

**ARPAE**  
**Regional Agency for Prevention, Environment and Energy of Emilia - Romagna**

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**Administrative acts**

Executive Determination: No. DET-AMB-2017-4621 on 04/09/2017

Subject: AUTHORIZATION TO MODIFICATION ACCORDING TO ART.208 of  
D. LGS. 152/2006 - S.A.BA.R.SPA LOCATED IN THE MUNICIPALITY  
OF NOVELLARA

Proposal: No. PDET-AMB-2017-4837 on 04/09/2017

Adopting department: Authorizations and Concessions department of Reggio Emilia

Adopting manager VALENTINA BELTRAME

On the day September 4<sup>th</sup> 2017 at the office in P.zza Gioberti, 4, 42121 Reggio Emilia, VALENTINA BELTRAME, Authorizations and Concessions department of Reggio Emilia, agrees to the following.

Document: 19908/2017

**Subject:** Authorization to modification according to art.208 of d. lgs. 152/2006 to the firm S.A.BA.R.PA located in the municipality of Novellara in Via LEVATA, 64 (tax identification number 01589850351) to modify the recovery operation at the site **R3** known as "Polo Tecnologico", and located in the municipality of Novellara in Via Levata, 64 and in the municipality of Cadelbosco di Sopra.

Considering:

- Art. 16 paragraph 2 of Regional Law no. 13/2015 which states that the functions of authorization in the matters referred to in Article 14 (1) (a), (b), (c), (d) and exercised by the Provinces under regional law, are exercised through the Agency Regional for Prevention, Environment and Energy (ARPAE).
- the deliberations of the Regional Council no. 2173/2015 approving the organizational structure of the Agency and 2230/2015 laying down the rules for the exercise of the functions of same as from 1 January 2016;
- authorization under art. 208 of Legislative Decree 152/2006, issued by the Province of Reggio Emilia to the company S.A.Ba.R. spa with registered office in the Municipality of Novellara in V. Levata 64, with Act No. 43431 on 7/8/2015 for the management of the site site in the Municipality of Novellara in Via Levata. 64, to execute the following:
  - **D15** Preliminary deposit before any of the operations referred to in points D1 through D14 (excluding temporary storage at the place where they are produced, prior collection), of Urban waste, Special Non-dangerous waste and Dangerous Special waste;
  - **R3** Recycling / recovery of organic substances which are not used as solvents (including composting and other biological transformations), of Urban waste, Special Non-dangerous waste;
  - **R13** Accumulation of waste for submission to any of the operations indicated in points R1 through R12, of Urban waste, Special Non-dangerous waste and Special Dangerous waste;
  - **R12** Exchange of waste to undergo one of the operations indicated in points R1 through R11, of Urban waste, Special Non-dangerous waste.
- the executive agreement no. DET-AMB-2016-1465 of 16/5/2016 issued by ARPAE-SAC to the company S.A.Ba.R. spa inheriting the modification of this authorization n. 43431 dated 7/8/2015 concerning the implementation of a dedicated drainage system dedicated to the waste management facility ("Polo Tecnologico"), which is diverted in public sewerage, concerning the updating of the R3 production of the "chippings of wood "and modification logistical waste management exerted in the existing "warehouse for the exploitation of dry waste";
- the executive agreement no. DET-AMB-2016-1806 of 13/06/2016 issued by ARPAE-SAC to the company S.A.Ba.R. spa inherent in the modification of the above authorization, with which replaces the attachment to the aforementioned authorization n. DET-AMB-2016-1465 of 05.16.2016, with the new attachment named 1B;

- the executive agreement no. DET-AMB-2017-1577 of 24/03/2017 issued by ARPAE-SAC to the company S.A.Ba.R. spa concerning the modification of this authorization, concerning the remodeling of the R13 and R3 activities of wood waste, by authorizing the operation of the R3 operation in the S12b placement, located in the part of the plant ("Polo Tecnologico") SAbA .R. spa located in the municipal territory of Cadelbosco di Sopra;

Given that S.A.Ba.R. spa with note n. 71 / SS of 24/03/2017, acquired the ARPAE protocol no. 3522 dated 28/03/2017, submitted a screening application pursuant to art. 9 of the RV.9 / 1999 on the project "Modifications to the R3 Recovery Facility of the Technological Pole of S.A.Ba.R. spa "for the increase of the total tonnage for recovery R3 from 50,000 t / a to 120,000 t / a (of which 90,000 t / a of wood, 60,000 t / a of paper and 10,000 t / a of plastic) the inverse of the activities previously carried out in the area occupied by the S10a paddle with those carried out in the area occupied by the S10b pitch to contain the dust diffusion generated during the 'operation of the wood shredding. The screening procedure ended with the exclusion from intervention EIA procedure proposed by the company, not implying the same, significant negative impacts on the environment, as approved by Regional Council Resolution n.1162 Emilia Romagna of 02/08/2017.

In view of the request under art. 208 of Legislative Decree 152/2006, acquired under the ARPAE Protocol No. 7998 dated 05/07/2017, of the SAbA.R Spa Company concerning the screening project for "Changes to the **R3** Recycling Plant of the Polo Technology of SAbA.R. spa "site in the municipality of Novellara in Via Levata n. 64, and in the commune of Cadelbosco Sopra, as a modification of the waste management activity already authorized by the aforementioned acts.

The plant called Polo Tecnologico is composed of: "ecological Platform" (which includes the "warehouse for the exploitation of dry waste"), "S12 Pitch" and "wastewater storage tank", and develops as follows:

The "S12b Pitch", where the **R3** wood activity is located, in the municipality of Cadelbosco di Sopra, is surveyed on the cadastral plot of the municipality of Cadelbosco di Sopra on sheet 5, maps 48, 49 and 20;

The "ecological platform" (which includes the "warehouse for the exploitation of dry waste") in which the R3 wood, R3 paper, R3 plastic activity is carried out, is instead censused on the inventory of the Novellara municipality on sheet 45, map 103;

The "wastewater storage tank" collecting wastewater, managed as waste, generated by the activities carried out in Polo Tecnologico, is sensed on the landfill of the municipality of Novellara on sheet 45, map 93, sub 6;

The request entails:

- A. the installation within the "warehouse for the exploitation of dry waste" of a septum for the separation of cardboard and cardboard coming together from separate collection,
- B. the reversal of the activities previously carried out in the area occupied by the pitch S10a with those carried out in the adjacent area occupied by pitch S10b,
- C. the inclusion of the R12 treatment of bulk waste collection and shredding identified by code CER 200307, in accordance with what the Emilia Romagna Region states in D.G.R. 2218 of 13/12/2016, concerning the methodology for determining the percentage of separate collection of urban waste. It should be noted that this request was not evaluated under the

screening procedure, since it is not subject to the procedure (Operation R12 in Annex C of Part IV of Legislative Decree 152/2006).

the increase in total tonnage, of non-hazardous Urban and Special Waste, recovered by operation R3 Recycling / recovery of unused organic substances such as solvents (including composting and other biological transformations) ranging from 50,000 t / a to 120,000 t / a, without modifying the amount of put into the functional reserve of the operation (instant storage) R3 carried out in the plant called "Polo Tecnologica" as summarized below:

### **Operation R3**

- Maximum daily planting capacity: 60 t / h x 8 hours / day = 480 ton / day for the press
- Working days: 300 days / year
- Maximum daily handling potential: 480 ton / day
- Maximum annual treatment potential: 120,000 tons / year - 150,000 cubic meters per year

There is no increase in hours and workdays compared to what is already authorized, but an increase in actual hours and actual working days is anticipated compared to what has already been done in the recovery facility.

For the R3 operation of the wood waste, the three shredders work alternately between them and that the screen SM720, located in the S12b pitch, works out the wood leaving the treatment, so the maximum potential of the R3-wood line is 60 t / h.

For the R3 part of the paper / cardboard cartridge is installed within the "warehouse for the exploitation of dry waste", a separator paper and cardboard separator coming together from separate collection to improve the phases of selection and increase the recovery of these fractions (decelerator screen, powered by electric power).

