



Submissions received

Taha Fertiliser Industries Ltd

Land use consent LU 2014/95

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Hileen Frances Meikle

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

As per attached document

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I wish for Tahas application to be declined in full and I totally oppose there application.

The application states that an environment risk assessment is being prepared as part of the application but was not attached to the resource application. So I reserve the right under section 92 of the Act to review and provide comments on the environment risk assessment prior to any hearings for this application. And I also reserve the right to review and provide comments on any other part of Tahas application where information is still to be provided but wasnt attached to the application at the time of Tahas resource application being lodged.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

That Tahas application be declined in full and the Onyea Pre Mix be removed from the old Papermill with out delay. And that if it isnt removed by a set date that \$20,000 per day fines are applied for every day over the removal date. To be paid to the Mataura Community!

I wish ~~to be heard~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

A. J. Puhle

Date:

13 April 2015

Address for service of submitter:

22 Selbourne Street

No 2. RD.

Gore

Telephone number:

2038762

Fax number:

Email:

Kalista@xtra.co.nz

Contact person:
(If applicable)

As Above.

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

we oppose the application in its entirety.

The reasons for our/my opposition are as follows:

- The site for the storage of hazardous substances is too close to the Maitara River and Waikana Stream. In this location the activity poses a significant risk of contamination of these waterways either via flooding, dust or vapour emissions and/or accidental spillage.
- The location of the storage activity is also within the Maitara River Inundation area depicted in the Gore District Plan, Planning Map MAT 04. The storage of hazardous substances, and particularly aluminium nitride which reacts with water to form ammonia, should not occur within a flood hazard area which has a heightened risk of inundation. The potential environmental effects to the Maitara River and Waikana Stream in a flood event that inundated the storage area could be significant.
- Further, Environmental Southland have ceased to allow gravel abstraction upstream of Maitara where it has occurred historically for many years. This appears to have resulted in a significant and continuing build-up of the river bed, resulting in river steadily becoming shallower. Given the changing dynamic of the river in this location, it is submitted that the flood risk assessment provided in the application may be flawed.
- There is the potential for dust emissions to arise from the storage activity. This could generate significant adverse health and safety effects for the surrounding community.
- The buildings in which the hazardous substance is stored are old and have been poorly maintained. They are not considered to be suitable for the storage of Class 6 and Class 9 Hazardous substances. Storage of these types of substances should be within purpose built buildings that can be fully sealed to prevent water entering the buildings and to prevent air emissions escaping the buildings. Alternatively, a thorough assessment of the building's suitability for this activity should be provided as part of the resource consent application.
- The application states that an environmental risk assessment is being prepared to confirm the conclusions made in the assessment of effects provided as part of the resource consent application. The environmental risk associated with the activity is the primary environmental effect of this activity. Without this environmental risk assessment a robust assessment of the application cannot be made. Therefore we reserve the right, under section 92 of the Act, to review and provide comments on the environmental risk assessment prior to any hearing for this application.

- The application states that the storage activity will take place at the site for a maximum of two years. There is no certainty provided in the application that the material will be removed within this timeframe.
- The application is contrary to Part 2 of the Resource Management Act 1991, and should be declined.

Environmental Consultants

PO Box 489, Dunedin 9054

New Zealand

Tel: +64 3 477 7884

Fax: +64 3 477 7691

By Email

13 April 2015

Our Ref: 9018

Gore District Council
PO Box 8
GORE 9740

Attention: Planning Assistant

Dear Sir/Madam

RE: LAND USE SUBMISSION – TAHA FERTILISER INDUSTRIES LIMITED

Please find enclosed a submission on behalf of Alliance Group Limited with respect to the land use consent being sought by Taha Fertiliser Industries Ltd

Yours sincerely,
MITCHELL PARTNERSHIPS LIMITED



CLAIRE HUNTER

Email: claire.hunter@mitchellpartnerships.co.nz

cc: Frances Wise

Alliance Group Ltd

Enc

Also in Auckland and Tauranga
Ground Floor, 25 Anzac Street, Takapuna
PO Box 33 1642, Takapuna
Auckland 0740, New Zealand
Tel: +64 9 486 5773
Fax: +64 9 486 6711

PO Box 4653, Mt Maunganui South
Mt Maunganui 3149
New Zealand
Tel +64 7 577 1261

Form 13
SUBMISSION ON A NOTIFIED RESOURCE CONSENT APPLICATION UNDER SECTION
95A OF THE RESOURCE MANAGEMENT ACT 1991

To: Gore District Council
PO Box 8
GORE 9740

Name: Alliance Group Limited ('Alliance')

Address: PO Box 1410
INVERCARGILL
(note different address for service below)

1. This is a submission on behalf of Alliance with respect to a resource consent application by Taha Fertilizer Industries Limited ('Taha Fertilizer') for a land use activity to store a Class 6 and Class 9 Hazardous Substances at 109 and 116-128 Kana Street, Maitara.
2. Alliance is not a trade competitor for the purposes of section 308B of the Resource Management Act 1991 ('the Act').
3. Background

Alliance was established in 1948 and its head office is based in Invercargill. The company is a farmer owned co-operative with approximately 5000 farmer shareholders. More than 85% of the stock supplied to the company for processing comes from shareholders. Alliance is one of the world's largest processors and exporters of sheep meat, with eight processing plants strategically located throughout the South Island and lower North Island. Approximately 6 million lambs, 1 million sheep, 200,000 cattle, 230,000 bobby calves and 115,000 deer are processed annually. Alliance produces 30% of New Zealand's sheep meat production, 10% of its beef production, and 30% of its venison production. The proportion of this volume processed at the Maitara Plant is vital to Alliance's operations.

Within the Gore District, Alliance currently operates the Maitara Plant, which employs 485 people seasonally. The Maitara Plant processes cattle, up to 1120 per day, for approximately 11 months of the year and is approved for exporting food to over 60 countries including the EU, North America and China.

