

From: [Stefan Press](#)
To: [Deana Burn](#)
Cc: [Chris Ritchie](#); [Julian Thompson](#)
Subject: RE: Shoalhaven Starches Modifications
Date: Friday, 27 November 2015 4:17:26 PM

Hi Deana

Thank you for referring through Shoalhaven Starches latest planning modifications. Comments are provided below for your consideration.

Mod 7 – Relocate Starch Dryer No. 5

The EPA notes that Starch Dryer No. 5 was originally approved under DA 223-7-2002 and then subsequently incorporated into the ethanol expansion project approval (MP06_0228).

The EA has reviewed the Environmental Assessment (EA), including the following reports:

- “Environmental Noise Impact Assessment – Proposed Starch Dryer”, prepared by Day Design Pty Ltd and dated 20 October 2015, and;
- “Air Quality Impact Assessment (Cumulative Impact) – Starch Dryer 5 Relocation”, prepared by Stephenson Environmental Management Australia and dated 29 October 2015

As a result of the review, the EPA makes the following comments:

Noise - Operational

The information contained in the noise impact assessment report predicts that the operation noise (post construction) from the relocation of the approved Starch Dryer No. 5 will not result in cumulative noise levels from the Shoalhaven Starches premises that exceed the current noise limits contained in Environment Protection Licence No. 883 (licence). It is noted that the predicted noise levels indicated in Table 4 of the noise impact assessment report are on the basis of the relocated starch dryer being constructed in accordance with the recommendations contained in section 7 of the noise impact assessment report.

As such, the EPA will not need to amend the noise limits in the licence but it is recommended that any approval of the proposal contain appropriate conditions which requires:

- Starch Dryer No. 5 to be constructed in accordance with the recommendations in section 7 of the noise impact assessment report - we note these have been included in the Statement of Additional Commitments in the EA, and;
- a noise validation be undertaken within the first 12 months of operation of Starch Dryer No. 5 to confirm that noise emissions comply with the predictions in the noise impact assessment and if not, all reasonable and feasible noise mitigation measures are implemented to achieve compliance.

Noise – Construction

The information contained in the noise impact assessment report predicts construction noise, including impact piling activities will comply with the noise management levels (as per Table 6 of the noise impact assessment report) at each nominated receiver location. It is understood that these noise management levels have been derived using the quantitative method detailed in the *Interim Construction Noise Guideline*.

The EPA does however note that impact piling activities are predicted to approach the noise management goals at each of the nominated receiver locations. As such, the short duration of impact piling activities (two weeks) are considered to be the only likely potential noise impact with the remaining works not considered likely to approach the noise management levels specified Table 6 of the noise impact assessment report. It is also noted that the noise impact assessment does not specify construction hours for the proposal.

To provide that any construction noise impacts from the proposal are able to be appropriately managed and provide minimal impact upon the community, it is recommended that any approval of the proposal contains conditions that restrict:

- all impact piling activities to between 9:00am and 5:00pm Monday to Friday, and;
- all other construction activities to standard construction hours (7:00am to 6:00pm Monday to Friday, 8:00am to 1:00pm Saturday and no work Sundays or public holidays).

Air Quality

The information contained in the air quality impact assessment report predicts the proposal will result in a worst case odour ground level concentration (GLC) of 0.4 odour units (ou) and a worst case GLC for total suspended particles (TSP) of 0.4 micrograms per cubic meter (ug/m³) at the nearest sensitive receiver location (Bomaderry). These fall well below the respective impact assessment criteria for odour of 2 ou and TSP of 90 ug/m³ contact in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*.

The EPA notes that while one year worth of weather data has been used in the odour dispersion modelling tool (AERMOD) no comparative analysis of this data set with longer term weather data/trends, particularly with regards to wind direction is included in the air quality impact assessment. Such comparative analysis provides a useful means of validating whether the data set used in the odour dispersion modelling tool is representative of longer term meteorological conditions experienced at the Shoalhaven Starches premises.

While the above deficiency has been identified, given that Starch Dryer No. 5 was included as part of the ethanol expansion approval, the EPA is satisfied that its relocation within the Shoalhaven Starches premises will not result in additional cumulative odour impacts to those previously assessed and determined as part of the expansion approval. Should the proposal be approved, the EPA will vary the licence to include the same air emissions monitoring regime, including odour as for the current starch dryers at the Shoalhaven Starches premises. It will also be necessary for Shoalhaven Starches to include the odour monitoring results from any approved relocated Starch Dryer No. 5 in the annual independent odour audit.

Mod 8 – Alterations to Existing Flour Mill

The EPA notes the existing flour mill was approved in 2007 under major project approval 07_0021 and then subsequently incorporated into the ethanol expansion project approval (MP06_0228).