#### Noting that:

- the plant is not subject to an Integrated Environmental Authorization;
- the company, for the management of the current plant, has obtained EMAS registration certificate no. IT-000211 of 12/5/2004, re-confirmed on 3/7/2015, valid until 21/06/2018;

#### Acknowledged that:

proceed with a re-release of the contents of the act n. DET-AMB- 2016-1465 of 16/05/2016 and Act no. DET-AMB-2017-1577 of 24/03/2017 and insert in this document an updated description of the activity carried out by SABAR SP in the "Polo Tecnologico", for easier understanding of the situation with the changes requested by the Company, as shown below:

### **DESCRIPTION OF THE ACTIVITY**

Waste management operations carried out in the "Polo Tecnologico" of SABAR SPA are reported below with their potential values:

#### Operation R3

- Maximum daily planting potential: 60 t / h x 8 hours / day = 480 tons / day for the press
- Working days: 300 days / year
- Maximum daily handling potential: 480 ton / day
- Maximum annual treatment potential: 120,000 tons / year - 150,000 cubic meters per year
- Functional instant storage: 480 ton - 600 mc / day

#### Operation R12:

- Maximum daily planting potential: 35 x 8 = 280 ton / day

- Working days: 300 days / year
- Maximum Daily Treatment Potential: 280 ton / day
- Maximum annual treatment potential: 10,000 tons per year - 12,500 cubic meters per year
- Functional instant storage: 480 ton - 600 mc / day

Operation R13:

- Instant maximum storage: 16,697 tons - 76,796 cubic meters
- Maximum annual storage: 72,460 tonnes per year - 194,410 cubic meters per year

Operation D15:

- Instant maximum storage: 1,661 ton - 1,656 cubic meters
- Maximum annual storage: 21,395 tonnes per year - 21,075 cubic meters per year

The total waste managed with operations R3, R12, R13, D15 is as shown in the attachment 1D "Waste Recovery and Recovery Operations Framework" to this Act, which summarizes the types and quantities of waste identified by single code CER, that the Company is authorized to manage the plant, with the indication of the relevant areas (areas and pitches) where recovery operations take place;

The recovery activities carried out in the plant, called "Polo Tecnologico", by the company, are summarized below:

Operation R12 involves the sorting, selection and subsequent packing of waste by pressing. Activities carried out within the "storage for the exploitation of the dry fraction", the polystyrene is worked in a dedicated press, also located inside the warehouse. After treatment, the waste results into a refined waste. The "storage for the exploitation of the dry waste" has been expanded (as already envisaged in the Authorization Act of the Province of Reggio Emilia No. 8655 of 17/02/2015) and the Company has sent the relevant Certification Certificate, drawn up by competent technician on 04/03/2016, with a note dated 03/05/2016, acquired under the ARPAE protocol no. 4695 on 05/05/2016.

In operation R12, the waste identified in CER 20 03 07 "bulky waste" is included, without modifying both daily and annually authorized quantities. The project is expected to carry out the operation R12 as follows: S10a will be the R12 recovery operation, including the new rejection (CER 200307), and the R3 operation. For putting in a functional reserve (instant storage) it takes place in heaps on the S10a pitch, serving the R3 and R12 treatment activities. The activity will be carried out with the following management arrangements: the use of temporary separation elements, with physical separation of areas serving the various activities by using new plastic jersey, and, at each area 'affixing of mobile signs, indicating the activity being carried out. For shredding, the shredder identified with no. 1 is already authorized, used alternatively for the R3 process for the production of chips and adjusters in the same S10a pitch. The shredder, at the end of the machining cycle R3, before being used for the operation R12, is subjected to washing and vice versa. The quantities of waste covered by R12 remain unchanged at 10,000 tonnes per year and the quantities of 480 tonnes which have already been authorized for storage (instant storage) remain unchanged.

The temporary storage of waste products is carried out inside boxes or containers, where a single type of waste is disposed at a time, with signs indicating the CERs inside. In case the containers are no longer used for the same types of waste, they will be washed and thoroughly cleaned in order to avoid any contamination from the waste that is subsequently stored.

**Operation R13**

is carried out in the "Ecological Platform" (S2, S3, S5, S6a and S6b, S7, S10b, S11) in the area of the "Polo Tecnologico" located in the municipality of Novellara, as per planimetry of the "Ecological Platform" rev. June 2017 and in the S12a pitch, in the "Polo Tecnologico" area, located in the commune of Cadelbosco di Sopra. Waste is stored in boxes, bags, crates, grids, containers or heaps, waiting to be handed over to the authorized internal or external recovery facilities.

**Operation D15** is expected to hold:

- solid wastes in boxes or heaps;
- waste liquids in the "waste water storage tank" limited to the transitional period preceding the activation of drainage in public sewerage or, for a precautionary order, for maintenance phases or other necessary interventions.

**Operations R3** includes an annual waste amount of 120,000 tonnes per year for all types of treated (paper, plastic, wood), without modifying the quantity of storage (instant storage) authorized at 480 tons per day as summarized in the following table:

Operation	Quantity Snapshot		Annual Quantity	
	Mc	Ton	Mc	Ton
Total R3 Urban waste and special non-dangerous waste	600	480	150.000	120.000

In respect of the total quantity, the quantities for each waste category (paper, plastic, wood), may be a maximum of those reported in the following table:

Operation	Quantity Snapshot		Annual Quantity	
	Mc	Ton	Mc	Ton
R3 Wood - Special Non-dangerous waste	600	480	112,500	90,000
R3 Wood - Urban waste				
R3 Paper - Special Non-dangerous waste	600	480	75,000	60,000
R3 Paper - Urban waste				

R3 Plastic - Special Non-dangerous waste	600	480	12,500	10,000
R3 Plastic - Urban waste				

**Operations R3**, also referring to the areas and zones (zone A, zone B, zone C, zone D, zone E) identified in the plan (Attachment 1 to the question) of the "warehouse for the exploitation of dry waste" dated March 2017, include:

### **1. Waste recovery of paper and cardboard using R3 operations**

Recycled waste identified to CER 150101, 150105, 150106, 191201 and 200101 for the production of products (secondary raw materials - m.p.s) conforming to DM 05/02/1998 (point 1.1. 4b of DM 05/02/1998), with a maximum treatment potential of 35 t / h for 8 hours per day and 300 days per year and a quantity of treated waste per year of 60,000 T / A, through the following steps :

- waste disposal in area S11 or directly from outside plant, after weighing,
- possible storage at service in area S10a,
- transfer of waste to zone A,
- mechanical selection in zone A,
- screening with decartoner screen, operation carried out inside the "warehouse for the exploitation of dry waste",
- Manual selection on the press feeding belt,
- packing using a press
- deposit of products obtained (secondary raw materials - m.p.s) in zone B or outside of the warehouse, in areas identified from signs and not subject to waste storage. External storage is carried out in such a way as to avoid the direct contact of the m.p.s. with the ground.

### **2. Waste recovery of plastic using R3 operations**

#### **2.1 Polystyrene**

Waste recovery identified in CER 150102, 191204 and 200139, for the production of products (secondary raw materials - m.p.s) conforming to D.M. 05/02/1998 (point 6.1.4 of DM 05/02/1998), with a maximum processing potential of 0.2 t / h for 8 hours day and 300 days / year, and the amount of waste treated per year to a maximum of 10,000 t / a (cumulative quantity of all the plastic waste fractions), through the following steps:

- waste incineration in S5 area, S11 area or directly from outside plant, after weighing,
- possible storage at service in area S10a,
- transfer of waste inside the warehouse in zone D,
- Manual selection in zone D,
- crushing and compaction of waste by the machine in zone D,
- deposit of products obtained (secondary raw materials - m.p.s) in zone E or outside of the warehouse, in areas identified from cartons and not subject to waste storage. External storage is carried out in such a way as to avoid the direct contact of the m.p.s. with the ground and, use waterproof canvas or big bags to protect the products from any meteoric water.

