

Environmental Planning and Assessment Act 1979

STATEMENT OF ENVIRONMENTAL EFFECTS

PROPOSED REDEVELOPMENT OF COTTON SEED PROCESSING PLANT AGRICULTURAL PRODUCE INDUSTRY

1. Construction of:
 - 1 x 1.289 ha Warehouse/Industrial Building
 - 2816m² Extension to Existing Warehouse/Industrial Building
 - Recladding of Existing Warehouse Building
 - 1 x 916m² Administration Building
 - 1 x 815m² Laboratory Building
 - Associated Outbuildings, Driveways/Parking Areas, Site Filling and Augmentation of Levee Bank.
2. Demolition of Existing Administration Building.

LOT 2 DP 612166 AND LOT 1 DP 873839 "SHENSTONE", NO. 2952 CULGOORA ROAD, WEE WAA

Statement of Environmental Effects

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Statement of Environmental Effects

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PROPOSAL

PROPONENT NAME: Cotton Seed Distributors Ltd
c/- Hill Lockart Architects

**LAND ON WHICH
DEVELOPMENT IS TO
BE CARRIED OUT:** Lot 2 DP 612166 and Lot 1 DP 873839
"Shenstone"
No. 2952 Culgoora Road
WEE WAA NSW 2388

**PROPOSED
DEVELOPMENT:**

1. Construction of:
1 x 1.289 ha Warehouse/Industrial Building
2816m² Extension to Existing Warehouse/Industrial Building
Recladding of Existing Warehouse Building
1 x 916m² Administration Building
1 x 815m² Laboratory Building
Associated Outbuildings, Driveways/Parking Areas,
Site Filling and Augmentation of Levee Bank.
2. Demolition of Existing Administration Building.

STATEMENT OF ENVIRONMENTAL EFFECTS:

SoEE: Attached.

Statement of Environmental Effects

CERTIFICATE:

I certify that I have prepared the contents of this document and to the best of my knowledge it is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

SIGNATURE:



NAME:

Andrew Swane
Director/Planning Consultant
Brown & Krippner Pty Ltd

DATE:

15.7.16

Statement of Environmental Effects

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1. DEVELOPMENT APPLICATION OUTLINE

**PROPOSED
DEVELOPMENT:**

1. Construction of:
1 x 1.289 ha Warehouse / Industrial Building
2816m² Extension to Existing Warehouse /
Industrial Building
Recladding of Existing Warehouse Building
1 x 916m² Administration Building
1 x 815m² Laboratory Building
Associated Outbuildings, Driveways / Parking
Areas, Site Filling and Stormwater Detention
Basins, Augmentation of Levee Bank.
2. Demolition of Existing Administration Building.

SUBJECT LAND:

"Shenstone"
No. 2952 Culgoora Road, Wee Waa NSW 2388
Lot 2 DP 612166 and Lot 1 DP 873839

REGISTERED PROPRIETOR:

Cotton Seed Distributors Ltd (CSD Ltd)
c/- Hill Lockart Architects

TYPE OF DEVELOPMENT:

Local Development

**ESTIMATED
CONSTRUCTION VALUE:**

\$41,223,460 + GST

(Quantity Surveyor's cost Report included as
Appendix A)

Based on this Capital Investment Value (CIV) and
the provisions of Section 23G and Schedule 4A of the
EP&A Act 1979, the consent authority for the subject
development is deemed to be the Northern Joint
Regional Planning Panel (JRPP).

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2. **EXECUTIVE SUMMARY**

2.1 **Background**

Brown and Krippner Pty Ltd has been engaged by CSD Ltd to prepare this Statement of Environmental Effects (SoEE) to accompany a Development Application (DA) to be submitted to Narrabri Shire Council. This Statement provides a description of the subject site and surrounds the characteristics of the proposed development and an assessment of the likely impacts of that development as detailed by Section 79C of the Environmental Planning & Assessment (EP&A) Act 1979

2.2 **The Proposal**

The DA is for:

1. Construction of:
 - 1 x 1.289 ha Warehouse/Industrial Building
 - 2618m² Extension to Existing Warehouse/Industrial Building
 - Recladding of Existing Warehouse Building
 - 1 x 916m² Administration Building
 - 1 x 815m² Laboratory Building
 - Associated Outbuildings, Driveways/Parking Areas, Site Filling and Stormwater Detention Basins, Augmentation of Levee Bank
2. Demolition of Existing Administration Building

2.3 **Permissibility**

The proposed development constitutes "agricultural produce industry", a type of "rural industry", as defined in Narrabri Local Environmental Plan 2012. That use is permitted with development consent within the subject zoning RU1 – Primary Production.

2.4 **Consideration by the Northern Joint Regional Planning Panel (JRPP)**

Due to the Capital Investment Value of the proposed development, the JRPP is the determining authority for this DA pursuant to Section 23G and Schedule 4A of the EP&A Act 1979.

The proposed development is not considered State Significant.

2.5 **Integrated Development.**

The proposal is not considered Integrated Development. Due consideration has been given to the Water Management Act 2000 and the Protection of the Environment Operations Act 1997.

2.6 **Key Matters for Consideration**

- **Context and Setting**

The site is typically north-west NSW flood plain, with little variation in terrain or opportunity for views. The locality has an extensive agricultural landscape. The site is occupied by the existing cotton seed processing facility.

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The redevelopment of the existing facility by the addition of new light industrial and administration buildings will increase the scale of development on the site, but not significantly in this context. The height, mass and bulk of new buildings will be in keeping with existing development. The character and design of the redeveloped facility will be more modern, but otherwise consistent with existing development.

Adjoining land uses are rural i.e. extensive agriculture. The existing facility has proved to be consistent with that land use and it is expected the proposed redevelopment will be also. The redeveloped facility will be enclosed by security mesh fencing to ensure public safety.

- **Access, Transport and Traffic**

The site has frontage to Culgoora Road, a bitumen sealed public road. Two (2) access points are currently in use. Both will be closed and two (2) new entrances will be created in the redevelopment – one for light vehicles and one for heavy vehicles. Separate light vehicle parking and heavy vehicle parking/loading/unloading and maneuvering areas will be provided. All of these facilities have been designed in accordance with appropriate standards.

No additional traffic will be created by the proposed development. The new facility will not increase production but simply be more efficient and more responsive to demand. A Traffic Impact Assessment prepared for the redevelopment confirms this.

- **Water**

Adequate supply is available on site for the proposed development. Waste water will be suitably treated to allow irrigation to open paddocks on site. Stormwater will continue to be discharged to the existing outlet at the north western corner of the site.

The flow regime of the local flood plain will be unaffected by the proposed augmentation of the existing levee bank, because its external perimeter will not change. This approach has been previously approved by DPI Water.

Groundwater will remain unaffected by the redevelopment.

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- **Air and Microclimate**

Dust is the main risk to air quality from the proposed development. Modern dust extraction equipment and dust suppression will be used at every stage of seed processing in the redeveloped facility. Dust extraction and filtration will be used on the production line, wetting of seed waste will be carried out prior to spreading on site and the sheltered central location of dump pits will contain most dust released at that point.

Dust emissions have not been an issue with the existing facilities and, with the introduction of modern equipment and practices, it is not expected dust will be an issue with the redevelopment.

- **Waste**

By-products will mostly be re-used on or offsite and many other materials will be recycled. Remaining waste will be appropriately disposed of offsite. Construction waste will be managed by the contracted builder for the development

- **Noise and Vibration**

Noise emissions from the proposed development are most likely to be due to dust extraction fans and mobile plant. All new industrial buildings will be clad with insulating sandwich panels which will suppress noise inside buildings. The existing extraction fans are barely audible at night in the town of Wee Waa and with the introduction of modern quieter fans it is expected this will be less so. The future configuration of buildings in the redevelopment of the existing facility will also surround the operating area of mobile plant. The buildings will thereby contain those noise emissions by physical barrier. Noise emissions have not been an issue with the existing facility and it is expected noise will be even less significant in the proposed redevelopment.

- **Natural Hazards**

The site is located on a floodplain. An existing levee bank provides flood protection to less than a 1 in 50 year flood frequency. A new levee has been designed which will protect the redeveloped facility up to a 1 in 100 year flood frequency.

- **Technological Hazards**

The site has been investigated for contamination. It was found that contamination was not an issue for the proposed development. The preparation of a Construction Environmental Management Plan was also recommended to cover the

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discovery of any significant site contamination during construction.

On-going testing will be required to monitor the effects of on-site waste disposal.

A Preliminary Hazard Assessment (PHA) has been prepared for two substances to be used in the redevelopment – LPG and liquid hydrochloric acid. The PHA found that the new facility “would not pose any fatality or serious injury risks to the offsite population” or pose significant risk of “offsite irritation”.

- **Economic Impact**

The construction period of the proposed development will create local employment and purchasing for this \$41M redevelopment, with significant multiplier effects across the economy of Wee Waa and the Narrabri Local Government Area. As noted above, the preservation of 32 skilled and semi-skilled jobs by the modernization of the existing facility will keep \$7.6M per annum of gross wages in the local economy. Apart from that, the entire cotton industry in the Narrabri Local Government Area and across Australia is totally dependent on this facility remaining in operation, productive and state of the art.

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3. SUBJECT SITE AND LOCALITY

3.1 Land Title

The subject land is Lot 2 DP 612166 and Lot 1 DP 873839 and has a total area of 137.96 hectares. Title documents are included in Appendix B

3.2 Site Details and Existing Development

The land is located on the northern side of Culgoora Road, about 2km southeast of the town of Wee Waa. See Aerial Image of the site – Figure 1. The property is known as “Shenstone”.

The site is essentially level – see Site Survey in Appendix D. The land drains generally to the western boundary. The relevant Topographical Map identifies a feature known as “Bundock Creek” on and adjoining the site. However there is minimal physical evidence of this feature in the locality.

The site is currently occupied by an existing cotton seed processing plant, which is to be upgraded by the proposed development. The existing facility consists of light industrial buildings, warehouses, an administration building, laboratory, gas/chemical storage, driveways/parking areas and detention ponds. See Site Survey and Appendix E – Photographs.

3.3 Land Use Context

The site is surrounded by rural land uses in the form of extensive agriculture i.e. grazing and cropping. Associated with these uses are residential dwellings, located as follows:-

- Lot 2 DP 543273 – about 1Km to the south-west of the proposed facility.
- Lot 47 DP 802 – about 800m to the south-west of the facility
- Lot 2 DP 510875 – about 600m to the south of the facility
- Lot 168 – about 1Km to the east of the facility
- Lot 2 DP 873839 – about 1.5Km to the north-east of the facility
- Lot 154 DP 757125 – about 800m to the north-west of the facility.

See Figure 1 and Figure 2 – Cadastral Image.

The site is surrounded on three sides by the RU1 – Primary Production zone and to the south (across Culgoora Road) by the R5 – Large Lot Residential zone, which is presently undeveloped and to be rezoned industrial in due course.

