

Tumbulgum Community Association Report

Contents

1. Introduction	p. 1
2. Volume of Quarry Trucks	p. 3
3. Condition of Dulguigan Rd	p. 6
4. Annual Production, including conversion rate	p. 9
5. Reporting Period	p. 11
6. Other Matters, including compliance	p. 13
7. Conclusion	p. 16

1. INTRODUCTION

The contents of this document have been sourced from material the Tumbulgum Community Association (Association) has been able to access via the Council, other public sources and community members. These have been referenced throughout the document.

As such, the following is the view of the Association, based on the material it has had access to up to this point in time. The Association does not attribute or infer any intentions or behaviours to any individuals or parties mentioned in any of this material.

A series of compounding decisions over a number of years have multiplied risk to Dulguigan Rd users and the community are now facing **grave safety issues**.

The community believes that earlier submissions by the Association and other community members regarding the volume of heavy vehicles, road condition, driver behaviour, management of quarry operations and interpretation of the EIS and original DA have not been given appropriate consideration.

The Environmental Impact Statement (EIS) 95893247, by GeoLINK in 1998 originally prepared for Reedy Creek Quarry, remains a primary source document for evaluation of the activity of the current quarry.

Development Application 98/174 (consented in May 2000) for Reedy Creek Quarry was used as the basis for the activity of the amalgamated quarry in 2004. The traffic associated with this consent was described as an average of 32 or maximum of 40 trucks per day, with a future capacity of 20 m³ in size. If the quarry had operated at maximum capacity i.e. 40 trucks on each of its 312 operating days, it would have produced 12,480 annual 20m³ truckloads of material.

A substantial increase in volume and size of vehicles and associated driver behaviour is now seriously compromising road safety.

The Association considers that:

1. DA 04/0162.02 and DA 04/0162.3 with changes to key definitions are not substantially the same development as that described in the original 2004 Development Consent;

2. Elements of the DA, particularly those relating to traffic, do not reflect the standard associated with other quarries of comparable size;
3. A review of the process of reporting and monitoring compliance of the quarry with its current development consent by the Council is required.

2 VOLUME OF HEAVY VEHICLES

Summary

Over recent years there has been a marked increase in the number and size of heavy vehicles, including Performance Based Standards (PBS) heavy vehicles, travelling between the quarry on Dulguigan Rd, across the river at Tumbulgum and the Tweed Valley Way (State Route 40).

In 1995, it was estimated there would be 16 trucks per day maximum (6 days per week) - 4992 pa from three (3) approved quarries, only one of which was operating regularly. A traffic count in 1993 was used to establish these figures.

In DA 98/174 for Reedy Creek Quarry, trucks permitted to leave this quarry went to a **maximum of 40 trucks per day** or from 1,560 p.a. to a maximum of 10,000 trucks p.a.

Development Consent 98/174, the EIS 95893257 prepared by GeoLINK in 1998 and the R.E.M.P. prepared by Glazebrook and Associates as part of this deferred consent in 2001 all stated **maximum of 40 trucks per day.** (ref 2.1, 2.2 and 2.3).

The above consent and supporting documents formed the basis of the Development Application 04/0162 to amalgamate three (3) quarries. When Reedy Creek Quarry applied to Council, a notional activity of 8 and 3 truckloads per day was quoted for Pollards and Sanderson's Quarries respectively (ref 2.2). However, it should be noted that these quarries did not operate every day.

Nevertheless, the development submission sent for public comment during 9 June to 12 July 2004 stated that the potential combined activity would be reduced to a **maximum 40 trucks per day for 6 working days per week**. If the amalgamated quarry operated at maximum activity on all working days this would have equalled 12,480 truckloads p.a.

The supporting technical reports e.g. traffic and noise in the Glazebrook Statement of Environmental Effects Feb 2004 (ref 2.3, 2.4 & 2.5) provided advice based on a **maximum of 40 truckloads per day**.

A meeting between quarry representative/s and Council officers agreed on significant variance from the original proposal, E.I.S. and R.E.M.P.

The outcomes, as reported by the quarry representatives in a letter to Council on 8 October 2004, included:

1. use the maximum daily truckloads identified in the EIS as an average;
2. non- working days in calculation of annual truckloads to reach potential of 14,600 truckloads; and
3. **the effective removal of any daily cap in vehicle movements.** (ref 2.7).