#### **2.2 Plastic waste**

Recovering plastic waste such as rigid polystyrene, hdpe containers, cassettes and polypropylene big bags, poly coiled coils, PET, CD / DVD, etc .. identified to CER 020104, 070213,150102, 160119, 170203, 191204 and 200139 for production of products (secondary raw materials - m.p.s) conforming to DM 05/02/1998 (point 6.1.4 of DM 05/02/1998) with a maximum treatment potential of 35 t / h for 8 hours day and 300 days / year and amount of waste treated per year up to 10,000 t / a (cumulative volume of all plastic waste fractions) through the following steps:

- waste incineration in S5 area, S11 area or directly from outside plant, after weighing,
- transfer of waste to S10a,

- Manual selection in zone S10a
- waste disposal in the mobile plant in zone S10a, by means of work (shredder) hired ad hoc,
- storage of secondary raw materials stored in big bags obtained in zone E or outside the warehouse, in areas identified from cartons and not subject to waste storage. External storage is carried out in such a way as to avoid the direct contact of the m.p.s. with the ground.

### **3. Waste recovery of wood using R3 operations**

#### **3.1 Production of chippings conforming to UNI EN ISO 17225-1 and UNI EN ISO 17225-4 standards from wood waste** (including casting and pruning)

Recover waste identified to CER 200138, 200201 and 191207 for the production of chipboard in accordance with UNI EN ISO 17225-1 and UNI EN ISO 17225-4, with a maximum processing power of 60 t / h for 8 hours day and 300 days / year and the amount of waste treated per year up to 90,000 t / a (cumulative volume of all waste wood fractions), through the following phases:

- waste disposal in zone S10b, zone S12a or directly from outside plant, after weighing,
- waste transfer in zone S10a or zone S12b,
- manual or mechanical selection for the removal of any impurities in the S12b or S10a pitches,
- shredding with a mobile shredder in plots S12b or S10a,
- possible screening in S12b.

At the end of these processes, wood chips are produced in accordance with the technical standards UNI EN ISO 17225 1 and UNI EN ISO 17225 4 which are stored in boxes.

#### **3.2 Production of simple non-composted vegetal fertiliser conforming to D.Lgs.75/2010 from wood waste** (including cuttings and pruning)

Waste Recovery identified in CER 191207 and 200201 for the production of simple non-composted vegetal fertiliser according to Legislative Decree 75/2010, with a maximum treatment potential of 60 t / h for 8 hours per day and 300 days per year; and the amount of waste treated per year up to 90,000 t / a (cumulative volume of all waste wood fractions) through the following phases:

- waste disposal in zone S10b, zone S12a or directly from outside plant, after weighing,
- waste transfer in zone S10a or zone S12b,
- manual or mechanical (spider) selection for the removal of any impurities in the S10a or S12b pitch,
- shredding by means of a movable shredder positioned for this purpose in platoon S10a or S12b,
- possible screening in S12b.

At the end of these processes, simple vegetal non-composted fertiliser conforming to D.Lgs. 75/2010 is stored in boxes.

To summarize, the following products / materials are obtained from operation R3:

- Paper and Cardboard, in accordance with the provisions of section 1.1.4b of DM 5/2/98 and the ANCI CONAI Agreement and the technical standards of the sector (eg UNI-EN 643);
- Plastics, conforming to the requirements of section 6.1.4 of DM 5/2/98 and the ANCI CONAI Agreement and the technical standards of the sector (eg UNIPLAST 10667);
- Wood (wood chips), in accordance with UNI EN ISO 17225-1 and UNI EN ISO 17225-4;
- Wood (simple non-composted vegetal fertiliser) in compliance with Legislative Decree 75/2010.

All waste products from the selection of the various **R3** recovery operation are managed under a "temporary storage" (Legislative Decree no. 152/2006, art. 183, letter bb).



## **DRAINAGE**

The project authorized by ARPAE Act no. DET-AMB-2016-1465 of 16/05/2016 (Tav. UNICA, December 2015) provides that wastewater is conveyed to the "waste water storage tank", and it includes:

- Wastewater washing the means of collecting waste on the territory, including the waters that drip from wet vehicles once parked inside the workshop and the media shelter. These waters are conveyed into the decanting tank adjacent to the warehouse, to be subsequently pumped into the "waste water storage tank".
- Black waters (household waste) from the sanitary facilities of the offices and service buildings conveyed to the decanting tank adjacent to the workshop storage facility - for subsequent dispatch via a pump to the "waste water storage tank".
- First rainwater of the equipped ecological platform coming from the square adjacent to the "warehouse for the exploitation of the dry waste." These waters are conveyed into the first rainwater tank and sent here with a pump inside the rolling tub for subsequent dispatch via pump to the "waste water storage tank." When the first rain bowl is full, the rest of the water (second rains) arriving in the queue to those of the first rain, finding the full tank, deviate from a special hydraulic tub of the bathtub of first rain for drainage in surface waters.
- The wastewater runoff of the fully equipped ecological platform, in sectors from S5 to S11, are delivered with a special collection network in the laminating tank for subsequent pumping to the waste water tank. The wastewater runoff S12 of the pitch, divided into S12a and S12B, part of the "Technological Pole" in area located in the territory of the neighboring municipality of Cadelbosco di Sopra, is collected from the existing perimeter ditch in the ground, and then raise by means of pump to the same "waste water storage tank". The perimeter ditch is contoured, compacted and protected on the outside by an earthing on the ground. The whole area, therefore, maintains the interception system and outflow of water existing in perimeter, with recovery of the same wastewater storage tanks at service of the entire area of technology.

In the present state and until the sewage collector is installed and tested in public sewerage, such effluents from the "waste water storage tank" are handled as liquid waste and delivered to authorized disposal companies. In addition, such waters may be contained in the "waste water storage tank", also for the period of time after the realisation of the induction manifold in the public sewerage, in case of precautionary maintenance or other interventions that would affect the drainage activities of the public sewerage.

In the report and planimetry (Tav. UNICA, December 2015), attached to the application filed at no. 63740 of 18/12/2015 (and authorized by ARPAE No. DET-AMB-2016-1465 of 16/05/2016) illustrates the collection of rain and meteoric water (in blue / light blue), as confirmed and updated by TAV. 4 "General plan for water management technology networks" dated June 2017, attached to this application (in the blue / blue planimetry). The waters are conveyed to the outer perimeter collector located south of the S.A.Ba.R. S.p.A. system, which is discharged directly into the Sissa cable through exhaust No. 6. These sites are solely dedicated to the transit of vehicles, the wastewater is not subject to discharge according to DGR n. 286/2005 and consist of:

- A. Water from wheel washing

- B. Water collected in the pit under the press inside the "warehouse for the exploitation of dry waste". Here come out any outbreaks from the stored waste or from waste packaging process.
- C. Black waters (household waste) coming from the sanitary facilities of the warehouse.
- D. drainage water from basins 13-16, which is collected with a special net placed at the bottom of the west and the east slope of the landfill body. This net does not have discharge points of surface waters and it is itself a collection and storage point for wastewater, as specified in the report attached to the application for modification of the Unique Authorization. The water is collected by artifacts to specific holds the autobots.
- E. Any water collected in areas S1 - S2 - S3 - S4.

The drainage water from basins 13-16 is expected to be collected directly from the holds of the landfill basins and conveyed as waste to offsite facilities.

The drainage waters flowing over the landfill basins roofs n. 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17A - 18A - 17B - 18B are collected perimeter ditches and conveyed in 'Collettore Aque Basse Reggiane'(CABR) in the drains 2 and 4, and into "cavo Sissa" in drains 1, 3A, 3B, 3C and 3D as indicated in the table attached dated 17/02/2016, and acquired by ARPAE according to prot. 1666 of 18/02/2016 (confirmed in the updated tav. 4 "General Planimetry with Indication of Water Management Technologies" dated June 2017) and being meteoric waters collected from the drains on the roofs, are not subject to authorization.

The drainage water from the roof of basins 17A – 18A – 17B – 18B are conveyed directly into "cavo Sissa" through the drains 3B e 3C, and into CABR through drain 2, as indicated in the table provided with the firm supplements dated 17/02/2016 (and acquired by ARPAE according to prot. 1666 of 18/02/2016 (confirmed in the updated tav.4 "General Planimetry with Indication of Water Management Technologies" dated June 2017). Being meteoric waters that run through the superficial layer of the roof (of the cover of the basins) and flow sideways to it ending in the drain, are not are not subject to authorization, as aforementioned.

## EMISSIONS

in order to contain widespread emissions during the storage and processing of the waste treated within the ecological platform, due to particular weather conditions such as strong winds or prolonged drought, it is expected to spray water onto the waste before being processed.

