

JRPP No:	Item 1 (2009WES003)
DA No:	160/09 DACC
PROPOSED DEVELOPMENT	RE-ESTABLISHMENT OF PYROTECHNICS FACILITY – 581 PIPERS FLAT ROAD, WALLERAWANG
APPLICANT:	HOWARD & SONS PYROTECHNICS
REPORT BY:	Lithgow City Council

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**DEVELOPMENT ASSESSMENT REPORT – DA/CC 190/09 HOWARD & SONS
PYROTECHNICS – RE-ESTABLISHMENT OF PYROTECHNICS FACILITY – 581
PIPERS FLAT ROAD, WALLERAWANG.**

PROPOSAL

In November 2009 Lithgow City Council received an Integrated/Designated Development Application from Howard & Sons Pyrotechnics Pty Ltd under Section 79(1) of the Environmental Planning and Assessment Act 1979 seeking approval for the re-establishment and operation of its Pyrotechnics Facility which was virtually destroyed by an explosion in December 2007. The land is described as Lot 2 DP 1124158 being known as 581 Pipers Flat Road, Wallerawang.

The proposal encompasses the re-establishment of a pyrotechnics facility that was destroyed by an explosion (December 2007) and involves;

- the demolition of the remaining factory sheds, replacing the factory sheds with changes to other components;
- The construction of 32 purpose built magazine containers (in 2 stages) for the storage of pyrotechnics;
- restructure the storage area with new stores, and associated earthworks to mound the new storage facility with appropriate separation distances;
- building a new packing shed;
- earthworks to mound the new packing shed and truck unloading bay;
- minor road works in new storage areas;
- reinstate and enhance landscaping;
- redesign and construct the drainage system, and do minor works to the existing fence lines;
- install new alarm systems; and
- minor electrical works and installation of lightning protection systems.

The applicant proposes to utilise best practice environmental management procedures in accordance with the requirements of WorkCover and relevant state and local authorities.

As part of the application the consultant for the applicant has indicated that:

- WorkCover has overseen the site cleanup following the incident and has signed off on the work. A report was lodged with the Coroner in April 2009 in regard to the explosion incident and as a result the Coroner found an open finding pertaining to the explosion in November 2009.
- The classification of materials has been altered by WorkCover, and the industry has redesigned the requirements for the storage of explosives vastly improving the safety standards and distances required for the storage of explosives.
- Ground vibration and over pressure are to be addressed through how tightly the materials are packed and the amounts each unit can hold.
- The company wished to rebuild much of the operation having regard to the lessons learnt through the accident and to protect the site and the community from incidents in the future.

- It is proposed by the applicant that optimum environmental management procedures in the rebuilding operation will be utilised by all appropriate legislation and authorities.

SUMMARY

As designated development the application is submitted to the Western JRPP for determination.

As a guide Council has investigated links between the existing approval and the proposed approval for consideration:

2000 Approval	Proposed 2009 Application
<ul style="list-style-type: none"> • 116ha of useable land 	<ul style="list-style-type: none"> • 92ha of useable land
<ul style="list-style-type: none"> • 24 well dispersed magazines (max capacity 4000 kg) 	<ul style="list-style-type: none"> • 32 concrete, banded magazines (max capacity 1500 kg)
<ul style="list-style-type: none"> • 15 employees 	<ul style="list-style-type: none"> • 25 employees
<ul style="list-style-type: none"> • Max storage capacity 70,000 kg 	<ul style="list-style-type: none"> • Max storage capacity 45,000 kg
<ul style="list-style-type: none"> • Landscaping of perimeter 	<ul style="list-style-type: none"> • Substantial planting out of site and bunding to incorporate site gradients
<ul style="list-style-type: none"> • Burning Chamber (incorporated through later approval) 	<ul style="list-style-type: none"> • No burning Chamber
<ul style="list-style-type: none"> • Compliance with NSW WorkCover guidelines 	<ul style="list-style-type: none"> • Subject to 'new' local and world best practice guidelines developed following the explosion
<ul style="list-style-type: none"> • Earth wiring of magazines 	<ul style="list-style-type: none"> • Lightning protection rods for each magazine complex
<ul style="list-style-type: none"> • Security fencing around perimeter 	<ul style="list-style-type: none"> • Additional electrified internal fencing around storage area
<ul style="list-style-type: none"> • On-site Managers residence 	<ul style="list-style-type: none"> • No proposed Managers residence

The application is forwarded for the Joint Regional Planning Panels consideration. Recommendation will be for approval subject to conditions.

LOCATION & SITE DESCRIPTION OF THE LAND

The land to which the application applies is described as Lot 2 DP 1124158 and is known as 581 Pipers Flat Road, Wallerawang. The land is approximately 92ha and has been predominantly cleared of any native vegetation from past uses. The topography of the facility precinct is undulating with a gentle slope towards the east and north. The facility precinct is characterised by localised grazing land with only minor pockets of moderately disturbed native eucalypt woodland.

The land is located approximately 20km northwest of Lithgow and approximately 4kms west of the town of Wallerawang. Surrounding landuses are predominantly agricultural with grazing being the dominant agricultural pursuit.

The structures on the site include the original dwelling, the residence garage and garden shed, the former shearing and machinery sheds, the office and staff amenities buildings, manufacturing sheds, chemical magazine sheds, fireworks magazines, storage sheds, warehouse shed and burn ground.

As a the result of an explosion that occurred in December of 2007, the storage units, general workshop, warehouse and storage magazines were the most seriously damaged elements onsite, with lesser damage to the dwelling precinct, several storage magazines and other storage components.

ZONING: The property is zoned General Rural 1(a) under Lithgow's Local Environmental Plan 1994.

PERMISSIBILITY: The development is defined as designated development in accordance with Schedule 3 of the Environmental Planning and Assessment Regulations 2000 and is defined as a Chemical Industry and Works, which states;

9 Chemical industries and works

(1) Chemical industries or works for the commercial production of, or research into, chemical substances, comprising:

(a) chemical industries or works referred to in subclause (2), or

- (b) chemical industries or works other than those referred to in subclause (2):
 - (i) that manufacture, blend, recover or use substances classified as explosive, poisonous or radioactive in the *Australian Dangerous Goods Code*, or
 - (ii) that manufacture or use more than 1,000 tonnes per year of substances classified (but other than as explosive, poisonous or radioactive) in the *Australian Dangerous Goods Code*, or
 - (iii) that crush, grind or mill more than 10,000 tonnes per year of chemical substances, or
- (c) chemical industries or works that are located:
 - (i) within 40 metres of a natural waterbody or wetland, or
 - (ii) in an area of high watertable or highly permeable soil, or
 - (iii) in a drinking water catchment, or
 - (iv) on a floodplain.

(2) The chemical industries or works referred to in subclause (1) (a) are the following:

(d) explosive and pyrotechnic industries that manufacture explosives for purposes including industrial, extractive industries and mining uses, ammunition, fireworks or fuel propellents,

As designated development the application is submitted to the Western JRPP for determination.

POLICY IMPLICATIONS (OTHER THAN DCP's)

None.

FINANCIAL IMPLICATIONS (eg Section 94)

The development will be subject to Councils Section 94 Rural Fire Services Contribution Plan. For industrial developments, contributions are based on development costs. Therefore, the re-development cost of this proposal is \$897,000 which will equate to a contribution of \$600.

Rural Roads Contributions does not apply as access is onto Pipers Flat Road, which is a classified road and is under the control of the Roads and Traffic Authority.

LEGAL IMPLICATIONS

In determining a development application, a consent authority is required to take into consideration the matters of relevance under Section 79C of the Environmental Planning and Assessment Act 1979. These matters for consideration are as follows:

Any Environmental Planning Instrument

Local Environmental Plan

The proposal is permissible within Council's Local Environmental Plan 1994, being development that is not prohibited in the rural 1(a) zone however the aims and objectives of the zone must also be met. Further, these aims and objectives of the rural 1(a) zone must be taken into consideration as part of any application.

The aims and objectives are outlined below and include:

The aims of the plan indicate, and seek;

(b) to encourage the proper management, development and conservation of natural resources and the built environment within the City of Lithgow by protecting, enhancing or conserving:

(i) prime crop and pasture land, *the land consists of Class 3 & 4 land in accordance with the Department of Agriculture, Agricultural Suitability Classification maps held within Council.*

Class 3 lands are described as;

Land not suited to continuous cropping or intensive horticulture but with good capability for agriculture and well suited for grazing. The land can be cultivated for an occasional cash crop or forage crop in conjunction with pasture management

Class 4 lands are described as;

Grazing Land not suited to cultivation. Agricultural capability is based on native pastures and/or improved pastures relying on aerial or zero tillage techniques.

Although the land is partially considered prime crop and pasture land the property could still maintain a predominantly grazing capacity over the majority of the land. The development in its capacity would not dilute or negate the use for agriculture should the proposed development lapse.

(ii) timber, minerals, soil, water quality, stream environment and other natural resources, *there are no known mineral deposits, natural resources or other critical environmental constraints that prohibit the proposed development.*

(iii) places of significance for nature or heritage conservation, *the existing dwelling on the property has been noted in Council's Draft Heritage Study. Recent approvals for the renovation of the dwelling have been undertaken in association with Council's Heritage Advisor and renovations have been completed sympathetic to its local heritage significance. It is perceived that any new development will have minimal impact on the overall significance of the existing dwelling.*

(iv) places or features of high scenic or recreational value, *there are no known scenic or recreational areas that prohibit the proposed development.*

and

Clause 9(2) of Council's Local Environmental Plan 1994 indicates:

The Council must not grant consent to development unless it is of the opinion that such development is consistent with the objectives of the zone in which it is proposed to be carried out.

The objective of the zone is to promote the proper management and utilisation of natural resources by:

(a) protecting, enhancing and conserving:

(i) rural land, in particular prime crop and pasture land, in a manner which sustains its efficient and effective agricultural production potential, *The proposed redevelopment consists of lands Class 3 and Class 4 in accordance with the Study of the Suitability of Agricultural Lands conducted by the NSW Department of Agriculture in 1983. The land in question has been subject to a previous approval for pyrotechnic manufacturing as well as subdivision approval for a boundary adjustment. It is considered that given these previous pursuits and the requirements of the definitions within Class 3 the agricultural viability of the land, and surrounding lands will not be impacted by the development*

(ii) soil, by controlling and locating development in accordance with soil capability, *the applicant has considered that the development will not impact on the soil capability of the land. Should the development lapse minimal impact will occur on the current capability of the land. The applicant in its submitted Environmental Impact Statement (EIS) has indicated that substantial soil erosion mitigation devices will be incorporated into the proposed development that proposed to stabilise soils within the site and minimise erosion from the site.*

(iii) forests of existing and potential commercial value for timber production , *In its correspondence the applicant has indicated that the land in the proposal has never been considered for forestry activity. Further, reference to forestry and mineral exploration is irrelevant in this instance – these activities rely on the supply of lands in large holdings in the right areas to support such cases.*

(iv) valuable deposits of minerals, coal and extractive materials, by controlling the location of development for other purposes in order to ensure the efficient extraction of those deposits, *the applicant in its EIS and supporting documentation indicates that the property has been subject to detailed surveys with no potential deposits revealed.*

There are no current, exploration or mining titles over the property and it has not been explored in the past.