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FIGURE 1 – AERIAL IMAGE OF SITE

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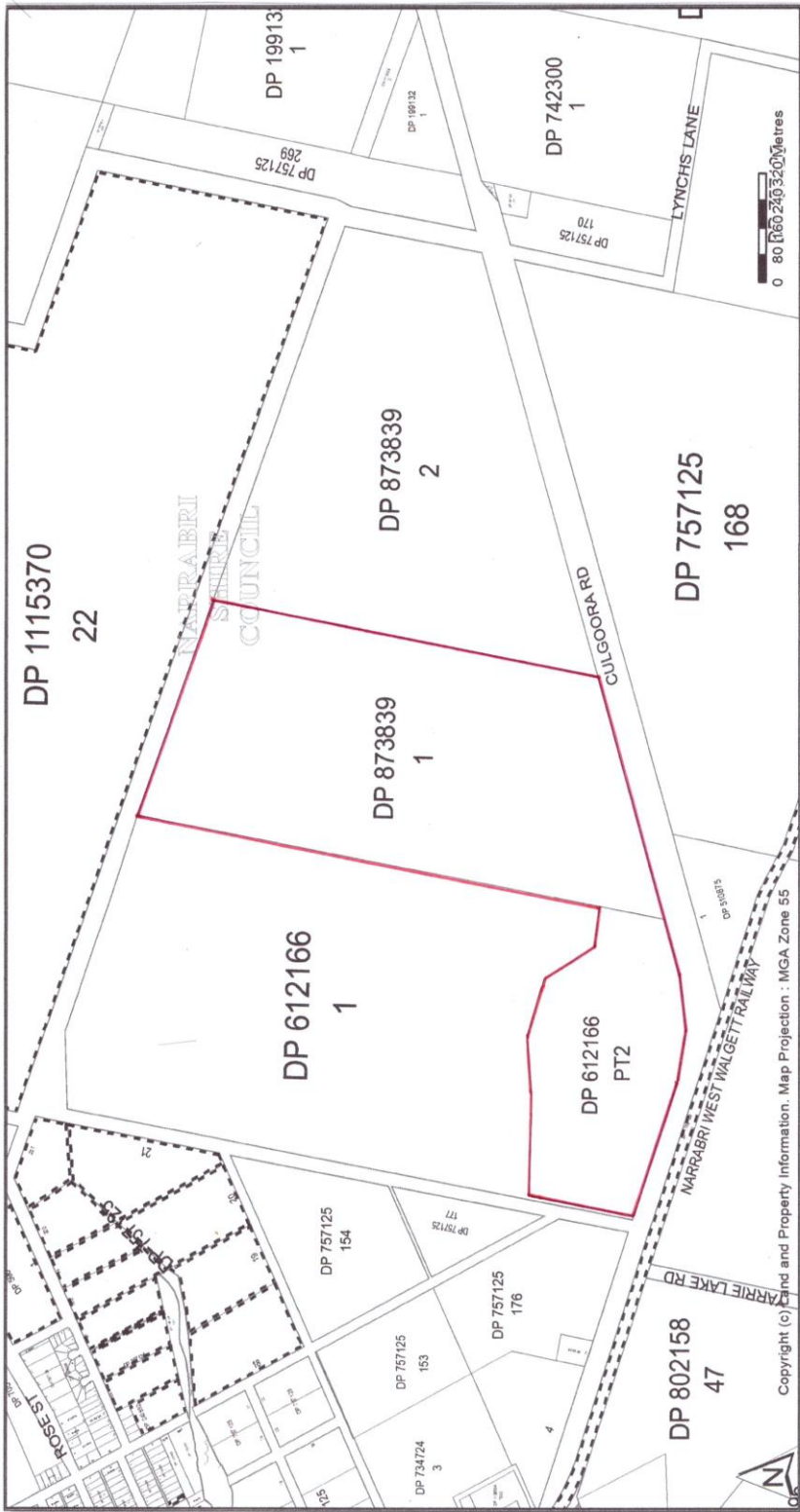


FIGURE 2 – CADASTRAL IMAGE

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4. COTTON SEED PROCESSING

CSD at "Shenstone" supplies cotton planting seed to all Australian cotton growers from its existing processing plant, based outside the small township of Wee Waa.

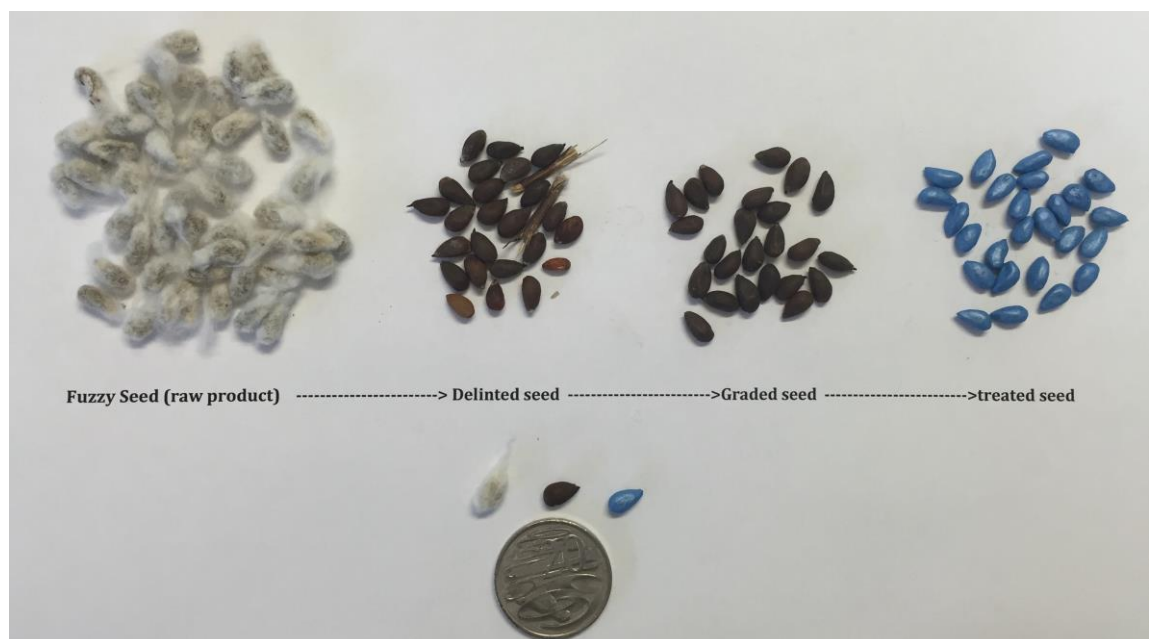
In modern cotton production, cotton is picked from the plant and transported to a facility called a cotton 'gin' where the fibre (lint) is torn from the seed. The lint is cleaned for contaminants such as leaf and sticks then compressed into a 227kg bale, sampled, assessed for quality and then shipped to spinning plants overseas.

What remains are the seeds which are about the size of a citrus plant seed, covered in short (2 to 3mm) remnants of the lint, which has been removed. This seed is referred to as 'fuzzy seed', for obvious reasons. The majority of this seed produced is either sold as a high value stock feed whole, or crushed for oil and the meal then used for stock feed. Fuzzy cotton seed is approximately 17% oil and 25% protein. Cottonseed oil is primarily used for industrial food frying.

Due to the remaining lint on the outside of the seed, the seed readily clumps together, meaning that it will not flow and requires buckets or air (blowing) systems to move seed. This has substantial implications for getting the cotton seed to flow through a planting device at sowing time. The solution to this issue is to remove the lint off the outside of the seed, where it then becomes like any other seed making it easily able to be moved, treated or handled with standard agricultural equipment. This naked seed is called "black seed".

The physical function of the processing plant operated by CSD is to store, delint, grade, apply seed treatments bag and dispatch quality assured (QA) cotton planting seed for the Australian cotton industry.

Figure 3 – The stages of cotton planting seed processing



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The cycle of producing commercial volumes of cotton planting seed

Specially selected seed that has been subjected to very high quality assurance (QA) processes is provided to a select group of Australian cotton growers. Based as far north as central Queensland through to central west NSW, these growers have their fields and equipment inspected by the CSD QA teams to ensure there are no other cotton seeds or plants which could contaminate crop. Once the crop reaches maturity all the equipment that comes into contact with the seed is inspected, at the sites where it is stored prior to being ginned.

At the time that the seed will be processed, the gin is then thoroughly cleaned down and inspected, as is the truck that transports the seed from the gin to CSD's processing site. The fuzzy seed arrives at the processing plant usually in semitrailers or B-Double combination trucks.

Figure 4: The receival pits where fuzzy seed is unloaded



Nearly all (99%) of seed processed and sold by CSD has at least one genetic technology (modification). Of this seed, the majority contains four distinct modifications. These technologies are subject to strict licence and regulation conditions that requires very high levels of purity (98%). While the initial seed planted is tested for technology purity, it is also tested throughout the plant's growing season. Prior to unloading, it is tested for gene purity, oil content and oil composition and samples are taken for germination testing in highly controlled conditions over the next 10 days. All laboratory work is completed on site and is

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certified compliant with International seed testing standards (ISTA). As a result of the multiple genetic technologies embedded in CSD's cultivars, the company utilises cutting edge high throughput DNA analysis equipment. The CSD laboratory team conducts in excess of 1.3 million leaf and seed tests annually.

Once unloaded, the seed is blown from the dump pit through a piping system controlled by valves into insulated fuzzy seed storage sheds. These vary in size from 125t to 1,200t. As seed is a live organism, keeping it cool and dry is important to ensure quality and longevity in storage. The fuzzy seed sheds have insulated roofs and in-stack aeration systems where air is drawn through the stack of seed as soon as it is loaded in. Thermocouple sensors are inserted into the seed piles to continuously monitor the seed temperature.

Based on projected cotton planting seed needs for the oncoming season, the process of removing the remaining fibre off the seed (delinting) commences around the time of the arrival of the first fuzzy seed from the gins. This is typically April or May and continues, depending on the volume, through to July.

To remove the lint from the outside of the seed without damaging it, a process is used to make the lint brittle so it can be rubbed off. Cotton fibre is made up of nearly completely of cellulose and exposing it to acid will degrade it. As the seed coat is reasonably impermeable, it remains relatively unaffected by this process.

The use of acid for removing the lint from the seed has been used around the world since early in the 1900's.

The commercial scale seed delinting utilises hydrochloric acid (HCl) for this process. The process used to create HCIL gas is as per the procedures described in Appendix N.

The Delinting Process

Depending on the grower demand, seed that has passed QA is selected for processing. It is loaded out of the seed sheds by bucket loader and dropped into a transfer pit where it is blown through piping into the delinting building.

As the speed of the reaction of the gas with the lint on the seed is temperature related, the fuzzy seed that arrives into the delinting shed is initially warmed to 45°C. Precise temperature control is critical so as not to damage the seed. In appearance, the delinter barrel is somewhat akin to a cement truck mixing bowl which has mixing paddles on the inside.

The seed is loaded into the delinting barrel in approximately 700-1,000kg lots. The barrel then seals and the HCl gas is injected under low pressure. The barrel rotates slowly while external LPG burners raise the temperature of the seed inside to approximately 55°C.

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Figure 5: The delinting barrel and buffers



After approximately 12 to 15 minutes, virtually all the HCl gas is absorbed by the lint on the seed and through the action of being tumbled around inside the drum and being mixed by the paddles, most of the lint is rubbed off and become a white powder. Once the drum is stopped, the air inside of the barrel is then evacuated through a scrubber to collect any traces of residual HCl gas. The drum contents are tipped into a pit and then elevated to the buffing cylinders to remove the powdered fibre and continue to the process.

The buffing cylinders are mesh sieves, which are in the form of a large rotating tube. The contents of the delinting drum are rolled around in the buffer for an additional 12-15 minutes. The action of the rotating buffers continues to rub the remaining brittle lint off the seed. The powdered fibre falls through the sieve and is then mixed with lime to neutralise it. As the powdered lint is now an inert organic product comprised of cellulose, it is spread with an agricultural spreader onto farm land, where it is broken down in the same manner as dry grass.

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Figure 6: The neutralised, powdered cotton lint loaded into spreader



After the buffing process has completed, the seed and remaining residues are also treated with lime to neutralise any remaining acidity.