The summary of emissions, including new emissions, has been updated: emission ET2 attributed to the shredder conventionally indicated as no. 2, for the production of "chipboard"; emission ET3 attributed to the shredder conventionally indicated as no. 3, for the production of "simple non-composted vegetal fertiliser"; emission EVI sifted and conventionally indicated with number 1. The classification (EC) of the existing shredder is replaced by the new classification ET1 emission (attributed to the shredder conventionally referred to as n. 1).

EMISSIONS SUMMARY TABLE

emission point No.	origin	payload (nm3/h)	emission duration (No.)	Frequency in 24 h (no.)	type of pollutant	concentration of pollutant (mg/Nm3)	T (°C) and other conditions	type of abatement equipment.	Periodicity of self-checks
E8	Inhalation of welding fumes	1300	irregular		dust	<10	T* < 60°C	/	(1)
E9(2)	Inhalation of exhaust gas	1300	irregular		hardly relevant		T* < 500°C	/	

ET1	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
ET2	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
ET3	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
EVI	sieve engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
(1) For such issue, given its periodic operation, the Company is exonerated from the performance of periodic self-checks		
(2) Limit values refer to normal conditions (273.15 ° K and 101.3 kPa) and dry volume		

The following types of emissions were analyzed in the preliminary environmental study submitted for the assessment of potential impacts on the atmosphere:

- emissions resulting from treatment operations such as crushing, screening, pressing and handling of materials;
- emissioni derivanti dal traffico dei mezzi che trasportano i rifiuti in ingresso e i materiali in uscita dal trattamento.

Compared with the emissions from the treatment operations it has been shown that:

- compacting and shredding of the polystyrene inside the press does not cause any emission, since the processing is confined within the machine itself;
- paper and cardboard pressing takes place in the press located inside the "warehouse for the exploitation of the dry waste" without the dispersion of dust outside; the projected screening that is planned to be carried out inside the warehouse can cause dust to be released into the atmosphere (however confined within the warehouse), which can be restricted by operators by spraying the material prior to its introduction into the machinery, if needed and depending on the characteristics of inert waste that needs to be treated;
- regarding emissions into the atmosphere due to the shredding of the cellulose wood fraction, a preliminary study on diffusion from the particulate matter source (PM10) was carried out, accounting for the joint treatment of Cadelbosco and in the municipality of Novellara. For the study it emerges that the contribution of the project activity is compatible with the values for the air quality indicated in Legislative Decree 155/2010;

Considering the increase in expected vehicular traffic (from 37 vehicles per day to 89 vehicles / day) as a result of the increase in tonnes of waste, a provisional assessment study was carried out, proving that the impact of the project activity will not be significant.

## **NOISE**

### Noise and Vehicular Traffic

As far as traffic is concerned, it emerges that the traffic recorded between 2001 and 2007 at the plant site is mainly due to the landfill activity nearby, and was fairly more substantial than the one planned for the project.

It is therefore not considered that the estimated increase of 37 vehicles / day to 89 vehicles / day, due to the quantitative increase in operation in R3 in the "Technological Pole", could have significant impact on the infrastructure. This is because the traffic peaks recorded in past have never been

critical, as recently the Bagnolo / Novellara variant has been implemented, which allows optimization of traffic management to the plant site, avoiding vehicles to transit in residential areas. The acoustic testing of the existing plant was carried out by a continuous acoustic test in June 2017 (following the setting up of the treatment area "S12b" in the municipality of Cadelbosco di Sopra). The investigation confirmed that the acoustic compatibility of the activity in examination, with respect to the settlement area, is compliant with the absolute limits inside the firm's boundaries and the non-applicability of the differential criterion at the detected receiver.

With regard to the activities carried out at the "S10a", "Polo Tecnologico" pitch in the Novellara municipality, it appears that the only sensitive receptors present around the processing areas are located more than 500 meters away and acoustic monitoring carried out in February 2016, as well as the previous ones, show full respect for daytime absolute limits and daytime differential limits at the receptors identified.

### **FIRE SAFETY**

The company is in possession of C.P.I. issued by the National Guard Fire Department, Provincial Command of Reggio Emilia on 25/03/2016, valid from 22/02/2016, among other things, for the activities carried out within the "warehouse for the exploitation of the dry waste" and for paper and plastic storage.

For the storage and processing activities carried out in Pitch S12 of wood waste, as shown by documentation, the Company declares that the activity does not fall under those subject to fire regulations, open and distant more than 100 meters from the exterior buildings. However, all operating machines are equipped with fire extinguishers to intervene promptly in case of fire.

The updated documents with the changes requested by the Company are summarized as follows:

1. Plan of the "warehouse for the exploitation of the dry fraction" dated March 2017.
2. Block diagram of activities R3 and R12. Date June 2017 (with insertion of screen cartoner in the line R3 of the paper and insertion of the line R12 for the CER 200307),
3. Plan of the "ecological platform" dated June 2017, (with updated layout of the activities taking place in the two parts of the S10 pitch (S10a and S10b) and with insertion of the CER 200307 in S10a.
4. TAV. 4 - General layout with indication of technological water management networks dated June 2017, which updates the plan "Tav. UNICA, December 2015 " already authorized in act n. DET-AMB-2016-1465 of 16/05/2016.

Noted that:

- the company sent, with note n.102 / SS dated 14/04/2017, to the ARPAE protocol no.4454 of 18/04/2017, the testing of the S12 pitch as provided for in the prescription no. Chapter 18 Waste management requirements of Determination No. DET-AMB-2017-1577 of 24/03/2017;
- the company sent with note n.156 / SS of 22/06/2017, taken at the ARPAE protocol no. 7453 of 22/06/2017 the acoustic test (report dated June 2017) as required by prescription no. Chapter 5 Requirements concerning the Acoustic Impact of Determine DET-AMB- 2017-1577 of 24/03/2017, including the date of commissioning and commissioning of ET2, ET3 and EV1 emissions during the day 06/22/2017;

→ the company has attached to the application the above mentioned acoustic test report, together with the Acoustic Monitoring Report dated February 2016, as required by Authorization No. DET-AMB-2017-1577 of 24/05/2017.

And that:

→ the site known as "Polo Tecnologico" has undergone the following procedure:

- ◆ Screening D.G.P. n. 360 of 29/11/2011 - change recovery activity R3
- ◆ Screening D.G.P. n. 243 of 12/9/2012 - increased quantity recovery activity R3.
- ◆ Screening on the project called "Changes to the Recovery Facility R3 of S.A.BA.R. Polo Tecnologico S.P.A. "that with Regional Council Resolution no. 1162 of 02/08/2017 excluded from the V.I.A. the project itself, with prescriptions;

Considering the favorable outcome of the Services Conference of 24/08/2017 for the approval of the modifications of the application filed by the firm;

Having received favorable approval by the Public Health Department of the AUSL of Reggio Emilia, 2017/0078054 dated 25/08/2017, acquired under the ARPAE Protocol No. 9886 on 28/08/2017;

On the proposal of the Head of Procedure according to the results of the inquiry;

Considering the Legislative Decree 152/2006 and in particular Article 208;

#### IT IS DETERMINED

A. to authorize the modifications proposed by the company S.A.Ba.R. spa, with registered office and waste management facility, called "Polo Tecnologico", located in Novellara, Via Levata no. 64, and in the neighboring municipality of Cadelbosco di Sopra, and to acknowledge that the Company is therefore authorized to carry out:

- **R3** Recycling / recovery of organic substances which are not used as solvents (including composting and other biological transformations), of Urban waste, Special Non-dangerous waste;
- **R12** Exchange of waste to undergo one of the operations indicated in points R1 through R11, of Urban waste, Special Non-dangerous waste;
- **R13** accumulation of waste for submission to any of the operations indicated in points R1 through R12, of Urban waste, Special Non-dangerous waste and Special Dangerous waste;
- **D15** Preliminary deposit before any of the operations referred to in points D1 through D14 (excluding temporary storage at the place where they are produced, prior collection), of Urban waste, Special Non-dangerous waste and Dangerous Special waste;

