ATTACHMENT N^{O} A.1

NON-TECHNICAL SUMMARY

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1. Introduction

Under the First Schedule of the EPA Act 1992 as amended, SmartPly Europe Ltd. conducts the following licensed activities:

- 8.7 The production of one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600m^3 per day;
- 2.1 Combustion of fuels in installations with a total rated thermal input of 50MW or more.

An EIA/EIS was not required under the Planning and Development Regulations (Ref. letter from Denis Malone, Kilkenny County Council, dated 17th December 2012, Attachment B.6).

The EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2006 do not apply to the facility or this application.

SmartPly Europe currently operates an Oriented Strand Board (OSB) panel mill, located on a 60 acre site, adjacent to the Port of Waterford at Belview, 4 miles east of Waterford City in the Republic of Ireland. The existing factory building encloses a total area of 7 acres (28,850m^2), including an office facility, canteen, security / weighbridge office, fire pump house and warehousing capacity for 10,000m^3 of product.

OSB is an innovative, environmentally sustainable, timber based solution for structural and non-structural building applications. Approximately 90% of the factory output is exported, comprising over 40 different products. Product applications include flooring, roofing, timber frame construction, furniture, site hoarding and DIY panels.

Originally the facility was a joint venture between the Louisiana Pacific Corporation of North America and Coillte, the Irish State Forestry Board. Since 2002, the Company is a wholly owned subsidiary of Coillte. SmartPly is a significant employer in the region, directly employing 170 people, with over 350 people employed indirectly, through related activities such as logistics, warehousing and engineering services.

In recent years the OSB market in Europe has rapidly evolved with an increasing demand for a wide range of product sizes and consistency of quality. SmartPly is planning to upgrade its OSB facility by investing in “state of the art” technology, to meet the anticipated future needs of the developing OSB market in Europe. The investment will transform SmartPly from a supplier of commodity OSB panels to a supplier of high quality, differentiated products, aimed at specific high-value market segments.

The plant upgrade will take place within the existing factory boundary with no additional demand for land arising. The upgrade involves a significant investment in plant and equipment to the value of €59 million which includes technology for the mitigation of the

environmental impact of the manufacturing process. Environmental aspects of the plant upgrade are summarised in Section 3.

2. Plant Description

2.1 Description of the Existing Plant Technology

The existing SmartPly OSB mill was constructed in 1996. The mill was designed to produce commodity OSB panel boards of dimensions 8ft x 4ft. The central feature is a multi-daylight press comprising 14 platens; size 24ft x 8ft.

Coniferous pulpwood logs are delivered to the mill in 3m lengths from forest thinnings sourced from sustainably managed FSC certified forests in Ireland. These logs are fed into the plant on a continuous basis where they are debarked and flaked. The plant is equipped with two parallel lines that debark and flake the logs. Bark removed from the logs is burnt in a thermal oil heater, along with flake and fines from the process, to provide the heat energy for the multi-daylight press. Surplus bark is sold off-site, principally for horticultural mulch. Combustion emissions from the biomass furnace are directed to the two Wet Electrostatic Precipitators (WESPs) for filtering before discharge to atmosphere.

The wood flake is dried in four drum dryers that operate in parallel. Each dryer is coupled with a rotary screen, located immediately downstream. Dry sawdust fines are screened from the dried flake and used as dryer fuel. There is a small wood suspension burner at the inlet to each dryer, where the fines fuel is burnt. The exhaust gases from the dryers are also directed to the WESPs for filtering before discharge to atmosphere.

The dried OSB flakes are then coated with resin in three drum blenders. There is one blender each; for Top Surface, Core & Bottom Surface layers of the OSB board. The resinated OSB flakes are mechanically conveyed to a Forming Line where flake mats are formed in 3 oriented layers.

The flake mats are transported, along the Forming Line to a Multi-daylight Press on woven mesh screens. The press is of simple design, with 4 main hydraulic cylinders arranged in a single row, from the press inlet side to outlet side. This arrangement offers minimal options for process control.

Following pressing, the OSB panels are cut to size in a finishing line designed to produce panels of 8ft x 4ft size with limited size flexibility. The panels are then stacked and packaged and moved to the warehouse for cooling and storage.

2.2 Description of the Plant Upgrade

The proposed plant upgrade is summarised as follows:

- Building extension of approximately 8,960m^2 to house a new forming line, continuous press and master panel storage area. This will include alterations to existing roads, drainage channels and paving outside the building to facilitate the extension.
- Replacement of the existing Forming Line and multi-daylight press with a new state of the art forming line and continuous press. This provides the precise tolerance and efficiency of size manufacture required.
- A new finishing line including board cooling, master panel storage, cut-to-size-line and packaging plant will be installed. This investment decouples the finishing operations from the press to maximise uptime & efficiency and provides the cutting & transport equipment necessary to support a wide range of product sizes.