- (v) *trees and other vegetation in environmentally sensitive areas, where the conservation of the vegetation is significant for scenic amenity or natural wildlife habitat or is likely to control land degradation, the application states that the proposal does not seek to remove any vegetation other than that required for the implementation of roadways. There is low quantities of eucalypt scattered around the site however in the preparation of the EIS the applicant indicated that no threatened fauna and flora exist on the land. However investigation by the applicant has been lodged in support of this concern. As part of previous applications over the land it had been identified through investigation that the lands had been extensively modified due to numerous decades of grazing over the site and as such will have minimal impact on potential threatened species that may be recorded in the area.*
 - (vi) *water resources for use in the public interest, preventing the pollution of water supply catchment and major water storages, There is one dam on-site currently used in support of fire fighting purposes. Appropriate documentation approved by the relevant water authority has been received by Council and it is considered that the development will have minimal impact on water resources in the public interest, or pollution of water supply catchments, given all water will be collected on-site.*
 - (vii) *localities of significance for nature conservation, including places with rare plants, wetlands and significant wildlife habitat, given the extensively modified nature of the property it is considered that the proposed development will have negligible impact on rare plants wetlands and wildlife habitat; and,*
 - (viii) *items of heritage significance, the existing dwelling on the property has been noted in Council's Draft Heritage Study. Recent approvals for the renovation of the dwelling have been undertaken in association with Councils Heritage Advisor and renovations have been completed sympathetic to its local heritage significance. It is perceived that any new development will have minimal impact on the overall significance of the existing dwelling.*
- (b) *preventing the unjustified development of prime crop and pasture land for purposes other than agriculture, the land consists of Class 3 & 4 land in accordance with the Department of Agriculture, Agricultural Suitability Classification maps held within Council.*

Class 3 lands are described as;

Land not suited to continuous cropping or intensive horticulture but with good capability for agriculture and well suited for grazing. The land can be cultivated for an occasional cash crop or forage crop in conjunction with pasture management

Class 4 lands are described as;

Grazing Land not suited to cultivation. Agricultural capability is based on native pastures and/or improved pastures relying on aerial or zero tillage techniques.

Although the land is partially considered prime crop and pasture land the property could still maintain a predominantly grazing capacity over the majority of the land. The development in its capacity would not dilute or negate the use for agriculture should the proposed development lapse.

- (c) *facilitating farm adjustments, the proposal allows for this with the varied allotment size indicating larger allotments are proposed on lands conducive to agriculture (being Class 3 land). However, the allotment sizes proposed do not adequately address how these sizes adequately justify agriculture.*
- (d) *minimising the cost to the community of:*
 - (i) *fragmented and isolated development of rural land, the proposed redevelopment adjoins lands that has been substantially modified by either changing agricultural patterns or approved development in and around the site; and*
 - (ii) *providing, extending and maintaining public amenities and services, should approval be considered all applicable services are already connected to the site.*
- (e) *providing land for other non-agricultural purposes, in accordance with the need for that development, and the proposed redevelopment provides for a unique industry within a rural zone. The redevelopment proposes to employ in excess of 25 people, far more than what would be required should an agricultural pursuit be undertaken on the land. Thus, the development does provide for the non agricultural purpose with the need providing employment for a unique industry.*
- (f) *providing for the separation of conflicting land uses. Surrounding landuses include agricultural pursuits, industry and Councils rural tip. It is considered that the re-development given the requirements of the 'best practise' WorkCover requirements provide for the appropriate separation requirements.*

Thus it is considered that the development is not antipathetic to the objectives of the zone in this particular instance.

Additional to this, Clause 11(1) of Councils Local Environmental Plan (LEP) 1994 applies to the development and indicates;

11. (1) Before determining a development application relating to land within Zone No. 1(a) or 1(c), the Council must take into consideration the effect that the proposed development would have on:

- (a) *the present use of the land, and the potential for sustained agricultural production of so much (if any) of the land as is prime crop and pasture land; given the limited land holding of the site it is considered that the land could not be used for commercial agricultural pursuits and therefore will not effect sustained agricultural production in the area.*
- (b) *vegetation, timber production, land capability and water resources (including the quality of the water, stability of water courses, ground water storage and riparian rights);*

The land is cleared of substantial timber given the previous nature of the development on the land and as such the redevelopment will not impact on either timber production. Through appropriate legislative assessment the SCA has assessed potential of site water impacts and it is considered that through conditions the redevelopment will have a neutral or beneficial effect on water supply.

- (c) the future recovery from known or prospective areas of valuable deposits of minerals, coal, petroleum, sand, gravel or other extractive materials; *the applicant in the EIS and supporting documentation indicates that the property has been subject to detailed surveys with no potential deposits revealed.*

There are no current, exploration or mining titles over the property and it has not been explored in the past.

- (d) the protection of areas of nature conservation significance or of high scenic or recreational value, and of items of heritage significance; *the existing dwelling on the property has been noted in Council's Draft Heritage Study. Recent approvals for the renovation of the dwelling have been undertaken in association with Council's Heritage Advisor and renovations have been completed sympathetic to its local heritage significance. It is perceived that any new development will have minimal impact on the overall significance of the existing dwelling.*
- (e) the cost of providing, extending and maintaining public amenities and services; *The extension of any services would be conditional should approval be recommended.*
- (f) development on adjoining land and on other land in the locality, including any cumulative impact; and *Given the nature of existing and approved development in the vicinity and given the requirements required by conditions of consent, should approval be granted it is considered that the redevelopment will not effect adjoining lands in the vicinity.*
- (g) the future expansion of settlements in the locality. *Currently there is no provision for the expansion of settlements in this locality.*

- (2) These considerations do not apply to proposed development which is:
 - (a) an addition to a building or work; *N/A*
 - (b) ancillary to a purpose for which development may be carried out with the permission of the Council under this Plan; or *N/A*
 - (c) the erection of a dwelling-house on an allotment of land that the Council is satisfied was created in accordance with this Plan for a dwelling. *N/A.*

Regional Environmental Plans

The application has been lodged in accordance with Drinking Water Catchments REP 1 requiring the development to have a neutral or beneficial effect on water quality. Given the provisions required to comply with the REP 1 the application was forwarded to the SCA for concurrence, as Council was not in a position to assume the neutral or beneficial effect clause. In their response the SCA indicated that a concurrence can be provided subject to specific conditions. These will be included in any approval document.

State Environmental Planning Policies

State Environmental Planning Policy 33 – Hazardous & Offensive Development

The development also falls into the requirements of the State Government for Hazardous and Offensive Development, which stipulates the way a proposal must be assessed.

The EIS incorporated a Preliminary Hazard Analysis and Preliminary Site Investigation in accordance with these provisions and hazard experts have assessed these requirements in accordance with the legislation provided.

State Environmental Planning Policy 55 – Remediation of Land

The subject land is not listed by Council as a contaminated site. The land was originally rural land and was previously utilised for partially industrial purposes, and contains an existing dwelling. The history of the site does not indicate any other landuses that would deem the land contaminated in accordance with the SEPP.

State Environmental Planning Policy (Infrastructure)

This policy repealed a number of policies including SEPP 11 – Traffic Generating Developments and aims to facilitate the effective delivery of infrastructure across the State by:

- (a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and
- (b) providing greater flexibility in the location of infrastructure and service facilities, and
- (c) allowing for the efficient development, redevelopment or disposal of surplus government owned land, and
- (d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and
- (e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and
- (f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

It is considered that with the justification of the reports supplied within the EIS the redevelopment satisfies these aims.

Integrated & Concurrence Authorities

The development application is also classed as “Integrated Development” as the proposal requires approval from the Environment Protection Authority under the Protection of the Environment Operations Act 1997.

The application was advertised in accordance with the EP& A Act. Initially, the incorrect days were specified for the advertising period off 38 days.

Draft Planning Instruments

Any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority

The existing dwelling on the property has been noted in Council's Draft Heritage Study. All development is behind the existing dwelling and is to be screened by landscaping. The dwelling will still enjoy prominence to the main road. The heritage significance of the dwelling and the property will not be detrimentally affected.

Any Development Control Plan

Nil.

Planning Instruments

Any planning agreement that has been entered into under Section 93F, or any draft planning agreement that a developer has offered to enter into under Section 93F?

Nil.

Any matters prescribed by the regulations that apply to the land

There are a number of existing buildings located on the site. It is proposed to retain the existing sheds for farm and machinery equipment. The application has been referred to Council's Building Officers for appropriate assessment of the application.

Impacts of the Development

The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

There are a number of environmental impacts that this development could create. Each impact is discussed in turn;

Context & Setting - The surrounding properties are generally utilised for livestock grazing. Located in the greater Wallerawang and Portland areas are numerous industries ranging from coal mining, approved rail unloader site and power generation to small farm based industries and other agricultural developments such as poultry and cattle farming.

The development will see the re-development of numerous sheds, which will be out of character with the existing setting. The current development is well setback from public roads and the proposed addition of earthen bunds and extensive landscape screening around the site and storage sheds should minimise the scope of the development.

The remainder of the property outside the fenced off areas will still be utilised for existing activity and provide buffer distances to existing development. Therefore, the

applicant contends that the majority of the property will appear to be retained for agricultural endeavours.

Access, transport and traffic- The development will increase traffic to the site, both through general motor vehicles for employees as well as truck movements to and from the site carrying raw materials and finished products. The EIS highlighted that vehicular traffic will be up to approximately 20 vehicles per day.

The existing access off Pipers Flat Road is currently upgraded to handle the safe turning of vehicles into and out of the property. The access with Pipers Flat Road was previously approved to meet the Roads and Traffic Authorities standards.

The haulage of raw and finished goods will need to comply with the Dangerous Goods Act 1975.

The access from Pipers Flat Road to the development site is currently of dirt construction. The additional traffic to utilise this access and car parking facilities does have the potential to generate dust. The applicant shall be required to delineate car parking facilities and seal the area with a bitumen seal or equivalent.

The transportation of explosives is a requirement of the applicant and will need to satisfy WorkCover's licensing criteria and receive a favourable national probity assessment from NSW and Commonwealth police and security agencies. Substantial legislation is required to be considered prior to the transportation of explosives for any 'explosives' site. This includes the [Explosive Act 2003](#) and [Explosives Regulation 2005](#) which govern the use of explosives and fireworks in NSW. The *Explosives Regulation 2005* requires all activities involving the handling of explosives and fireworks be carried out in accordance with the:

- [AS2187 – Explosives: Storage, Transport and Use](#)
- [Australian Code for the Transport of Explosives by Road and Rail](#)
- [Australian Dangerous Goods Code](#)

The Guide for the Secure and Safe Handling of Explosives and Security Sensitive Dangerous Substances is also to be considered prior to WorkCover issuing any license for the transportation of explosives.

Prior to the issue of a license from WorkCover the applicant will need to provide assurances from the above legislative authorities and under the relevant Acts.

Utilities, Water & Effluent Disposal- The development will be required to be connected to most utility services, especially water. All services except reticulated sewer are provided to the site. Due to the potential hazardous chemicals that will be used on-site, water supply from the Fish River pipeline will need to be extended around the property to ensure safe fire fighting ability.

It is proposed to assimilate all effluent and grey water within the boundaries of the property. The EIS detailed a geotechnical report outlining the soils' capability on the site as well as the proposed means to handle effluent disposal. The Sydney Catchment Authority has reviewed the EIS and has given their concurrence to the development subject to a number of conditions being applied to any development approval.

Visual Impact- The proposed sheds have been located behind the existing residence and sheds located on site, which are approximately 150 to 200 metres off Pipers Flat Road. To help reduce the visual appearance of the buildings, sheds will be made of colorbond and be built in a colour "Wheat". This colour should help blend the buildings in with the surrounding landscape for the majority of the time.