B. to acknowledge that the description of the waste management activity carried out in the plant is as stated in the preamble to this Act in the ACTIVITY DESCRIPTION and **Attachments 1D "Waste Recovery and Recovery Scheme" and 2B " activity R3 and R12 "**, which replace those set out in the authorization granted by Act no. DET-AMB-2016-1465 of 16/05/2016 and subsequent act no. DET-AMB-2016-1806 of 13/06/2016 and subsequent act no. DET-AMB-2017-1577 of 24/03/2017;

C. to acknowledge that in carrying out the business, the Company is obliged to comply with the prescriptions contained in the Regional Council Resolution no. 1162 of 02/08/2017 on the screening procedure

D. to acknowledge that the coordinated text and updated prescriptions, also referring to what has been already acquitted by the Company, replacing as reported in the authorization issued by deed No. DET-AMB-2016-1465 of 16/05/2016 and subsequent act no. DET-AMB-2016-1806 of 13/06/2016, and subsequent act no. DET-AMB-2017-1577 of 24/03/2017, which also takes into account the requirements set forth in the Regional Council Resolution no. 1162 of 02/08/2017 on the above-mentioned screening procedure, is as follows:

#### **Requirements regarding municipal licenses and permits**

- 1) The provisions of the acts and procedures of the territorially competent municipalities in the field of construction must be complied with, without prejudice to all sectoral provisions. In particular, as of letter of 12/02/2016 of the Municipality of Novellara acquired to PGRE no. 1750 of 19.02.2016, the restoration of the road surface as a result of the operations envisaged in the project of construction of the sewer must be performed in an accurate manner. Concerning the construction of the sewer pipe must be assured the compliance with the requirements of the regulations in force in the field of earth and rock excavation.

#### **Acoustic Impact Requirements**

- 2) Installing new sound sources or enhancing the potential of the source sources must be evaluated in advance.
- 3) The Company must ensure the proper operation of the plant and equipment at all times and that, with the necessary periodicity, the necessary maintenance to keep the noise below the prescribed limits is carried out.
- 4) Regarding the sound sources, provided for to the amendment request obtained under Protocol No. 7989/2017 on 05/07/2017, the acoustic mitigation works must be maintained and functioning.
- 5) The activity must be carried out in accordance with the documentation submitted in the attachment to the application and attached to the application for the activation of the screening procedure as reported in the Regional Council of Emilia-Romagna n . 1162 of 02/08/2017.

#### **Requirements for emissions into the atmosphere**

- 6) The existence and maintenance of the best available technology must be ensured.
- 7) Respect for the limits in scope and concentration given in the following table (summary of emissions) must be verified by the management of the plant with the periodicities indicated therein:

emission point No.	origin	payload (nm3/h)	emission duration (No.)	Frequency in 24 h (no.)	type of pollutant	concentration of pollutant (mg/Nm3)	T (°C) and other conditions	type of abatement equipment.
E8	Inhalation of welding fumes	1300	irregular		dust	<10	T°< 60°C	/
E9(2)	Inhalation of exhaust gas	1300	irregular		hardly relevant		T°< 500°C	/
ET1	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.						

ET2	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
ET3	Shredder Engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
EVI	sieve engine	The emission limits are not set as they are of a lesser emission to the effects of air pollution, according to article 272, paragraph 1 of Legislative Decree 152/5.
(1) For such issue, given its periodic operation, the Company is exonerated from the performance of periodic self-checks		
(2) Limit values refer to normal conditions (273.15 ° K and 101.3 kPa) and dry volume		

- 8) All necessary measures should be taken to avoid dangerous fumes, development of insects and rats. Waste discharge operations must be carried out in such a way to avoid dispersion into the atmosphere and dangerous fumes.
- 9) The continuity of the operation of the capture plants must be guaranteed through periodic maintenance of which to keep records.
- 10) Dust emissions resulting from waste trituration carried out outside the warehouse on the front yard, must be minimized by spraying the waste before treatment.
- 11) For any failure and / or failure of the in-plant emission system, the plant manager must provide:
  - (a) immediately adapt to the operating conditions of the installation in order to comply with the emission limits, verified by means of analytical control to be kept by the Company at the disposal of the control bodies;
  - (b) in the case of exceeding the limits or in the absence of the abovementioned verifications, suspend only to the production cycle interested until the conformity is restored;
- 12) Any abnormality or fault that does not allow compliance with the emission limits must be provided within 8 hours (via fax) to ARPAE and the Municipality; such communication shall indicate:
  - type of action taken (see previous paragraph);
  - the type of processing connected;
  - date and time of reactivation;
- 13) The Manager shall maintain at the facility the original communication regarding the halts, and make it available to the Authority's control for the duration of this authorization;
- 14) In the event of temporary, partial or total interruption of the activity with a consequent deactivation of one or more of the above mentioned issues, the Company is required to give prior notice to the ARPAE Authorization and Concession Facility and ARPAE Territorial Service and from the date of communication the obligation for the same Company to comply with the above mentioned limits and requirements is interrupted in regard to deactivated emissions. It should also be noted that:
  1. In the event that the halt of the emissions continues for a continuous period of more than 2 (two) years from the date of communication, this authorization shall cease to have legal effect with respect to the same emissions;
  2. If the Company intends to reactivate the emissions within 2 (two) years from the date of notification of their deactivation, the Company shall:

(a) give prior notice of the date of reactivation of the plant and its emissions to the ARPAE Authorization and Concession Facility and ARPAE Territorial Service;

(b) from the same date of reactivation, the obligation for the Company to comply with the above limits and requirements regarding the re-activated emissions resumes;

(c) in the case where one or more of the emissions that are reactivated, based on periodic checks are required, the same Company is required to carry out the first self-check within 30 (thirty) days after its reactivation.

#### **Requirements regarding discharges**

15) The requirements for urban-building titles for the construction of sewerage pipelines and its interferences with public and private infrastructures, as well as for the realization and functionality of sewage drainage systems in the public sewerage system purification of urban waste water from Villa Seta, the requirements and indications given in the following documents must also comply with:

15.1 Authorization issued by AIPO with letter no. 32100 on 05/11/2014. to perform traversal sub riverbed with sewer pipes under Canalazzo Tassone, at Via Casaletto (purifier Villaseta, municipality of Cadelbosco di Sopra),

15.2 Authorization No. 22005, issued by the Reconstruction Consortium of Emilia Centrale with note no. HG009252-2014-A of 16/10/2014, for the construction of 4 parallels with sewer pipes PE DE 110 between the municipality of Cadelbosco di Sopra and the municipality of Novellara.

15.3 The following indications must always be observed (ARPA note 8569 of 29/09/2015):

a) With regard to the realization of the sewer in the project and in particular the horizontal drilling technique for jacking the overcoming of roads and canals, it is recalled that the use of any chemical additives such as to determine a change in the composition of bentonite resulting sludge, will impose their prohibition on re-use on site and the obligation to dispose of as special waste,

(b) In the case of surplus quantities, in the case of surplus quantities, their re-use outside the place of production must be in accordance with the relevant provisions in the field;

16) The Company must install appropriate systems and equipment to allow controls by the authorities, of the good functioning of drainage sewerage (sealing pressure) of the wastewater to the public sewerage; this installation must be carried out prior to the testing and the start of functioning of sewerage and it will have to be notified to ARPAE, to the Integrated Water Service Manager, to the Municipalities of Novellara, Bagnolo, Cadelbosco di Sopra, within 15 days.

17) The Firm where to carry out no. 4 annual self-monitoring of wastewater that from the "storage tank wastewater" is entered in the sewer, relatively to the parameters: BOD - COD - Suspended Solids - Surfactants - Phosphorus - Sulfates - Chlorides - Lead - Copper - Nickel - Cadmium. These self-checks must be made available to ARPAE, to the Integrated Water Service Manager, to the Municipalities of Novella, Bagnolo, Cadelbosco di Sopra.

18) Complete sewage disposal must be achieved within 2 (TWO) years from the effective date of authorization no. DET-AMB-2016-1465 of 16/05/2016.



- 19) The testing and commissioning of sewage drainage pipes must be notified to ARPAE, Municipality of Novellara, Municipality of Bagnolo in Piano and Municipality of Cadelbosco di Sopra.