The Maitara Plant relies upon water taken from the Maitara River for the day to day operation of this food export plant. This water take is located opposite the Taha Fertilizer storage activity that is the subject of this submission. Water from the intake is used in all facets of the meat processing operation. It is therefore imperative that the water quality is of a high standard, suitable for use during all facets of the meat

processing. In the event that water quality is compromised, operations at the plant may be required to cease. Any cessation of works at the plant, regardless of the length of time, would result in considerable financial cost to Alliance and its farmer shareholders. Alliance is also concerned about the health and safety of its staff, who could be potentially exposed to the dust and gaseous emissions arising from the storage and handling of the hazardous substances.

For these reasons Alliance is very concerned about the risk of contamination of the Waikana Stream and/or the Mataura River and the potential for health and safety impacts on its employees that could result from the Taha Fertiliser storage activity that is the subject of the resource consent application.

4. The specific parts of the application that my submission relates to are:

The application in its entirety.

5. Alliance's submission on the application is set out below:

Alliance is opposed to the resource consent application. The reasons for Alliance's opposition relate predominately to the risk of contamination of the Waikana Stream and/or the Mataura River arising from the activity.

The site for the storage activity is located at 109 and 116-128 Kana Street, Mataura. This site is situated immediately adjacent to the Mataura River and the Waikana Stream. The Mataura River is located immediately west of the site. The site is also immediately adjacent to the Waikana Stream, which flows adjacent to the northern part of 116-130 Kana Street, then crosses Kana Street via a culvert and runs adjacent to the southern part of 109 Kana Street, before being directed, via a culvert under the building, into the Mataura River. Alliance submits that the site for the storage of hazardous substances is too close to the Mataura River and the Waikana Stream. In this location the activity poses a significant risk of contamination of these waterways occurring either via flooding, dust or vapour emissions and/or accidental spillage.

The location of the storage activity is also within the Mataura River Inundation area depicted in the Gore District Plan, Planning Map MAT 04. The storage of hazardous substances, and particularly aluminium nitride which reacts with water to form ammonia, should not occur within a flood hazard area which has a heightened risk of inundation. The potential environmental effects to the Mataura River and Waikana Stream in a flood event that inundated the storage area could be significant.

Further, Alliance understands that Environment Southland have ceased to allow gravel abstraction upstream of Mataura where it has occurred historically for many years. This appears to have resulted in a significant and continuing build-up of the river bed, resulting in river steadily becoming shallower. Alliance is concerned about the effect of this apparent change in the river level and the possibility that any flood may result in higher river levels. Given the changing dynamic of the river in this location, Alliance submits that the flood risk assessment provided in the application may be flawed.

There is the potential for dust emissions to arise from the storage activity. Any dust may contain aluminium nitride which could deposit in the Waikana Stream or the Maitara River resulting in contamination of these water bodies. The buildings in which the hazardous substance is stored are old and have been poorly maintained. They are not considered to be suitable for the storage of Class 6 and Class 9 Hazardous substances. Storage of these types of substances should be within purpose built buildings that can be fully sealed to prevent water entering the buildings and to prevent air emissions escaping the buildings. Alternatively, a thorough assessment of the building's suitability for this activity should be provided as part of the resource consent application.

Alliance is also concerned about the transportation and / or handling of the hazardous substances at the site at the time the substance is removed from the site. The description of how the materials will be transported (paragraph 3.3 of the application) confirms that some external handling of the goods is required. Alliance submits that the risk associated with any external handling of the hazardous substances is too great and the adverse environmental effects that could result from any mishandling or minor errors in handling the substances could be significant.

Further, the application does not include any suggested conditions of consent. This is considered to be a significant oversight for an activity which requires very careful management in order to avoid the risk of contamination of the adjacent waterways. Alliance also submits that if consent is granted, the Council should consider imposing a financial bond condition in accordance with section 108(2)(b) of the Act. Such a condition would secure the removal of the material or clean-up of the site should it be necessary.

The application states that an environmental risk assessment is being prepared to confirm the conclusions made in the assessment of effects provided as part of the resource consent application. Alliance considers that the application is incomplete under section 88 of the Act without the inclusion of the environmental risk assessment, and that the Council has erred by accepting the application. The environmental risk associated with the activity is the primary environmental effect of this activity. Without this environmental risk assessment a robust assessment of the application cannot be made. Therefore Alliance reserves the right, under section 92 of the Act, to review and provide comments on the environmental risk assessment prior to any hearing for this application.

The application states that the storage activity will take place at the site for a maximum of two years. There is no certainty provided in the application that the material will be removed within this timeframe. Alliance therefore submits that the activity should not occur in this location and seeks that the application be declined. Alternatively the consent should impose a timeframe for removal of the substance, such that a more suitable location is found and the material moved within 6 months of the grant of any consent.

In summary, Alliance submits that:

- the application is contrary to Part 2 of the Act, in particular section 5 in that it does not promote the sustainable management of natural and physical resources;
- the site is not a specially designed storage facility for hazardous substances;
- the proximity of site to the Mataura and Waikana Stream has the potential to result in significant adverse environmental effects, particularly in the event of any flooding at the site, or spillage or mishandling of the hazardous substances;
- there are risks on its staff and Plant operations which have not been properly quantified if the hazardous substance is released into the water or air;
- there is no certainty that the material will be removed from the site within the two year timeframe noted in the consent and Alliance seeks that this certainty is imposed by a condition or consent term which requires that the material is removed within 6 months;
- there are no suitable conditions of consent to ensure that the risks will be appropriately avoided, remedied or mitigated.

6. Alliance seeks that unless its concerns can be adequately resolved, then the application is declined by the Council.
7. Alliance wishes to be heard in support of their submission.
8. If others make a similar submission, Alliance would be prepared to consider presenting a joint case with them at any hearing.