To further screen the redevelopment, the proponent is undertaking extensive landscaping between the sheds and Pipers Flat Road. Existing vegetation will also be added to help screen the development by nearby residences. In the application the applicant has stated that screening of the previous approval was poor and proposes to place mitigation devices to help promote the growth of landscaping around the site.

Previously onsite the use of shipping containers for use as storage magazines have been approved by WorkCover NSW. As part of any new approval and given the applicants intention to use concrete bunded magazines in the future it is considered that the use of shipping containers will not be needed. As such, to reduce the visual context on the site shipping containers could be conditioned to be removed and not used in any part of the operation.

Air & Microclimate - It is anticipated that the development will create minimal impacts on the surrounding environment. The EIS indicated that airborne dust will be minimised during the construction phase. Further, should approval be recommended for the development conditions relating to fully sealed internal roads will be a requirement.

Landscaping- A landscaping plan has been submitted as part of the application. The EIS states that landscaping was approved as part of the initial development however had substantially perished due to the drought in the area over the past 10 years. It is considered that no assurance can be given that this will not happen in the future unless conditioned should an approval be issued. As such, it is considered that the issue of retained landscaping could be overcome through conditions relating to how the landscaping will be retained and maintained for the life of the development.

Waste- The predominant waste from the process is packaging cardboard which will be collected in an industrial bin and emptied by a contractor. All waste chemicals and any materials that may be contaminated by chemicals will be collected and stored at a central location. Those materials will then be transported to an approved waste disposal facility. It should be conditioned that wherever possible, a recycling program be put in place to handle the waste cardboard that this development will generate.

Liquid wastes will be collected at a central wash down area. The expected quantities are such that there will be only one truckload approximately every four months to a recognised disposal facility in Sydney.

Noise- The development should generate minimal noise. The only noise generating activity proposed for the facility is testing for the Railway Authority. The predicted noise levels these tests will have will not meet the EPA's Industrial Noise Policy and the EPA's Environmental Noise Control Manual's Blasting Criteria. However it was found that whilst non-compliance with the guidelines is expected for the testing of Railway Track Signals during a two hour period based on measured daytime noise levels, the impact would not be significant.

Further, through the notification process the application was forwarded to the DECCW who have indicated that a License for the site exists and should the redevelopment be approved the new license will be required to be put in place. The DECCW have indicated that all development proposed will be required to comply with the amended license or cease to operate.

General increase of traffic to and on the site will be acceptable, as distances of roads to adjoining neighbours are in the order of 500 to 800 metres.

Safety, security & crime prevention - The transport of material to and from the site, the storage of raw and finished products and the handling of materials must be undertaken in accordance with WorkCover NSW new requirements, and in accordance with the Dangerous Goods Act. All manufacturing and storage sheds that will retain hazardous materials will be extensively protected by security fencing and associated measures.

The applicant has indicated that as the stored materials may be a risk to public safety it is essential that special security arrangements are in place to protect the facility against break in. The site is secured with a man proof fence to ensure no member of the public can obtain access to any part of the facility. The site will be occupied by a part time site manager.

WorkCover has overseen the site cleanup following the explosions and has signed off on the work. Classification of materials has been altered by WorkCover, and the industry is redesigning storage requirements, including separation distances. These rules reclassify some products as 1.1G for storage where some were previously classed as 1.3G, which in turn required less stringent controls. Further, stability can now be addressed through how tightly materials are packed and what amounts are stored.

Further, the Company proposes in addition to the man proof external fencing an internal 3m high electrified fence around the perimeter of the storage area. This fence is set up to detect and deter break-ins that may occur outside operation hours. In addition to this the applicant proposes to include lightning protection systems, locking devices on magazines, security lighting, vehicle and equipment maintenance (reducing auditable noise) as well as enhancing site security in accordance with Australian Standard.

Safety and security primarily drove the new WorkCover requirements put in place after the events in December 2007. Four major factors which required reform were identified and are incorporated into these new requirements. They included:

1. *Magazine construction* – the confined nature of freight containers for storage can cause lower division of fireworks to explode, and light construction buildings are prone to damage.
2. *Moulding* – fireworks of lower hazard division may behave like higher division fireworks in unmoulded magazines, which does not provide protection to other nearby containers.
3. *Separation Distances* – the Standard requirements did not appear to be sufficient to provide protection from an explosion in an adjacent magazine.
4. *Classification* – the classification of fireworks relates to their stability when being packed for transport. This is now found to be inappropriate for storage when the effects of confined space, such as in freight containers is not considered.

In addition to the Australian Standard a number of new requirements will apply to licence holders relating to storage, construction, separation distances, mounding and classification. The general construction requirements now state that where fireworks are to be stored or manufactured, the construction, including mounding of magazines and process buildings, must mitigate the consequences of an event should initiation occur.

Other matters were enhanced as part of the revised requirements that included requirements for the storages of quantities over 50kg NEQ (from the previous 250kg NEQ), lightning protection and security.

Hazard Analysis – a Preliminary Hazard Analysis has been prepared by the applicant and referred to the Department of Planning's Hazard Analysis team for assessment. In their comments to Council it has been determined that the Department concurs with the applicants submission however advise that conditions should be implemented into any consent should approval be recommended.

Site Design & Internal Design- The design of a site will enable the safe handling of materials. For each days work staff will collect enough materials for one days production from the stores and transfer them to the appropriate manufacturing shed. Products are developed to a certain degree within each shed, and may be passed on to another shed for enhancement, prior to being taken to storage for finished products.

Flora and Fauna- The applicant employed Anderson Ecological Surveys Pty Ltd to undertake an assessment on the flora and fauna of the site as part of a previous application. The investigation highlighted that the site had been extensively modified due to decades of livestock grazing over the site.

The assessment identified possible threatened species that have been recorded in the area. From this, they undertook an Eight Part Test of Significance as required by the EP&A Act. The test highlighted that this development would not have any impact on potential threatened species that may be recorded in the area.

As such no further assessment was required to be undertaken as part of this redevelopment. However, given the current nature of the land it is considered that no threatened fauna or flora will be compromised as part of the redevelopment. The applicant has undertaken an Assessment of Significance that indicated that the proposal poses no significant threat to threatened species, populations or ecological communities or habitats, provided the conditions highlighted within the Threatened Species Assessment are carried out. This would be a requirement should approval be recommended.

Social & Economic impacts- The EIS has indicated that the development will employ up to 25 persons and when fully developed. Therefore, economically this development will have a positive impact for the Wallerawang and greater Lithgow economy with not only additional employment generation, but multiplier effects that additional employment will have to spend in the community.

The EIS indicates that the proposed rebuilding of the facility is unlikely to significantly impact on the socio-economic status of the Wallerawang area. However the facility will provide a viable source of pyrotechnics materials for use across the state, as well as internationally, whilst at the same time, providing employment for the local

economy. This as stated above has flow on effects for the Lithgow LGA with the benefit of helping to retain income locally.

The EIS goes on to further indicate that the concerns of the community raised through the assessment process particularly with reference to the safety of the facility in light of the events of December 2007 can be overcome by assurances by the applicant of reviewed industry standards and the thorough supervision of all activities by WorkCover.

Furthermore this community assurance can be further gauged by the conditions of consent proposed should approval be recommended.

The Suitability of the site for the development

The development will suit the locality, and need to comply with all WorkCover related issues relating to suitable buffer distances to adjoining properties and be suitably screened from public viewpoints such as the Pipers Flat Road and Willowvale Lane. There are no other hazardous land uses or activities in the immediate area that could limit the siting of development as proposed. The adjoining rubbish depot controlled by Council is situated on the boundary, with a ROW traversing the proposed land. The rubbish tip is quickly coming towards total capacity and as such will be closed at capacity. Should this occur issues relating to the ROW and sterilised tip land potentially could be used by the applicant as additional buffer for the development.

There are no known natural or man made hazards that affect the site. The potential for bushfire hazard has been partially overcome by the imposition of two fire fighting vehicles that will be kept on-site. Further the NSW RFS have indicated that they are willing to issue a Bushfire Authority for the site subject to conditions. Furthermore, the EIS has indicated that grasses within the complex will be regularly mowed. Finally, a 100mm water main has been installed around the complex, with hydrants located at 30 metre intervals.

The immediate area surrounding the property is utilised for livestock grazing. This development is not perceived to impact on the continued use of that land for livestock grazing. The revised WorkCover 'best practice' principles that will be required to be implemented in addition to conditions of consent proposed should mitigate the concerns raised through the assessment process.

As such, the site is considered to be suitable for the redevelopment.

Any submissions made in accordance with this Act or the Regulations
If relevant, consider public and authority submissions. Do submissions relate to valid Planning issues?

As part of the application process the appropriate agencies and authorities were advised of the application as they are considered Integrated or Concurrence authorities. Substantial notification was undertaken as part of the assessment with in excess of 600 letters sent to adjoining landowners within a 3km radius as well as the entire town of Wallerawang. The application was placed on public display for a period of 38 days. Correspondence from authorities and landowners is summarised below:

AUTHORITY REFERRALS

Councils Building Officer

Reference is made to your recent request for comments in respect to the above development proposal.

The above proposal provides for:

- Demolition and rebuild of remaining factory sheds (not covered by 036/09DACC);
- Restructure of existing storage area (including new storage facility and associated earthwork mounding);
- Construct new packing shed and associated earth mounding
- Truck unloading bay
- Minor road works to new storage areas
- Internal drainage works
- Installation of new alarms, lightning protection systems and minor electrical works.
- Install a hydrant ring main system throughout the site.

The development is to be staged as follows:

Stage 1

15 concrete storage magazines with mounding
MX 34 mixing shed
Sheds 4, 41, 5, 6, 6a & 9
Shed R21
DR 35
Factory central heat pump

Stage 2

Clay 24
R22
M26 & M27
SFX 31
SFX 32
17 concrete storage magazines with mounding
Construction of burn ground.

It should be noted that the site plan (Appendix A) accompanying this submission does not indicate the location of the following buildings / structures:

4, 41, 5, 6a, 9, SFX 31.

Also, Bldg Nos SFX 33, CM15, 16 & 17 are indicated on the Site Plan but not described elsewhere in supporting documentation.

Generally, insufficient detail is provided to enable a proper assessment of the proposed buildings / structures against the provisions of BCA2009. Further details are required to be submitted prior to the issue of a Construction Certificate, and include:

- Fully dimensioned architectural drawings of proposed sheds / structures
- A revised site plan drawn to scale and showing all proposed and existing structures including proposed hydrant / hose reel locations;
- Structural details prepared by a practising structural engineer in respect to steel framing, reinforced concrete slabs, freestanding walls. The proposed structures shall be designed in accordance with AS 1170 Pts 1, 2 & 3. Details prepared by a practising structural engineer are to be submitted prior to release of the Construction Certificate.
- Certified hydraulic design in respect to the existing / proposed hydrant and hose reel system prepared by a practising hydraulic engineer and complying with requirements of AS2419.1 (hydrants) & AS2441 (hose reels). Hydraulic investigations may be required in conjunction with the water supply authority to determine whether the requirements of AS 2419.1 can be satisfied.
- Detailed hydraulic details in relation to the proposed stormwater drainage including a Stormwater Management Plan for the site.
- Certification prepared by a practising structural engineer to verify the structural adequacy of existing concrete floor slabs to withstand superimposed loads from the new structures (where proposed).

Other Points to Consider

Disabled access and sanitary facilities.

Under D3.4 it is not necessary to provide access for people with disabilities (public & staff) to any area if access would be inappropriate because of the particular purpose for which the area is used.