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At this point, standard seed grading equipment can process the seed, sorting the sample for size and weight and removing the impurities. The 'offgrade' (seed and impurities) that are removed are stored in a silo and sold as stock feed at a later date. Typically 10-40% of the contents of the delinter barrel end up as offgrade. The graded seed is then sampled, bagged into 20kg paper bags and uniquely identified. This is the stage where the seed has moved from being a raw product to being an intermediate product called 'black seed'. The samples of black seed are then tested again for germination and quality over the following 10 days.

Figure 7: Germination tests of cotton planting seed in controlled conditions



After germination and quality tests are complete the seed is then categorised as conforming or not conforming to CSD's strict standards.

Figure 8: Robotic palletising of black seed bags

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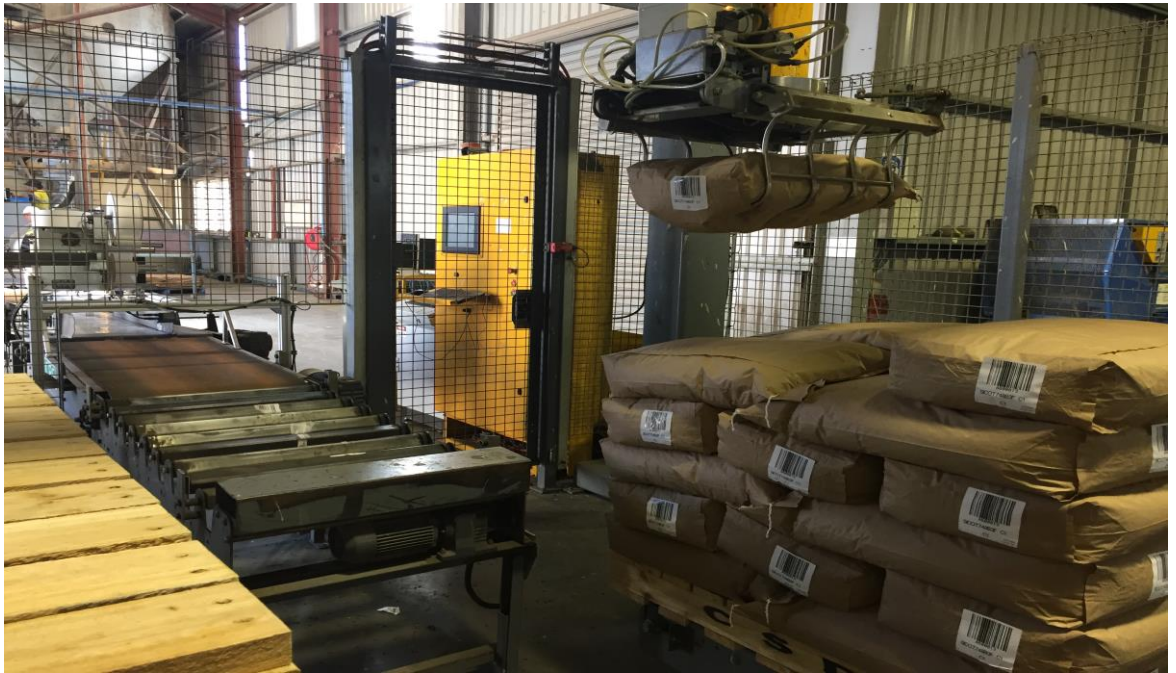
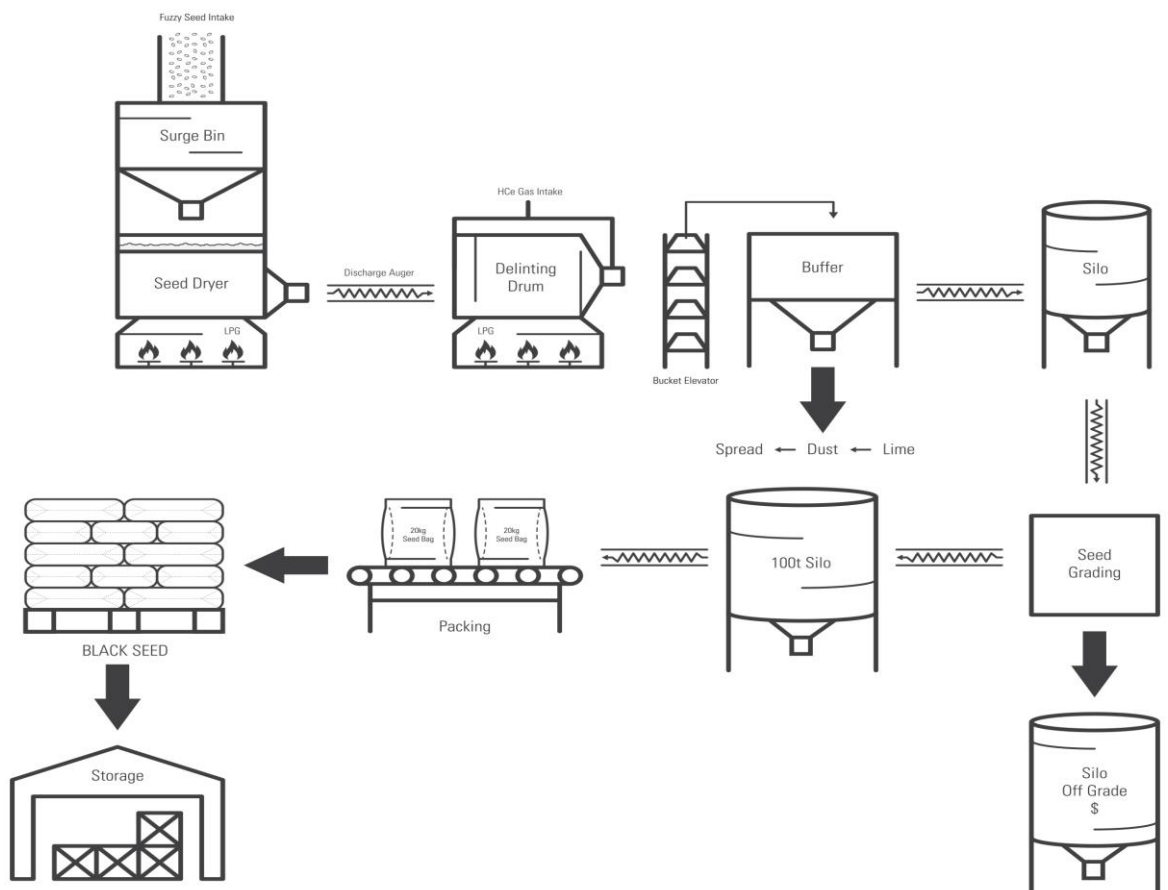


Figure 9: The delinting process



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The Seed Treatment Process

Seed ordering from cotton growers through CSD's distribution agents occurs from July through to early November, with most being ordered in August to September. Changes in the genetic technologies in the seed will now mean that the window for ordering seed can occur right from August to mid/late December.

Seed is offered to growers with a range of treatments to ensure protection of the young seedling cotton plant, and to ensure its ease of handling both in the planter and in the soil. All seed is treated with an APVMA (Agricultural Pesticides and Veterinary Medicines Authority) registered seed fungicide and a product that stimulates the plant's natural immune system. A bright coloured polymer is added to make the seed easy to see once planted in the ground and to clearly identify the genetic technology contained in it. An inert powder (fluency agent) is also added to help dry the seed and make it slippery and lustrous. CSD also offers, as an option, treatment of planting seed with various registered seed insecticides and seed nutrients. Most seed ordered by cotton growers is treated with both the fungicide and an optional insecticide.

Once seed orders have been received, the treatment process commences. Conforming black seed by cultivar is retrieved from storage and de-bagged from its paper bags into the two treatment lines. As the discarded paper bags have not been exposed to any pesticide and do not have any residues in them, they are baled and fully recycled. Non-conforming seed is also debagged and loaded out into a storage silo for sale as stock later in the treating season.

The seed is subsequently treated in a standard commercial seed treatment unit, which processes batches of 100kg of seed. The seed treatments are liquid (with the exception of the fluency powder), and are applied sequentially to the seed over 40 to 90 seconds per batch. The powder is applied last and then the seed is dropped onto a vibrating mesh table with warm air blowing up through it to help dry it as well as remove any seed which may be stuck together.

The registered seed treatments are supplied to CSD in various container sizes from 1 litre through to 1,000L. As per best practice for agricultural pesticide containers, once empty, they are rinsed and sent to Drum Muster for recycling. The rinsates from the drums are stored in a tank, diluted and then sprayed out onto the farmland where they are broken naturally in the soil (as they are designed to be).

Prior to dispatch to CSD's distribution agents and on to cotton growers, the treated seed is sampled for germination testing again, bagged, labelled, palletised and wrapped with a robotic handling system. This seed is usually held until the germination results become available 10 days later.

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CSD primarily only treats seed to order, meaning that there is very limited treated seed carried over to a subsequent year. In the rare instances where treated seed fails germination, this seed is debagged and then cast out on the surface of the farm land (in very low densities) with a spreader, where on the first shower of rain it germinates and then dies. The seed treatments break down as they would if the crop were planted.

Figure 10: The seed treatment process

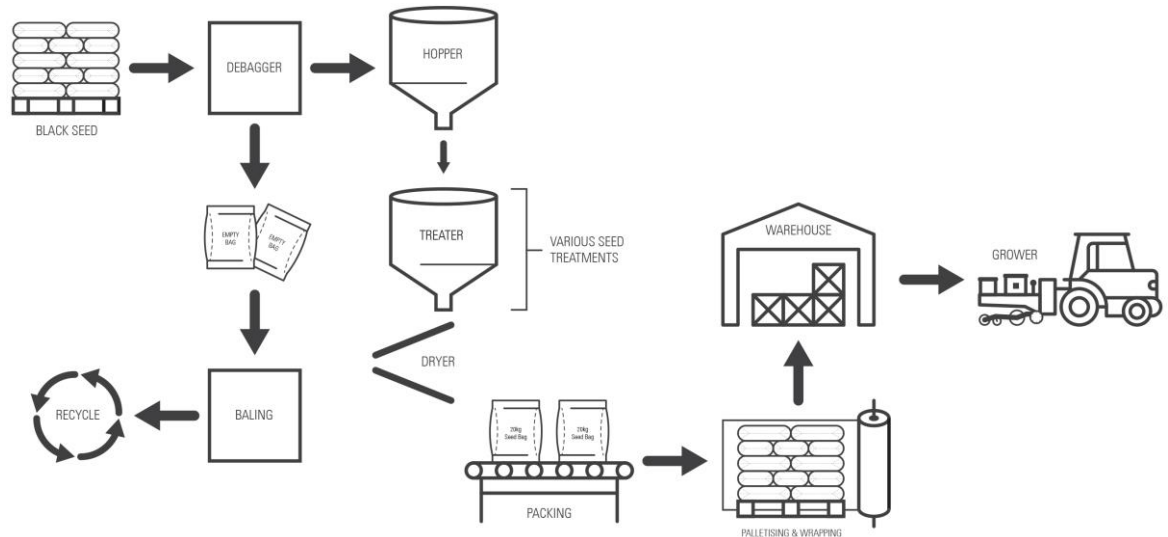


Figure 11: Treated seed, ready for dispatch to distribution agents



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Non Commercial Scale Seed Processing

CSIRO are CSD's Joint Venture partner in creating the cultivars that CSD commercialises for Australian cotton growers. CSIRO undertakes over 30,000 single plant crosses per year in their breeding program based at the Australian Cotton Research Institute at Narrabri and their research facility at Black Mountain, Canberra. At this early stage of the breeding cycle, CSIRO also cross their early lines with cotton plants that contain new genetic technologies from CSD's commercial biotechnology partners. This stage of the breeding is securely conducted under strict Office of Gene Technology Regulator conditions.