Despite their significance, these changes were not referred for a traffic and/or road study nor were they returned to the community for further comment by the many challengers. (ref 2.6).

The report to the Council Meeting held on 3 November 2004 **incorrectly** stated that the annual average daily truck activity was consistent with the E.I.S. for Reedy Creak Quarry. (*ref 2.2 & 2.8*)

The resolution by councillors passed at the meeting at Schedule B General Point 3 states "*average number of trucks departing the quarry to be 40 vehicles per day*". It did **not** mention including non-working days in the average. (*ref 2.9*)

Despite repeated complaints and increasing concerns about the volume of truck movements, the first time the community became aware that the development may have been so significantly different from the EIS and R.E.M.P. was when applications to vary the DA were released for comment.

A review of Council documentation shows that the **permitted annual truckloads have been exceeded**. A recent Council traffic count taken on Dulguigan Rd, north east of the Quarry, indicated an average weekday volume of heavy vehicle traffic of 244 movements. (*ref 2.10*). This is consistent with a community member's observation of 92 trucks leaving the quarry in a north easterly direction by 10.30 am on a morning earlier in the year.

Misinterpretations and/or re-interpretations have been a significant factor in the increase in truck movements on quarry operating days, now approaching 200 truckloads or 400 heavy vehicle movements on individual days with considerable increase in risk to road users.

Both the EIS and R.E.M.P. relied on the advice of 40 trucks **maximum** per day and had very scant information about the road geometry and its capacity. There is no evidence that the advice was reviewed prior to inclusion of **unlimited** heavy vehicle daily activity in October 2004.

A review of the other quarry development applications of this scale in NSW show that DA's and/or significant variations are generally accompanied by detailed Traffic Studies including traffic volume, movements by direction to and from the quarry, day of the week, time of day, analysis and capacity of the roads.

The Association believes that any further controllable increase in truck movements is highly irresponsible and potentially negligent.

QUESTIONS

- 1. Did the Council review the EIS and REMP before considering the request for increased truck movements in 2016/17?**
- 2. What consideration did the Council give to the community concerns about road safety?**
- 3. What action has been taken by the Council following the patent breaches in consent?**

Reference/s

- 2.1 Determination Notice 98/17 signed off 24 May 2000
- 2.2 EIS GeoLINK EIS 95893257 1998 p. 61
- 2.3 Jim Glazebrook and Associates Statement of Environmental Effects. Feb 2004 5.4
- 2.4 Blueland Engineers, Engineering Impact Assessment, 9 Sept 2003 at 5.2.2
- 2.5 James Heddle Acoustical Consultants 10 January 2004, p. 11
- 2.6 Report on DA 04/0162 to Council Meeting 3 November 2004, p. 66.
- 2.7 Jim Glazebrook and Associates Pty Ltd Letter to TSC, dated 8 October 2004
- 2.8 Report on DA 04/0162 to Council Meeting 3 November 2004, p. 58.
- 2.9 Minutes of the Tweed Shire Council Meeting held 3 November 2004 at p.9
- 2.10 TSC Traffic Data Dulguigan Rd 2012 and 2017

3 CONDITION OF DULGUIGAN RD including classification and PBS vehicles

Summary

The report to the TSC Planning Meeting dated 4 August 2016 cites Dulguigan Rd traffic as 812 vehicles per day (v.p.d.) northeast of the Quarry and 481 v.p.d. southwest of the quarry. **(ref 3.1)**

Both counts put road requirement in the Class C category. However, the report talks about a Class B road i.e. up to 250 v.p.d.

The Council Standard Drawings for a Class B Minimum Standard Road - summarised on the attached table **(ref 3.2)** and marked in pink - show a minimum width of 8.6m, combination of sealed and shoulders. The same table shows Class C roads as 8.6m sealed minimum width and marked in orange.

