ENVIRONMENTAL PROTECTION ACT 1990, sect. 10

NOTICE OF VARIATION OF AUTHORISATION

EPA 8/01

To **Sundown Straw Products Limited**

of **15 Belmont, Shrewsbury, Shropshire, SY1 1TE**

The **Huntingdonshire District Council**
("the Council") has decided that the authorisation to carry out a prescribed process, namely
the processing and storage of vegetable matter

at the premises known as
Sundown Straw Products Limited, Station Road, Tilbrook, Huntingdon, Cambridgeshire, PE28 0JY

granted to you by the Council on the **13th April 1994**
under reference **3/94** should be varied in the following manner*

1. The process description is amended and replaced by that contained within the attached schedule to this Notice.

2. The conditions are deleted and replaced by that contained within the attached schedule to theis Notice.

The date(s) on which the variation(s) are to take effect, unless this notice is withdrawn or is varied under section 10(3A) of the Environmental Protection Act 1990, is/are†

The variations are to have immediate effect.

continued on page 2

Delete any words in square brackets which do not apply

* Specify the variation(s) to the authorisation.
† Specify the effective dates for each variation.

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YOU ARE REQUIRED, within a period of 6 months from the date of service on you of this notice, to notify the Council of the action (if any) which you propose to take to ensure that the process is carried on in accordance with the authorisation as varied by this notice.

~~[The Council also requires you to pay the sum of £ being the prescribed fee‡, within a period of from the date of service of this notice on you.]~~

~~[In the opinion of the Council, the action to be taken by you in consequence of this variation notice will involve a substantial change** in the manner in which the process is being carried on.]~~

Dated **29 May 2001**

(Signed).....

Designation **Director of Operational Services**

(the officer appointed for this purpose)

address for all communications:

Huntingdonshire District Council
Environmental Health
Pathfinder House
St Mary's Street
Huntingdon, Cambs.
PE29 3TN

Delete any words in square brackets which do not apply

NOTE

You have a right of appeal against this notice to the Secretary for [the Environment] [Wales] except where the notice implements a directive of his or where variations of an authorisation which the Council, as enforcing authority, has decided to make in consequence of representations made in accordance with paragraph 6 of Schedule 1 to the Environmental Protection Act 1990, and which are specified by way of variation of a variation notice by a further notice under section 10(3A) of the Act. If you wish to appeal you must do so in writing within a period of two months beginning with the date of this notice.You must set out the grounds for your appeal and send to the Secretary of State a copy of this notice, together with copies of all relevant documents and correspondence. You should also indicate whether you wish the appeal to be dealt with at a hearing or on the basis of written representations. A copy of your notice of appeal must also be sent to the Council.

‡ The prescribed fee for the purposes of section 10 of the Environmental Protection Act 1990 is the fee (if any) prescribed by a scheme under section 8 of that Act.

** "Substantial change" is defined in section 10(7) of the Environmental Protection Act 1990 as "a substantial change in the substances released from the process or in the amount or any other characteristic of any substance so released"; and the Secretary of State may give directions to enforcing authorities as to what does or does not constitute a substantial change in relation to processes generally, any description of process or any particular process.

HUNTINGDONSHIRE DISTRICT COUNCIL

ENVIRONMENTAL PROTECTION ACT 1990, PART 1
THE ENVIRONMENTAL PROTECTION (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1991, SI 472 (AS AMENDED)
THE ENVIRONMENTAL PROTECTION (APPLICATIONS, APPEALS AND REGISTERS) REGULATIONS 1991, SI 507 (AS AMENDED)

Authorisation 3/94
as varied by 8/01

(i) Name and Address of Operator

Sundown Straw Products Limited
15 Belmont
Shrewsbury
Shropshire
SY1 1TE

Registered Company No. 389 6568

(ii) Address of Authorised Process

Sundown Straw Products Limited
Station Road
Tilbrook
Huntingdon
Cambridgeshire
PE28 0JY

Marked in red on the
Attached drawing
Reference number 3/94/Var/A

Huntingdonshire District Council hereby authorises Sundown Straw Products Limited to operate a prescribed process for storing and processing vegetable matter as described below, in accordance with the following conditions, which are based upon guidance from the Secretary of State in process guidance note PG 6/27(96).