Given the expansive nature of this site, the provision of complying access and sanitary facilities within the proposed storage / manufacturing sheds would be onerous. Therefore access and sanitary facilities complying with D3.2 & D3.3 have been provided in conjunction with the Office building only.

The upgrade of existing access and sanitary facilities associated with the site building has been addressed under the previous DA's (04/09DACC & 36/09DACC).

Recommendation

That the DA be approved subject to the following conditions:

Administrative Conditions

That the development be carried out in accordance with the application, Statement of Environmental Effects, accompanying information, plans submitted with the application and any further information provided during the process unless otherwise amended by the following conditions.

Further details are required to be submitted prior to the issue of a Construction Certificate, and include:

- Fully dimensioned architectural drawings of proposed sheds / structures
- A revised site plan drawn to scale and showing all proposed and existing structures including proposed hydrant / hose reel locations;

- Structural details prepared by a practising structural engineer in respect to steel framing, reinforced concrete slabs, freestanding walls. The proposed structures shall be designed in accordance with AS 1170 Pts 1, 2 & 3. Details prepared by a practising structural engineer are to be submitted prior to release of the Construction Certificate.
- Certified hydraulic design in respect to the existing / proposed hydrant and hose reel system prepared by a practising hydraulic engineer and complying with requirements of AS2419.1 (hydrants) & AS2441 (hose reels). Hydraulic investigations may be required in conjunction with the water supply authority to determine whether the requirements of AS 2419.1 can be satisfied.
- Detailed hydraulic details in relation to the proposed stormwater drainage including a Stormwater Management Plan for the site.
- Certification prepared by a practising structural engineer to verify the structural adequacy of existing concrete floor slabs to withstand superimposed loads from the new structures (where proposed).

Your attention is drawn to the existence of the Disability Discrimination Act. A construction certificate is required to be obtained for the proposed building/s, which will provide consideration under the Building Code of Australia, however, the development may not comply with the requirements of the Disability Discrimination Act. This is the sole responsibility of the owner, builder and applicant.

The following conditions of consent have been imposed to ensure that the administration and amenities relating to the proposed development comply with all relevant requirements. These conditions are to be complied with during the construction of the development on site.

To ensure structural integrity, the maintenance of minimum health standards, the management of the buildings surrounds and the protection of the environment, compliance certificates are to be issued at significant stages throughout the construction period. These stages are:

- a) Pier holes/pad footings before filling with concrete.
- b) Trenches complete with reinforcing and prior to filling with concrete.
- c) Internal drainage carried out by licensed plumber prior to covering reinforcing steel in position and before concrete is poured (footings, lintels, beams, columns, floors, walls and the like).
- d) Slab base if no piers required and prior to placement of the membrane.
- e) Floor frame, dampcourse, antcapping, foundation walls before floor material is laid.
- f) Framing when external wall and roof cladding is in place and prior to internal linings.
- g) External drainage (including onsite waste disposal system) installed by a licensed plumber and prior to covering.
- h) Wet area flashing prior to tiling or covering.
- i) Stormwater drainage between building and discharge point (drainage pipes, soakage pits and the like) prior to covering.
- j) Completion of the development and sign off to all conditions of the consent including landscaping, prior to occupation and use.

At each inspection, erosion and sediment control measures and site management will be inspected.

Note: forty-eight (48) hours notice shall be given to Council prior to inspections.

To ensure compliance with Australian Standard 3500 – National Plumbing and Drainage and Council (being the Water and Sewer Authority), compliance certificates are to be issued by Council for the following:

- a) Internal drainage carried out by licensed plumber prior to covering.
- b) External drainage (including onsite waste disposal system) installed by a licensed plumber and prior to covering.
- c) Hot and cold water plumbing installation

Note: forty-eight (48) hours notice shall be given to Council prior to inspections and inspection fees must be paid.

All work on site shall only occur between the following hours:

Monday to Friday	7.00am to 6.00pm
Saturday	8.00am to 1.00pm
Sunday and public holidays	No work

Erosion and sediment control measures shall be provided and maintained throughout the construction period in accordance with the requirements of the manual – “Soils and Construction” (2004) (Bluebook), the approved plans, Council specifications and to the satisfaction of the principal certifying authority. The erosion and sedimentation control devices shall remain in place until the site has been stabilised and revegetated

Subject to the provisions of essential fire or other safety measures, Environmental Planning and Assessment Regulation 2000 as detailed in Table 1:

Essential fire or other safety measures are subject to specific requirements under Environmental Planning and Assessment Regulation 2000. Upon completion of the building and prior to issue of an Occupation Certificate, all of these services must be certified on a Fire Safety Certificate as required and submitted to Council stating that the essential fire and other safety measures have been installed and comply with the relevant standard specified below.

Once the building is occupied, an Annual Fire Safety Statement must be submitted to Council and the NSW Fire Brigades, PO Box A249, SYDNEY SOUTH NSW 2001, and a copy retained on site certifying that:

The essential fire and other safety measures have been maintained and serviced at regular intervals in accordance with the appropriate maintenance specified below and are still operable; and

That the path of travel is clear of anything which would impede free passage of any person at any time.

The roofs for sheds are to be constructed in a manner that ensures all runoff is directed to the rainwater tanks. The overflow from the rainwater tanks is to be directed to stabilised grassed surface in a manner that does not cause any erosion.

The stored rainwater from the tanks can be used for any purposes, including landscape watering, dust suppression and fire fighting.

Effective erosion and sediment controls are to be installed prior to any construction activity. The controls must prevent sediment entering drainage depressions and watercourses and are to be regularly maintained and retained until works have been completed and groundcover established.

Noise

That no undue noise is created during the demolition operations which cause a nuisance to neighbouring occupied residential properties.

Environmental Protection

The techniques adopted for stripping out and for demolition are to minimise the release of dust into the atmosphere.

Before commencing work, any existing accumulations of dust are to be collected, placed in suitable containers and removed. Selection of appropriate collection techniques, such as vacuuming or hosing down, shall take account of the nature of the dust and the type of hazard it presents (eg., explosive, respiratory etc).

Dust generated during stripping or during the breaking down of the building fabric to removable sized pieces shall be kept damp until it is removed from the site or can be otherwise contained. The use of excess water for this purpose is to be avoided.

It should be kept in mind, that in certain environments and under certain stimuli, deposits of combustible dust on beams, machinery and other surfaces may be subject to flash fires, and suspensions of combustible dusts in the air can cause them to explode violently (see NFPA Handbook).

Table 1 - Fire Safety Schedule

Issued pursuant to Clause 168 of Environmental Planning & Assessment Regulation 2000.

Application No: 190/09DACC

Proposed Development: Demolition and Rebuild of existing sheds, Installation of Magazines, Construction of Internal / external Road Works & Associated Earthworks

Property Description: Lot 2, DP 1124158, 581 Portland Road, Wallerawang

Issue date: March 2010

Fire safety measure	Performance Standard	Existing measure	Proposed Required measure	Critical measure
Emergency Lighting	Part E4.2 of BCA2008 and AS 2293.1-2005	No	Yes	No
Exit signs	Part E4.5 & 6 of BCA2008 & AS 2293.1-2005	No	Yes	No
Hydrants	Part E1.3 of BCA2008 & AS2419.1-2005	Yes	Yes	No
Hose reels	Part E1.4 of BCA2008 & AS2441-2005	Yes	Yes	No
Portable fire extinguisher & fire blankets	E1.6 of BCA2008 & AS 2444 – 2001	Yes	Yes	No

NB: This Schedule applies to whole development upon the subject land.

Councils Engineering Manager

Councils Operations division has assessed the redevelopment and is happy to recommend approval subject to the following conditions;

Traffic and Access

The transportation of explosives is a requirement of the applicant and will need to satisfy WorkCover's licensing criteria and receive a favourable national probity assessment from NSW and Commonwealth police and security agencies

Civil Construction/ Stormwater and Drainage

All development is to be constructed in accordance with Lithgow City Council's "Subdivision and Development Code" adopted by Council 28 September 1992, Minute No. 1439.

Works as Executed Plans shall be lodged with Council prior to the issue of a Construction Certificate for the driveways and internal access.

The internal access, to the car park area is to be constructed at a minimum two coat bitumen seal (or equivalent) and will be designed so as all stormwater will run into appropriate detention systems within the boundaries of the allotment. The detention system will be designed to cater for volumes created by the sealing of the internal road access, loading area and internal accesses, for the proposed development.

All drainage work associated with the development shall be submitted on detailed plans to Council's Development Engineer for approval prior to any civil construction. All stormwater from existing buildings shall be directed into Council's stormwater system with upgrading to existing guttering and downpipes to be undertaken where required.

Department of Environment Climate Change & Water (DECCW)

Council in its notification processes forwarded the application to the DECCW seeking comment on the proposal. In correspondence received the DECCW commented as follows;

The Department has reviewed the information provided and has determined that it is able to issue a licence for the proposal subject to a number conditions.

The general terms of approval for this proposal are provided at attachment A. If Lithgow City Council grants development consent for this proposal these conditions should be incorporated into the consent.

These general terms relate to the development as proposed in the documents and information currently provided to the department. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with the department about the changes before the consent is issued. This will enable the DECCW to determine whether its general terms need to be modified in light of the changes.

In assessing the proposal the DECCW has also identified a number of environmental issues that Lithgow City Council may wish to consider in its overall assessment of the application. These include the following issues:

Minimising noise impacts;
Minimising dust impacts, and
Waste disposal.

The DECCW requests that Council add a condition to its consent requiring the proponent to retain an Environment Protection Licence from the DECCW.

Sydney Catchment Authority (SCA)

Council in its notification processes forwarded the application to the SCA seeking comment on the proposal. In correspondence received the SCA commented as follows;

1 The SCA understands that the applicant has notified Council that the existing damaged burn pit will not be re-established. Under such circumstances, the SCA recommends that a geotechnical investigation of the damaged burn pit and surrounding area be carried out to assess contamination of the area, any requirement for decontamination, preparation of a rehabilitation plan and rehabilitation of the burn pit site and surrounding area.

2 It is noted that an office building and a 5-bedroom dwelling is serviced by an aerated wastewater treatment system (AWTS). It appears that the AWTS is a 8-person treatment system and has a design daily wastewater treatment capacity of 2500 litres. Given that the dwelling is and will be occasionally occupied by the owners (pers. Comm. with Christian Howard on 13 January 2010) and the facility will have a maximum of total 25 employees, the SCA considers that this wastewater treatment system has adequate capacity to treat wastewater generated at the site. There is an established subsurface irrigation system for effluent disposal and the SCA considers that there is sufficient land area available for effluent disposal. The old septic tank and trenches that serviced the dwelling still exist on the site and these will need to be decommissioned.

3 It is further noted that the former shearing shed (currently shed 3) is serviced by an existing septic tank and an absorption trench to manage domestic wastewater from amenities used by about 5 employees (pers. Comm. with Christian Howard on 13 January 2010).

4 The Preliminary Hazard Analysis report (Appendix L of the EIS) states that the manufacture of stars requires the product to be mixed in a wet process. Although an email from Howards dated 23 November 2009 had informed the SCA that there is no water use and wastewater generation from the manufacturing process, Christian Howard clarified on 13 January 2010 that water is used in mixing some of the chemicals but no wastewater is produced in the process.

5 The number of magazines for storage of pyrotechnics has been invariably reported in the EIS and during further correspondence from Howards. An email from Howards dated 8 December 2009 clarified that there will be a total of 27 magazine

positions and some of these positions will hold more than one magazine and that there will be a total of 39 actual magazines installed.