Dulguigan Rd has an actual minimum seal width of 6.0 m where the report to Council **(ref 3.1)** states 6.6 m sealed width or greater. The road also has little or no shoulder in places and includes blind corners and areas of poor sight lines. **(ref 3.3)**

The current Austroads Guide (March 2016) Part 3 at Table 3-2 states a road with this volume of traffic requires a 9.0 m sealed width **(ref 3.4)**. The superseded version of the Guide was referred to in the Council report of 4 August 2016. **(ref 3.5)**.

Twelve (12) years ago, the Local Traffic Committee reported to Council that the speed of trucks was *“unsatisfactory and given the narrow and winding alignment of some sections of Dulguigan Road, is potentially a serious traffic safety issue”*. **The issue remains unresolved (ref 3.6)**

The 2016 report to the Planning Meeting reports that no detailed analysis of sight distances has been performed. **(Ref 3.1 at p, 274)**

Despite the situation described in 2004, without a current traffic count, analysis of sight lines and review of accident reports, the council staff continued to advise that Dulguigan Rd has the capability to handle more and heavier vehicles.

The widening of some sections that was easily achieved may have encouraged speeding. This observation is supported by the Traffic Data recorded on Dulguigan Road in September 2017 **(ref 3.7)** and, possibly, the number of heavy vehicle accidents collated by the community. **(ref 3.8)**

The Association and individual community members have regularly raised concerns with the Council about the condition of Dulguigan Rd. The road surface includes sections of hollowed out pavement and a flat profile causing pooling of water during rain. Low lying sections and inside curves have repeatedly deteriorated.

The disintegration of road pavement and verges are contributing to road safety concerns. Vehicles are damaging roots. Of grave concern, is the damage to the

riparian vegetation and loss of separation between the road and river along both the Tweed and Rous River sections of the road. **(ref 3.9)**.

The contribution of heavy vehicles to road damage is acknowledged in the response by Roads and Stormwater ATM to the first s96. **(ref 3.10)**

The quarry has commenced using Class 2 Performance Based Standards (PBS) certified trucks. The Tweed Shire has given blanket access, unless otherwise specified, for PBS vehicles to travel on its roads. **(ref 3.11)**. These vehicles can legally carry a heavier load, up to 8 tonnes extra, making a gross weight of up to 50.5 tonnes **(ref 3.12)** The gross weight of the quarry vehicle involved in the quarry truck accident on the 22 August 2017 was **57.24 tonnes** and potentially highly dangerous.

The heavier PBS vehicles, together with the limitations of the road described above, present an unacceptable risk to road users. Reports of accidents with casualties between 2012 and 2016 from the NSW Centre for Road Safety and community collated heavy vehicles accidents are attached **(ref 3.8 & 3.13)**. A photograph of the scene of the latest truck accident is attached **(ref 3.14)**.

Unfortunately, near misses and accidents not involving injury are not recorded in the NSW statistics, but rightly point to the likely risk of a more serious accident. Residents face challenges on Dulguigan Rd every day the quarry is operating. Attached is a collection of photographs to illustrate this **(ref 3.15)**.

Traffic Studies on Dulguigan Rd associated with the quarry DA's are very scant and it may be as far back as 1993 to when a comprehensive study was undertaken.

A major upgrade would not be feasible without significant impact on the rivers and/or be very expensive.

Questions

- 1. To date, upgrades during maintenance have not been able to keep up with the increased activity and types of vehicles using the road. What is the Council Plan to improve safety in the short term?**
- 2. What is the Council long term plan to manage the traffic on Dulguigan Rd?**
- 3. Will the Council investigate an alternate route?**

References

- 3.1 Agenda Council Planning Meeting held on August 2016 pp 273-4
- 3.2 Council Standard Drawings SD.009 – TSC website
- 3.3 Map of areas of Dulguigan Rd with limited width marked by Community.
- 3.4 2016 Austroads Guide, edition 2, Part 3, 4.2.6 pp 9-10
- 3.5 Archived Austroads Standard Table 4.5 Single carriageway rural road widths
- 3.6 August 2004 Local Traffic Committee Minutes reported in Council Agenda on Sept 2004 at p.177
- 3.7 TSC Traffic Data Dulguigan Road September 2017
- 3.8 Community map of heavy vehicle accidents on Dulguigan Rd
- 3.9 Photographs of road edge and riparian vegetation damage
- 3.10 Roads and Stormwater referral memo 28 October 2015
- 3.11 NSW RMS Performance Based Standards Vehicles Map at <http://www.rms.nsw.gov.au/business-industry/heavy-vehicles/maps/performance-based-standards/map/index.html>
- 3.12 <http://www.rms.nsw.gov.au/business-industry/heavy-vehicles/road-access/performance-based-standards-vehicles.html>
- 3.13 NSW Centre for Road Safety Report 2010 – 2015 Dulguigan Rd
- 3.14 Truck Accident 22 August 2107 - Photograph.
- 3.15 General Heavy Vehicle Traffic Photographs.