Signature:



By its authorised agent Claire Hunter, on behalf of
Alliance Group Limited

Date:

13 April 2015

Address for service:

Alliance Group Limited
C/- Mitchell Partnerships Ltd
PO Box 489
DUNEDIN

Attn: Claire Hunter

Telephone:

(03) 477 7884

Email:

Claire.hunter@mitchellpartnerships.co.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

Amelia Parere

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries. Our Early Childhood Centre Kohanga Reo o Kio Hgawon 10-a-108 Kara St. It's at high risk when this chemicals toxic release into the environment. I would like this chemical to be removed.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*



Date:

14. 4. 2015

Address for service of submitter:

35 Burns St.
Mataura 9712
Southland

Telephone number:

021213830

Fax number:

Email:

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991



To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name) Anah Kautusi

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries storage of fertiliser at Kana Street. I live a long Kana Street and our Kohanga Reo is very close to the building. There are too many potential risks to our children + community if it is stored where it currently is. Decline application, remove offensive residue immediately.

Attach a separate sheet if required

I seek the following decision from the consent authority: (give precise details, including the general nature of any conditions sought)

I wish / do not wish (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Kautusi

Date:

14/04/15

Address for service of submitter:

171 Kana Street
Mataura

Telephone number:

203 6005

Fax number:

Email:

anahkautusi@yahoo.co.nz

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): ANNETTE GLENN

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Storage of overa pre-mix in the former papermill
109-130 Kana St, Matukura. Amount stored:

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose this consent for the following reasons.
Building suitability: condition of building ie: Cannot be kept at a
steady temperature (b) age and asbestos in construction of building.
(c) Earthquake risk (d) not weatherproof - bags of mix in view behind
broken windows and open gaps (approx 12" from floor at the old
top yard of papermill) which can be accessed by animals as well
as people at anytime. Doors left open at various times with no one
around to make sure security of overa-premix is not compromised.
(e) broken drains under building (f) building on edge of river
allowing the toxin to be able to contaminate waterways. If
Installation of sprinkler system knowing moisture reaction to
product. Fire brigades effectiveness in controlling any emergency
to do with product (g) Gravel build up behind building in river
damming the water and in case of flooding would compromise
the already Submission on Land Use Consent LU 2014/95 unstable flood banks so
water cannot escape. (h) Vicinity - next to preschool and in
center of town surrounded by residential housing, 17
center, doctors surgery etc. (i) history of moisture getting into bags

(J) The integrity of Taha Pacific (amount stored, where stored, how substance is stored). (K) Wanting to release known toxins into the air knowing the health affects on surrounding town and residents, a waterways (L) Length of time to remove substance which should be immediate whether or not used in manufacturing.
Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To decline the application to store area-premix in the old papermill building and to order the instant removal of substance. Obtain a liability clause of not less than 10 million in case of cleanup of toxins to be kept in the Mataura Borough exclusively until such substance

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission. has effectively gone and the building proven to be clear of toxins.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

14/4/15

Address for service of submitter:

24 Riverhead Lane

Mataura

Telephone number:

03-2038918

Fax number:

Email:

gleam.family@xtra.co.nz

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

Crichton David Edwards

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries Because of, Earthquake Risk, Flooding leakage created by rainfall, Asbestos who's responsible for residue general emission, Building uses by date expired, Decline Application, Remove offensive residue, Immediately, Taha have Public Liability High risk management.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

A. D. Edwards

Date:

14. 4. 2015.

Address for service of submitter:

15 Street Street,
Mataura 9712.
Southland.

Telephone number:

022 407 4625

Fax number:

Email:

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

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Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Basil John Turnbull

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Taha Industries application for Resource Consent to store a class 6 hazardous material (Queg mix) in the old Carter Holt paper mill buildings for up to 24 months

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I am totally opposed to this application being granted for the following reasons.

1. This material has already been identified by an environmental court judge as being toxic to human health if it gets wet. Two men were hospitalized at Edendale

2. This company (Taha) cannot be trusted as they state in the application the building has been made waterproof + secure yet that work is only now being carried out and this product can be seen stored beside broken windows.

3. They have recently been seen taking some material away because it became wet and people could smell the fumes which is affecting their health.

4. It is a disaster waiting to happen as if one bag of this got into the river it would kill everything from Mthunzi to Fortrose.

5. It not only contains aluminium but also a high content of Fluoride which poisons everything and sterilizes the soil.

6. There is no risk management plan and our local authority should not be expected to deal with a disaster should it happen, the whole town would need to be evacuated.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I request that this application be denied and the Ruwea mix be removed by winter. The building needs to be totally cleared of this product.
In the event of it being granted I ask that a substantial bond be put in place in the event that Taha renege on their responsibility to remove it. This needs to be in the millions of dollars. Bond to be kept in a Mataura account Plot Gore D.C. Also a removal ~~wish~~ / do not wish (Delete one) to be heard in support of my submission. date needs to be stipulated.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

B. Turnbull

10-4-2015

Date:

Address for service of submitter:

*9 Scott Street
Mataura*

Telephone number:

03 203 3417

Fax number:

Email:

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Carolyn Phillips & Gary Phillips

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The removal of the Class 6 Hazardous Substance

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

We ~~are~~ strongly oppose the storage of the class 6 Hazardous Substance in the Carter Holt mill site.
We ~~are~~ am concerned about our health, if the substance gets wet it is toxic
IF the substance leaking into the waterways it kills all the fish

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

~~that the consent for storage be declined,~~
~~that a date is set for the safe~~
~~removal be given.~~
That taka pay a bond of a large amount
of money

I ~~wish~~/ do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

C. J. Phillips
S. J. Phillips

Date: 9/4/15

Address for service of submitter:

8 Argyle St
Mataura 9712

Telephone number:

03 203 8099

Fax number:

Email:

Contact person:

(If applicable)

Carolyn Phillips
Gary Phillips

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

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PO Box 8, Gore 9740

29 Civic Avenue, Gore 9710

(03) 209-0357

info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

**To: Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter (full name): Christopher Stanley & Linda Jane Couzens

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

We strongly oppose it!

