a draft post closure plan.
- **Response** Condition 8.1 of the PD requires that a decommissioning and aftercare plan be prepared.
- (29) The submission stated that if background studies were carried out, it would be possible to determine  $CO_2$  levels in site emissions.
- **Response** No reference to  $CO_2$  was made in the section of the application being referred to in the submission. CO was discussed in the application in the context of boiler emissions. The boiler is a minor emission. Measurement showed that its CO and  $NO_x$  emissions are well within standard discharge limits.
- (30) The submission considered the lack of determination of the effect of  $NO_2$  emissions from the boiler to be a side stepping statement.

Response See item 28.

- (31) The submission considered that the boiler emissions are not insignificant and that a characteristic profile should be determined.
- **Response** The boiler emission is not considered to be insignificant. However, it is considered to be minor. See item 28.
- (32) The submission queried how the Agency intends ensuring that the effluent is discharged within the emission limit values set in the licence.
- **Response** A monitoring programme is contained in the PD. The applicant is required to monitor the discharge from the waste water treatment plant and the interceptor on a monthly basis for the parameters specified in the PD.
- (33) Inconsistencies in the mass balance were noted by the submission.
- **Response** Verification of the quantities of the different fractions obtained was not considered necessary in making a PD. Conditions 3.13 and 3.14 of the PD require the recording of all waste accepted to and discharged or consigned from the facility.
- (34) The submission questioned whether the waste oil removed to a waste oils recovery facility required further processing.
- **Response** The acceptance of the waste oil removed from the facility is at the discretion of the receiving company. The waste oil is typically subjected to further filtration at other waste oils recovery and disposal facilities.
- (35) Inconsistencies in the mass balance were noted by the submission.
- **Response** Verification of the quantities of sludge and screenings obtained was not considered necessary in making a PD. Condition 3.14 of the PD require the recording of all waste consigned from the facility.
- (36) The submission queried the quantity of wash water required to clean waste oil filters.
- **Response** The AER requires the future annual reporting of resource and energy consumption. This will include water consumption.
- (37) The submission considers that the onus remains on the applicant to ensure waste removed from the facility is properly managed.
- **Response** Condition 3.14(g) of the PD places the onus on the licensee to obtain written confirmation of the recovery or disposal of waste removed from the facility. This condition is made in the context of Condition 1.4 which re-emphasised the licensee's obligations under other legislation.
- (38) The submission questioned whether the recipients of the waste removed from the facility can verify acceptance of the waste.

**Response** See the response to item 36.

Submission 2: Thomas Ryan & Co. Solicitors made a further submission dated 7/12/98.

The submission considered that inadequate consideration was made by the Agency of the items raised in the original submission dated 11/8/98. Particular shortcomings were identified in the consideration of the items relating to the mass balance of materials at the facility.

**Response** Many of the items raised in the submission were not addressed in the Agency's article 16 letter to the applicant. Article 16 of the licensing regulations (S.I. 133 of 1997) allows the Agency to "require the applicant to furnish such further information or particulars relating to the application as it considers necessary to enable it make a decision in respect of the application". It was not considered necessary at this stage to raise the issue of the mass balances provided in the original application. Conditions have been included in the PD for the recording of all waste quantities and services used at and discharged from the facility. In addition, Condition 2.4 requires the licensee to submit proposals for a mass balance of specified substances. It is considered that the information required by the PD will enable the accuracy of future mass balances to be verified.

It is considered that all points raised in the original submission have been addressed.

#### Submission 3: Dublin Corporation made a submission dated 30/11/98.

The submission concerned odour complaints received in relation to the facility. The source of the odour appears to have been waste accepted from one of the applicant's customers. The submission does not detail any odour complaints made since May 1998.

**Response** No complaints were recorded by the Corporation between May and November 1998. The applicant's waste acceptance procedure provides for the rejection of excessively odorous loads. In addition, the applicant, in responding to correspondence from Dublin Corporation, stated in October 1997 that waste would not be accepted if it could not be processed without causing a nuisance. Condition 6.3 of the PD requires that odours shall not cause a nuisance.

#### **Complaints**

There has been one complaint with respect to odour from the facility in the 12 months to October 1998. On investigation by the local authority, the source of the odour nuisance was another facility.

Signed: \_\_\_\_\_ Name: Brian Meaney Dated:

# APPENDIX 1 LOCATION PLAN, SITE LAYOUT DRAWING AND FLOW DIAGRAM

## APPENDIX 2 LIST OF PERSONS MAKING SUBMISSIONS

Thomas Ryan & Co. Solicitors 193 New Cabra Road Dublin 7

Dublin Corporation Environment and Cultural Department Environmental Health Section Civic Offices Wood Quay Dublin 8