4. ANNUAL PRODUCTION, including conversion rate

Summary

The relationship between extracting, processing and movement of materials is explained in the table in the GeoLINK EIS 95893257 1998. (ref 4.1). The production for the Reedy Creek Quarry is explained in the allowance for the "bulked material" in the GeoLINK EIS 95893257 1998 (ref 4.2). Bulk material is the material produced, ready to transport and not the solid material in the ground i.e. "in situ".

The bulking rate for materials at the quarry is explained in the table shown in GeoLINK EIS 90793260 (ref 4.3).

The importance of the definition in the EIS document is shown in the report of Council in 1999 on the Reedy Creek Quarry in which it states that expansion is to be completed generally in accordance with the EIS prepared by GeoLINK dated 1998. (ref 4.4).

There have been attempts to re-interpret words used to describe produced material and/or production based on this development. (ref 4.6 & 4.7)

The GeoLINK EIS states that in the "future extraction is based on 20m³ truck capacity". This truck size matches the original definition of quarry material as processed material and delivered the original fully functional Development Consent for the operators when truck sizes were described in the report to Council (ref 4.1).

The attempted change of the definition of the m³ measurement from "bulked" material to "in situ" material in 2016 leads to a serious mismatch between annual permitted production and quarry traffic, both in number and size of vehicles. Refer to table below.

Definition	Produced Material * (bulked by processing)	Material In Situ # (in ground prior to processing)
Volume (m ³)	200,000	200,000
Weight (tonnes)	340,000	500,000 - 550,000 ^
Weight of 20 m ³ (tonnes)	34	54 - 55 ^
Gross weight of vehicle (if load is 20m ³ and tare weight is 17 tonnes)	51	71 - 72 ^

* as defined in EIS 1998 and used a basis for the original 2004 Development Consent.

proposed 2016 variation re-definition

^ lower figure is limit of current EPA licence, higher figure is that quoted in DA 04/0162.03

Note: Current absolute gross weight of a Class 2 PBS vehicle is 50.5 tonnes

The current proposed variation to the DA, using revised definitions, does not come close to a functional DA.

Questions

- 1. How can a proposed variation to a DA that changes a key definition of the original DA be considered substantially the same development?**
- 2. Why would the Council support a variation that turns a fully functional development consent into a one that is not?**
- 3. If the quarry is not planning to comply with the truck size specified in the EIS, what size range vehicles does the quarry propose to use?**

References

- 4.1 GeoLINK Group EIS 95893257 1998 page 61
- 4.2 GeoLINK Group EIS 95893257 1998 pages 21,22 and 26
- 4.3 GeoLINK Group EIS 90793260 1998 page 28
- 4.4 Report by Director Development Service of the Council Meeting 15 November 1999 page 2
- 4.5 Report to Council Meeting 3 November 2004, page 71
- 4.6 Email from D Galle (TSC) to S Smith 23 February 2017
- 4.7 Report on DA 04/0162 to Council Meeting 3 November 2004, page 64

5. REPORTING PERIOD

Summary

Prior to late last year, “the quarry” and its predecessor, the Reedy Creek Quarry (RCQ), have always reported in calendar years.

In 2004, the Council certified paperwork (*ref 5.1*) shows RCQ activity reported in calendar years whilst operating a DA that was **not** consented on 1 January.

In February 2016, a Council officer reported “the operators have said that total truck departures will continue to be closely monitored to ensure they remain consistent with the consent requirements over the **2016 calendar year**” (*ref 5.2*).

On the 4 August 2016, the report to the Council Planning Meeting described quarry activity for the **2015 calendar year** (*ref 5.3*).