6 The EIS states that the wastewater from wash down and refuelling hardstand areas is collected and stored in sealed receptacles in shed 9 and subsequently transported off the site. Christian Howard during the site inspection and subsequently on phone on 13 and 14 January 2010 informed that all the wastewater from the wash down area is stored in an underground concrete tank and transported to a suitable waste facility by a contractor on a needs basis whilst any spills in the refuelling area are managed with a spill kit.

7 An inspection of the site identified that some of the existing internal unsealed roadsides (particularly on the southern end of the site) have erosion problems. The SCA has raised this issue with Christian Howard who informed that the roads will be sealed and erosion problems will be rectified. It has been identified that a new internal road will be constructed as shown on the site plan provided by Howard's via an email to SCA dated 8 December 2009. The site inspection also identified that the existing stormwater diversion swales need to be upgraded and the dam 5 needs to be desilted to ensure that all stormwater runoff is appropriately managed.

All these above matters have been addressed in conditions below.

Based on the SCA's site inspection and the information provided, the proposed development has been assessed by the SCA as being able to achieve a neutral or beneficial effect on water quality provided appropriate conditions are included in any development consent and are subsequently implemented. The Chief Executive would therefore concur with Council granting consent to the application subject to the following conditions being imposed:

General

1 All works associated with the rebuild of the Pyrotechnics Facility shall be implemented as:
Specified in the Environmental Impact Statement prepared by Barson Pty Ltd (dated 22 July 2009);
Shown on the Site Plan including the Site Plan emailed to the Sydney Catchment Authority (dated 8 December 2009); and
Specified in the Stormwater management Plan report (dated October 2009) and associated addendum to this report (dated December 2009) prepared by Geolyse Pty Ltd;

Except where modified in conditions below.

2 Any further revision to the proposed rebuild works is to be agreed to by the Sydney Catchment Authority.

Reason for Conditions 1 & 2 – The Sydney Catchment Authority has based its assessment under the Drinking Water Catchments Regional Environmental Plan No 1 on this version of the development.

Internal Roads

3 The new and upgrade of existing internal roads shall be sealed or constructed of compacted roadbase as a minimum and otherwise in accordance with Council's engineering standards. The construction of the roads shall also be

consistent with the guidelines Environmental Practice Manual of Rural Sealed and Unsealed Roads (ARRB Transport Research Ltd 2002).

4 All eroded roadsides particularly in the southern part of the site, as appropriate, shall be stabilised and grass cover established.

5 All internal roads must incorporate the runoff management measures as elaborated below:

- Have vegetated swales, as appropriate, for their entire length of the road with appropriately spaced cross drains, level spreaders, sills or mitre drains that divert water onto a stable surface capable of accepting concentrated water flow and provide for efficient sediment trapping and energy dissipation.
- Where appropriate and necessary, have roadside drains on both sides of the road in conjunction with appropriately spaced small check dams to slow down and reduce concentrated flow. In steeper areas where the slope is in excess of 10%, the drains need to be armoured with coarse gravel, cobbles or rock underlain by geotextile fabric.
- All swales, batters and verges associated with the roads shall be vegetated and stabilised with bitumen and jute matting or equivalent as soon as possible after construction.

Reason for Conditions 3 to 5 – To ensure that the construction and upgrade of the roads and associated drainage works have a sustainable neutral or beneficial impact on water quality over the long term.

Domestic WasteAS1547-2000 On-Site Domestic Wastewater Management

6 The existing aerated wastewater treatment system including the subsurface effluent disposal area surfacing the dwelling and the office building and the septic tank and absorption trench servicing the shed 3 shall be inspected, cleaned and maintained as per the manufacturer's specifications. The maintenance of both wastewater management systems is also be consistent with Section 5 of the guidelines On-site Sewage Management for Single Households and AS/NZS 1547-2000 On-site Domestic Wastewater Management.

7 No effluent management area shall be located within 100 metres of any perennial or intermittent creek or watercourse, or within 40 metres of a dam or drainage depression. In this regard it is noted that a dam is located about 40 metres to the east of effluent irrigation area.

8 The old disused septic tank and associated effluent disposal trench that serviced the dwelling shall be decommissioned in accordance with the NSW Health Advisory Note (dated 3 May 2006) for Destruction, Removal or Reuse of Septic Tanks, Collection Wells, Aerated Wastewater Treatment Systems and Other Sewage Management Facility Vessels.

Reason for Conditions 6 to 8 – To ensure that on-site wastewater management and effluent disposal systems will have a sustainable neutral or beneficial effect on water quality over the longer term, and that the decommissioning of the existing wastewater system is undertaken in a way that does not cause pollution.

Washdown Wastewater Management

9 All tools and any other objects shall be washed in a dedicated concrete and appropriately bunded area and all wastewater shall be collected in an underground concrete collection tank.

10 Wastewater from the concrete tank shall be transported to a suitable licensed waste facility as required on needs basis and must be consistent with Council requirements.

11 No wastewater from manufacturing or processing or wash down area shall be discharged into the stormwater drainage system or domestic wastewater management systems or on the site and must meet requirements of any trade waste agreement with Council.

Reason for Conditions 9 to 11 – To ensure appropriate contaminated industrial wastewater management and disposal measures are in place so as to ensure a sustainable neutral or beneficial effect on water quality over the long term.

Storage and Management of Chemicals and Contaminated Spills

12 All hazardous chemicals shall be stored, as appropriate, in appropriately sealed containers in a dedicated covered area underlain by an impervious floor.

13 All refuelling activities shall be undertaken on a hardstand and appropriately bunded area.

14 Management and disposal of all contaminated spills and associated wastes must be in accordance with the Department of Environment Climate Change Environment Guidelines for Waste (DECC 2008).

Reason for Conditions 12 to 14 – To ensure appropriate contaminated spill management and disposal measures are in place so as to ensure a sustainable neutral or beneficial effect on water quality over the long term.

Stormwater Management

15 All stormwater treatment and management measures shall be implemented as specified in the Stormwater Management Plan report (dated October 2009) and associated addendum (dated December 2009) and shown on the Stormwater Management Plan (Project No. 209148, Drawing No. 01A_EV03, dated October 2009) prepared by Geolyse Pty Ltd, in particular as elaborated or varied below

- The sheds 10 and 3 shall have rainwater tanks with a minimum total capacity of 128,000 litres to collect all roof runoff from the sheds.
- A vegetated swale shall be constructed on the eastern side of the magazine area to direct all runoff to a water quality control pond.
- A water quality control pond shall be located and constructed as shown on the Stormwater Management Plan (Project No. 209148, Drawing No 018_EV03; dated October 2009) and as elaborated below:
 - the general design of the pond shall be consistent with Chapter 10 of WSUD Engineering Procedures: Stormwater (Melbourne Water 2005)

and shall be designed to ensure that flow path is maximised, short circuits are avoided and retention time is optimised.

- it shall have a minimum surface area of 1500 square metres, an extended detention depth of 1 metre and a minimum permanent pool volume of 750 cubic metres.
- the discharge from the pond shall be directed to a watercourse in the east, with the discharge point to be constructed and armoured in such a manner so as not to cause erosion.
- the construction of the pond and discharge point shall also to be consistent with the requirements of any Controlled Activity Approval under the Water Management Act (2000) from the NSW Office of Water.

16 Dam 5 shall be de-silted to ensure that it has a minimum of 55mm extended detention depth and a minimum permanent pool volume of 90 cubic metres.

17 All runoff from the magazines shall be piped and directed via vegetated drainage swales, as appropriate, to the water quality pond or dam 5.

18 All existing drainage swales shall be upgraded to ensure the stormwater runoff is directed to farm dams from the respective catchments and in a manner to prevent scouring.

19 All drainage swales shall be hydraulically sized and vegetated. The design of the swales otherwise shall be consistent with Chapter 8 of WSUD Engineering Procedures: Stormwater (Melbourne Water 2005).

20 The vegetated drainage swales and water quality control pond shall be protected from vehicular damage by fences, steel barriers or similar permanent structures, with signs erected to advise of the nature and purpose of its stormwater quality management function.

21 Any variation to stormwater treatment and management shall be agreed to by the Sydney Catchment Authority.

Reason for Conditions 15 to 21 – To ensure appropriate stormwater management and quality control measures are installed and managed to ensure a sustainable neutral or beneficial impact on water quality particularly during wet weather over the longer term.

Removal and Rehabilitation of Existing Burn Pit

22 A geotechnical investigation of the damaged burn pit and surrounding area including the dam used for the collection or runoff from the burn pit shall be undertaken within 3 months of issue of an occupation certificate to assess contamination of the site and any requirement for decontamination.

23 A rehabilitation plan for the burn pit site and surrounding area shall be prepared and rehabilitation of the area shall be undertaken within 6 months of the issue of an occupation certificate. The rehabilitation plan shall be prepared by a person with the knowledge and experience in the preparation of such plans and shall be agreed to by Council.

Reason for Conditions 22 & 23 – To ensure the disused burn pit is appropriately rehabilitated to ensure a sustainable neutral or beneficial impact on water quality over the longer term.

Remnant Native Vegetation

There is to be no clearing or harvesting of native vegetation including regrowth on the property other than the minimum clearing required for the construction of magazines. The existing native vegetation and regrowth is to be protected, retained and maintained and no livestock grazing is permitted in these native vegetation areas at any time;

Reasons for Condition 24 – To ensure that the water quality impacts of the proposed development are minimised so as to have a sustainable neutral or beneficial effect on water quality over the longer term.

An Operational Environmental Management Plan shall be prepared for the site in consultation with the Sydney Catchment Authority by a person with knowledge and experience in the preparation of such plans. The plan which is to be agreed to by Council and is to include, but is not limited to, the following:

- the procedures and responsibilities for the storage, use and spill management of all hazardous chemicals and wastes on the site;
- an inspection, maintenance and monitoring program for all stormwater and wastewater management structures such as wastewater management systems, rainwater tanks, drainage swales, dams and water quality control pond;

Reason for Condition for 25 – To ensure appropriate site management measures are in place so as to have a neutral or beneficial effect on water quality and will be sustainable over the long term.

Other

26. All rubbish including materials stockpiles on the site shall be removed and disposed of at a suitable waste facility;

Reason for Condition 26 – To ensure an overall and sustainable neutral or beneficial effect on water quality over the long term

27. Conditions 1 to 5, 9 to 14, and 17 if and as relevant, 15, 16, 18 to 21, 25 and 26 must be implemented prior to the issue of an occupation certificate;

Reason for Condition 27 – To ensure that the necessary management structures and works are properly constructed and in place so as enable an overall and sustainable neutral or beneficial effect on water quality over the long term.

28. A Soil and Water Management Plan (SWMP) is required for all site works undertaken and proposed as part of the development. The SWMP is to be prepared by a person with knowledge and experience in preparation of such plans. The SWMP is to meet the requirements outlined in Chapter 2 of the NSW Landcom's Soils and Construction: Managing Urban Stormwater (2004) manual – the "Blue Book" – and to be to the satisfaction of Council;

29. Effective erosion and sediment controls are to be installed prior to all construction works. The controls must prevent sediment entering the drainage depressions and watercourses, and are to be regularly maintained and retained until works have been completed and groundcover established.

Reason for Conditions 28 & 29 – To manage adverse environmental and water quality impacts during the construction stage of the development and to minimise the risk of erosion, sedimentation and pollution within or from the site during this construction phase.

NSW Office of Water (NOW)

Council in its notification processes forwarded the application to the NOW seeking comment on the proposal. During the exhibition period Council received no comment from NOW. However as part of any approval conditions the applicant must provide evidence to Council, prior to undertaking manufacturing works that an approval under the Water Management Act is not required or an approval has been issued by NOW.