P.T.O.

GORE MEDICAL CENTRE

P.O. Box 39, 12 Eccles Street, Gore 9740

Phone: (03) 208 9222 Fax: (03) 208 1926

www.goremedical.co.nz

Patient Name: **Christopher Couzens**
Address: **1 Hillcrest Ave**
Address: **Mataura Southland**

17 Dec 2014

To whom it may concern:

This is to certify, that the patient described above has a longstanding history of asthma which has been quite stable on regular medications.

This has recently deteriorated and he is having to use increasing amounts of medication with less effect. In addition he has noticed increasing throat and eye irritations over the last few months.

I wonder if this a possible a reaction to chemical exposure in light of the recent increasing storage of chemical product in close proximity to his property.

Yours sincerely,



Dr Jochen Clemens

This Gore Council should be discredited over the handling of this situation, as the council states that they were initially unaware of this product being stored in the paper mill belonging to Paterson Holdings. We find this very hard to believe - at the very least the rate-payers of this area should have expected from the Council was for its removal immediately following their awareness of the product. This Council has no consideration what so ever for the residents of Motaro and surrounding areas, or the would-have had this product removed at the first instance. They are saying this product is (Cullet Premix) which it could not be, as they have not had a licence to process the aluminium dross into this state. The product we believe is Aluminium Dross. This toxic product is highly dangerous, to all things living in the area, (human beings - animals - birds - waterways etc etc). We're aware that Greg Paterson - being the head of Patersons Holdings, makes quite large contributions to the national party coffers at election time. We feel it is possible that Mr Paterson is calling in favours owed, in this regard. Putting or Allowing this product to stay in the present building is putting the whole community and surroundings at terrible risk. (It's not unlike the Germans did to the Jews in the second world war) the only difference is they knew when they were going to be gassed. We have to live with the uncertainty of WHEN IT WILL HAPPEN. (maybe up to 5 years before the Cancers etc start to show up on regular basis, not excluding other illnesses).

or Death. We think sometime soon this Council will be brought to task over this, and that is the whole Council. As you are all well aware of the potential danger²⁸ you are placing this community in, (that goes from the oldest to the unborn) and you might find that the courts will have "no" sympathy for any Council that can act in this irresponsible way to its residents. Mr Petersen and Paterson Holding will also be brought to account for knowingly allowing this dangerous product to be placed in a building they own - full well knowing the dangers it will present to a community, (all in the name of money). I can say at that time Taha would have gone home to their own country - leaving New Zealand to clean up the mess.

We think this is the most callous act we have ever come across, in all our years - The community should not have to be fighting to protect themselves in this way. That's what we supposedly have a Council for!! We have on tape the senior Planner in the Gore Council stating that this product is in some form or other - will remain in the Paper mill. We can't help but wonder who's pulling his chain?!

Chris and Linda Couzens
1 Hillcrest Ave
Mataura

P.S. At the very least there should be an investigation into the Council's handling of this matter and samples of every bag stored within these buildings should be tested.

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Colin Hamilton Meikle

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

See attachment.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Totally oppose Taha's resource consent for the Mataura Paper Mill sight.

The application states that an environment risk assessment is being prepared as part of the application but was not attached to the resource application. So I reserve the right under section 92 of the Resource Management Act 1991 section 92 of the Act to review and provide comments on the environment risk application. And I also reserve the right to review and provide comments on any part of Taha's application where information is still to be provided but wasn't attached to the application at the time of Taha's resource application being lodged.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To be Declined. Full removal of the Ouva Pre Mix from the Mataura Papermill site within two months the application being declined. \$20,000 per day fine of any product left in the building after the final removal date. All money from fines to go to the Mataura Community.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

14 April 2015

Address for service of submitter:

51 Oakland St

Mataura

Telephone number:

203 8728

Fax number:

203 8728

Email:

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

- 1 Ouvea Premix to be removed from the old Paper Mill immediately. And Tahas application for storage of the Ouvea Premix to be declined
- 2 The risk of a flood going through the buildings is too great because of the gravel build up in the river.
- 3 Also the building is in a flood channel within the Gore District, Planning Map MAT04 as a Flood Hazard Area.
- 4 The building is unsuited for the storage of hazardous substances class 6 and class 9. The Ouvea Premix should be stored in a purpose built building that can be fully sealed to prevent water entering it and to prevent air emissions escaping the building.
- 5 The 2005 Mataurua on the Mataura river is another reason the application should be declined. Along with the Mataura river being recognised as the best brown Trout river in the world.
And the Crown acknowledging the association and values which the river holds for Ngai Tahu whananga as set out in Ngai Tahu's Claim Settlement Act 1998
- 6 The application is contrary to Part 2 Resource Management Act 1991 and should be declined

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name) Darren Rerekohu Matahiki

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

I oppose the consent being given their consent for the following reasons

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

- Age of the building involved for storage, valid and up to date building WOF proof and responsive landlord responsibilities
 - Dangerous nature of the Hazardous substance to be stored on this insecure building site through disrepair and the lack of security to ensure no public person can access this dangerous product
 - The location of the proposed building and its close proximity to residential homes the Kia Ngawari Kohanga Reo child care facility, the Maitara river and its banks. The Maitara River provides food sources, recreational and tourism opportunities for the Maitara community and surrounding areas to the length leading to the Fortrose Estuary and beyond eg Southland Fishery, Coastline, including Bluff Oyster beds
 - No public liability is held by this company which would mean if the worst case scenario occurred who would be responsible to clean up the environmental disaster and support the whanau affected
 - The concern of the credibility of the company concerned due to the false information previously provided by their employees
- If they were given consent the following should be enforced
- Liability Insurance by a local domestic company
 - Premises to be cleared and then a solid building inspection completed
 - A bond should be paid of no less than 5 million should be held by the appropriate environmental organisation as a safe guard to an environmental disaster

I seek the following decision from the consent authority: (give precise details, including the general nature of any conditions sought)

I ~~wish~~ / do not wish (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

14.4.15

Address for service of submitter:

18 Culling Terrace
Mataura

Telephone number:

0272176251

Fax number:

Email:

darren.matahiki@fonterra.com

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Daryl Francis Meikle

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

As per attached documents.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Totally oppose Tahas application for the Owen
Pce Mix
As per attached documents.