Email correspondence from a Council officer describes truck movements (loads) declared by the quarry, for the 18-month period 1 January 15 to 30 June 2016, at 27,480. (*ref 5.4*)

NOTE: This quantity of truck loads in 12 months exceeds the allowance for 2 years, assuming maximum 40 trucks on 312 operating days i.e. 12,480 p.a. or close to allowance for 2 years if non-operating days are included i.e. 16,400 p.a.

After 2 August 2016, when the quarry was put on notice re the number of truck loads exiting the quarry (*ref 5.4*), a change of reporting period of 7 March to 6 March is noted. (*ref 5.5*)

Any change in reporting date required by Council, should be associated with a review of activity over recent years.

If a change in reporting period is to be considered in the future, alignment with the EPA i.e. Financial Year may be the best option.

Note, however that the EPA has advised the Association that it does not collect data on extraction rates or trucks numbers. (*ref 5.6*)

Questions

1. **What is the legal reporting period to Council for quarry activity?**
2. **Does the Tweed Shire Council have a standard reporting year?**
3. **Will the Council set the appropriate legal reporting period and put in place compliance monitoring?**

6. OTHER MATTERS Including Compliance

Summary

Residents have had ongoing concerns about the operation of Hy-Tech Industries North Tumbulgum Quarry and the monitoring of its compliance within its existing Development Consent by the Council. Community observations and evidence has been collated.

Quarry operators are confused about School Bus times (*ref 6.1 & 6.2*). Community surveys show approximately 30% of truck movements occur in bus times. On two recent occasions trucks were observed turning into (7.28am) or leaving the quarry (7.22 am) prior to 7.30 am as the school bus passed.

Residents regularly report trucks arriving and machinery operating to load trucks prior to the consented start time of 7.30 am. On 11 September 2017, fifteen (15) trucks entered quarry between 6.54 am and 7.30 am. Fifteen (15) trucks left the quarry between 7.30 am and 8.00 am. The industry standard time stated in traffic study reports to load, weigh and wheel wash is 5- 6 minutes. (*ref 6.3*)

Following rain, Dulguigan Rd is slippery around the entrance to the quarry and often dusty when dry. The wheel wash mechanism, required as a condition of the original DA, is either non-existent or ineffective. (*ref 6.4*).

There is evidence of significant erosion and sediment often pouring out of the quarry onto Dulguigan Rd creating a traffic hazard and pollution. (*ref 6.5*).

The Hy-Tech Industries Code of Conduct and Haulage Route Map advises drivers they may exceed the speed limit. The community has reported excess speed of trucks over many years as noted at a Local Traffic Committee Meeting and reported to Council in 2004. It remains a dangerous problem. (*ref 6.6 & 6.7*).

In addition to the speed of trucks, the traffic counts show movements, almost 3 times the "allowable" average movements. (*ref 6.8*)

This same traffic data provided in 2012 and 2017 also confirms excess speed by trucks.

The volume and speed of trucks recorded by the Council are consistent with the experiences reported and recorded by residents. Residents concerns about safety issues related to the volume and speed of trucks raised with both quarry management and the Council have led to no discernible improvement.

Repeated assurances about the short-term nature of increased activity and promised reinforcement of the same strategies to manage the driver behaviour has not proven a satisfactory manner to manage road safety.

Groundworks Plus state an "average truck load size" of 32 tonnes as shown in the consent condition in Table 1 of the Development Application 04/0162.03 and reported at the 7 September 17 Planning Meeting Agenda at page 225 (*ref 6.9*). Presuming it is the average load size, it is unclear how this is achieved without a significant number of vehicles exceeding the allowable weight.

Residents have regularly commented on the height of loads and weight trucks are carrying; some are so full they are unable to fully draw the curtain over their loads. When the m³ capacity of these fully loaded trucks are converted to tonnes, the safety of these vehicles, risk to other road users and damage to the road is of grave concern.