The EA has reviewed the Environmental Assessment (EA), including the following reports:

- “Environmental Noise Impact Assessment – Proposed Alterations to Existing Flour Mill”, prepared by Day Design Pty Ltd and dated 4 November 2015, and;
- “Air Quality Impact Assessment V2 – Proposed Modification to Existing Flour Mill”,

As a result of the review, the EPA makes the following comments:

Noise - Operational

The information contained in the noise impact assessment report predicts that the operation noise (post construction) from the alterations to the existing flour mill will not result in cumulative noise levels from the Shoalhaven Starches premises that exceed the current noise limits contained in Environment Protection Licence No. 883 (licence). It is noted that the predicted noise levels indicated in Table 4 of the noise impact assessment report are on the basis of silencers being fitted to the discharge side of the four (4) new extraction fans (roller mills, sifter, conveyors and bucket) in the altered flour as per the recommendation contained in section 7 of the noise impact assessment report.

As such, the EPA will not need to amend the noise limits in the licence but it is recommended that any approval of the proposal contain appropriate conditions which requires:

- silencers to be fitted to the discharge side of the proposals four (4) new extraction fans (roller mills, sifter, conveyors and bucket) in accordance with the recommendation in section 7 of the noise impact assessment report - we note these have been included in the Additional Statement of Commitments in the EA, and;
- a noise validation be undertaken within the first 12 months of operation of the altered flour mill to confirm that noise emissions comply with the predictions in the noise impact assessment and if not, all reasonable and feasible noise mitigation measures are implement to achieve compliance.

Noise – Construction

The information contained in the noise impact assessment report predicts construction noise, will comply with the noise management levels (as per Table 5 of the noise impact assessment report) at each nominated receiver location. It is understood that these noise management levels have been derived using the quantitative method detailed in the *Interim Construction Noise Guideline*.

It is noted that the noise impact assessment does not specify construction hours for the proposal but does specify that the majority of construction work will occur within the existing masonry mill building and as result noise emissions from the construction phase will be inaudible at each of the nominated receiver locations .

To provide that any construction noise impacts from the proposal are able to be appropriately managed and provide minimal impact upon the community, it is recommended that any approval of the proposal contains conditions that restrict construction activities to standard construction hours (7:00am to 6:00pm Monday to Friday, 8:00am to 1:00pm Saturday and no work Sundays or public holidays).

Air Quality

The information contained in the air quality impact assessment report predicts the proposal will result in a worst case odour ground level concentration (GLC) of 0.3 odour units (ou) and a worst case GLC for total suspended particles (TSP) of 0.17 micrograms per cubic meter (ug/m3).

These fall well below the respective impact assessment criteria for odour of 2 ou and TSP of 90 ug/m3 contact in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*.

The EPA notes that while one year worth of weather data has been used in the odour dispersion modelling tool (AERMOD) no comparative analysis of this data set with longer term weather data/trends, particularly with regards to wind direction is included in the air quality impact assessment. Such comparative analysis provides a useful means of validating whether the data set used in the odour dispersion modelling tool is representative of longer term meteorological conditions experienced at the Shoalhaven Starches premises.

While the above deficiency has been identified with the air quality impact assessment, it is important to note that past odour monitoring data for the Shoalhaven Starches premises, including the data contained in the report titled *Ethanol Upgrade – Air Quality Assessment* (GHD 2008) shows the existing flour mill not to be a significant odour source at the premises. As a result the current flour mill is not subject to any specific odour treatment. Further, the EPA notes that similarly to the current arrangement of the flour mill, the alterations will result in additional baghouses for the capture and control of TSP. As such the EPA is satisfied that the proposal will not likely have any impacts on air quality.

I trust that the above comments are of assistance and please don't hesitate to get back in contact with either me or Julian should you wish to discuss further.

Regards

Stefan _

Stefan Press

Acting Unit Head – South East Region

NSW Environment Protection Authority

+61 2 6229 7002 +61 408 029 607

stefan.press@epa.nsw.gov.au www.epa.nsw.gov.au [@EPA NSW](#)

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555



From: Deana Burn

Sent: Thursday, 19 November 2015 12:10 PM

To: Stefan Press; Andrew Lissenden

Cc: Chris Ritchie

Subject: Shoalhaven Starches Modifications

Dear Stefan & Andrew

I have just received two new modification applications from Shoalhaven Starches. The EA and plans for the modifications can be accessed at the links below. The modifications include:

MOD 7 – Relocate Starch Dryer No. 5

- The starch dryer was approved under DA 223-7-2002 which was consolidated into the ethanol expansion project approval 06_0228.
- The mod involves relocating the Starch Dryer to the Moorehouse site and increasing its size. There would be no change to production volumes.
- The starch dryer includes a 33.5m high stack

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7371

MOD 8 – Alterations to Existing Flour Mill

- The flour mill was approved in 2007 under 07_0021 which was consolidated into the ethanol expansion project approval 06_0228.
- The mod involves installation of additional plant within the flour mill to increase production, including two additional exhausts from the roof of the building
- There would be a corresponding reduction in the amount of flour railed to the site, hence overall production volumes would not change.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7384

I invite the EPA and Council to make comments and provide recommended conditions for the modifications. The Department is under tight timeframes for determining applications, and as such, I require your comments no later than **Friday 27 November**. The Department's recommendation will be provided to the Planning Assessment Commission for determination in the week commencing 30 November.

If you have any questions, please contact me on 9228 6431 or 0431741190, or feel free to discuss directly with Brian Hanley from Shoalhaven Starches on 4423 8388.

Thank you for your prompt attention.

Regards,

Deana.