The application states that an environment risk assessment is being prepared as part of the application but was not attached to the resource application. So I reserve the right under section 92 of the environment risk assessment prior to any hearings for this application. And I also reserve the right to review and provide comments on any other part of the Tahas application where information is still to be provided but wasn't attached to the application at the time of Tahas resource application being lodged.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

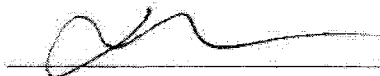
Declined in full and the Oauera Prc Mix to be removed from the Old Paper Mill without delay. And a \$20,000 per day fine for every day over the final removal date to be Paid to the Mataura Community

☒ I wish ~~do not wish~~ *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing. *(Delete if you would not consider presenting a joint case)*

Signature of submitter:

(Or person authorised to sign on behalf of submitter. Signing of electronic submissions not required.)



Date:

14 April 2015

Address for service of submitter:

9 McKelvie Heights
Mataura

Telephone number:

0274 757356

Fax number:

Email:

southlandn2@hotmail.com

Contact person:

(If applicable)

Daryl Meikle

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

Or for delivery in person:

Or for fax delivery:

Or email:

P.O. Box 8, GORE

29 Civic Avenue, GORE

(03) 209-0357

info@goredc.govt.nz

***Re: Jacobs – Taha Fertiliser Industries Limited – Application
for land use consent and assessment of environmental
impacts – Review 02, 11 March 2015***

1. The site for the Ouvea Premix is too close to the Mataura River and the Waikana Stream that flows under the building. And, should flooding occur, there is a significant risk to both the Mataura River, the Southland coast line and the Waikana Stream. As well as vapour emissions if the products comes in touch with water on the Mataura residents. The area is within the Gore District Plan, Planning Map MAT04 as a Flood Hazard Area.
2. Taha states that it wishes to store 10,000 tonnes in the old Paper Mill for two years. Yet it does not have a date for the start of the storage nor a date for it to be removed from the building. It also states Taha wishes to store the Ouvea Premix in the old Paper Mill until it finds a site for a processing factory and that factory to be fully operational – Will this be within the two-year storage timeframe? The buildings which the hazardous substance has been stored in are old and poorly maintained. They are not considered suitable for the storage of Class 6 and Class 9 Hazardous Substances. Storage of these types of substances should be in a purpose-built building that can be fully sealed to prevent water entering the buildings and to prevent air emissions escaping the buildings. Alternatively, a thorough assessment of the buildings' suitability for this activity should be provided as part of the Resource Consent application. And, if the Council has signed off the buildings as being suitable, how have they been able to do that as there are 10,000 tonnes of Ouvea Premix stored in the buildings at present and ALL OF THE OUVEA PREMIX WOULD HAVE TO BE REMOVED FROM THE BUILDINGS FOR A FULL INSPECTION of the floor for cracks and holes to be carried out.
3. There can be no guarantee given that water will not enter the buildings because the buildings are not purpose-built. And Taha have stated they have no public liability insurance to cover any effects of water entering the buildings and the product becoming contaminated. This is of major concern and I suggest public liability of a minimum of \$60 million to mitigate any effects of water entering the buildings and contaminating the Ouvea Premix.
4. There have to be major concerns as to Taha carrying out flood-protection measures at the buildings when a flood warning has been issued by Environment Southland and the Gore District Council. Because of no staff living at Mataura and Taha staff

having to travel from Invercargill to carry out the work. And, if the Maitai site needs flood-protection work after a flood warning, it is more likely that the Kennington site will require flood-protection work at the same time. Who says there will be enough Taha staff to carry out the work – what happens if staff are away on leave or unable to be contacted? Taha are now on their third manager since 2014 until now, April 2015. This would indicate to me a question-mark around Taha's management being able to organise or carry out flood-protection work at short notice.

5. Taha state in its application that it is proactively involved with the Maitai community. At a meeting on 21 January 2015, the then-manager, Mark Egginton, stated that Taha would remove the Ouvea Premix from the Paper Mill site immediately. They have now gone back on their word and not removed it, and also stated they would hold another meeting to address the concerns of the abovementioned meeting within three weeks of 21 January 2015. No further meeting was called by Taha to address these concerns.
6. There needs to be a bond placed on Taha if consent is given to the storage of the Ouvea Premix in the old Paper Mill site. The sum needs to be as such that, if Taha cease to exist or went out of operation for whatever reason and walked away from the Maitai site while the Ouvea Premix was still in the buildings, there are enough monies available for the full clean-up of the site. My opinion is that it should be no less than \$5 million, to be held only to be spent in Maitai if Taha walked away and left any product in the buildings. Any monies left over from the sum, if such a clean-up did occur, should be forfeited to the Maitai community.
7. If consent is granted, a full building inspection should be carried out every two months, with a representative of Taha, a Gore District Council building inspector, Maitai's elected councillor and a representative of the wider Maitai community, as nominated by the Maitai Action Group; and any costs of this inspection incurred by these people to be met in full by Taha.
8. The Maitai River is internationally recognised for its brown trout fishery and, as such, this must be given major consideration when judgement is given on Taha's application for Resource Consent.

Also, the 2005 Maitaitai Reserve is another reason Taha's application should be declined.

The Crown has formally acknowledged the association and values which the river

holds for Ngai Tahu whanau by giving effect to the status of Deed of Recognition as set out in Ngai Tahu's Claim Settlement Act 1998.