Roads & Traffic Authority (RTA)

Council in its notification processes forwarded the application to the RTA seeking comment on the proposal. During the exhibition period Council received no comment from the RTA.

Rail Infrastructure Corporation – (ARTC)

Council in its notification processes forwarded the application to the ARTC seeking comment on the proposal. During the exhibition period Council received comment from the ARTC indicating that they have no objection to the proposal.

Rural Fire Service (RFS)

Council in its notification processes forwarded the application to the RFS seeking comment on the proposal. In correspondence received the RFS commented as follows;

The RFS has reviewed the documentation provided and advise that a bushfire authority can be issued subject to the following conditions:

Asset Protection Zone

The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities.

1. At the commencement of building works and in perpetuity the property around the existing dwelling to a distance of 20 metres, shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of Planning for Bushfire Protection 2006 and the NSW Rural Services document 'Standards for asset protection zones'.

Evacuation and Emergency Management

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants.

2. Arrangements for emergency and evacuation are to comply with Section 4.2.7 of Planning for Bushfire Protection 2006.

WorkCover NSW

In discussion with WorkCover it was indicated to Council that WorkCover would not comment on the proposal. Further, if approved the owner would be required to be licensed from WorkCover prior to any activity on the premise for manufacturing be undertaken.

NSW Department of Planning (DoP)

Council in its notification processes forwarded the application to the NSW DoP (Hazardous Industries Branch) seeking comment on the proposal. During the exhibition period Council received the following comment from the DoP.

I refer to your recent request for advice on the hazards-related issues associated with the proposed re-establishment of the Howard & Sons Pyrotechnics Facility at 581 Pipers Flat Road, Wallerawang. Accordingly, I have reviewed the Preliminary Hazard Analysis (PHA) in Appendix L of the documents on the Council website.

The PHA has been prepared by AECOM in accordance with the relevant Department of Planning guidelines, in particular, the Multi-level Risk Assessment Guidelines. The PHA demonstrates that the separation between most site activities and the site boundary, together with the proposed technical and management safeguards, is sufficient to ensure that significant explosion risks do not extend off-site.

Notwithstanding this conclusion, section 6.2 of the PHA includes a number of recommendations aimed at ensuring that hazards and risks are reduced to as low as reasonably practicable. This is consistent with the Department's policy on risk avoidance.

It is recommended that, if Council decides to approve the development, a condition of consent should be imposed, requiring the applicant to implement the section 6.2 recommendations.

Additionally, the Department has prepared a standard set of conditions of consent in relation to potentially hazardous development. I am attaching a subset of those conditions that would be relevant to the proposed development and recommend that these, too, be imposed. The conditions have been framed having regard to the previous site history.

Should Council be of mind to approve the proposal the following conditions should be incorporated into the approval;

Recommended Hazards-related Conditions of Consent

Pre-construction

At least one month prior to the commencement of construction of the proposed development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as Council may agree, the Applicant shall prepare and submit for the approval of Council the studies set out under subsections (a) to (d) (the pre-construction studies). Construction, other than of preliminary works, shall not commence until approval has been given by Council and, with respect to the Fire Safety Study, approval has also been given by the Commissioner of the NSW Fire Brigades.

(a) FIRE SAFETY STUDY

A Fire Safety Study for the proposed development. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry

Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study shall also be submitted for approval, to the NSW Fire Brigades.

(b) HAZARD AND OPERABILITY STUDY

A Hazard and Operability Study for the proposed development, chaired by an independent qualified person approved by Council prior to the commencement of the study. The study shall be carried out in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.

(c) FINAL HAZARD ANALYSIS

A Final Hazard Analysis (FHA) of the proposed development prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'. If the final design is substantially unchanged since the Preliminary Hazard Analysis (PHA) was performed, the FHA requirement is waived.

(d) CONSTRUCTION SAFETY STUDY

A Construction Safety Study prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'.

Pre-commissioning

The Applicant shall develop and implement the plans and systems set out under subsections (e) to (g). No later than two months prior to the commencement of commissioning of the proposed development, or within such further period as Council may agree, the Applicant shall submit for the approval of Council documentation describing those plans and systems. Commissioning shall not commence until approval has been given by Council.

(e) TRANSPORT OF HAZARDOUS MATERIALS

Arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the proposed development. The routes shall be selected in accordance with the Department of Planning's draft 'Route Selection' guidelines. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.

(f) EMERGENCY PLAN

A comprehensive Emergency Plan and detailed emergency procedures for the proposed development. This plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'.

(g) SAFETY MANAGEMENT SYSTEM

A document setting out a comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms

for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by Council upon request. The Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Pre-start-up

PRE-STARTUP COMPLIANCE REPORT

One month prior to the commencement of operation of the development, the Applicant shall submit to Council, a report detailing compliance with conditions 1 and 2, including:

- a) dates of study/plan/system submission, approval, commencement of construction and commissioning;
- b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
- c) responses to each requirement imposed by Council under condition 0.

Post-start-up

POST-STARTUP COMPLIANCE REPORT

Three months after the commencement of operation of the development, the Applicant shall submit to Council, a report verifying that:

- (h) transport routes specified under condition (e) are being followed;
- (i) the Emergency Plan required under condition (f) is effectively in place and that at least one emergency exercise has been conducted; and
- (j) the Safety Management System required under condition (g) has been fully implemented and that records required by the system are being kept.

Ongoing

INCIDENT REPORT

Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to Council no later than 14 days after the incident or potential incident.

The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection at any time by the independent Hazard Auditor and Council.

HAZARD AUDIT

Twelve months after the commencement of operations of the proposed development or within such further period as Council may agree, the Applicant shall carry out a comprehensive Hazard Audit of the proposed development and within one month of the audit submit a report to Council.

The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by Council prior to commencement of the

audit. Further audits shall be carried out every three years or as determined by Council and a report of each audit shall within a month of the audit be submitted to Council. Hazard Audits shall be carried out in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.

The audit shall include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit.

The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.

FURTHER REQUIREMENTS

The Applicant shall comply with all reasonable requirements of Council in respect of the implementation of any measures arising from the reports submitted in respect of conditions 0 to 0 inclusive, within such time as Council may agree.

PUBLIC CONSULTATION AND RESPONSES

The application is considered designated development and as such was placed on public exhibition for a period of 38 days. Given the nature of the application and the events of December 2007, Council in its exhibition processes substantially notified the surrounding area, which included all residents within a three kilometre radius of the site and the entire town of Wallerawang. This totalled in excess of 600 notifications.

Further, Given Councils involvement, it was resolved to hold a public meeting inviting all concerned landowners to voice opinion relating to the proposed redevelopment and give Councillors some community feedback so as they could comment on the proposal.

Through the notification process Council received 9 public submissions relating to the proposal. Of the submissions received 6 objected to the proposal on the following, summarised grounds:

- The proposed development does not comply with the objectives of the zone considering that the manufacture and use of fireworks does not utilise and promote the proper management and utilisation of natural resources as defined in the LEP.
- The existing site and the explosion that occurred in December 2007 has already had adverse social and economic impacts on the locality, however the development of the site will have considerable additional detrimental social and economic impacts.
- The property values of nearby properties and homes have decreased significantly since December 2007, and redevelopment of the site will ensure those properties do not recover their value.
- Given the limited number of employees proposed by the redevelopment it is considered the value to the region introduced by the proposed redevelopment will be significantly less than the devaluation of many properties and homes significantly impacted by the redevelopment.
- The site is not suitable for the site given its close proximity to around 20 family homes and properties. The explosion in December 2007 and the subsequent explosion that destroyed the burn ground in March 2008 has shown how poor the safety measures were at the site at that time. **NOTE: As**

indicated in Councils correspondence the applicant has indicated that given the additional information required by Council for the assessment of the burn chamber, this component of the application has been withdrawn and will not be assessed as part of the application.

- Adjoining residents have no surety that the explosion that occurred in December 2007 will not happen again, even given the proposed new improved safety standards.
- It is not in the public interest for the development to proceed, which has been demonstrated by the strong negative response shown by the local community to the development proposal
- The stress and psychological harm to residents of immediately adjoining properties who recall the explosion and its aftermath also provide support for this argument. Residents are still suffering from the affects of shock, mental anguish, and physical side effects including heart palpitations and nightmares.
- The bunker design is not easily transposed. Clarification as to what bunkering will go where would give residents a better grasp of what is being proposed.
- Landscaping for the proposal appears minimal and was non existent from the original proposal.
- Concern is raised over potential projectiles that scattered over the adjoining area from the initial explosion. Wouldn't light weight construction materials eliminate this?
- The mounding of the proposed sheds needs to be higher than the shed itself.
- Much will change in the new factory complex and the amount of NEQ Licensed Storage has been reduced by 25,500kg, that all storage areas will have earth mounding, a new lightning protection system and that a pulse electrified security fence has already been installed. All this should make me and my family feel safer but the memories of that night on 8 December 2007 are still very vivid and it will be a long while before the four generations of my family living in Wallerawang can enjoy spectacular fireworks displays that once seemed so magical.
- The development should be moved to a more remote location where there can be no damage to persons or property because there is no amount of anything, job or financial gain that is worth one single life.
- The development is to close to major road links.
- The development is to close to the current tip that has on occasions caught fire.
- No warnings are ever given to adjoining landowners when testing is being undertaken.
- WorkCover only sporadically inspects the site. This is not adequate for such a dangerous development.
- Carcinogenic materials have been stored at the site to dispose of , within Sydney's Water supply.

However as part of the application notification process 3 submissions of support were also received. There support submissions are highlighted below;

- I am currently employed by the applicant and in my time at the complex I feel safe in the knowledge that the safeguards put in place not only protect me as an employee but also the adjoining residents.
- I have witnessed safety measures the applicant is undertaking as part of the revised WorkCover requirements and feel confident in the procedures proposed.

- My employment is very important to me and given the specialty area I am engaged in should the development be refused I couldn't stay in the area.

Further, as indicated, Council held a public meeting in order to gauge community comment and to see if Council should lodge a submission to the JRPP. Attached as Attachment B are the agenda and minutes of the meeting held 9 December 2009.

THE PUBLIC INTEREST

Public interest or concern has been predominantly driven by 'justifiable emotive' issues that have been the consequence of events of December 2007. The public concern at the time was driven by the need to become aware of 'how and why this happened' and the need for answers to these questions.

Through the Coroner's Enquiry into the Howard & Sons explosion the Coroner issued an open finding into the incident, but there is still a view in the community that the cause may have been sabotage or the explosion being purposely carried out.

However, over time these concerns have seemed to diminish, with Council receiving only 6 letters of objection relating to the application, after substantial public consultation.

DISCUSSION AND CONCLUSIONS

As part of Council's assessment of this application, the emotive component of community concern needs to be minimised or negated by the proponent's justification for the redevelopment. It is considered, given the proposed mechanisms to be put in place by the proponent, the improved 'best practise' requirements of WorkCover, and the additional conditions proposed within the recommendation, that all the issues raised by the objectors have been addressed.

Council has assessed the application under Section 79C of the Environmental Planning and Assessment Act 1979, and has determined that the impacts of the development are minimal; as such the development should be approved subject to conditions.

RECOMMENDATION

THAT development application/Construction Certificate 190/09 be approved subject to the following conditions:

Administrative Conditions

1. That the development be carried out in accordance with the application, Statement of Environmental Effects, accompanying information, plans submitted with the application and any further information provided during the process unless otherwise amended by the following conditions.
2. Other than those superseded by the below conditions the application is to be carried out in accordance with the recommendations highlighted within Section 9 of the Environmental Impact Statement prepared by Barnsons Pty Ltd, dated July 2009.
3. No burnpit is approved as a result of this application. Should the applicant seek to re-establish the burn-pit a separate application process will be required to be undertaken and separate justification will be required to be lodged.