The following requirements must be met for wastewater sewerage and for the management of the sewage system and treatment plants:

- 20) The waste streams in the "waste water storage tank" must consist only of those illustrated in the project authorized by Act no. DET-AMB-2016-1465 of 16/05/2017.
- 21) The maximum annual volume of drainage discharged into public sewerage is fixed at 4,000 mc.
- 22) The maximum permissible limits for effluents in question discharged into public sewer, must respect the limits of Tab. 3 all. 5 of Legislative Decree no. 152/06, into the sewer discharges column with the exception of the parameters indicated below for which derogation respectively to the values:

Parameters	Value	Measuring units
Total Suspended Solids	1000	mg/l
BOD	500	mg/l
COD	1000	mg/l
Phosphorus	40	mg/l

- 23) The inspection well shall be of a regulatory nature and such as to permit a smooth and proper sampling of the reflux. It must be accessible to supervisory authorities and the operator of the public service officers manning checkpoints in accordance with art. 20 of the Regulations for sewerage and sewage treatment.
- 24) An instrument for measuring water from autonomous sources must be installed, which will be placed in a suitable position in accordance with art. 14 of the Sewerage and Purification Service Regulation.
- 25) Determination of the volume downloaded must be objectified by the installation of an appropriately installed discharge counter, by its owner and judged fit by the Integrated Water Service Manager (IRETI).
- 26) The acceptability limits the discharge into the public sewer system outlined above can not in any case be achieved by dilution with water withdrawn exclusively for this purpose.
- 27) It is forbidden, in accordance with the provisions of Art. 16 of the Regulations for sewerage and sewage treatment, drainage of wastewater and other substances incompatible with the biological purification system and potentially damaging to sewage and / or hazardous materials for maintenance personnel.
- 28) The wastewater must be processed for separation of solids and mineral oil before placing into the public sewer.
- 29) The systems used for the treatment of water discharges must be maintained with appropriate periodicity. The documentation relating to ordinary and extraordinary maintenance works must be available for inspection by the competent authority.

- 30) Regular maintenance of the waste collection system and waste water treatment or storage facilities must be carried out. In particular, the pipes and cutters must be cleaned whenever necessary to ensure their efficiency, keeping them away from the residues and avoiding occlusion with subsequent stagnation of liquids.
- 31) Maintenance and maintenance records at refuse collection / treatment plants must be kept and made available to the inspection bodies.
- 32) The sludge produced in the sewage plants (eg Imhoff, ...), may these be predominantly organic or inorganic nature, must be disposed properly according to the relevant regulations and can not be discharged into public sewerage.
- 33) In the event of permanent or partial failure of the sewage collection and treatment system or other problems related to drainage in public sewerage, a timely communication must be made to the Integrated Water Service Manager by fax (currently at no. 0521/248946), indicating the type of failure or problem encountered, the expected time to restore the plant, the methods used to avoid, even temporarily, a discharge of a reflux that does not correspond to the table limits given in the previous paragraph.
- 34) The "waste water storage tank" filling and level monitoring system must be kept in perfect efficiency.
- 35) The company must provide regular cleaning and maintenance of drains, drainage systems, sewage networks, and drainage products (eg Sissa n. 6 on the floor plan) and carry out cleaning and maintenance on the same drainage .
- 36) It is forbidden to drain potentially hazardous or harmful waste into the environment.

Requirements to be observed for the period prior to testing of the sewer delivery of the wastewater collected in the "tank wastewater storage" to the public sewerage:

- 37) In the period prior to the testing and commissioning of sewage drainage pipes, the "waste water storage tank" waste must be treated as waste and disposed off by authorized disposal companies.
- 38) The "wastewater storage tank" emptying frequency, with the provision of appropriate treatment facilities, must be such as to guarantee its effective capacity and continuous functionality for the collection of all waste streams destined for it.

Requirements to manage waste water as waste:

- 39) Continuing with the management already carried out by the company, the wastewater of the wheel wash tank, the water collected in the tank placed inside the "warehouse for the exploitation of the dry waste", the domestic waste water of the sanitary facilities of the extension of the "warehouse for the exploitation of the dry waste " and not related to the "waste water storage tank" and any waste collected from areas S1-S2-S3-S4 must be handled as waste and handed over to authorized companies.
- 40) The drainage water of landfill basins 13 to 16 must be managed as waste and transferred to approved facilities off site.

**Waste management requirements**

Project-related and waste management operations must be carried out in accordance with what is stated in the reports of the project itself, and the subsequent modifications and additions to it in accordance with the following requirements:

- 41) The types and quantities of waste reported for each CER code and the total quantities shown in attachment 1D "Framework for Recovery and Disposal" may be accepted in the installation. For the operation R3, in particular, the total amount of waste treated is 120,000 tonnes / year, with respect to this total quantity, the individual recoverable quantities are at most equal to:
- waste paper up to a maximum of 60,000 t / a,
  - plastic waste up to 10,000 t / a,
  - wood waste up to 90,000 t / a.
- 42) R3 activities may be carried out for 8 hours per day for 300 days, with maximum daily capacity of 480 ton / day.
- 43) R12 activities may be carried out for 8 hours a day for 300 days with a maximum daily capacity of 280 tons / day.
- 44) The R3 recovery operation of paper and cardboard waste must be carried out in accordance with what is stated in the sub-point 1.1.4b attachment 1 to DM 05/02/1998 for obtaining secondary raw materials for the paper industry respondent the specific rules of UNIEN 643.
- 45) The operation of existing R3 recovery of polystyrene foam waste recovery and plastic waste recovery R3 operations shall be carried out in accordance with point 6.1.4 of sub-attachment 1 to DM 5/02/1998 to obtain plastic materials conforming to Uniplast-Uni 10667 specifications and for the production of plastic products in the forms usually marketed.
- 46) Regarding the recovery activity of wood waste, waste incoming to the plant should be checked to avoid that other types of unauthorized waste are present, such as: treated or impregnated wood waste, are not allowed along with those authorized, plastic bags etc. The materials obtained from the wood waste recovery activity R3 must meet technical requirements for the specific purpose and must comply with the existing standards and standards applicable to the corresponding products. Furthermore, their use must not lead to overall negative impacts on the environment or human health. In particular, for the purposes of the cessation of the waste status, pursuant to art. 184-ter of Legislative Decree 152/06: "Wood chips", to be used as biofuels, must comply with the UNI EN ISO 17225-1 and UNI EN ISO 17225-4 technical standards.
- 47) The operation R3 recovery of wood waste (twigs and pruning) must be carried out in accordance with the provisions in paragraph 16.1.2 lett. l) of sub-Annex 1 of DM 5/02/1998 for the purpose of obtaining "simple non-composted vegetal fertiliser" in accordance with Legislative Decree 75/2010.
- 48) The waste of paper and plastic for the production of products and related products, if stored outside the warehouse, must be placed in covered bins or places for less than 10 days, and on a suitable support in order not to be in direct contact with the flooring, and protected from meteoric waters by a special protective cover.
- 49) In the management phase, the company must prepare paper / computerized daily tabs that allow the traceability of the incoming and outgoing waste that indicate:
- a. incoming waste streams in relation to CER codes and quantities;
  - b. the physical destination of waste on storage sites;
  - c. the treatment system to which they are initiated;
  - d. the flows of the materials leaving the treatment plants with the indication of the quantity, the denomination, the deposit and the final destination