Description of Process

The process is prescribed for Local Authority Air Pollution Control under Section 6.9 of Schedule 1 to the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, S472 (as amended). It consists of the upgrading of straw primarily for use as animal bedding, by chopping, grinding, some minimal drying and treatment with a bactericide. By-products of the fines are Sundown Flakes (bedding material) and animal feed compound produced by further treatment, including pelletising at high pressure. Drawing reference number 3/94/Var/B is a simplified schematic of the plant showing the main process equipment, abatement plant and five points of discharge to atmosphere.

Cereal straw is delivered to the plant by lorry where it is weighed and tested for moisture content up to a maximum of 16% before being accepted. The straw is then mechanically unloaded and stacked in the mill yard under cover in a storage bay, before being introduced to the process.

Tub Grinding

Straw is fed via bail transporters into two intakes: one tub grinder 2A is for the bedding plant and tub 2 is used to top up the fines for Flakes as the pelleting machines are designed for continual operation. The tub grinders reduce the straw particle size and are enclosed to contain dust. The straw is pneumatically and mechanically conveyed to the bedding plant and mechanically conveyed to the upgrade plant. Dust separation for grinder 2A is provided by cyclone 2A, which emits filtered air at discharge point 1 as shown on drawing 3/94/Var/B. Some fugitive dust emissions occur from the bail transporters.

The Bedding Plant

Straw is chopped to the required size and conveyed to the baling plant where it passes through two de-dusters before a preservative is added depending upon the product being processed. Further materials can be added at this point. The treated or blended straw is stored in a large variable speed conveyor to control the throughput to the baling plant. The product is weighed before being compressed into a pre-determined bale size and heat-sealed in plastic wrapping. The bales are conveyed to an automatic palletiser and, using a robotic bale placer, the bales are stacked up to eight rows high. The packaging is finished by stretch wrapping the completed pallet and contents. The palleted product is taken from the machine mechanically and stored in the warehouse waiting for dispatch.

Fines from the de-dusters are conveyed to the old plant for processing whilst any remaining dust in the product steam is filtered by a Provenair dust filter, with the filtered air being discharged to atmosphere at position 5 on drawing 3/94/Var/B.

There is also a dust extractor and bag filter system serving the baler. The separated fines are mechanically conveyed to the upgrading plant for further processing together with the fines from the de-dusters. Filtered air is discharged to atmosphere at position 4 on drawing 3/94/Var/B.

The whole of the bedding plant is enclosed inside a building.

The Upgrading Plant

Straw and fines are fed into the storage conveyor, which controls the throughput of the plant, by variable speed motors. Straw is then fed into the process area and pneumatically conveyed through a hammer mill to reduce the particle size further. Warm air can be injected to dry to the straw if required. The hot air is supplied from a diesel burner and the products of combustion remain within the process. With the reduction in requirement for animal feed and the delivery and storage procedures for the straw, drying is now infrequent. The process material is then separated via two cyclones in series, both fitted with rotary seal and detection equipment, which stops all feed through the cyclone and sets of an alarm in the event of a blockage. Discharge to atmosphere is from the secondary cyclone, shown at position 2 on drawing 3/94/Var/B.

The chopped straw is then fed into a continuous process mixer where small quantities of sodium hydroxide and water are added. After the mixer the material is conveyed to two extrusion presses which pellet the straw into 6mm nuts and through heat and pressure starts the upgrading process. The pellets are passed over a weigher, which controls the proportioning system. Pellets are passed through a crumbler for bedding products or by-passed for pellet manufacture.

The product is then fed into a cooler with no air movement at one end to ensure the chemical reaction is complete and then cooled to ambient temperature by air being circulated through the product removing any fines. Dust/fines are separated via another cyclone, with fines being returned to the extrusion presses and filtered air being discharged to atmosphere at position 3, as shown on drawing 3/94/Var/B.

After cooling the product is conveyed to four 125 tonne storage silos. Bedding material is taken out by an outloading system and transferred to the bedding plant or pellets can be loaded into bulk vehicles.

Both sodium hydroxide and diesel are stored in bulk tanks in a bunded wall and fitted with visual and audible alarms.

Conditions

Emission Limits and Controls

1. All emissions to air from the process, other then steam or water vapour, shall be colourless and free from persistent mist, persistent fume and droplets.

2. All emissions to air shall be free from offensive odour outside the process boundary as perceived by the local enforcing authority.

3. Emissions to air from any combustion process shall, in normal operation, be free from visible smoke and shall not exceed the equivalent of Ringelmann Shade 1, as described in British Standard BS 2742: 1969 except for a maximum of 45 minutes on start up from cold when the emissions shall not exceed the equivalent of Ringelmann Shade 2.