9. In August 2014 a decision by the Environment Court of New Zealand; Southland Regional Council vs Taha Asia Pacific; Environmental Judge J.E. Borthwick ruled: "I am satisfied that the material (Ouvea Premix) is dangerous to human health and is an eco toxicant."
10. The application is contrary to Part 2 Resource Management Act 1991 and should be declined.

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

To: **Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter: *(full name)* Daad John Van Tongeren
on behalf of the Mataura Angling Club

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

The Resource Consent Application in its entirety

My submission is: *(include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)*

see attached

Attach a separate sheet if required

I seek the following decision from the consent authority: (give precise details, including the general nature of any conditions sought)

see attached

I wish do not wish (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

on behalf of
the Matawa Angling
Club

Date:

13-4-15

Address for service of submitter:

2 Ingon Plc
Matawa

Telephone number:

03 2038703

Fax number:

—

Email:

dmbuntangeren@gmail.com

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:
Or for delivery in person:
Or for fax delivery:
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(03) 209-0357
info@goredc.govt.nz

Mataura Angling Club

The Resource Consent Application in its entirety

We the members of the Mataura Angling Club are unanimously opposed to the delayed granting of this Resource Consent.

As fishermen/women who have lived beside and fished in this World Famous Brown Trout river for most of our lives, we are gravely concerned about the goings on by Taha Pacific Industries, in the old Mataura Papermill building. Those of us who have lived in Mataura all of our lives, know intimately the condition of the Mataura Papermill buildings, and we have very serious doubts over its suitability for the storage of this very dangerous Ouwea Premix. We were all appalled to find out that this had already happened (without consent)

Despite being assured by Taha Pacific that the buildings had been checked and repaired where needed, we are not prepared to take the risk with our river, given especially since Taha's reputation in the way it has operated in the past is anything but exemplary. The latest example being the moving of Ouwea Premix onto the site without a resource permit/Consent, and when found out telling everyone there was only 1 ton stored there, but in reality there was approximately 10,000 tons stored in the Papermill.

Issues we raise are as follows:

- 1) Earthquake Risk - 100yr old Building
- 2) Flood Risk - a lot higher than they make out
 - 1) Water race for mill full of gravel - where does the water go in flood times
 - 2) Changing topography of river-bed above mill due to lack of maintenance.

- 3) Leakage / Rainfall - 100yr old building
- 4) General State of building - only have Taha's and Landlords word on maintenance
- 5) General Emissions - should it get wet - Health Risk
- 6) Clean up - who responsible for clean up or any left over substances, should company go belly-up?
- 7) Reports - In Taha's application certain reports had not been completed or presented

- 1) Potential Health Risks
- 2) Public Liability
- 3) Building Report
- 4) Product leaching into river
- 5) Storage of Product in floodway
- 6) Firefighting Procedures - use of water!!

How can we make informed submissions without these, and if we had them, no doubt we are sure there would be a lot more issues of concern.

Action

- 1) Resource Consent not to be issued
- 2) Court Action to be taken over illegal storage
- 3) Removal of Ocea Premix immediately

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

Decline the Application

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Dennis William Rutter

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

2.4, 5.2.4, 5.4, 6.1, 7, 8.2.5, 8.2.8, GDC Management Act,
Amend G Building WOF, Public liability, Suitable Bond
Fire & Flooding

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Time limit for removal & regular public inspections
Other effected public
Independent environment professional
Effect on river due to quantity
low on storage
Building WOF
Public liability
Suitable Bond
Fire & flooding
Gas emissions

Decline the application

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

Decline the Application, want to be heard in person
Date and time for removal,

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

No wife only

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

D. Kull

Date:

12 4 2015

Address for service of submitter:

14 Dover

Mataura

Telephone number:

03 2033019

Fax number:

Email:

Contact person:
(If applicable)

Sonia 0210401621

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

PO Box 8, Gore 9740
29 Civic Avenue, Gore 9710
(03) 209-0357
info@goredc.govt.nz

Diane Krs
114 Kana Street
Mataura

P. O. Box 1388
TAUPO 3351
dianekrs@vodafone.net.nz
021321391

Gore District Council
P. O. Box 8
GORE 9740

Date: 13 April 2015

Submission on Publicly notified resource consent application by Taha Fertiliser Industries Limited

Submission on application from Taha Fertiliser Industries Ltd seeking approval to store 10 000 tonnes of Class 6 and Class 9 Hazardous Substance for a period of up to two years at former Carter Holt Harvey paper mill site

The parts of the application that my submission apply to are

1. Storage of hazardous substance without consent
2. Location of storage buildings to our property at 114 Kana St
3. Storage buildings' suitability
4. Proximity of storage buildings to water ways used for recreation and drinking water source
5. Storage of Hazardous substance within Mataura town boundary
6. Storage time limit factor
7. Flood hazard
8. Suitability of storage bags and pallets
9. Security of stored product

There are too many unanswered questions and assumptions that if this hazardous product just sits there how can anything go wrong? An increase of dead rats on our evening stroll or should I say escapade passed the relevant buildings might be witness to an effect taking place.

Floods of unseen proportions are happening world wide and should be the warning we need to see that the risks are too great for this product in this location and another location well away from water and population should be found.

Whether or not there is any substance to Global Warming the real facts are the news stories of never seen before flooding worldwide. We have just had a very dry season which means more runoff in rain meaning more volume in the water ways. Those of us who are not hydrologists, who understand the power of water – once the dam is burst there is no going back....

I Oppose this application for the reasons as follows

1. There is no consent to store this product in this location currently. How can this be happening? Why is it not feasible for Taha to move this product to another location until such time consent is granted? Why have the council let this happen and continue to let it happen with no accountability.

2. Why, as the closest neighbour, were we not notified prior to this storage of hazardous substance taking place? There are real hazards to the health and well being for us and our family and friends who come to stay.