Surrender of Consents

4. All consents over the site, apart from DACC 004/09 and DACC 036/09, are to be surrendered by the applicant prior to the continued manufacturing of pyrotechnics. This development approval will override any previously issued for the lands.

Building Code of Australia Compliance

5. Your attention is drawn to the existence of the Disability Discrimination Act. A construction certificate is required to be obtained for the proposed building/s, which will provide consideration under the Building Code of Australia, however, the development may not comply with the requirements of the Disability Discrimination Act. This is the sole responsibility of the owner, builder and applicant.
6. Prior to the commencement of works further details are required to be submitted together with a Construction Certificate application, and include:
 - Fully dimensioned architectural drawings of proposed sheds / structures
 - A revised site plan drawn to scale and showing all proposed and existing structures including proposed hydrant / hose reel locations;
 - Structural details prepared by a practising structural engineer in respect to steel framing, reinforced concrete slabs, freestanding walls. The proposed structures shall be designed in accordance with AS 1170 Pts 1, 2 & 3. Details prepared by a practising structural engineer are to be submitted prior to release of the Construction Certificate.
 - Certified hydraulic design in respect to the existing / proposed hydrant and hose reel system prepared by a practising hydraulic engineer and complying with requirements of AS2419.1 (hydrants) & AS2441 (hose reels). Hydraulic investigations may be required in conjunction with the water supply authority to determine whether the requirements of AS 2419.1 can be satisfied.

- Detailed hydraulic details in relation to the proposed stormwater drainage including a Stormwater Management Plan for the site.
 - Certification prepared by a practising structural engineer to verify the structural adequacy of existing concrete floor slabs to withstand superimposed loads from the new structures (where proposed).
7. The following conditions of consent have been imposed to ensure that the administration and amenities relating to the proposed development comply with all relevant requirements. These conditions are to be complied with during the construction of the development on site.
8. To ensure structural integrity, the maintenance of minimum health standards, the management of the buildings surrounds and the protection of the environment, compliance certificates are to be issued at significant stages throughout the construction period. These stages are:
- a) Pier holes/pad footings before filling with concrete.
 - b) Trenches complete with reinforcing and prior to filling with concrete.
 - c) Internal drainage carried out by licensed plumber prior to covering
 - d) Reinforcing steel in position and before concrete is poured (footings, lintels, beams, columns, floors, walls and the like.
 - e) Slab base if no piers required and prior to placement of the membrane.
 - f) Floor frame, dampcourse, antcapping, foundation walls before floor material is laid.
 - g) Framing when external wall and roof cladding is in place and prior to internal linings.
 - h) External drainage (including onsite waste disposal system) installed by a licensed plumber and prior to covering.
 - i) Wet area flashing prior to tiling or covering.
 - j) Stormwater drainage between building and discharge point (drainage pipes, soakage pits and the like) prior to covering.
 - k) Completion of the development and sign off to all conditions of the consent including landscaping, prior to occupation and use.

At each inspection, erosion and sediment control measures and site management will be inspected.

Note: forty-eight (48) hours notice shall be given to Council prior to inspections.

9. To ensure compliance with Australian Standard 3500 – National Plumbing and Drainage and Council (being the Water and Sewer Authority), compliance certificates are to be issued by Council for the following:
- a) Internal drainage carried out by licensed plumber prior to covering.
 - b) External drainage (including onsite waste disposal system) installed by a licensed plumber and prior to covering.
 - c) Hot and cold water plumbing installation

Note: forty-eight (48) hours notice shall be given to Council prior to inspections and inspection fees must be paid.

10. All work on site shall only occur between the following hours:

Monday to Friday	7.00am to 6.00pm
Saturday	8.00am to 1.00pm
Sunday and public holidays	No work

11. Erosion and sediment control measures shall be provided and maintained throughout the construction period in accordance with the requirements of the manual – “Soils and Construction” (2004) (Bluebook), the approved plans, Council specifications and to the satisfaction of the principal certifying authority. The erosion and sedimentation control devices shall remain in place until the site has been stabilised and revegetated
12. Subject to the provisions of essential fire or other safety measures, Environmental Planning and Assessment Regulation 2000 as detailed below:
13. Essential fire or other safety measures are subject to specific requirements under Environmental Planning and Assessment Regulation 2000. Upon completion of the building and prior to issue of an Occupation Certificate, all of these services must be certified on a Fire Safety Certificate as required and submitted to Council stating that the essential fire and other safety measures have been installed and comply with the relevant standard specified in table 1.
14. Once the building is occupied, an Annual Fire Safety Statement must be submitted to Council and the NSW Fire Brigades, PO Box A249, SYDNEY SOUTH NSW 2001, and a copy retained on site certifying that:
 - a) essential fire and other safety measures have been maintained and serviced at regular intervals in accordance with the appropriate maintenance specified below and are still operable; and
 - b) at the path of travel is clear of anything which would impede free passage of any person at any time.
15. The roofs for sheds are to be constructed in a manner that ensures all runoff is directed to the rainwater tanks. The overflow from the rainwater tanks is to be directed to stabilised grassed surface in a manner that does not cause any erosion.
16. The stored rainwater from the tanks can be used for any purposes, including landscape watering, dust suppression and fire fighting.
17. Effective erosion and sediment controls are to be installed prior to any construction activity. The controls must prevent sediment entering drainage depressions and watercourses and are to be regularly maintained and retained until works have been completed and groundcover established.

Noise

18. That no undue noise is created during the demolition operations which cause a nuisance to neighbouring occupied residential properties.

Environmental Protection

19. The techniques adopted for stripping out and for demolition are to minimise the release of dust into the atmosphere.
20. Before commencing work, any existing accumulations of dust are to be collected, placed in suitable containers and removed. Selection of appropriate collection techniques, such as vacuuming or hosing down, shall take account of the nature of the dust and the type of hazard it presents (eg., explosive, respiratory etc).
Dust generated during stripping or during the breaking down of the building fabric to removable sized pieces shall be kept damp until it is removed from the site or can be otherwise contained. The use of excess water for this purpose is to be avoided.
It should be kept in mind, that in certain environments and under certain stimuli, deposits of combustible dust on beams, machinery and other surfaces may be subject to flash fires, and suspensions of combustible dusts in the air can cause them to explode violently (see NFPA Handbook).

Table 1 - Fire Safety Schedule
Issued pursuant to Clause 168 of Environmental Planning & Assessment
Regulation 2000.

Application No: 190/09DACC
Proposed Development: Demolition and Rebuild of existing sheds, Installation of Magazines, Construction of Internal / external Road Works & Associated Earthworks
Property Description: Lot 2, DP 1124158, 581 Portland Road, Wallerawang
Issue date: March 2010

Fire safety measure	Performance Standard	Existing measure	Proposed Required measure	Critical measure
Emergency Lighting	Part E4.2 of BCA2008 and AS 2293.1-2005	No	Yes	No
Exit signs	Part E4.5 & 6 of BCA2008 & AS 2293.1-2005	No	Yes	No
Hydrants	Part E1.3 of BCA2008 & AS2419.1-2005	Yes	Yes	No
Hose reels	Part E1.4 of BCA2008 & AS2441-2005	Yes	Yes	No
Portable fire extinguisher & fire blankets	E1.6 of BCA2008 & AS 2444 – 2001	Yes	Yes	No

NB: This Schedule applies to whole development upon the subject land.

Landscaping

21. Landscaping of the site is to be carried out in accordance with the submitted Landscaping Plan lodged as Attachment N unless conditioned. Further information is to be supplied to Council indicating how the proposed landscaping is to be implemented and maintained, regardless of weather condition.
22. Landscaping along the Pipers Flat Road frontage is to be enhanced to minimise the visual impact of the development from Pipers Flat Road. A revised plan indicating proposed heights of proposed plantings is to be submitted and approved by Council prior to the continuation of pyrotechnics manufacturing.

Shipping Containers

23. No shipping container is to be kept on-site relating to the development without written approval of Council. All storage of material is to be undertaken within the submitted concrete bunkered magazines submitted as part of the Environmental Impact Statement.
24. All existing shipping containers/magazines are to be removed from the site within 6 months of the approved date of consent.

Hours of Operation

25. Hours of operation for the ongoing operation of the development (apart from construction) will be limited to the following

Monday – Friday	6am-5pm
Saturday	6am-3pm
Sunday	No operation

Product Testing

26. Hours of operation for the railway signals testing of the development (apart from construction) will be limited to the following

Monday – Friday	9am-4pm
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27. No testing of pyrotechnics will be permitted onsite. This includes all pyrotechnics other than the railway track signals mentioned above.

Traffic and Access

28. The transportation of explosives is a requirement of the applicant and will need to satisfy WorkCover's licensing criteria and receive a favourable national probity assessment from NSW and Commonwealth police and security agencies

Civil Construction/ Stormwater and Drainage

29. All development is to be constructed in accordance with Lithgow City Council's "Subdivision and Development Code" adopted by Council 28 September 1992, Minute No. 1439.
30. Works as Executed Plans shall be lodged with Council prior to the issue of a Construction Certificate for the driveways and internal access.

31. The internal access will be constructed at a minimum two coat bitumen seal (or equivalent) and will be designed so as all stormwater will run into appropriate detention systems within the boundaries of the allotment. The detention system will be designed to cater for volumes created by the sealing of the internal road access, loading area and internal accesses, for the proposed development.
32. All drainage work associated with the development shall be submitted on detailed plans to Council's Development Engineer for approval prior to any civil construction. All stormwater from existing buildings shall be directed into Council's stormwater system with upgrading to existing guttering and downpipes to be undertaken where required.

Amenity

33. Any external and security lighting proposed on the site is to be directed and shielded to avoid light spillage to adjoining residential areas.

Sydney Catchment Authority

General

34. All works associated with the rebuild of the Pyrotechnics Facility shall be implemented as:
- Specified in the Environmental Impact Statement prepared by Barson Pty Ltd (dated 22 July 2009);
 - Shown on the Site Plan including the Site Plan emailed to the Sydney Catchment Authority (dated 8 December 2009); and
 - Specified in the Stormwater management Plan report (dated October 2009) and associated addendum to this report (dated December 2009) prepared by Geolyse Pty Ltd;
 - Except where modified in conditions below.
35. Any further revision to the proposed rebuild works is to be agreed to by the Sydney Catchment Authority.

Internal Roads

36. The new and upgrade of existing internal roads shall be sealed or constructed of compacted roadbase as a minimum and otherwise in accordance with Council's engineering standards. The construction of the roads shall also be consistent with the guidelines Environmental Practice Manual of Rural Sealed and Unsealed Roads (ARRB Transport Research Ltd 2002).
37. All eroded roadsides particularly in the southern part of the site, as appropriate, shall be stabilised and grass cover established.
38. All internal roads must incorporate the runoff management measures as elaborated below:
- Have vegetated swales, as appropriate, for their entire length of the road with appropriately spaced cross drains, level spreaders, sills or mitre drains that divert water onto a stable surface capable of accepting concentrated water flow and provide for efficient sediment trapping and energy dissipation.

- Where appropriate and necessary, have roadside drains on both sides of the road in conjunction with appropriately spaced small check dams to slow down and reduce concentrated flow. In steeper areas where the slope is in excess of 10%, the drains need to be armoured with coarse gravel, cobbles or rock underlain by geotextile fabric.
- All swales, batters and verges associated with the roads shall be vegetated and stabilised with bitumen and jute matting or equivalent as soon as possible after construction.