3. Environmental Impact

Every effort has been made to incorporate BAT conclusions into processes and techniques in order to lessen the environmental impact of the OSB manufacturing process. BAT conclusions from The EPA Final Draft BAT Guidance Note on Best Available Techniques for the Production of Paper Pulp, Paper and Board (April 2010) were considered in the design process.

3.1 Visual Impact

The proposed building extension will range from 10 to 25 metres high and will incorporate a total area of 8,960m^2. Visually it will be similar to the existing building being of similar scale and with comparable finish and profile. The new forming line, press and finishing plant will be installed inside the building extension.

3.2 Resource Use and Energy Efficiency

- The proposed new continuous press is the best available technology for wood panel manufacture. The new press will yield less waste as trim. This yields a corresponding reduction in demand for wood, resin and wax as per BAT on Resource Use Efficiency.
- The new building will utilise translucent panels in the roof as much as possible resulting in a reduction of electrical energy requirements for artificial lighting.

3.3 Air Emissions

The proposal includes a significant investment in equipment to control air emissions from the OSB manufacturing process as per BAT 9.3.2.

Two new high-efficiency dust collection filters will be installed on the new forming line and fuel reclaim to control dust levels in the workplace within national occupational exposure limits. All existing bag-houses will be retained in their current location (emission point ref. A2-2 - A2-7).

The new equipment comprises of bag-house filters, fans, blowers and ducting. The new bag-house filters will be specified to the latest efficiency standards to ensure efflux particulate emissions are less than 10mg/m^3. Current and proposed future plant emissions from bag-house filters are presented in Table 1.

Table 1: Current baghouse emission limits and proposed baghouse emission limits

Emission Point Ref	Current Plant			Proposed Future Plant		
	ELV Nm3/hr	ELV mg/m^3	Mass Emission kg/hr	ELV Nm^3/hr	ELV mg/m^3	Mass Emission kg/hr
A2-2	43,000	20	0.86	47,000	20	0.94
A2-3	24,500	20	0.49	27,000	20	0.54
A2-4	25,500	20	0.51	32,000	20	0.64
A2-5	43,000	20	0.86	47,000	20	0.94
A2-6	45,000	20	0.90	47,000	20	0.94
A2-7	46,700	10	0.47	70,000	10	0.70
A2-8	*NA*	*NA*	*NA*	*150,000*	*10*	*1.50*
A2-9	*NA*	*NA*	*NA*	*15,000*	*10*	*0.15*
Total	**227,700**	**-**	**4.09**	**435,000**	**-**	**6.35**

Mass emissions on all monitored parameters from the WESPs (emitted through A2-1) remain as per the current licence conditions (Table 2).

Table 2: A2-1 Emission limits

WESPs (A2-1) Parameter	Emission Limit kg/hr
Volumetric flow rate	620,000 Nm^3/hr
Particulates	9.4
Condensable VOCs (excluding particulate matter) (as C)	61.1
Formaldehyde	9.4
Total Aldehydes (as C)	9.4
Isocyanates (as NCO group) (2hr mean)	0.05
Phenol (2hr)	2.35
Carbon Monoxide	282.00
Nitrogen oxides as (NO_2)	141.00
Oxides of sulphur	4.70

An extensive system for efficiently extracting and treating press fumes will also be installed, comprising of a scrubber, extraction fan & ductwork. This system will mitigate fugitive emissions from the press and facilitate treatment of press emissions prior to discharge to atmosphere via the WESPs.

Air dispersion modelling predicts that the worst case long term (annual average) and short term (90^{th} percentile 24-hour average) predicted environmental concentrations of particulates, using conservative assumptions that process contributions are wholly PM_{10}, will be below the applicable AQS values at all offsite locations with the proposed change in emission rates and additional air emission sources.

3.4 Noise Impact Assessment

As part of the project design a noise impact assessment was carried out for the proposed upgrade to identify plant items which give rise to significant noise emissions, to assess the potential noise impacts at the nearest noise sensitive locations (NSLs) and to identify suitable mitigation measures to ensure any potential impacts are eliminated or minimized (BAT 9.3.5).

Existing monitoring was reviewed and predicted noise levels at a selection of seven locations were then assessed. These levels were compared with existing noise levels in order to establish if the proposed upgrade would result in a significant increase in noise levels. All new equipment located within the factory building with noise levels in excess of 85dB(A) will have sound attenuation installed. For example all blowers, fans & saws will be enclosed inside sound attenuating enclosures. New equipment located outside the factory building, such as dust filters, cyclones and fans will be installed with sound insulation to ensure compliance with licence limits, thereby minimising the impact on the neighbouring environment.