After 4 to 6 years of selection and quality assurance CSIRO hand over to CSD 10 to 12 elite lines a year. This hand over of 'nursery lines' involves providing CSD with 1 to 2 kg of seed which is then grown out on CSD's research farm to increase the volume up to a scale where the volumes of seed require commercially contracted cotton growers to continue the process. Typically, of the 10 to 12 lines handed to CSD annually, only 1 or 2 normally will make it to commercial scale production. From the initial crossing to commercial scale seed production takes a minimum of 8 years, but more usually 10 to 12 years.

The processing of the nursery lines is also undertaken at CSD's Shenstone site. CSD uses very small scale ginning equipment that can gin samples from a couple of kilos through to 50 tonnes. The lint ginned from these lines is pressed into Australian standard 227kg bales on site then sold.

Delinting of the small scale seed is undertaken in CSD's nursery facility on site. For the small scale of the delinting, the nursery uses concentrated liquid sulfuric acid instead of the HCl gas. The fuzzy seed is fed into a trough with the acid, which, in a matter of seconds dissolves all the lint. The seed is quickly rinsed with water and neutralised, before being dried and graded. The waste acid is neutralised with lime and then stored with the seed rinsing before being mixed with water and evaporated or used on site.

Similarly, the seed treatments for the nursery lines are applied on site. Depending on the volume to be treated, specialist small scale applicator equipment is used to apply a similar range of products as is used on the commercial scale lines.

As the sole supplier to the Australian cotton industry, CSD is acutely aware of the importance of being able to supply the planting seed for what can be up a \$2.5billion/year agricultural industry. CSD holds significant volumes of seed both as fuzzy and as black on site with the ratio of the two depending on various criteria and the climatic outlook. Some cultivars of seed can be stored for 3 to 5 years, while some store for much shorter times.

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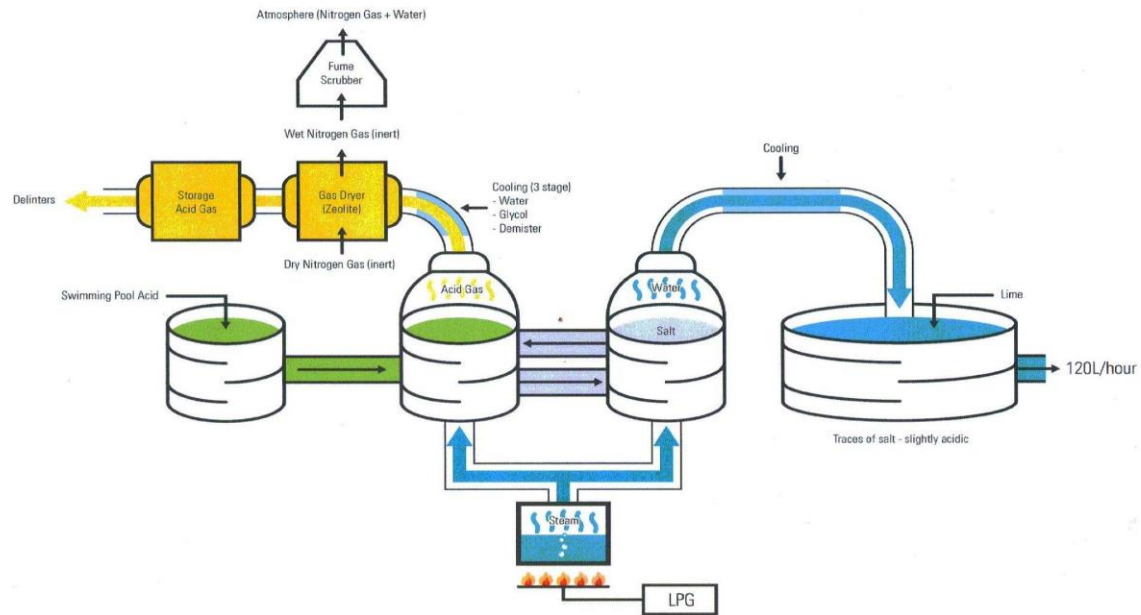


FIGURE 12 – HCL Gas Process

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5. THE PROPOSAL

5.1 **Summary**

CSD have identified a need to upgrade their production, either on the existing site or a greenfields location (possibly outside of the Narrabri LGA). It was decided to utilize existing staff and physical infrastructure and modernize the existing facility. This will make it more efficient and enable production over a longer period. The existing Administration building, Laboratory and parking/manoeuvring areas will be replaced with modern facilities. The existing system of mixing hydrogen and chlorine on site to make HCL gas is to be replaced with a much safer system which makes the gas directly from "pool acid". One warehouse will be refurbished, while modern delinting, treatment and dispatch facilities will replace outdated facilities.

New buildings are as follows:-

- Administration Building
- Laboratory
- Delinter extension and recladding of Black Seed Warehouse
- Finished Goods, Treatment and Despatch Building
- Fuzzy Seed Silo
- Dump Pits 6 & 7
- Staff/Visitor Car Park, accessways and truck loading/unloading areas
- Augmented Flood Levee Bank and Pond Filling
- Fuel Depot
- Fire Control Centre
- HCL Gas Plant

Plans for the above are detailed at 5.2.

The proposed development will be constructed with a balance of cut and fill across the site. The finished surface will slope to the west, as does the existing surface, varying from RL193.85m to RL 193.55m.

Two new access points are required from Culgoora Road to the development, with both existing accesses to be closed off. There will be separate accesses for cars and trucks – to minimize conflict between heavy and light vehicles. No additional heavy or light vehicle traffic is anticipated due to the redevelopment. While there has been some queuing of trucks on Culgoora Road to the existing facility, the additional parking and maneuvering proposed on site will eliminate the need for queuing.

The redeveloped facility will operate under the same hours as the existing one. The operation will continue to be seasonal, although with the peaks and troughs of activity "smoothed out". From April to August delinting will be carried out 24 hours per day, 7 days per week. From August to December seed treatment and production will be

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carried out 24 hours per day, 5 days per week. At other times plant and equipment will be in "care and maintenance" mode and administration/research staff will work regular office hours.

Generally staffing job descriptions and numbers will remain the same, although some positions will require increased levels of technical expertise due to increases in technology in the new equipment.

5.2 Submitted Documents and Plans

Author	Title	Document No.	Issue No.	Date
Hill Lockart	Title Page	C0114DA-00-100	1	29.4.16
Hill Lockart	Existing Locality Plan	C0114DA-01-100	1	29.4.16
Hill Lockart	Proposed Locality Plan	C0114DA-01-101	1	29.4.16
Hill Lockart	Site Plan & Landscaping Plan	C0114DA-01-102	1	29.4.16
Hill Lockart	Part Site Plan, Car Park, Admin, Lab	C0114DA-01-103	1	29.4.16
Hill Lockart	Gas Plant Area Plan	C0114DA-01-104	1	29.4.16
Hill Lockart	Admin Floor Plan	C0114DA-02-101	1	29.4.16
Hill Lockart	Admin Elevations	C0114DA-02-102	1	29.4.16
Hill Lockart	Admin Sections	C0114DA-02-103	1	29.4.16
Hill Lockart	Laboratory Floor Plan	C0114DA-03-101	1	29.4.16
Hill Lockart	Laboratory Elevations	C0114DA-03-102	1	29.4.16
Hill Lockart	Laboratory Sections	C0114DA-03-103	1	29.4.16
Hill Lockart	Treatment, Finished Goods, Dispatch & Loading Area	C0114DA-04-101	1	29.4.16
Hill Lockart	Treatment, Finished Goods, Dispatch & Loading Area Floor Plan	C0114DA-04-102	1	29.4.16
Hill Lockart	Treatment, Finished Goods, Dispatch & Loading Area Elevations	C0114DA-04-103	1	29.4.16
Hill Lockart	Treatment, Finished Goods, Dispatch & Loading Area Sections	C0114DA-04-104	1	29.4.16

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Author	Title	Document No.	Issue No.	Date
Hill Lockart	Delinter & Black Seed Warehouse Floor Plan	C0114DA-05-101	1	29.4.16
Hill Lockart	Delinter & Black Seed Workhouse Elevations	C0114DA-05-102	1	29.4.16
Hill Lockart	Delinter & Black Seed Workhouse Sections	C0114DA-05-103	1	29.4.16
Hill Lockart	Silo Plan	C0114DA-06-101	1	29.4.16
Hill Lockart	Silo Plan North & South Elevations	C0114DA-06-102	1	29.4.16
Hill Lockart	Silo Plan East & West Elevations	C0114DA-06-103	1	29.4.16
Hill Lockart	Pits 6-7 Plan & Section	C0114DA-07-101	1	29.4.16
Hill Lockart	Pits 6-7 Elevations	C0114DA-07-102	1	29.4.16
Hill Lockart	Fuel Depot Plan, Elevations & Sections	C0114DA-08-101	1	29.4.16
Hill Lockart	Entry Gates	C0114DA-08-102	A	22.4.16

Table 1 – Submitted Documents & Plans

5.3 Scope of Work

5.3.1 Administration Building

The Administration Building is detailed in architectural design series 01-102 to 02-103. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel or timber frame, brick external veneer, plasterboard internal lining, light-weight coloured metal roof and aluminium window frames.
- The Building will contain the following rooms:-
 - Entry/Lobby/Reception
 - 19 Offices
 - Interview Room
 - Communications Room
 - Kitchen
 - Boardroom and Lounge
 - Male/Female Toilets
 - Access Toilet
 - 2 Unisex Toilets
 - Staff Room
 - Training Room
 - Archive Room
 - Printing Room

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- 2 Store Rooms
- Building Envelope Area 916m²
- Outdoor Areas 170m²
- The Administration Building will be used for:-
 - Overall site control
 - Check in/induction of visitors
 - Data Control
 - Staff Training
 - Meetings
 - Accounting and Clerical

5.3.2 Laboratory

The Laboratory building is detailed in architectural design series 03-101 to 03-103. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel or timber frame, brick external veneer, plasterboard internal lining, light-weight coloured metal roof and aluminium window frames.
- The building will contain the following rooms:-
 - Foyer
 - 6 Offices
 - Quality Control Room
 - Planting Room
 - Wet Area Room
 - PCR
 - Laundry
 - Kitchen
 - Staff Room
 - 2 Laboratory Bench spaces
 - Seed Preparation rooms
 - 6 Store Rooms
 - Cool Room
 - Freezer Room
 - 5 Germination Rooms
 - Access Toilet
 - 2 Unisex Toilets
 - 2 Covered Outdoor Areas
- Building envelope Area 815m²
- Outdoor Areas 103m²
- The Laboratory will be used for seed germination and plant growth testing.

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5.3.3 Warehouse Refurbishment and Extension, Delinting / Bagging Room

The Warehouse refurbishment, extension and Delinting/Bagging room are detailed in architectural design series 05-101 to 05-103. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel frame light-weight coloured metal insulating sandwich panels, (2 colours alternating), steel framed floor over basement, light-weight coloured metal roof, coloured metal roller-doors.
- The building will contain the following rooms:-
 - Reclad Warehouse
 - Palletising space
 - Control Room
 - Bagging space
 - Delinting space
 - Basement (under Bagging/Delinting)
 - Outdoor covered area with truck wash and chemical drum store
- New Building Envelope Area 2816m²
- Outdoor Area 1967m²
- This building will be used for seed storage, removing fuzz from seed and packaging storage of black seed.