Domestic Wastewater AS1547-2000 On-site Wastewater Management

39. The existing aerated wastewater treatment system including the subsurface effluent disposal area surfacing the dwelling and the office building and the septic tank and absorption trench servicing the shed 3 shall be inspected, cleaned and maintained as per the manufacturer's specifications. The maintenance of both wastewater management systems is also be consistent with Section 5 of the guidelines On-site Sewage Management for Single Households and AS/NZS 1547-2000 On-site Domestic Wastewater Management.
40. No effluent management area shall be located within 100 metres of any perennial or intermittent creek or watercourse, or within 40 metres of a dam or drainage depression. In this regard it is noted that a dam is located about 40 metres to the east of effluent irrigation area.
41. The old disused septic tank and associated effluent disposal trench that serviced the dwelling shall be decommissioned in accordance with the NSW Health Advisory Note (dated 3 May 2006) for Destruction, Removal or Reuse of Septic Tanks, Collection Wells, Aerated Wastewater Treatment Systems and Other Sewage Management Facility Vessels.

Washdown Wastewater Management

42. All tools and any other objects shall be washed in a dedicated concrete and appropriately bunded area and all wastewater shall be collected in an underground concrete collection tank.
43. Wastewater from the concrete tank shall be transported to a suitable licensed waste facility as required on needs basis and must be consistent with Council requirements.
44. No wastewater from manufacturing or processing or wash down area shall be discharged into the stormwater drainage system or domestic wastewater management systems or on the site and must meet requirements of any trade waste agreement with Council.

Storage and Management of Chemicals and Contaminated Spills

45. All hazardous chemicals shall be stored, as appropriate, in appropriately sealed containers in a dedicated covered area underlain by an impervious floor.
46. All refuelling activities shall be undertaken on a hardstand and appropriately bunded area.

47. Management and disposal of all contaminated spills and associated wastes must be in accordance with the Department of Environment Climate Change Environment Guidelines for Waste (DECC 2008).

Stormwater Management

48. All stormwater treatment and management measures shall be implemented as specified in the Stormwater Management Plan report (dated October 2009) and associated addendum (dated December 2009) and shown on the Stormwater Management Plan (Project No. 209148, Drawing No. 01A_EV03, dated October 2009) prepared by Geolyse Pty Ltd, in particular as elaborated or varied below
- The sheds 10 and 3 shall have rainwater tanks with a minimum total capacity of 128,000 litres to collect all roof runoff from the sheds.
 - A vegetated swale shall be constructed on the eastern side of the magazine area to direct all runoff to a water quality control pond.
 - A water quality control pond shall be located and constructed as shown on the Stormwater Management Plan (Project No. 209148, Drawing No 018_EV03; dated October 2009) and as elaborated below:
 - the general design of the pond shall be consistent with Chapter 10 of WSUD Engineering Procedures: Stormwater (Melbourne Water 2005) and shall be designed to ensure that flow path is maximised, short circuits are avoided and retention time is optimised.
 - it shall have a minimum surface area of 1500 square metres, an extended detention depth of 1 metre and a minimum permanent pool volume of 750 cubic metres.
 - the discharge from the pond shall be directed to a watercourse in the east, with the discharge point to be constructed and armoured in such a manner so as not to cause erosion.
 - the construction of the pond and discharge point shall also to be consistent with the requirements of any Controlled Activity Approval under the Water Management Act (2000) from the NSW Office of Water.
49. Dam 5 shall be de-silted to ensure that it has a minimum of 55mm extended detention depth and a minimum permanent pool volume of 90 cubic metres.
50. All runoff from the magazines shall be piped and directed via vegetated drainage swales, as appropriate, to the water quality pond or dam 5.
51. All existing drainage swales shall be upgraded to ensure the stormwater runoff is directed to farm dams from the respective catchments and in a manner to prevent scouring.
52. All drainage swales shall be hydraulically sized and vegetated. The design of the swales otherwise shall be consistent with Chapter 8 of WSUD Engineering Procedures: Stormwater (Melbourne Water 2005).
53. The vegetated drainage swales and water quality control pond shall be protected from vehicular damage by fences, steel barriers or similar permanent structures, with signs erected to advise of the nature and purpose of its stormwater quality management function.

54. Any variation to stormwater treatment and management shall be agreed to by the Sydney Catchment Authority.

Removal and Rehabilitation of Existing Burn Pit

55. A geotechnical investigation of the damaged burn pit and surrounding area including the dam used for the collection or runoff from the burn pit shall be undertaken within 3 months of issue of an occupation certificate to assess contamination of the site and any requirement for decontamination.
56. A rehabilitation plan for the burn pit site and surrounding area shall be prepared and rehabilitation of the area shall be undertaken within 6 months of the issue of an occupation certificate. The rehabilitation plan shall be prepared by a person with the knowledge and experience in the preparation of such plans and shall be agreed to by Council.

Remnant Native Vegetation

57. There is to be no clearing or harvesting of native vegetation including regrowth on the property other than the minimum clearing required for the construction of magazines. The existing native vegetation and regrowth is to be protected, retained and maintained and no livestock grazing is permitted in these native vegetation areas at any time;
58. An Operational Environmental Management Plan shall be prepared for the site in consultation with the Sydney Catchment Authority by a person with knowledge and experience in the preparation of such plans. The plan which is to be agreed to by Council and is to include, but is not limited to, the following:
- the procedures and responsibilities for the storage, use and spill management of all hazardous chemicals and wastes on the site;
 - an inspection, maintenance and monitoring program for all stormwater and wastewater management structures such as wastewater management systems, rainwater tanks, drainage swales, dams and water quality control pond;

Other

59. All rubbish including materials stockpiles on the site shall be removed and disposed of at a suitable waste facility;
60. Conditions 34 to 38, 42 to 47, and 50 if and as relevant, 48, 49, 51 to 54, 58 and 59 must be implemented prior to the issue of an occupation certificate;
61. A Soil and Water Management Plan (SWMP) is required for all site works undertaken and proposed as part of the development. The SWMP is to be prepared by a person with knowledge and experience in preparation of such plans. The SWMP is to meet the requirements outlined in Chapter 2 of the NSW Landcom's Soils and Construction: Managing Urban Stormwater (2004) manual – the "Blue Book" – and to be to the satisfaction of Council;
62. Effective erosion and sediment controls are to be installed prior to all construction works. The controls must prevent sediment entering the drainage depressions and watercourses, and are to be regularly maintained and retained until works have been completed and groundcover established.

Department of Planning

63. The applicant is to implement all recommendations outlined within Appendix L of the submitted Environmental Impact Statement prepared by Barnsons Pty Ltd, dated July 2009, specifically those highlighted within the Section 6.2 recommendations.

Pre-construction

64. At least one month prior to the commencement of construction of the proposed development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as Council may agree, the Applicant shall prepare and submit for the approval of Council the studies set out under subsections (a) to (d) (the pre-construction studies). Construction, other than of preliminary works, shall not commence until approval has been given by Council and, with respect to the Fire Safety Study, approval has also been given by the Commissioner of the NSW Fire Brigades.

(a) FIRE SAFETY STUDY

A Fire Safety Study for the proposed development. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study shall also be submitted for approval, to the NSW Fire Brigades.

(b) HAZARD AND OPERABILITY STUDY

A Hazard and Operability Study for the proposed development, chaired by an independent qualified person approved by Council prior to the commencement of the study. The study shall be carried out in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.

(c) FINAL HAZARD ANALYSIS

A Final Hazard Analysis (FHA) of the proposed development prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'. If the final design is substantially unchanged since the Preliminary Hazard Analysis (PHA) was performed, the FHA requirement is waived.

(d) CONSTRUCTION SAFETY STUDY

A Construction Safety Study prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'.

Pre-commissioning

65. The Applicant shall develop and implement the plans and systems set out under subsections (e) to (g). No later than two months prior to the commencement of commissioning of the proposed development, or within such further period as Council may agree, the Applicant shall submit for the approval of Council documentation describing those plans and systems. Commissioning shall not commence until approval has been given by Council.

(a) TRANSPORT OF HAZARDOUS MATERIALS

Arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the proposed development. The routes shall be selected in accordance with the Department of Planning' draft 'Route Selection' guidelines. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.

(b) EMERGENCY PLAN

A comprehensive Emergency Plan and detailed emergency procedures for the proposed development. This plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'.

(c) SAFETY MANAGEMENT SYSTEM

A document setting out a comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by Council upon request. The Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Pre-start-up

PRE-STARTUP COMPLIANCE REPORT

66. One month prior to the commencement of operation of the development, the Applicant shall submit to Council, a report detailing compliance with conditions 1 and 2, including:
- dates of study/plan/system submission, approval, commencement of construction and commissioning;
 - actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
 - responses to each requirement imposed by Council under above conditions.

Post-start-up

POST-STARTUP COMPLIANCE REPORT

67. Three months after the commencement of operation of the development, the Applicant shall submit to Council, a report verifying that:
- (a) transport routes specified under condition (e) are being followed;
 - (b) the Emergency Plan required under condition (f) is effectively in place and that at least one emergency exercise has been conducted; and
 - (c) the Safety Management System required under condition (g) has been fully implemented and that records required by the system are being kept.

Ongoing

INCIDENT REPORT

68. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed

report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to Council no later than 14 days after the incident or potential incident.

69. The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection at any time by the independent Hazard Auditor and Council.

HAZARD AUDIT

70. Twelve months after the commencement of operations of the proposed development or within such further period as Council may agree, the Applicant shall carry out a comprehensive Hazard Audit of the proposed development and within one month of the audit submit a report to Council.
71. The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by Council prior to commencement of the audit. Further audits shall be carried out every three years or as determined by Council and a report of each audit shall within a month of the audit be submitted to Council. Hazard Audits shall be carried out in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.
72. The audit shall include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit.
73. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.

FURTHER REQUIREMENTS

74. The Applicant shall comply with all reasonable requirements of Council in respect of the implementation of any measures arising from the reports submitted in respect of conditions 0 to 0 inclusive, within such time as Council may agree.

Department of Environment Conservation Climate Change & Water

75. The applicant is to comply with all conditions highlighted in the Department of Environment Conservation Climate Change & Water licensed approval attached as Attachment A of this approval.

Rural Fire Service

76. At the commencement of building works and in perpetuity the property around the existing dwelling to a distance of 20 metres, shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of Planning for Bushfire Protection 2006 and the NSW Rural Services document 'Standards for asset protection zones'.
77. Arrangements for emergency and evacuation are to comply with Section 4.2.7 of Planning for Bushfire Protection 2006.

OTHER CONDITIONS

78. Prior to commencement of any works Council is to be furnished with documentation indicated that a permit under the Water Management Act 2000 is not required and/or the appropriate has been applied for, and subsequently approved by the NSW Office of Water. Any work approved as part of this permit is to be undertaken in accordance with the conditions attached to the permit to the satisfaction of Council and the NSW Office of Water.
79. Prior to the commencement of manufacturing, Council is to be furnished with an approved license from WorkCover NSW indicating appropriate conditions and mechanisms for operations.

Complaints Register

80. The applicant shall implement a complaints register onsite for the use from the general community. This register will be displayed on the lands together with an appropriate number and information as to how a complaint can be made.
81. Each twelve months after the approval date the applicant will forward to Council a full copy of the complaints register highlighting how each complaint has been dealt with and the recommendations made as a result of the complaint.
82. The complaints register will be made available to Council within 24 hours of written notice, at any time.