- 50) Any materials resulting from treatment operations that are not attributable to the types of recovery authorized must be disposed of at authorized plants.
- 51) The materials and products obtained from the marketing must be accompanied by a specific label on which they are expressly mentioned, in addition to the provisions of the industry standards (eg UNI EN ISO 17225-1 and UNI EN ISO 17225-4)
  - Product name;
  - Origin of the product and its prescribed characteristics;
  - Existing uses with the same characteristics allowed by the specific industry standards.
- 52) The daily amount of waste possibly destined for incineration or co-incineration must never exceed 75 tonnes.
- 53) Waste must be stored in the appropriate spaces provided for this purpose.
- 54) The Company must ensure a periodical cleaning outside of the containment structures (New Jersey) of S6A and S6b pitch, in particular in space place the containment structure and the existing outer wall.
- 55) The management of recovery operations R3 and R12 in pitch S10a and operation R13 in pitch S10b must occur without creating mismatches between different types of waste.
- 56) In order to prevent any odorous incidents, during the periods and situations in which they may be found, the Company must increase the frequency of emptying glass waste from the S6a pitch with the transfer by Authorized Retrieval Companies.
- 57) The Company must make an assessment of the composition of the waste powders consisting of CER 200303 road cleaning residues, by seeking the presence of any carcinogenic chemical pollutants in order to update the risk assessment referred to in D.Lgs. 81/2008. and s.m.i.
- 58) The wetting of the waste identified at the CER 200303 road cleaning residues stored on the S6b pitch and at the time of their handling must be carried out, in order to reduce dust dispersion.
- 59) The company must be in possession of fire safety requirements and certifications.
- 60) Appropriate sinage should be made in order to identify the functional waste storage facilities awaiting treatment R3 and R12 from the R13 storage and storage (temporary storage) of the waste already produced by the R3 and R12 activities pending on another company.
- 61) All waste produced by the recovery operation must be managed under "temporary storage" (Legislative Decree 152/2006, article 183, letter bb).
- 62) The plant must be provided with complete and integrate fences.
- 63) The handling and waste management should be carried out using appropriate equipment at all times, which must comply with the "machinery" Directive (459/1996 DPR and subsequent amendments). The obligation to comply strictly to the Safety and Health Regulations for Workers, with particular reference to the use of "shredders and screeners", must be compulsory and must be accompanied by mandatory CE safety and certification.
- 64) Regarding waste management in S12 pitch, the Company must comply with the project presented to the Municipality of Cadelbosco Sopra (SCIA April 2016) and to what has been agreed upon by the "integration of the agreement under the former art. 11 Law 241/90 and ex art. 18 LR 20/2000 "approved by the City Council resolution no. 38 dated 02/10/2007, registered at Directory no. 45 of 29/12/2016.
- 65) The obligation of scrupulous observance of standards in matter of protection of the health and safety of workers (Legislative Decree no. 81/2008) with particular reference to the use

of shredders and screening machines to be equipped with safety devices and certifications Mandatory CE.

- 66) Within six months of the date of cessation of activities, the environmental restoration of the site must be completed, with the execution of the following works:
- cleaning the area by removing all the waste present and starting it for recovery and / or disposal;
  - elimination of potential environmental risks associated with the maintenance of plant structures.
- 67) In the case of plant changes, must be activated in advance the procedures V.I.A. (Environmental Impact Assessment) or screening, where it fulfills, as a result of these changes, the conditions provided for by Decree. 152/2006.
- 68) At least 15 days before the expiration of the EMAS certification, the company must inform ARPAE Reggio Emilia (SAC and Territorial Service), the Municipality of Cadelbosco di Sopra, the Municipality of Novellara and the AUSL (Department of Health) of Guastalla about its renewal. When it has been acquired, a copy must be sent to the same bodies.
- 69) The amount of the financial guarantee can be reduced by 50% on the financial guarantees for existing installations, while the full tariff for the D15 operation without reduction is applied to the "waste water storage tank" not covered by the EMAS certification. This guarantee may be reduced to the entry into operation of the sewage collector by updating the EMAS certification.
- 70) The Company is required to update the financial guarantees already provided, within 180 days of receipt of this document, with the amounts shown in the following scheme and with the details of this Act, for the Agency acceptance.

#### FINANCIAL SECURITY TO BE PROVIDED FOR THE EXERCISE OF ACTIVITIES

Operati on	Classif icatio n	Ton/y ear	€/Ton	Amount €	guarantee €	guarantee reduction EMAS	guarantee amount	Function operation
R3	NP	120.000	12,00	1.440.000,00	1.440.000,00	50%	720.000,00	R13
R12	NP	10.000	12,00	120.000,00	120.000,00	50%	60.000,00	R13
R13	NP	1.191	140,00	166.740,00	166.740,00	50%	83.370,00	-
R13	NP	16.625	140,00	2.327.500,00	2.327.500,00	50%	1.163.750,00	-
R13	P*	72	250,00	18.000,00	20.000,00	50%	10.000,00	-
D15	NP	144	140,00	20.160,00	20.160,00	50%	10.080,00	-
D15	NP	1.500	140,00	210.000,00	210.000,00	-	210.000,00	
D15	P*	17	250,00	4.250,00	30.000,00	50%	15.000,00	-
<b>TOTAL GUARANTEE €</b>							<b>2.272.200,00</b>	
<p>P: Dangerous. NP. Not dangerous  Warranty ° If the guarantee does not match the amount calculated it is related to the minimum amount set out in the Resolution of the Regional Council n.1991 of 13/10/2003  Notes: For D13, D15 and R13 only, the quantities in the table are NOT expressed in Tons per year but in Tons as they refer to instant storage.</p>								

71) The implications and effectiveness of this authorization are suspended until the date of receipt of the notice of acceptance by the ARPAE of the financial guarantee.

This document must be kept in conjunction with the Single Authorization issued by the Province of Reggio Emilia by Act no. 43431 of 07/08/2015, of which validity expires on 16/02/2025, and together with Determination no. DET-AMB-2016-1465 of 16/05/2016 and Determination no. DETAMB-2017-1577 of 24/03/2017. Of the above mentioned acts are subject to the descriptions of the systems, the provisions and requirements / conditions to the extent not inconsistent with the present act.

For the purposes of the realization of the draft amendment in question, the company is still required to acquire the additional authorizations, opinions and acts of assent, however denominated and prescribed by current provisions for special cases which have not been included and / or replaced by this measure.

Please be informed that against the present provision may be appealed before the competent Regional Administrative Tribunal within 60 (sixty) days, or extraordinary appeal to the Head of State within 120 (one hundred and twenty) days; both terms shall start from the communication or dall'avvenuta knowledge of this document concerned.

The Manager  
Reggio Emilia Authorization and Concession Structure  
(D. Valentina Beltrame)  
digitally signed

Stamp Filled with MARCA DA BOLLO Identification number: **01110116412089**

## Attachment 1D "Framework for recovery and disposal operations"

COMPANY: S.A.BA.R. SPA

ADDRESS: Via LEVATA n. 64

MUNICIPALITY: NOVELLARA

R3 - Recycling / recovery of unused organic substances as solvents

R12 - Exchange of waste to submit to one of the operations indicated by R1 to R11

R13 - Waste disposal to submit to one of the operations indicated in points R1 to R12

D15 - Preliminary deposit before any of the operations mentioned in points D1 through D14 - Urban wastes, non dangerous special waste, dangerous special waste;

CER	activity :R3 Paper and cardboard waste description	Instant Storage		Storage Max. per year		Treatment / Use Max. per year		Origin and zone
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
150101	packaging in paper and cardboard							RU/RS – zone A
150105	packaging composed material							RU/RS – zone A
150106	packaging mixed material							RU/RS – zone A
191201	paper and cardboard							RU/RS – zone A
200101	paper and cardboard							RU/RS – zone A
<b>Total:</b>		<b>600</b>	<b>480</b>	<b>75.000</b>	<b>60.000</b>	<b>75.000</b>	<b>60.000</b>	

CER	Activity: R3 Plastic (Polystyrene) waste description	Instant Storage		Storage Max. per year		Treatment / Use Max. per year		Origin and zone
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
150102	plastic packaging							RU/RS zone D
191204	plastic and rubber							RS – zone D
200139	plastic							RU – zone D

<b>Totale:</b>	<b>600 480</b>	<b>12.500 10.000</b>	<b>12.500 10.000</b>	
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CER	activity: R3 plastic waste description	Instant Storage		Storage Max. per year		Treatment / Use Max. per year		Origin and zone
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
020104	plastic waste (excluding packaging)							RS – S10a
070213	plastic waste							RS – S10a
150102	plastic packaging							RU/RS – S10a
160119	plastic							RS – S10a
170203	plastic							RS – S10a
191204	plastic and rubber							RS – S10a
200139	plastic							RS – S10a
<b>Total:</b>		<b>600</b>	<b>480</b>	<b>12,500</b>	<b>10,000</b>	<b>12,500</b>	<b>10,000</b>	

CER	activity:R3 wood - woodchips waste description	Instant Storage		Storage Max. per year		Treatment / Use Max. per year		Origin and pitch
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
191207	wood other than that mentioned in 19 12 06							RS – S10a, S12b
200138	wood other than that mentioned in 20 01 37							RU – S10a, S12b
200201	biodegradable waste							RU – S10a, S12b
<b>Total:</b>		<b>600</b>	<b>480</b>	<b>112.500</b>	<b>90.000</b>	<b>112.500</b>	<b>90.000</b>	