4. All pollutant concentrations shall be expressed at reference conditions 273K, 101.3 kPa, without correction for water vapour and, in the case of particulate matter emissions from combustion plant, 17% oxygen.

5. The concentration of total particulate matter in emissions to from all contained sources shall not exceed 150 mg/m^3, with the exception of the discharge points detailed in condition 6.

6. The concentration of total particulate matter in emissions from the cyclones serving the pneumatic tub transfer system and the pneumatic grinder transfer system shall not exceed 300 mg/m^3. (Note: these emission points are shown as discharge points 1 and 2 respectively on drawing 3/94/Var/B.)

7. Fugitive emissions of dust from the process shall not be so extensive to be prejudicial to the health of or a nuisance to the inhabitants of the neighbourhood, subject to the defence of Best Practical Means.

8. The introduction of dilution air to achieve the emission concentration limit for particulate matter shall not be permitted and exhaust flow rates shall be consistent with efficient capture of emissions.

Monitoring, Sampling and Measurement of Emissions

9. Emissions from contained sources shall be tested at least once a year in accordance with condition 11.

10. The Local Enforcing Authority shall be advised at least 7 days in advance of any periodic monitoring exercise to determine compliance with emission limit values, of the date and time of monitoring, pollutants to be tested and the methods to be used.

11. The reference test method for particulate emissions in chimneys or ducts is that of British Standard BS 3405:1983 and tests shall be carried out according to the main

procedural requirements of that standard, although more stringent test methods are acceptable as and when they become available. For the measurement of the concentration of any prescribed substance, methods shall be submitted by the operator for approval by the local enforcing authority.

12. If three or more periodic monitoring exercises, carried out over a period of at least 2 years, indicate consistent compliance with emission limits, the local enforcing authority will consider allowing an increased interval between future monitoring exercises. In determining 'consistent compliance', regard will be given to the variability of monitoring results and how close the results are to the specified emission limit. Thus results which vary between 10-48 mg/m^3 against an emission limit of 50 mg/m^3 might not qualify for a reduction in monitoring.

13. Where emission limit values are consistently met without the use of abatement equipment, the monitoring requirements for those pollutants may be dispersed with, subject to the caveats in condition 12.

14. The results of periodic monitoring exercises and inspections shall be recorded in a log book. The log book and a summary record of continuous monitoring shall be retained by the operator for a minimum of two years and made available for examination by the local enforcing authority. Adverse results shall be investigated immediately and in all cases shall be recorded in the log book. The operator shall ensure that the cause of such adverse results has been identified and corrective action taken, and this action recorded in a log book.

15. In any case where the emission measurement exceeds the concentration limits specified in conditions 5 and 6, the results shall be forwarded promptly to the local enforcing authority. Where the emission concentration is more than twice the specified emission concentration limit, the local enforcing authority shall be advised immediately.

16. The results of all non-continuous emission testing shall be forwarded to the local enforcing authority within 8 weeks of the completion of the sampling.

17. Adequate facilities for sampling shall be provided on vents or ducts. Care is needed in the design and location of sampling systems in order to obtain representative samples.

Materials Handling

18. Stocks of dusty or potentially dusty materials shall be stored in such a manner to minimise wind whipping.

19. Adequate provision shall be made for the containment of liquid and solid spillages. All spillages shall be cleared as soon as possible, and in the case of solid materials, dry sweeping shall not be permitted in circumstances where it may lead to the deposition of dust outside the site boundary.

20. The transfer of raw materials within the process shall be achieved by mechanical handling devices and these shall, other than in the case of straw entering the process, be fully enclosed.

21. Where the packing of animal bedding or feed into bags necessitates local exhaust ventilation, which discharges externally, suitable arrestment plant shall be installed.

22. Where materials are removed from site in bulk vehicles, the loading area shall be provided with protection against wind whipping of dust. The discharge of products into the vehicles shall be carried out in order to minimise the generation of air-borne dust, and fall heights from discharge pipes shall be kept to a minimum.

23. The storage of dried products shall be in:

    a) Silos or enclosed hoppers fitted with arrestment plant – for example, a bag filter, where necessary to meet the requirements of condition 5.
    b) Processing buildings, provided that adequate steps are taken to minimise entrainment of particulate matter outside the building – for example, by the use of plastic strip curtains at building access points.