6.ID – Substances that are acutely toxic – Harmful

6.3A – Substances irritating to the skin

6.4A – Substances irritating to the eye

We used to see NZ native skinks in our backyard at 114 Kana St. Truth is I haven't seen them for a while.

9.3C – Substances that are harmful to terrestrial vertebrates (skinks and geckos) etc.

3. The entrance to the building at 116 Kana is approximately 30 meters outside our bedroom window. If you check the red oval indicating the buildings on the south side of Kana st Section 2 of the application, you will see our 'bedroom' is within that oval. While we were there over christmas this building at 116 had part of it's roof flapping in the wind and it lacks suitable guttering and down-pipes. We can hear the water pouring off the building from a great height when it is raining. It also has a threat of ground water that drains off the hill which increases dramatically when raining.

It appears that all the buildings have single skin roofs which are prone to drip condensation. The hazardous substance stored has a severe reaction to water, yet it is proposed to be stored in unsealed bags. If any thing the bags are tied closed with string which just creates a funnel to collect the condensation and deliver it in more concentrated amounts into the hazardous substance.

4. The dangers associated with this product all relate to when it is mixed and agitated with water. Why store it so close and inbetween water ways that are severely affected by rain? What about high humidity in southland? One of the known wet climates of NZ.

Check out the moss around the buildings 116 + Kana street and tell me it's not a wet climate.

If this product gets into the water ways, what is the clean up time? If it floods houses will they still be able to be lived in? What would the clean up entail? How long would the water supply be affected? Cost of trucking water to all the people affected by this potential environment disaster? Cost to the fishing industry? Once the product is wet how is it dealt with? Can it still be moved? Where to? Who decides who's put at risk to do the clean up.

9.1C – Substances harmful to aquatic environment.

9.ID – Substances slightly harmful to aquatic environment

5. I am sure the people of Matura do not want this hazardous substance stored in their 'back yard'. We also own 26 River St and do not want this washing through our property there in the next major flood. The town and river of Matura is in the process of recovery from Carter Holt Harvey and the people are starting to take pride in our wee town of Matura but how long will this continue if we see our backyard as a dumping ground for the unwanted.

6. What is the storage time factor. **'If** this consent is granted is there a storage time limit imposed for Taha Fertilizers. There is mention of two years after a consent is granted but it is not clear if this is the consent under current discussion or the consent for the proposed 'Plant'. Will Taha Fertiliser get consent to build a 'Plant' to use this product to manufacture a 'safe' product from this substance? Is this a viable business proposition? I believe Taha signed a contract to sell the raw product to an European buyer some years ago. Is this other business still current and ongoing and if not, then what if the 'Plant' is never granted consent, how long will we roll the dice against nature and this hazardous threat remain at our door step? Remember the odds of a major event increase as

the period of none increases. No one can predict how big that event will be. It is a short term view to think that 100 years is a safe historical count. The earth has been around for 4600 000 000 years and there is plenty of evidence of the major events that have and will continue to occur.

7. It is interesting that the Mataura has had approx. five significant recorded floods in the last hundred years. It is 16 years since the last noted flood according to Environment Southland. That gives us a window of approx four years if the stats go their way but with global warming there is increased risk of force and frequency. There is increased flooding through out the world reported daily. In this worst case signario the Mataura will be swift as it swirls through these buildings and these disturbed waters will be agitating this hazardous substance to give off it's worst possible reaction. It doesn't seem sensible to store it in between two flood prone water ways so close to industry and people.

8. Are the bags sealed? Tied at the neck is not a seal but a funnel. What about the condensation from the roof. What is the recommended life of the plastic bags when used to store a hazardous product? Is there an ISO rating on the bags? Are they even the required type of storage vessel for this hazardous product?
Are the wooden pallets sealed?/water resistant? Is the wood treated for water or will they rot? Most pallets today are made from either untreated pine and/or some composite of wood chip and glue and neither are water resistant. What happens when the wood absorbs the ground water its suppose to insulate the plastic bags from? Are the plastic bags just stitched or are they seam sealed? What force of agitated water will disturb the bags from the pallets or their stacks?

9. This is a very hazardous product and what security is there to protect it from some nutter who may take it upon themselves to hurt some or many and steal or use it for that purpose. What if someone takes it upon themselves to set fire to the buildings? There is no security on site to monitor what is happening or secure the buildings in any way.

We dont want this hazardous substance in land fills so lets change it a little and fertilise our vege patch instead. Yeah Right!

Desired Outcome

It is my wish that the council acknowledge the risks are too great and there are no guarantees to the safe and secure storage of this hazardous product at the suggested location and

No consent be granted and the product to be removed immediately.

I would like to be heard at the hearing in regards to my submission – the hearing date yet to be notified. Parts of this submission not clear or complete will be added to further at the hearing.

This is not part of a joint case.

Copy of submission to	nathan@tahacorp.com
Copy of submission to	info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

**To: Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter: *(full name)* Emily Hall _____

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

Abhorrent neglect to protect the local and natural environment

My submission is: *(include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)*

I strongly oppose this application by Taha Fertiliser.

It is astonishing that in the year 2014 when we know so much more than we have in the past about the disastrous and negative impacts of various types of chemicals, waste and by-products on the environment, that Gore Council could even consider this application as remotely feasible.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

100% decline of this application.

~~I wish~~ / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Emily Constance Hall

Date:

14th April 2015

Address for service of submitter:

2F Siena Terraces, 6 Burgoyne St, Auckland

Telephone number:

021 550 534

Fax number:

Email:

emshall@hotmail.com

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:

P O Box 8, GORE

Or for delivery in person:

29 Civic Avenue, GORE

Or for fax delivery:

(03) 209-0357

Or email:

info@goredc.govt.nz



14 April 2015

Planning Department
Gore District Council
PO Box 8
Gore 9740
Attention: Howard Alchin

Our Reference: A190436
Enquiries to: Carmen Russell



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Dear Sir

Landuse Consent Application

Applicant: Taha Fertilizer Industries Limited
Proposal: To store a Class 6 Hazardous Substance
Location: 116-128 Kana Street, Mataura

The above proposal has been assessed by Environment Southland's Hazard Mitigation Planner, the Managers of Resource Consents, Policy and Planning, Catchment, Land and Water and Biosecurity, and Pollution Prevention.