CER	activity:R3 wood - fertilizer waste description	Instant Storage		Storage Max. per year		Treatment / Use Max. per year		Origin and pitch
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
191207	wood other than that mentioned in 19 12 06							RS – S10a, S12b
200201	biodegradable waste							RS – S10a, S12b
<b>Total:</b>		<b>600</b>	<b>480</b>	<b>112.500</b>	<b>90.000</b>	<b>112.500</b>	<b>90.000</b>	

CER	Activity :R12 waste description	Instant Storage	storage Max. per year	Treatment / Use Max. per year	Origin and zone / pitch
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		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
020104	plastic waste (excluding packaging)							RS – zone C
070213	plastic waste							RS – zone C
150102	plastic packaging							RU/RS zone C D
160119	plastic							RS – zone C
170203	plastic							RS – zone C
191204	plastic and rubber							RS – zone CD
200139	plastic							RU - zone CD
200307	bulky waste							RU - S10a
	<b>Total:</b>	<b>600</b>	<b>480</b>	<b>12.500</b>	<b>10.000</b>	<b>12.500</b>	<b>10.000</b>	

CER	Activity:R13 waste description	Instant Storage		storage Max. per year		Treatment / Use Max. per year		Origin and pitch
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
130109	mineral oils for hydraulic circuits, chlorinated							RSP – S2
130110	mineral oils for hydraulic circuits, non chlorinated							RSP – S2
130205	scrap of mineral oil for engines, gears and lubrication, non-chlorinated							RSP – S2
130206	synthetic oil scraps for engines, gears and lubrication							RSP – S2
130208	other oils for engines, gears and lubrication							RSP – S2
130703	other fuels (including mixtures)							RSP – S2
160107	oil filters							RSP – S2
160601	Lead-acid batteries							RSP – S2
200113	solvents							RSP – S2
200133	batteries and accumulators referred to in items 16 06 01, 16 06 02 and 16 06 03 and batteries and accumulators not including those batteries							RSP – S2
200135	apparecchiature elettriche ed elettroniche fuori uso, diverse da quelle di cui alla voce 20 01 21 e 20 01 23, contenenti componenti pericolosi (6)							RSP – S2
	<i>sub-group:</i>	40	49	155	205	0	0	
200113	solvents							RSP – S2
200121	fluorescent tubes and other waste containing mercury							RSP – S2
200133	batteries and accumulators referred to in items 16 06 01, 16 06 02 and 16 06 03 and batteries and accumulators not including those batteries							RSP – S2
200135	apparecchiature elettriche ed elettroniche fuori uso, diverse da quelle di cui alla voce 20 01 21 e 20 01 23, contenenti componenti pericolosi (6)							RSP – S2
	<i>sub-group:</i>	23	23	60	60	0	0	
	<b>total</b>	<b>63</b>	<b>72</b>	<b>215</b>	<b>265</b>	<b>0</b>	<b>0</b>	

CER	Activity:R13 waste description	Instant Storage		storage Max. per year		Treatment / Use Max. per year		Origin and pitch
		Mc.	Ton.	Mc./a	ton./a	Mc./a	Ton./a	
120101	filing and shavings of ferrous materials							RS – S3

120102	dust and particles of ferrous materials								RS – S3
120103	filing and shavings of non-ferrous materials								RS – S3
120104	dust and particles of non-ferrous materials								RS – S3
150104	metal packaging								RU/RS – S3
170401	copper, bronze, brass								RS – S3
170405	iron and steel								RS – S3
200140	metal								RU – S3
	<i>sub-group</i>	180	360	360	720	0	0		
020104	plastic waste (excluding packaging)								RS – S5
150102	plastic packaging								RU/RS – S3
200139	plastic								RU – S3
	<i>sub-group</i>	180	150	3600	3000	0	0		
150106	mixed material packaging								RU/RS – S6a
150107	glass packaging								RU/RS – S6a
170202	glass								RS – S6a
191205	glass								RS – S6a
200102	glass								RU – S6a
	<i>sub-group</i>	660	400	8300	6000	0	0		
150103	wood packaging								<b>RU/RS – S10b</b>
170201	wood								RS – S10b
200138	wood other than that mentioned in 20 01 37								RU – S10b
	<i>sub-group</i>	280	200	8400	6000	0	0		
080318	empty print toner cartridges, other than that mentioned in 08 03 17								RS – S3
160216	components removed from discarded equipment, other than that mentioned in 16 02 15								RS – S3
	<i>sub-group:</i>	2	2	10	10	0	0		
020103	vegetal waste								RS – S10b
020501	materials unsuitable for consumption or processing								RS – S10b
020701	wastes produced by washing, cleaning and grinding of raw materials								RS – S10b
020702	wastes produced by the distillation of alcoholic beverages								RS – S10b
020704	materials unsuitable for consumption or processing								RS – S10b
200101	paper and cardboard								RU – S10b
200108	biodegradable waste of kitchens and canteens								RU – S10b
200201	biodegradable waste								RU – S10b
	<i>sub-group:</i>	200	300	10390	15530	0	0		
150101	paper and cardboard packaging								RU/RS – S11
1501015	composted materials packaging								RU/RS – S11
200101	paper and cardboard								RUS – S11
	<i>sub-group</i>	72	54	3600	2400	0	0		

020702	waste produced by the distillation of alcoholic beverages	1	1	5	5	0	0	RS – S6a
150106	mixed material packaging	7	7	25	25	0	0	RU/RS – S2
160103	tires	50	50	7500	7500	0	0	RS – S7
200125	oils and edible fats	1	1	5	5	0	0	RU – S3
200201	biodegradable waste	750 00	1500 0	150000	30000	0	0	RU – S12a
200303	road cleaning waste	100	100	2000	2000	0	0	RU – S6b
	<b>Total</b>	<b>76.73 3</b>	<b>16.62 5</b>	<b>194.195</b>	<b>72.195 00</b>	<b>0</b>	<b>0</b>	

CER	Activity :D15 waste description	Instant Storage		storage Max. per year		Treatment / Use Max. per year		Origin and zone
		Mc.	Ton.	Mc./ a	ton./ a	Mc./ a	Ton./a	
030307	scraps of mechanical separation in the production of pulp from paper and cardboard waste							RS – S9
150106	mixed material packaging							RU/RS – S1
160103	tires							RS – S7
191001	iron and steel waste							RS – S9
191201	Paper and cardboard							RS – S9
191212	other wastes (including mixed materials) produced by the mechanical treatment of waste, other than those mentioned in 19 12 11							RS – S9
200132	medicines, other than those mentioned in 20 01 31							RS – S1
	<i>sub-group</i>	144	144	2545	2545	0	0	
190899	Wastes not otherwise specified - Wastewater collected in the tank of waste waters and substantial storage in: • wastewater collection facilities; • first rain water and drainage of the eco-friendly platform; • black waters (domestic waste) of offices; • Wastewater disposal waste (S12 area).							RS - waste water storage tank
	<i>sub-group</i>	1500	1500	18000	18000	0	0	
	<b>Total</b>	<b>1644</b>	<b>1644</b>	<b>20545</b>	<b>20545</b>	<b>0</b>	<b>0</b>	

CER	Activity :D15 waste description	Instant Storage		storage Max. per year		Treatment / Use Max. per year		Origin and zone
		Mc.	Ton.	Mc./ a	ton./ a	Mc./ a	Ton./a	
020108	agrochemical waste containing dangerous substances							RSP – S1
150110	packaging containing residues of dangerous or contaminated substances							RSP – S1
170605	building materials containing asbestos							RSP – S1
200119	pesticides							RSP – S1
200131	cytotoxic and cytostatic medicines							RUP – S1
	<i>sub-group</i>	10	15	525	845	0	0	
200119	pesticides							RUP – S1
	<i>sub-group</i>	2	2	5	5	0	0	

	Total	12	17	530	850	0	0	
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RS: Special Waste; RSP: Special Dangerous Waste; RU: Urban waste; RUP:Urban Dangerous Waste

**Annex 2B updated diagram of R3 and R12 activities**