Arrestment Equipment

23. The discharge of collected particulate matter from arrestment equipment shall be carried out using a method that minimises emissions – for example by screw feed or by pneumatic means. Measures shall be taken to ensure that any blockage of the discharge point for collected particulate matter from arrestment equipment is quickly detected. This may be achieved by, for example, the installation of a continuous indicative monitor. Any monitor fitted shall have an audible and visual alarm to indicate a blockage.

General

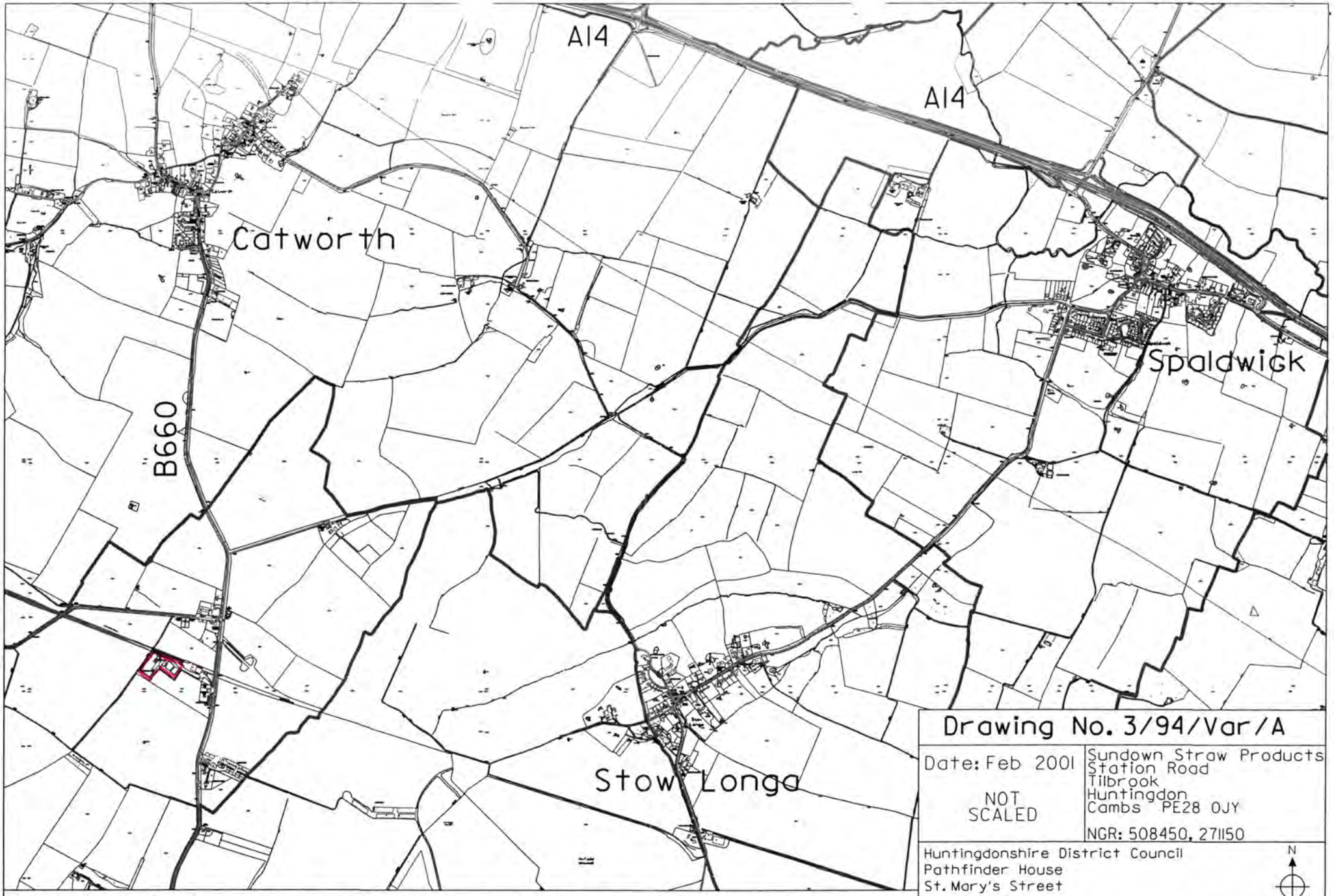
24. Effective preventative maintenance shall be employed on all plant and equipment connected with the process which can have an effect on the concentration of emissions to air. Essential spares and consumables shall be held on site or be available at short notice, in order to rectify breakdowns rapidly.