5.3.4 Finished Goods Warehouse and Treatment Area

The Finished Goods Warehouse and Treatment Area is detailed in architectural design series 04-101 to 04-104. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel frame light-weight coloured metal insulating sandwich panels, (2 colours alternating), light-weight coloured metal roof, plasterboard internal lining to personnel areas, aluminium window frames, coloured metal roller doors.
- The building will contain the following rooms:-
 - Quality Assurance Laboratory
 - Weighbridge
 - Despatching area
 - Warehouse
 - Seed Treatment area
 - Chemical Store
 - Receiving Room
 - 5 Offices
 - Entry Foyer
 - Interview Room
 - Kitchenette

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- First Aid Room
- Two Store Rooms
- Laundry
- Staff Room
- 2 Unisex wash/shower/toilets
- Male/Female shower/locker rooms
- Covered Outdoor Area
- Building Envelope Area 12,781m²
- Outdoor Area 28m²
- This building will be used for:-
 - Chemical treatment of seed
 - Treated seed packaging and storage
 - Seed dispatch
 - Truck Weighbridge
 - Seed Chemical Storage
 - Seed Processing Control
 - Administration/Clerical
 - Staff Amenities

5.3.5 Silo – “Fuzzy” Shed

The Silo – “Fuzzy” Shed is detailed in architectural design series 06-101 to 06-103. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel frame light-weight coloured metal insulating sandwich panels, (2 colours alternating), light-weight coloured metal roof, steel swinging doors.
- The building will contain 12 storage compartments.
- Building Envelope Area 940m²
- This building will be used for the storage of fuzzy seed prior to delinting.

5.3.6 Dump Pits 6-7

Dump Pits 6-7 are detailed in architectural design series 07-101 to 07-102. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel frame light-weight coloured metal external cladding and roof, reinforced concrete walls to pit, reinforced concrete ramp.
- The building will contain 2 pits for the receipt of fuzzy seed.
- Building Envelope Area 136m²

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5.3.7 Driveways / Parking

Driveways, parking and maneuvering areas are detailed in architectural plans 01-100, 01-101, 01-102, 04-101, 04-102, 05-101. Works associated with construction are as follows:-

- Compacted subgrade, compacted gravel basecourse, concrete, bitumen or DGB wearing course, concrete kerb and guttering, stormwater drainage, painted line marking.
- 74 car spaces and ample parking for B-double trucks will be provided. 8 existing covered car spaces will also be retained near the old administration building.

5.3.8 Levee Bank Augmentation and Pond Filling

Levee Bank Augmentation is detailed in the Drainage Review by TCS (Appendix Q), the Stormwater Management Plan (Appendix I) and Pond Filling is detailed in architectural design plans 01-100 and 01-101. Works associated with construction are as follows:-

- De-watering of ponds and irrigation to fields on-site.
- Placement of engineered fill won from site.

5.3.9 Fuel Depot

The Fuel Depot is detailed in architectural design plan 08-101. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel frame, light-weight coloured metal roof.
- The building will contain the existing oil shed, existing diesel tank bunded area, wash down bay and external existing pump house shed.
- Building Envelope Area 147m²
- This building will be used for diesel re-fuelling and truck wash-downs.

5.3.10 Fire Control Centre

The Fire Control Centre is detailed in architectural plans 01-100, 01-101, 01-102. Works associated with construction are as follows:-

- Extension of utility services.
- Reinforced concrete slab, steel structure, light-weight metal external cladding and roof, 4 metal water tanks.
- The building will contain fire control equipment to meet Australian Standards and the BCA.
- This facility will provide a completely self-contained fire-fighting capability for the development.

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5.3.11 HCL Gas Plant

The HCL Gas Plant is detailed in plans in Appendix N and Architectural plan 01-104. Works associated with construction are:-

- Extension of utility services.
- Reinforced concrete slab, one bulk HCL liquid storage tanks, light-weight metal boiler shed, steel-framed evaporator towers 25 metres high.
- The facility will contain the following structures:-
 - Bunded HCL liquid unloading area
 - One 40m³ HCL liquid storage tank
 - LPG fueled high pressure boiler
 - HCL Azeotrope and flash evaporator towers with reboilers
 - Glycol driller
 - Dryer
 - Gas accumulation tank
 - Gas absorption system
 - 210KL waste water treatment tanks
 - Waste water storage tank
- This facility will be used to make HCL gas for the delinting process.

5.3.12 Demolition of Existing Administration Building

The existing Administration building will be demolished and materials disposed of to a licensed waste facility.

5.4 Waste Management

5.4.1 General Site Waste

Other than as noted below, solid and liquid (oil/fuel spills) waste will be disposed of at Council's Wee Waa waste transfer station.

5.4.2 Cotton Lint Waste and Poor Quality Seed

Off grade seed (2,000 tonne per year) will continue to be sold as stock feed and for mushroom compost.

Lint fibre (2 tonne per year), grain dust (12 tonne per year), delinter dust (1,200 tonnes per year) and floor sweepings (440 tonne per year) will continue to be wetted-down, neutralized by the addition of Calcium Hydroxide and dispersed on open paddocks on site. Dust emissions from this practice to date have not been an issue that we are aware of (similar to spreading of any other vegetable matter in extensive agriculture).

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5.4.3 Chemical Waste

HCL fumes will continue to be neutralised by a caustic scrubber before being released to the atmosphere in accordance with Australian Standards. Washed chemical drums will continue to be sent to Council's Drum Roundup.

5.4.4 Packaging Waste

Paper packaging from black seed (from packaging prior to treatment) will continue to be baled and recycled by a licensed recycler.

5.4.5 Waste Water

Waste water from the scrubber will continue to be neutralized by the addition of Calcium Hydroxide in the scrubber dosing system to a balanced pH and irrigated to landscaped areas.

Empty seed treatment drums will continue to be triple rinsed (as per best practice) which dilutes residual contents by 5,000 fold. Approximately 60,000L of this highly dilute rinsate is produced annually. It is spread topically over 80ha of open paddocks on site. This practice has recently been reviewed by the NSW Environment Protection Authority (EPA) and found to be satisfactory. Copies of recent correspondence are attached at Appendix G. The EPA recommendation to dispose of rinsate to evaporation ponds was superseded by a subsequent verbal agreement. That agreement followed concerns raised by our client that such a method of disposal would simply serve to re-concentrate any contamination in another part of the site. The alternative dilution of the chemicals to less than levels found in extensive agriculture, together with broadacre irrigation, was agreed.

Furthermore we have arranged for an independent review of this practice, in the light of recent concerns raised by the EPA. The "Review of Land Application of Seed Treatment Residue (Rinsate) Shenstone, 2952 Culgoora Road, Wee Waa" is attached for your review (Appendix Q). We note the following conclusions to that review:-

Overall it was considered unlikely that CSD's land application of seed treatment residues would significantly impact the environment, based on the following:

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- Sensitive environmental receptors were not identified in close proximity to the Site;
- The land application rates were less than industry topical foliar application rates;
- There was no significant increase in the concentration of active ingredients in the soil between sampling rounds.

It is recommended that routine soil monitoring is undertaken to confirm that active ingredient concentrations in soils within the land application area are not increasing or accumulating with time.

That is, Bundock Creek was not considered a sensitive environmental receptor and the levels of chemical application were considered to be significantly less than would normally be present in extensive agriculture. We would accept the above recommendation as a condition of consent.

5.4.6 Sullage / Sewage Disposal

All sewage and Sullage will be treated and disposed of on-site. See report by Marline Newcastle Pty Ltd in Appendix C.

5.4.7 Construction Waste Management

The contracted builder for the redevelopment will be required to submit a Waste Management Plan prior to commencing work. The Plan required will be to demonstrate compliance with NSW Environment Protection Authority and Council standards.

5.5 Utilities

5.5.1 Water Supply

Filtered bore water will continue to be used as potable water in the redevelopment. Bore water will also be used for washing, laundry and toilet flushing in the Administration building, laboratory and staff amenities.

Firefighting water will continue to be sourced from a dedicated bore. New rainwater tanks will collect water for seed processing and all industrial wash downs (topped up by bore water as required).

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5.5.2 Electricity Supply

The proposed redevelopment will continue to use the existing high voltage supply to the site, with a new transformer to augment the existing one. A stand-by generator will power the laboratory when required. See report by Marline Newcastle Pty Ltd at Appendix C.

5.5.3 Gas Supply

A central LPG tank will be provided to serve the re-developed facility, reticulated throughout as detailed in the report by Marline Newcastle Pty Ltd at Appendix C.

5.5.4 Telecommunications

The existing facility has an optic fiber connection, which has capacity to cater for the redevelopment.

5.5.5 Stormwater Discharge

The proposed development will continue to utilize the existing gated culvert discharge point in the northwestern corner of the site. No augmentation will be required and therefore there will be no additional discharge due to the proposed development. See report by Rowen Meyer & Associates at Appendix I.

Stormwater discharges will be protected from contaminants by separation from waste streams by self-contained pipe work and roofing/bunding of potential contamination areas.

5.6 Pest Management

5.6.1 Rodent Control

Rats and mice will continue to be controlled by bait stations supplied and maintained by a licenced pest controller.

5.6.2 Bird Control

Birds will be kept out of new buildings by blowers over main doorways.

5.6.3 Insect Control

Insects are not generally a pest of stored cotton seed, but occasionally flour beetles need to be controlled by spraying of fuzzy seed sheds when empty. These sprays are also carried out by a licenced pest controller.

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6. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

SECTION 79C EVALUATION

6.1 *c(1)(a)(i) the provisions of any environmental planning instrument*

6.1.1 **State Environmental Planning Policies (SEPPs)**

6.1.1.1 **SEPP44 – Koala Habitat**

This Policy applies in the Narrabri Shire LGA, on development sites 1ha or larger in area and so applies to this development. The site has been highly modified and cleared for cropping and grazing. No tree removal will be required due to the proposed development. It is therefore considered that the development will have no additional impact on the Koala species or Koala Habitat.

6.1.1.2 **SEPP55 – Remediation of Land**

An Environmental Site Assessment has been carried out on the site by Prensa Pty Ltd and a copy is included as Appendix O.

Clause 7 of SEPP55 is relevant to this proposal, as follows:-

C17(1)(a): the land has been identified in the Prensa report as contaminated, although at insignificant levels

C17(1)(b): there will be no change in the use of the land – the same rural industry will be continued albeit with modernized equipment and methods.

C17(1) (c): remediation of the land has not been recommended by Prensa, due to the absence of significant contamination. Prensa has, however, recommended that a Construction Environmental Management Plan is prepared to deal with any significant contamination uncovered during construction of the development.

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They have also recommended that a Site Management Plan be prepared to deal with any significant contamination that emerges post-development.

C17(1)(d): there will be no change in the use of the land – the same rural industry will be continued albeit with modernized equipment and methods.

6.1.1.3 SEPP (Infrastructure) 2007

The area of the site which is to be developed for new or refurbished buildings is approximately 18,000m². The development therefore does not meet the criteria in this SEPP for referral to the RMS as an Industry which is Traffic Generating.

6.1.1.4 SEPP (Rural Lands) 2008

This SEPP applies to the Narrabri Shire LGA and the following aims of the Policy are relevant to the proposed development:-

- (a) *to facilitate the orderly and economic use and development of rural lands for rural and related purposes,*
- (b) *to identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State,*
- (c) *to implement measures designed to reduce land use conflicts.*

The proposal meets aim (1) by providing the continuation of a high-value and employment supporting use of the land. Aim (c) will be met by appropriate analysis through this Statement and, where necessary, mitigation of adverse impacts accordingly.