On 22 August 2017, there was yet another heavy vehicle accident on Dulguigan Rd. This vehicle was a 'truck and dog' combination which, with PBS certification, could possibly carry up to an additional 8 tonnes above the normal 42.5 tonne gross weight - i.e. 50.5 tonnes. The RMS incident report for this vehicle showed a recorded 57.25 tonnes (recorded at the quarry weighbridge). **(ref 6.10)**

On 3 April 2017, a blanket approval for these PBS heavy vehicles to travel on any road in the Tweed Shire, unless otherwise specifically prohibited, was gazetted. Heavy and potentially overloaded vehicles are travelling on a narrow winding rural road, limited by its topography.

In December 2016, Groundworks Plus reported that in past years the quarry had achieved extraction rates in the order of 500,000 tonnes pa. **(Ref 6.11)**. It is queried how this was achieved without exceeding load limits, truck numbers or both. Neither is it consistent with the figures provided and quoted in the report for the September 207 Planning Meeting **(ref 6.12)**.

In 2015/6 extraction rates may have increased when the quarry increased its EPA licence to 500,000 – 2 million tonnes **(ref 6.13)**. This extraction rate is in excess of the original 2004 Development Consent.

Self-reporting of extraction volumes and truck movements cannot be relied upon. Lack of effective compliance monitoring is compounding the safety issue.

It is noted that the Council version of the GeoLINK EIS differs from the that held by the NSW Department of Industry, Skills and Regional Development Mineral Resources Library. Comparison of the two documents show anomalies in reference to produced m³ and truck movements.

It has also been noted that quarry management has not met the 90-day deadline of 11 November 2016 for deferred commencement conditions for the earlier s96 - DA04/0162.02. Work is still progress.

This delay with compliance with the deferred commencement conditions was not disclosed to Council in the report for the second and current s96 application DA04/0162.03.

Recent photographs show a significantly greater exposed area at the quarry, giving rise to concern that the quarry may have already commenced clearing and/or extraction in the new entitlement covered by DA04/0162.02 without consent and the new REMP. **(Ref 6.14)**.

Questions

- 1. What is the Council doing to ensure compliance?**
- 2. What penalties have been applied for any non-compliance?**

3. **Is there a register of community complaints and feedback?**
4. **How is the council protecting the safety of the residents and ratepayers from the cost of any non-compliance?**

References

- 6.1 DA 04/0162.03 December 2016 Application Groundworks Plus at page 1
- 6.2 Bus Sign Dulguigan Rd *photograph*
- 6.3 Transport and Urban Planning - Umwelt(Australia) Pty Ltd
- 6.4 Wheel Tracks leaving quarry indicating unwashed wheels *photographs*
- 6.5 Sediment spilling from quarry *photographs*
- 6.6 Hy-Tech Industries Driver Code of Conduct and Haulage Route Map
- 6.7 Traffic Committee Report Council Papers 1 September 2004 page 177
- 6.8 Traffic Data for Dulguigan Rd TSC 2012 and 2017
- 6.9 Council Report for Item 5, Planning Committee Agenda 7 September 2017, page 225
- 6.10 RMS Heavy Vehicle Accident Report - Dulguigan Rd on 22 August 2017
- 6.11 DA 04/0162.03 December 2016 Application Groundworks Plus at page 3
- 6.12 Council Report for Item 5 Planning Committee Agenda 7 September 2017 p 219 224
- 6.13 Environmental Protection Licence 3430 Notice Number 1541415 issued 14 June 2016
- 6.14 Quarry from Farrants Hill - Photograph taken on 24 October 2017

7. CONCLUSION

The Association strongly recommends that:

1. due to the issues identified, the Council does not approve the variation to the existing DA that requests retrospective approval to increased quarry activity for the specified period;
2. Councillors request a comprehensive report from the relevant Council departments outlining if, where and how the quarry has complied with the original DA and associated EIS and what outstanding actions need to be taken to achieve this;
3. Councillors seek a comprehensive report from relevant Council departments and/or other authorities on the suitability of Dulguigan Rd for existing and future traffic and, if not deemed suitable, explore options for an alternate transport route;
4. due to the various issues exposed in our correspondence to date, including this report with associated references, the Council request that the Quarry prepare a new DA with updated EIS, traffic studies, and other supporting documentation to reflect the true nature of their past, current and any future activities.
5. Council act to ensure compliance with the existing 2004 development consent and associated EIS, with restrictions to activities to reflect the unsuitability of the current road, until such time as a new development application is approved.