25. Any malfunction of breakdown leading to abnormal emissions shall be dealt with promptly and process operations adjusted until normal operations can be restored. All such malfunctions shall be recorded in the log book and the Local Authority is to be informed. If there is likely to be an effect on the local community, the Local Authority is to be informed immediately.

26. Staff at all levels shall receive the necessary formal training relating to control of the process and emissions to air.

27. Roadways and other areas where there is regular movement of vehicles shall be hard-surfaced and kept clean, in order to minimise the emission of airborne dust.

28. A high standard of housekeeping shall be maintained. A regular programme of cleaning shall be instigated. Cleaning operations shall be carried out by methods that minimise emissions of particulate matter to the air – for example by vacuum cleaning, wet cleaning or other appropriate methods.



Drawing No. 3/94/Var/A

Date: Feb 2001 NOT SCALED	Sundown Straw Products Station Road Tilbrook Huntingdon Cambs PE28 0JY NGR: 508450, 271150

Huntingdonshire District Council
Pathfinder House
St. Mary's Street
Huntingdon
Cambs PE29 3TN Licence No. HDC/LA/07828X

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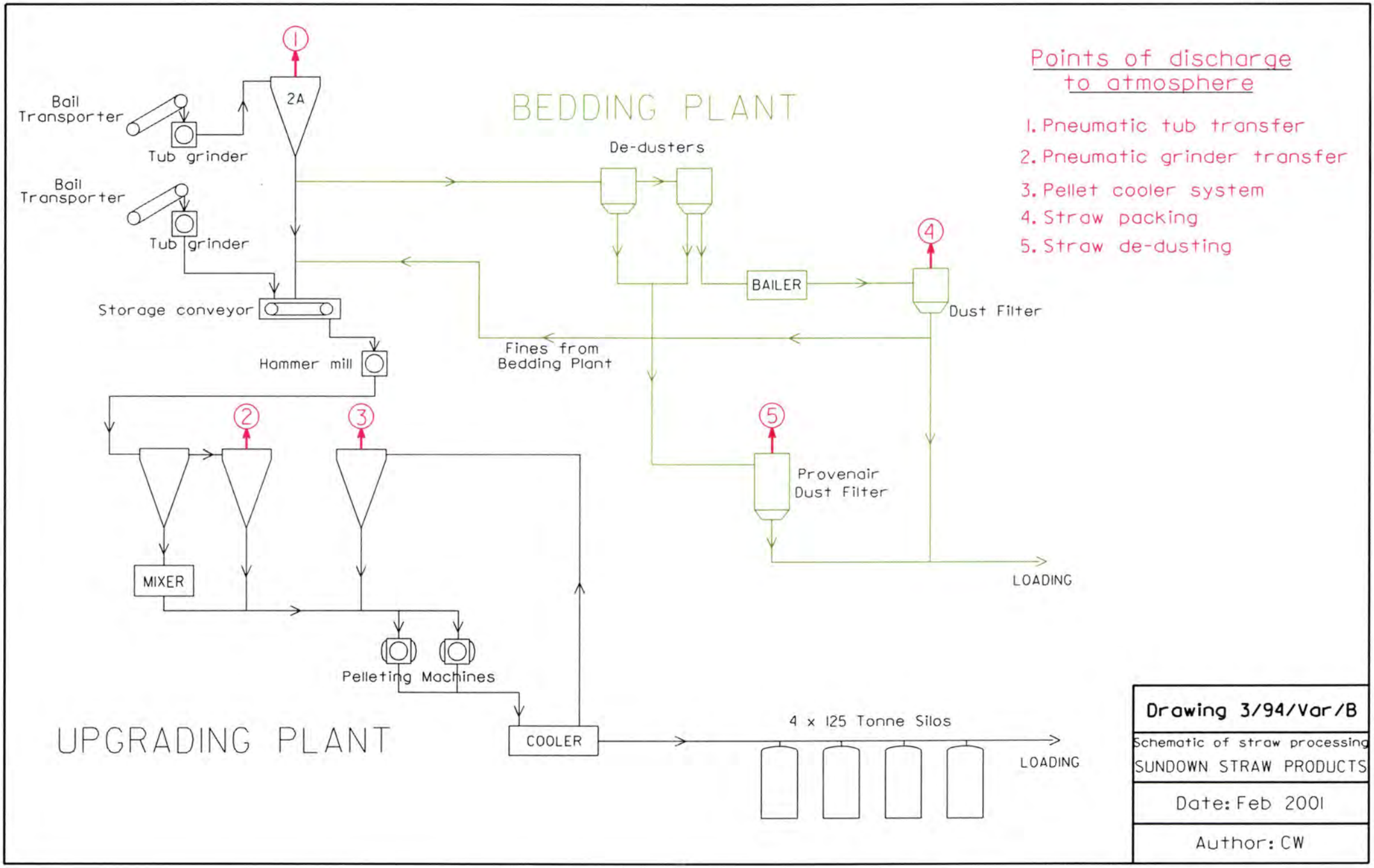
BEDDING PLANT
UPGRADING PLANT
Points of discharge to atmosphere
1. Pneumatic tub transfer
2. Pneumatic grinder transfer
3. Pellet cooler system
4. Straw packing
5. Straw de-dusting
Bail Transporter
Tub grinder
Bail Transporter
Tub grinder
2A
Storage conveyor
Hammer mill
De-dusters
BAILER
Dust Filter
Fines from Bedding Plant
Provenair Dust Filter
LOADING
MIXER
Pelleting Machines
COOLER
4 x 125 Tonne Silos
LOADING
Drawing 3/94/Var/B
Schematic of straw processing
SUNDOWN STRAW PRODUCTS
Date: Feb 2001
Author: CW