The following Rural Planning Principles referred to above at (b) are relevant:-

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- (a) *the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas.*
- (b) *recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State,*
- (c) *recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development,*
- (d) *in planning for rural lands, to balance the social, economic and environmental interests of the community,*
- (e) *the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land.*

The development proposed will allow the increased efficiency and modernization of a rural industry which is crucial to cotton farming in Australia. Social, economic and environmental interests will be balanced by the analysis in this Statement and implementation of impact mitigation measures outlined. There is only limited biodiversity or native vegetation on the subject land. Water resources will be protected by appropriate waste treatment and disposal and working within existing ground water allocations. Flood risk will be mitigated by augmentation of the existing levee bank on the site.

6.1.1.5 SEPP33 Hazardous and Offensive Development

For the purposes of the subject Development Application it is relevant to consider whether the proposed development, being industry, is potentially hazardous or offensive under this SEPP. It is noted that industries involving chemicals such as fertilisers and pesticides,

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grain handling, gas processing, storage and handling may be considered potentially hazardous under "Applying SEPP33" by NSW Planning (2011). The same document also points to agricultural produce processing as an industry which may be considered potentially offensive.

Processes and inputs/outputs in the new facility will remain essentially the same as in the existing facility, with the noted exception of the new hydrogen chloride gas processing facility. Otherwise new plant and equipment will improve dust and noise emissions.

With regards to hazardous substances and SEPP33, the following ingredients are intended to be used in the new facility (MSDS Sheets are provided in Appendix K):-

(a) Inert Seed Treatments

These are liquids (colours and polymers) and a powder (fluency powder) used to aid seed handling. They are:-

- Peridium Silver SV96004
- Red 23004
- Peridium Purple 23005
- Green 23007
- Fluency FP24001
- Peridium EV23003

None of these substances are considered Dangerous Goods and are therefore not Hazardous under Appendix 4 of "Applying SEPP33".

(b) Fertilisers

Awaken ST is applied to the seed to aid germination and early growth. It is not considered Dangerous Goods and therefore not Hazardous.

(c) Insecticides

These chemicals are applied to the seed to control soil, sucking and chewing pests. They are Cruiser and Cruiser X, which have the Australian Dangerous Goods (ADG) Class of 9, Packing Group III – Miscellaneous

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Dangerous Goods presenting low danger. Genero is also used, which is not considered Dangerous Goods.

These substances are therefore not considered Hazardous under Appendix 4 of "Applying SEPP33".

(d) Fungicides

These chemicals are applied to the seed to stop wilt, root rot and damping-off. The product is Dynasty, which is not considered Dangerous Goods. These substances are therefore not considered Hazardous under Appendix 4 of "Applying SEPP33".

(e) Plant Activator

This product is designed to stimulate the plant's natural resistance mechanisms. Bion is ADG Class 9 Packaging Group III and therefore these substances are therefore not considered Hazardous under Appendix 4 of "Applying SEPP33".

(f) Hydrogen Chloride (HCL) Liquid Acid ("Pool Acid")

This chemical is used in the seed delinting process, to produce the HCL gas required. Liquid HCL is in ADG Class 8, Packaging Group II. Up to 50 tonnes of liquid HCL will be stored on site and therefore is considered Potentially Hazardous under Appendix 4 of "Applying SEPP33". The Gas Plant Design Strategy and Preliminary Hazard Assessment (PHA) included in Appendices N and R detail measures to be put in place to ensure this as part of the development does not become Hazardous

(g) Calcium Chloride (CaC12)

CaC12 (salt) is used in the distillation process to produce HCL gas. It is not considered Dangerous Goods and therefore not Hazardous.

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(h) Hydrogen Chloride Gas

This is the form of HCL which actually removes the lint from the seed. HCL gas is in ADG Class 2.3 (no Packaging Group, being a gas). The gas is made and used on demand, so that only a maximum of 48kgs in total will be held on site at any one time. The HCL gas is therefore not considered Potentially Hazardous under Appendix 4 of "Applying SEPP33".

(i) LPG

A central storage cylinder of LPG gas is included in the proposed development for heating purposes. It is in ADG Class 2.1. Approximately 30m³ will be stored, which is considered Potentially Hazardous under Appendix 4 of "Applying SEPP33". The Gas Plant Design Strategy and PHA in Appendices N and R detail measures to be put in place to ensure this aspect of the development does not become Hazardous.

(j) Calcium Hydroxide

This product is used to neutralize acidic waste water. It is not considered Dangerous Goods and therefore not Hazardous under Appendix 4 of "Applying SEPP33".

(k) Liquid Nitrogen

This product is used to dry the seed after treatment. It is not considered Dangerous Goods and therefore not Hazardous under Appendix 4 of "Applying SEPP33".

Dust and noise emissions from the proposed development have the potential to be offensive. However, apart from the initial unloading of fuzzy seed from trucks, all stages of seed processing are dust-sealed, with dust extractors and filters stopping the escape of dust. The unloading of fuzzy seeds to the new

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dump-pits (6 and 7) is centrally located within the redeveloped facility and is a sporadic practice. This source is also considered to be sufficiently sheltered and of sufficient distance away from residential uses to be considered inoffensive.

Noise emissions from new plant and equipment would be less than existing. The same numbers and types of machines will be used, however new equipment will be much quieter.

6.1.1.6 SEPP (State and Regional Development) 2011

It is relevant to consider whether the proposal is State Significant Development under this SEPP.

We believe the proposed redevelopment should be considered partly a "cotton seed mill" and partly a "warehouse or distribution centre" under Schedule 1 to the SEPP. The Capital Investment Value (CIV) of those components are approximately \$14m excluding GST and \$27.2m excluding GST respectively, which are both less than the respective thresholds of \$30m and \$50m under Schedule 1. We therefore do not consider the redevelopment to be State Significant.

Due to the total CIV of the proposed development the Joint Regional Planning Panel is the determining authority for this application, pursuant to Section 23G and Schedule 4A of the EP&A Act 1979.

6.1.2 Local Environmental Plans (LEPs):

6.1.2.1 Narrabri LEP2012

Narrabri LEP2012 applies to the site. The aims of this plan are as follows:-

- (a) *To encourage the orderly management, development and conservation of resources by protecting, enhancing and conserving:*
 - (i) *land of significance for agricultural production, and*

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- (ii) *timber, minerals, soil, water and other natural resources, and*
- (iii) *areas of high scenic or recreational value, and*
- (iv) *native plants and animals including threatened species, populations and ecological communities, and their habitats, and*
- (v) *Places and buildings of heritage significance,*
- (b) *to provide a choice of living opportunities and types of settlements,*
- (c) *to facilitate development for a range of business enterprise and employment opportunities, to ensure that development is sensitive to both the economic and social needs of the community, including the provision of community facilities, and land for public purposes.*

The proposed development is considered to be consistent with these aims, with relevant issues being discussed throughout this Statement. Of particular relevance is aim (c). The proposed development will allow the existing high-value and employment-intensive industry on the site to modernize and continue well into the future.

The subject land is zoned RU1 under this LEP. The objectives of that zone are as follows:-

- *to encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *to encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *to minimize the fragmentation and alienation of resource lands.*
- *to minimize conflict between land uses within this zone and land uses within adjoining zones.*
- *to allow for non-agricultural land uses that will not restrict the use of other land for agricultural purposes.*

It is considered that the proposed development is consistent with these objectives, as follows:-

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- The development will increase the footprint of the existing facility by a relatively small area of 2.1 ha (approx.). While the site is part of a region of significant agricultural land, the amount lost to production due to this proposal would be insignificant.
- The development will modernize and increase the efficiency of the existing high-value and employment-intensive rural enterprise on the site.
- No land subdivision is proposed.
- Rural land use conflict will be minimized by the mitigation measures proposed throughout this Statement.
- The proposed development will not restrict the agricultural use of adjoining lands and will enhance the use of all land under cotton production.

The proposed redevelopment is permissible within the subject zone as a Rural Industry.

Clause 6.1 Earthworks is relevant to the proposed development, due to the excavation of material on-site for construction and the subsequent creation of a "borrow pit". The following matters in that Clause are relevant:-

- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*
- (b) the effect of the development on the likely future use of redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
- (h) any appropriate measures proposed to avoid, minimize or mitigate the impacts of the development.*

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Regarding matters (a), (d) and (e) we note that all earthworks will be contained within the site and specifically within a levee bank designed to isolate the 1% AEP flood. Regarding matter (b), it is envisaged that the site will continue its current use indefinitely. Matter (c) has been addressed by SQS Pty Ltd in their Geotechnical Study of the site (see Appendix M) and found to be satisfactory. It is considered unlikely that any relics referred to in (f) remain on the site, due to the long history of cultivation. The site is isolated from the features noted under matter (g) by the levee bank. The impacts of the proposed development and their treatment under matter (h) are addressed throughout this Statement.

Clause 6.2 Flood Planning is also relevant to the proposed development. The following matters in that clause are relevant:-

- (1) *The objectives of this clause are as follows:*
 - (a) *to minimize the flood risk to life and property associated with the use of the land.*
 - (b) *to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change.*
 - (c) *to avoid significant adverse impacts on flood behavior and the environment.*
- (2) *This clause applies to:*
 - (b) *other land at or below the flood planning level.*
- (3) *Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:*
 - (a) *is compatible with the flood hazard of the land, and*
 - (b) *is not likely to significantly adversely affect flood behavior resulting in detrimental increases in the potential flood affectation of other development or properties, and*
 - (c) *incorporates appropriate measures to manage risk to life from flood, and*
 - (d) *is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and*

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- (e) *is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.*

A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005, unless it is otherwise defined in this clause.

*In this clause, **flood planning level** means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.*

Flooding is discussed in detail immediately above and in sections 5.3.8, 6.4.6, 6.4.13, 6.6 and 7. In this context we can summarise those discussions with respect to subclause (3) as follows:-

- (a) The redevelopment will be protected from a 1:100 ARI flood by the augmented levee bank proposed.
- (b) The redevelopment will not significantly affect local flood behavior because the augmented levee bank will not encroach beyond its existing outer perimeter. DPI Water have concurred on this – see Appendix J.
- (c) The augmented levee will protect the site occupants from flooding. External flooding and any failure of the levee are addressed in the CSD Flood Evacuation Plan as follows:-

Attachment J - Flood Evacuation Plan **Emergency Response**

Flash Flooding - flood waters cut off site without warning

It is extremely unlikely that flash flooding would ever occur at a CSD site (Shenstone, CSD Farms, Dalby) due to the topography. Every CSD site's assembly point is in a flood free area.

On hearing the alert (verbally, automatic alarm or manual alarm):

- All staff, contractors and visitors should collect their belongings (**ONLY WHEN IT IS SAFE TO DO SO**).
- Collect visitor, employee and contractor rolls and move all personnel along designated routes to the designated assemble area(s).
- Assist staff, contractors and visitors with disabilities or special needs.
- Assemble visitors, employees and contractors in groups and mark off roll.
- Confirm rolls with Emergency Controller (most senior person on site) immediately after checking.
- Remain at assembly point and wait further instructions from Emergency Controller.

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- The Emergency Controller will liaise with Emergency Services to arrange evacuation from site.

Flood Events with warning

CSD sites being cut off due to a moderate flood is likely. It will come with about a week's fore warning due to the topography of CSD sites (Shenstone, CSD Farms, Dalby). Depending on the severity of the flood, a work plan will be communicated to all staff prior to the flood arriving. The work plan will range from complete site shutdown until the flood passes to limited work activity with staff transported to site by helicopter.

Continuity Response

The Critical Incident Team should:-

- Organise trauma counselling for affected staff and contractors
- If the workplace was closed, arrange for re-opening in consultation with emergency services
- Debrief unaffected staff and contractors. Arrange for any counselling.
- Arrange for an interim external communications plan. (i.e. re-directing phones for general enquiries)
- Prepare Incident Report for the CSD Board

Recovery Response

The Critical Incident Team should:-

- Monitor affected staff for posttraumatic stress disorder; providing specialist treatment as necessary
- Review Critical Incident Plan

(d) See (b)

(e) See (b) and (c)

Flooding of the locality up to and including the 1:100 ARI event is therefore not considered a significant issue.