The noise impact assessment found that with all mitigation measures in place the day, evening and night time noise criteria outlined in EPA Guidance Document NG4 and in the IE licence will not be exceeded at any of the representative NSLs as a result of the cumulative impact of existing and proposed operations.

3.5 Wastewater

BAT 9.3.1 stipulates that waters of distinct origins should be kept separate. As with the current plant, there will be no process effluent emissions arising from the plant upgrade. Storm water runoff is currently contained in two large settling ponds, each with a capacity of 2,500m^3. The quantities arising on-site are dependent on rainfall. Surface storm water is re-used where possible in the WESPs and any surplus arising is discharged to the River Suir. All water emissions from the toilets and canteen are treated using two Rotating Biological Contactors on-site. The final effluent is combined with the settlement pond discharge on release.

3.6 Waste

Wastes arising at the plant typically include waste oils, greases, inks, general refuse and smaller amounts of WEEE, fluorescent tubes, batteries, filters, board trimmings and scrap metal. BAT 9.2 concludes that the recovery of trimmed materials as fuel is appropriate. Board trimmings are used to generate heat energy for the process. Wastes are classified into their appropriate categories and removed from site by authorised permitted contractors. There will be no significant change to the overall waste streams following the plant upgrade. During the construction phase and decommissioning of older plant and equipment, there will be a temporary increase in C&D material, scrap metal and general refuse. These again will be removed from site by authorised permitted contractors.

3.7 Water Supply

Water is supplied to the existing mill from wells on site. Water demand for the process may increase as a result of the plant upgrade. The additional water requirements can be provided by the onsite wells. A hydrogeological assessment was carried out and found that there will be no significant impact on existing wells in the locality as a result of the abstraction of this supply from the aquifer.

3.8 Power Supply

Electricity is currently provided to the existing mill on a 38kV supply line from the ESB. The average electrical demand is 4,800 kW and is expected to increase as a result of the requirements of the new efficient dust filters. The existing supply infrastructure is adequately sized to cater for the increase in load.

3.9 Traffic Impact

Logs are delivered to the site by road transport. On average there are approximately 80 deliveries of logs per day. Peak deliveries to the plant can reach 100 trucks per day and there are up to 50 shipments per day of finished product from the factory. These are mainly exported, through Belview and Rosslare ports, or to destinations throughout Ireland. An additional weighbridge will also be installed at the plant entrance to facilitate the efficient movement of weighed goods. This will ensure that there is no build-up of traffic on the lead road to the plant during construction times. Planning permission for the additional weighbridge was received in Oct 2012 (PP 12/346).

3.10 Fire Safety & Emergency Response

Firefighting water is provided from the existing firewater pond on the site. The pond has a capacity in excess of 250,000 gallons of water (BAT 9.3.4). It is linked to a pump house which delivers water to fire hydrants surrounding the plant. There are concrete or tarmacadam paved roads encircling the site with numerous opportunities for u-turning. Access to the site is excellent and SmartPly have a team of trained fire fighters in house. There are two

Emergency Holding Tanks on site, each with a capacity 2,500m^3. In the event of a fire or spill, storm drains can be diverted to the Emergency Holding Tanks where fire water or spilt material can be contained. As part of the EMS comprehensive emergency response procedures are in place to deal with potential emergencies and incidents.

4. Project Construction

Planning permission for the upgrade has been granted by Kilkenny County Council in 2010. During this time, SmartPly consulted with local residents in the area and permissions were granted without objections. SmartPly intends to continue to consult with local residents and intends to be proactive in seeking solutions to any issues and concerns raised by local residents.

In accordance with the requirements of the planning permission SmartPly will take steps to protect the environment during the construction phase of the project. During construction phase, all operations shall be carried out in a manner such that noise and air emissions will not result in significant interference with the environment beyond the site. The finishing of the building extension will also match the existing building, which currently blends with the surrounding environment.

It is anticipated that building works will commence in Q4 2014 with new plant equipment installation commencing in Q3 2015 to allow for a start-up date in Q1 2016. Production will cease for a period of approximately three weeks during the changeover to new line equipment.

5. Employment

One of the primary aims of the investment is to ensure the future of the SmartPly OSB business and thereby protect the jobs of those currently employed. There will be no significant change in employment as a result of the plant upgrade. The project will help to maintain current employment, both direct and indirect, which the factory supports. Significant employment will also be generated during the construction and installation stages.

6. Glossary of terms

EHT – Emergency holding tank
FG – Finished goods
LPF – Liquid phenol formaldehyde
mbgl – meters below ground level
MDI – Methylenediphenyldiisocyanate
OSB – Oriented strand board
WESP – Wet electrostatic precipitator