GENERAL NOTES

1. Implied Conditions

It should be noted that Section 7(4) of the Act provides that, in relation to any aspect of the process not regulated by the conditions in this authorisation the best available techniques not entailing excessive cost shall be used:

(i) for preventing the release of substances prescribed for air into the air, or where that is not practicable by such means, for reducing the release into the air of such substance to a minimum and for rendering harmless any such substances which are so released, and
(ii) for rendering harmless to any other substances which might cause harm if released into the air.

2. Review

The Local Authority will undertake a review of the conditions in this authorisation at least every 4 years or where complaint is attributable to the process an immediate review shall be undertaken.

3. Variation

The Local Authority will ensure that the authorisation remains up to date in line with the objectives set out in section 7(2) of the Act. This may involve issuing a Variation Notice following amendment to the Secretary of State's Guidance Note or following receipt of any direction from the Secretary of State.

4. Appeal

The operator can appeal in writing to the Secretary of State for the Environment against the conditions included in an authorisation or any refusal to vary the authorisation within six months of the date of the decision against which the appeal is made. Appeals will not put notices into abeyance, except in the case of revocation notices.

5. Transfer of Authorisation

The holder of the authorisation may transfer it to a person who proposes to carry out the process in the holder's place. The person to whom the authorisation is transferred must notify the Local Authority within 21 days of the date of transfer and anyone who fails to do so is guilty of an offence.

6. Notification of Proposed Change

The holder of the authorisation who wishes to make a relevant change in the process may at any time-

(i) notify the enforcing authority in the prescribed form of the fact, and
(ii) request the enforcing authority to make a determination, in relation to the proposed change, of the matters mentioned in note 7 below;

and a person making a request under paragraph (ii) shall furnish the enforcing authority with such information as may be prescribed or as the authority may by notice require.

7. Determination by Local Enforcing Authority

On receiving a request under section 11 of the Environmental Protection Act 1990 (see note 6 above) the enforcing authority shall determine-

(i) whether the proposed change would involve a breach of any condition of the authorisation;
(ii) if it would not involve such a breach, whether the authority would be likely to vary the conditions of the authorisation as a result of the change;
(iii) if it would involve such a breach, whether the authority would be likely to vary the conditions of the authorisation so that the change may be made; and
(iv) whether the change would involve a substantial change in the manner in which the process is being carried on;

and the enforcing authority shall notify the holder of the authorisation of its determination of those matters.

8. Other Legal Requirements

This Authorisation is issued solely for the purpose of Part 1 of the Environmental Protection Act 1990 and the Operator must ensure that he complies with all other statutory requirements.

9. Annual Subsistence Charge

The Secretary of State has drawn up a charging scheme under Section 8 of the Environmental Protection Act 1990, Part 1. Under this scheme Local Authorities are required to levy an annual subsistence charge related to the authorisation. The Local Authority will invoice for the amount due which is subject to annual review by the Department of the Environment.