Clause 6.5 Essential Services is also relevant to the proposed development. The provision of water supply, electricity supply and sewage disposal/management are addressed in the Project Definition Plan by Marline Newcastle Pty Ltd (see Appendix C). Stormwater Management is addressed in the Stormwater Management Plan by Rowen Meyer & Associates (see Appendix I). Vehicular access is addressed in the project Architectural Plans by Hill Lockart Pty Ltd and the Traffic Impact Assessment by RoadNet (see Appendix R). It is considered that Clause 6.5 has been adequately addressed by those studies.

6.2 c(1)(a)(iii) the provisions of any Development Control Plan (DCP):

6.2.1 Narrabri Shire Council DCP 2012

The following chapters of DCP2012 are applicable to the proposed development:

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6.2.1.1 DCP – Outdoor Advertising

A building identification sign is proposed for the development. The sign will be less than 2.5m² and is therefore considered Exempt Development under SEPP (Exempt and Complying Development Codes) 2008.

6.2.1.2 DCP – Building Line

All new buildings will be erected at a distance of greater than six (6) metres from the Culgoora Road Boundary. See Submitted Plans by Hill Lockart Pty Ltd.

6.2.1.3 DCP – Drainage to Buildings

- **Roof Water Drainage**
Roof water will discharge to new and re-aligned swale drains will continue to capture and convey internal Stormwater to the existing outlet at the north western corner of the site. See Stormwater Management Plan by Rowen Meyer & Associates Pty Ltd at Appendix I.
- **Sanitary Drainage / Effluent Disposal**
All sewage / Sullage will be treated and disposed of on-site. See report by Marline Newcastle Pty Ltd in Appendix C.
- **Trade Waste**
Liquid waste other than Sullage / sewage will consist of waste water from the Scrubber and Drum Rinsafe from the cleaning of chemical drums. This waste will be neutralized / diluted and irrigated to open fields on the site. The NSW EPA has recently reviewed this process and copies of correspondence are included in Appendix G.

6.2.1.4 DCP – Parking Code No. 1

Parking, accessways and manoeuvring areas have been designed in accordance with AS 2890.1, 2890.2, 2890.6 and AUSROADS turning templates.

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74 Car spaces are provided in the proposed development, including 3 disabled spaces. 8 existing covered car spaces will also be retained near the old Administration building. Maximum staff numbers on site will be 32 (unchanged from the existing facility). Few visitors are experienced currently and few are expected in the redeveloped facility.

In the unlikely event of a shortage of car spaces there is ample overflow space scattered around the site. It is not envisaged that there will be any desire for visitors or staff to park on Culgoora Road.

All loading and unloading at the proposed development will be via the new truck parking/maneuvering area at the front of the facility and the access loop attached to it. Loading/unloading movements will be totally separate to the car parks.

Fuzzy seed delivery is and will continue to be via B-double trucks. A maximum of 12 trucks per day are expected in peak periods (April-June). Queuing well in excess of requirements for B-doubles will be available on site and no queueing on Culgoora is expected. The maneuvering area will allow B-doubles to do a U-turn.

Dispatch of finished seed, by-products and waste usually occurs via B-doubles down to small flatbed trucks. A maximum of 10 trucks per day are expected during peak periods (August-December).

Car parks, access ways and maneuvering areas will be constructed of bitumen, concrete or DGB pavement and line marked as shown on the plans by Hill Lockart. All hard-stand will be as drained to the site stormwater drainage system.

Proposed parking has also been addressed in the Traffic Impact Assessment (Appendix R) and found to be more than adequate.

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6.3 c(1)(a)(iv) matters prescribed by the regulations

Schedule 3 of the Environmental Planning and Assessment Regulation 2000 sets out criteria by which Designated Development Agricultural Produce Industries, such as the proposed development, which are considered Designated are those:-

- (a) *that crush, juice, grind, mill, gin, mix or separate more than 30,000 tonnes of agricultural produce per year, or*
- (b) *that release effluent, sludge or other waste:*
 - (i) *in or within 100 metres of a natural waterbody or wetland, or*
 - (ii) *in an area of high watertable, highly permeable soils or acid sulphate, sodic or saline soils.*

The redeveloped facility would have a theoretical capacity to produce up to 13,000 tonnes of finished seed per year, however expected demand is only for a maximum of 7,000 to 9,000 tonnes per year. The proposed development will not release effluent, sludge or other waste to a natural water body or wetland and is not located on land which has a high water table, highly permeable soils, or acid sulphate, sodic or saline soils.

We do not consider that Clause 1(b)(i) and (ii) of Schedule 3 of EP&A Reg 2000 apply to the redevelopment, for the following reasons:

- Bundock Creek does not meet the definition of "natural waterbody or wetland" as defined in the Regulation – as noted above.
- The disposal of rinsate in the vicinity of Bundock Creek is an existing practice for which development consent is not sought or required.
- The rinsate being applied in the vicinity of Bundock Creek should not be considered "effluent, sludge or other waste", as outlined earlier in this document.
- The disposal of Stormwater to the existing outlet at the north west corner of the site should not be considered "effluent sludge or other waste", being physically separated from all waste streams.

The proposed development is therefore not considered to be Designated Development.

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6.4 c(1)(b) the likely impacts of the development

6.4.1 Context and Setting

The site is typical north-west NSW flood plain, with little variation in terrain or opportunity for views. The locality has an extensive agricultural landscape. The site is occupied by the existing cotton seed processing facility (see Figure 1 and Appendix P).

The redevelopment of the existing facility by the addition of new light industrial and administration buildings will increase the scale of development on the site, but not significantly in this context. The height, mass and bulk of new buildings will be in keeping with existing development. The character and design of the re-developed facility will be more modern, but otherwise consistent with existing development.

Adjoining land uses are rural i.e. extensive agriculture. The existing facility has proved to be consistent with that land use and it is expected the proposed redevelopment will be also. The redeveloped facility will be enclosed by security mesh fencing to ensure public safety.

See architectural plans of the redevelopment in Appendix F.

6.4.2 Access, Transport and Traffic

The site has frontage to Culgoora Road, a bitumen sealed public road. Two (2) access points are currently in use. Both will be closed and two (2) new entrances will be created in the redevelopment – one for light vehicles and one for heavy vehicles. Separate light vehicle parking and heavy vehicle parking/loading/unloading and maneuvering areas will be provided. All of these facilities have been designed in accordance with appropriate standards, as noted elsewhere in this statement.

No additional traffic will be created by the proposed development. The new facility will not increase production but simply be more efficient and more responsive to demand. The attached Traffic Impact Assessment (Appendix R) confirms this.

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6.4.3 Utilities

Water supply will come from existing bores and new rainwater tanks (collecting from the new and existing buildings). Electricity and telecommunications are already connected to the site. LPG Gas will be reticulated throughout the redevelopment from a new central tank. Stormwater will continue to be discharged to the existing outlet at the north western corner of the site.

6.4.4 Heritage

Due to the long history of cultivation of the site it is not expected that any items of Aboriginal Heritage remain on the site.

6.4.5 Other Land Resources

The additional area of the site to be occupied by improvements is insignificant in terms of agricultural land lost to the region.

6.4.6 Water

Water supply will be provided as detailed at 6.4.3. Adequate supply is available on site for the proposed development. Waste water will be suitably treated to allow irrigation to open paddocks on site. Stormwater will continue to be discharged to the existing outlet at the north western corner of the site.

The flow regime of the local flood plain will be unaffected by the proposed augmentation of the existing levee bank, because its external perimeter will not change. This approach has been previously approved by DPI Water as per correspondence in Appendix J.

Groundwater will remain unaffected by the redevelopment, as noted in the Environmental Site Assessment by Presna Pty Ltd at Appendix O.

6.4.7 Soils

A geotechnical investigation of the site has been carried out by SQS Pty Ltd and is included at Appendix M. The investigation found the site soils to be suitable for the proposed development, subject to the building practices recommended.

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A soil and water management plan will be prepared prior to construction, in accordance with "Managing Urban Stormwater: Soils and Construction" by NSW Office of Environment and Heritage ("The Blue Book").

6.4.8 Air and Microclimate

Dust is the main risk to air quality from the proposed development. Modern dust extraction equipment and dust suppression will be used at every stage of seed processing in the redeveloped facility. Dust extraction and filtration will be used on the production line, wetting of seed waste will be carried out prior to spreading on site and the sheltered central location of dump pits will contain most dust released at that point.

Dust emissions have not been an issue with the existing facilities and, with the introduction of modern equipment and practices, it is not expected dust will be an issue with the redevelopment.

6.4.9 Flora and Fauna

Given the long history of cultivation on the site, little native vegetation remains. It is not expected that any threatened species remain on the parts of the site affected by the proposed redevelopment.

6.4.10 Waste

Waste management is described in detail at 4.5. By-products will mostly be re-used on or offsite and many other materials will be recycled. Construction waste will be managed by the contracted builder for the development.

6.4.11 Energy

It is in the interests of the developer to conserve energy wherever possible, to limit costs. Insulation to all walls and roofing for the Administration, Laboratory and industrial buildings will limit energy use for heating and cooling. Both the Administration and Laboratory buildings will be fed primarily from solar panels during daytime operations. Energy usage will otherwise be limited by good management.

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6.4.12 Noise and Vibration

Noise emissions from the proposed development are most likely to be due to dust extraction fans and mobile plant. All new industrial buildings will be clad with insulating sandwich panels which will suppress noise inside buildings. The existing extraction fans are barely audible at night in the town of Wee Waa and with the introduction of modern quieter fans it is expected this will be less so. The future configuration of buildings in the redevelopment of the existing facility will also surround the operating area of mobile plant.

The buildings will thereby contain those noise emissions by physical barrier. Noise emissions have not been an issue with the existing facility and it is expected noise will be even less significant in the proposed redevelopment.

6.4.13 Natural Hazards

The site is located on a floodplain. An existing levee bank provides flood protection to less than a 1 in 50 year flood frequency. TCS have designed a new levee (see Appendix L) which will protect the redeveloped facility up to a 1 in 100 year flood frequency.

6.4.14 Technological Hazards

The site has been investigated for contamination by Prensa Pty Ltd (see Appendix P). Prensa found that contamination was not an issue for the proposed development, based on site sampling. However they also recommended the preparation of a Construction Environmental Management Plan to cover the discovery of any significant site contamination during construction.

On-going testing will be required to monitor the effects of on-site waste disposal.

A Preliminary Hazard Assessment (PHA) has been prepared for two substances to be used in the redevelopment – LPG and liquid Hydrochloric Acid. The PHA found that the new facility “would not pose any fatality or serious injury risk to the off-site population” or pose significant risk of “off-site irritation”. The PHA recommended that several Australian Standards be followed in the detailed design process and these will be adopted in full.

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6.4.15 Safety and Security

The site access and parking layout has been designed to separate heavy and light vehicles and visitors from industrial areas. All vehicle entries to and exits from the site will be in a forward direction. Buildings will be well separated to allow ample vehicle maneuvering and safe pedestrian access. All parking and access will be line-marked in accordance with Australian Standards.

A comprehensive Work Health and Safety Plan is in place for the existing facility and will be adapted for new features in this proposal (See Appendix H).

The site will be fully fenced with a mesh security fence, with strategically placed CCT cameras monitoring activities. The site is located a significant distance from the village of Wee Waa, which will discourage trespass. All buildings will be set back a significant distance of from boundaries, which will aid surveillance.

6.4.16 Social Impact

The existing seed processing facility at "Shenstone" is a very significant employer in the Wee Waa area and the proposed development will enable this to continue. Staff numbers will remain constant, although levels of expertise will need to increase with the introduction of more modern equipment and procedures.

Stable or preferably increasing employment numbers are considered to be essential in maintaining vibrant and diverse communities. The population of Narrabri Local Government Area has been in decline since at least 2001 and is predicted to decline at an average of -0.4% in the next 15 years (Source: NSW Department of Planning and Environment (DPE) population projections 2016). Population decline is said by the DPE (2016) to be mainly due to internal migration to other local government areas for economic opportunities. The DPE (2016) also notes that there is a high fertility rate in Narrabri Local Government Area and the 15-44 years age group is predicted to remain at a constant 33% proportion of the population. This means that demand for employment will continue. With a total of 32 staff at "Shenstone" representing a significant proportion of the likely working population of Wee Waa, it is essential that the facility be enabled to continue and prosper.

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6.4.17 Economic Impact

The construction period of the proposed development will create local employment and purchasing for this \$41M redevelopment, with significant multiplier effects across the economy of Wee Waa and the Narrabri Local Government Area. As noted above, the preservation of 32 skilled and semi-skilled jobs by the modernization of the existing facility will keep \$7.6M of gross wages in the local economy per annum. Apart from that, the entire cotton industry in the Narrabri Local Government Area and across Australia is totally dependent on this facility remaining in operation, productive and state of the art.

6.4.18 Design

Considerable architectural design by Hill Lockart Pty Ltd has been carried out to meet the developer's needs, while ensuring the environment and local community are protected from adverse impacts.

The proportion of the site occupied by buildings in the redevelopment will be approximately 12% (on Lot 2 DP 612166). Substantial buffers to neighbouring properties will be maintained around all buildings and other working areas. The height of new buildings will generally be consistent with the heights of existing buildings on the site.

New buildings will be insulated against heat and cold by insulated building cladding. All dust generating elements of seed processing will be fitted with extraction and filtering. Noise generated by new plant and equipment will be less than existing noise levels. The redeveloped facility will be fitted with a fire protection and control system. External finishes will be mostly non-reflective and pre-coloured with a consistent alternating colour scheme to add interest to facades. A building Code of Australia compliance report has been included at Appendix Q.

6.4.19 Construction

The contracted builder for the redevelopment will be required to prepare a suitable Soil & Water Management Plan and Project Work Health Safety Plan prior to commencement of construction. A Construction Environmental Management Plan will also be required to be developed to deal with any significant contamination discovered during construction.

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6.4.20 Cumulative Impacts

The facility at "Shenstone" is the only one of its kind in Australia. We are not aware of any other developments in the locality which have impacts similar to the proposed development which could act in unison to amplify detrimental effects.

6.5 *suitability of the Site for Development*

There are no significant constraints on the proposed development. Traffic generated by the redevelopment will remain the same as in the existing development. The site is already fully serviced by utilities and any required augmentation of supplies is feasible. Air quality and noise levels on and around the site will be preserved or improved by the redevelopment. The water requirements of the redevelopment and the physical presence of the redevelopment will not have any significant effects on the water cycle of the relevant catchment.

The site is on a floodplain but the existing levee bank will be augmented to mitigate flooding risk to insignificant levels. The soil characteristics are suitable for the development. The proposal will have no significant impact on the availability of prime agricultural land in the region and will in fact under-write the future of the cotton industry in Australia.

6.6 *any submissions*

Submissions have been received from DPI Water, the NSW EPA and RMS and their requests for information have been incorporated into this proposal. Pre-development application meetings have been held with Narrabri Shire Council. Other submissions received during the exhibition period will be responded to according to good planning practice.

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6.7 *the public interest*

6.7.1 **Relevant Strategies, Studies**

6.7.1.1 **Narrabri Shire Council Section 94A Development Contributions Plan 2011**

This plan is applicable to the proposed development and a Cost Summary Report in the form of a Detailed Cost Report from a quantity surveyor. See Quantity Surveyor's report in Appendix A.

6.7.1.2 **Namoi – 2030 Regional Resource Strategy Issues Paper 2008**

This paper applies to the Narrabri LGA, as part of the Namoi River catchment. Cotton production, together with grain, is noted as a dominant plant agricultural activity in the Namoi Region. The authors describe this as a mature industry with little scope for expansion, because of a lack of additional irrigation water. However, the Paper does not take into account advances in dryland production. The Paper notes that the economy of the Namoi Region depends heavily on agriculture and agricultural product processing, but also that there is a trend for economic activity to move to larger centres.

Water, physical infrastructure, agriculture, human settlement and the economy are identified as major issues in the Paper. All of these issues are addressed in this Statement.

6.7.1.3 **Narrabri Shire Growth Management Strategy 2009**

This document was prepared to guide the preparation of Narrabri LEP2012, which has been addressed at 7.1. The Strategy largely deals with land settlement patterns across the LGA and industrial / commercial development in Narrabri / Boggabri. The philosophy generated in the Strategy is summarized as follows:-

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- *Limit expansion to those towns that have the capacity for growth;*
- *Encourage a wide range of agricultural and other complimentary rural uses such as tourism having regard to environmental impact;*
- *Encourage a diverse and prosperous economy for the Shire:*
- *Ensure that communities have an adequate level of facilities and services to ensure a good quality of life for all residents;*
- *Embody the concepts of:*
 - *Ecologically Sustainable Development*
 - *Catchment Management, including the Actions in the Namoi and Border Rivers Gwydir Catchment Action Plans*

The proposed development is considered to be consistent with that philosophy, as embodied in the zoning and other relevant requirements in LEP2012. The Strategy also specifically lists as an Economic and Employment Opportunity:-

Continue to promote and support the existing businesses

The existing facility at "Shenstone" is a long-term sustainable business which is surely worthy of such support.

6.7.1.4 Narrabri Shire Economic Development Strategy 2011

This Strategy has identified Agricultural Processing as a Target Industry Sector to "contribute high value-adding, knowledge-driven jobs". The proposed development is certainly part of that Sector and an "Opportunity for Growth" as identified in the Strategy

The Strategy introduced the following vision:

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To facilitate the growth and development of a vibrant, sustainable and diversified economy that value adds to the region's resources and provides a quality living environment and prosperous future for all residents and communities

and again commits the Narrabri Shire to assist existing businesses by assisting with expansion and the development of local employment opportunities. The development proposal is certainly consistent with that vision and should receive assistance from Council wherever possible.

6.7.1.5 Narrabri Shire Economic Social Plan 2010-2015

This Plan promotes economic development in conjunction with "environmental stewardship", "social planning" and "governance". The proposed development is an economic opportunity recognized by the Plan, which will provide investment and preserve and create knowledge-based jobs. This Statement ensures all legislative requirements are met and describes how that development will be environmentally

responsible. Associated contributions made under Council's Section 94A plan will be used towards physical and social infrastructure.

6.7.2 Ecologically Sustainable Development (ESD)

ESD is defined for the purposes of the Environmental Planning and Assessment Act under Section 6(2) of The Protection of the Environment Administration Act 1991, as follows:-

- (a) *The precautionary principle – namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:*

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- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
 - (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity – namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity – namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms – namely, that environmental factors should be included in the valuation of assets and services, such as:
 - (i) polluter pays – that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full life cycle of costs providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximize benefits or minimize costs to develop their own solutions and responses to environmental problems.
- (i) polluter pays – that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full life cycle of costs providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,

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- (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximize benefits or minimize costs to develop their own solutions and responses to environmental problems.*

The proposed development has been designed to avoid irreversible environmental damage, as detailed throughout this Statement. Appropriate risk-weighted assessment has been carried out in the analysis of the development with respect to SEPP33. The additional impact of the development on the site environment will be minimized, as detailed in this Statement, to ensure sustainability and the operation into the future. The site is not rich in biodiversity due to previous land-use, but what remains or can be re-introduced will be preserved. Waste streams will be managed on-site where possible, recycling will be utilized wherever possible and appropriate off-site disposal will be used where necessary. All ESD appropriate cost structures for environmental impact will be incorporated into the new processes of the re-developed facility.

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7. **INTEGRATED DEVELOPMENT (Section 91 EP&A Act 1979)**

7.1 **Water Management Act 2000**

DPI Water have confirmed that the proposal is not Integrated Development, either due to its proximity to Bundock Creek or its location on a floodplain. See Appendix J.

7.2 **Protection of the Environment Operations Act 1997**

We have reviewed Schedule 1 of the POEO Act and believe no licensing is required. We are advised that the previous licence for the existing facility was withdrawn by the EPA because the production volumes of the facility did not warrant a licence. Those production volumes will remain unchanged and environmental impacts will be reduced in the redeveloped facility, as noted elsewhere in this document.

Regarding potential POEO Act licensing areas we can advise as follows:-

General Agricultural Processing: the threshold for licensing is a production capacity of 30,000T pa. The capacity of the existing and redeveloped facility is 13,000T pa.

Container Reconditioning: refers to used containers received from off site. This will not occur in the redevelopment.

Sewage Treatment: the proposed on-site sewage treatment facility will only service sanitary facilities for 32 site staff and occasionally up to 20 off-site staff and visitors (threshold 2,500 people), with a capacity of considerably less than the threshold of 750KL per day contained in the Act.

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8. CONCLUSION

Development Consent is sought for the redevelopment of "Shenstone" in the form of construction of new industrial buildings, associated outbuildings, driveways/parking areas, earthworks and demolition, as detailed in this report.

The proposed redevelopment will allow the existing cotton seed processing plant on the site to modernize, improve efficiency and continue operations well into the future. This will mean the preservation of 32 local jobs and the annual cash injection of \$7.6M in gross wages to the local economy. Furthermore, the redevelopment will underpin the entire cotton industry in Australia, with Shenstone being the only supplier of planting seed.

There are ample opportunities for the redevelopment of this site (rather than relocation). There are no site constraints which would prohibit this proposal.

- The proposal is consistent with all applicable Environmental Planning Instruments and the relevant Development Control Plan.
- The redevelopment is not Designated Development.
- Being the redevelopment of a long standing existing facility, the proposal is in context with the existing local setting.
- Vehicular traffic or parking demand will not be increased under this proposal. However new driveways and parking/maneuvering areas will greatly improve the access and storage of all light and heavy traffic.
- All required utilities are available to the site.
- There are no heritage constraints.
- There will be no significant reduction in the regional availability of agricultural land under this proposal.
- Water resources are adequate for the proposed development and the proposal will not affect the availability or quality of this resource in the local area.
- Site soils are suitable for the redevelopment and will be appropriately protected during construction.
- Dust, as a potential source of air pollution, will be controlled at all stages of seed processing.
- There are no flora or fauna constraints on the site.
- All forms of waste produced during construction and operation will be reused, recycled or appropriately disposed of.
- Existing noise levels, which are currently unobtrusive, will be reduced under this proposal.
- Flooding hazards will be mitigated by the augmentation of the existing site levee bank.
- The site does not have significant levels of contamination.
- The redeveloped site will be made more secure, both to protect the business and the public.
- The redevelopment will have a positive social impact due to the preservation of 32 local jobs.

Statement of Environmental Effects

- The redevelopment will have a positive economic impact due to the value of the initial investment and ongoing wage spending.
- The redevelopment has been designed in accordance with all required standards.
- Construction will be professionally carried out.
- The redevelopment will not contribute to adverse cumulative impacts.

The proposed development is consistent with the substantial amount of economic and social planning which has been carried out for Narrabri Shire and is in the public interest.

On this basis development consent is now sought for the project as detailed in this Statement and attached Appendices.



A.P. Swane
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