Environment Southland as an affected party in the above matter has seen and understood the application and wishes to make a submission in opposition to this application.

Pending reports

The application refers to a number of pending reports that further assess the environmental effects of the proposal. Specifically these are as follows:

Section 2.3 Flood History: Note that Taha has engaged flood modellers to further assess the likelihood of the building flooding in extreme events. This information will be provided to GDC as part of additional risk assessment once complete."

Section 2.4 Building Suitability: "A final building report will be developed as part of the risk assessment and submitted to the GDC once complete":

Section 5.7 Summary: "Taha has engaged a suitably qualified environmental professional to conduct an environmental risk assessment to confirm this assessment. Taha intends to provide a final report to GDC in April";

Given that the assessment of environmental effects is obviously incomplete, it is difficult to see how the application as it stands could conclude, or more correctly "anticipate" that the "environmental effects of the proposed activity will be less than minor and the effects on any person will be negligible."

Until such time as Environment Southland has had the opportunity to consider the further information to be supplied by the applicant, Environment Southland opposes this application.



for now and your future

Environment Southland is the brand
name of Southland Regional Council

To assist the applicant in fully assessing the environmental effects of the proposal Environment Southland includes the following comments as part of its submission:

Summary

- This site is subject to actual or potential inundation from a number of sources but mainly the Mataura River and the Waikana Stream.
- The site is protected from inundation from floods up to the size of the highest past floods on the Mataura River and the Waikana Stream.
- The ouvea premix that is stored in the building reacts with water to produce ammonia gas and heat.
- The plastic lined storage bags may protect the ouvea premix from getting wet in the event of the storage area being flooded but there is some uncertainty about that.

Floodplain Location (see photos below)

1. The site is located on the floodplains of the Mataura River and the Waikana Stream.
2. The site is located adjacent to the Mataura River, part of which flows through the site to feed a hydro-electric power generation plant.
3. The Waikana Stream flows through the site.
4. A small yet important stormwater channel is located between the shed on the east side of Kana Street and the foot of the terrace.
5. The buildings within which the storage will occur are old and have not received a lot of maintenance over the last 15 years. This includes the roofs, gutters, downpipes, etc. On the face of it, there is more potential for leaks than for most buildings.
6. The buildings are part of what was once an old paper mill, a use that had high water use demands and many piped or channelled connections with the Mataura River and the Waikana Stream.



May 2009



May 2009

Flood History

7. The paper mill buildings on the west side of Kana Street were extensively flooded during a flood in October 1978 (see photo below and the attached photos and report from the publication entitled "The 100 year flood – 1978"). The depth of flooding was in the order of 5-6 feet in parts of the mill. The 1978 flood is the largest Mataura River flood on record in Mataura. It has a return period in the order of 50-60 years or in other words, there is approximately a 2% chance of a flood of this size occurring in any one year.



15 October 1978 several hours after the peak

Kana Street above

8. Flooding to a lesser depth (3 feet) occurred in a flood on 17 January 1980. The General Manager of the Catchment Board at the time stated that "unfortunately the proposals to lift some of the floodwalls had not been completed ..."
9. Previous significant floods threatened the site in 1913 and 1968 (see photos below) but the actual extent of on-site inundation is unknown. The Waikana Stream is visible in the background of the 1968 photo.



Flood Alleviation works

10. Following the 1978 and 1980 floods, Environment Southland investigated means of reducing the flood hazard in Mataura. Those investigations included the construction of a scale model of the Mataura River floodway over a 4 kilometre reach from the tannery to the Waimumu Stream confluence downstream of the bridge.

11. The model revealed that flood levels in the reach from the Waimumu Stream to the falls could be significantly reduced by clearing willows downstream of the bridge. The model was also used to derive the stopbank crest levels required to contain a 1978 sized flood with 500 millimetres of freeboard.
12. Subsequently willows were removed and new stopbanks were erected upstream of the paper mills. At the paper mill site, the owners of the time erected a new flood wall, fitted non return valves on or blocked off various pipes that led to the river and constructed various flood barriers that were put in place when a flood threatened. A contingency plan was developed to guide such action.
13. The Mataura River stopbank system incorporates a design feature that is designed to minimise the amount of water that flows through the paper mill reach in floods greater than that of 1978. This feature is the Boundary Drain stopbank at the northwest end of Mataura. The bank, which runs at right angles to the Mataura River, is lower than the main Mataura River stopbank. As such, in floods that are bigger than the design flood (the 1978 flood), floodwaters will overtop this section of stopbank before the freeboard is used on the main stopbank. In effect it is a form of "safety valve" that takes the pressure off the stopbanks in the downstream reach where the stopbanks are higher and the consequences of overtopping much higher.
14. In 1987, the second largest ever flood occurred on the Mataura River. Although there was a lot of concern about the effect of that flood on the paper mill buildings, the various flood mitigation activities implemented by Environment Southland and the mill owners resulted in no floodwater entering the paper mill building. Around the paper mill itself, it was the flood wall that kept the water out. The various doorway and other opening barriers were put in place but no water came against them.
15. In Nov 1999, the third largest flood occurred and Environment Southland understands that once again no floodwater entered the paper mill building. Below is a photo of the site during, but not at the peak of, the November 1999 flood.



16. In January 1984, heavy rainfall fell in the western and southern catchments of the Southland region and caused widespread and record flooding in Invercargill, Otautau and Tuatapere. It also caused significant flooding in the Mataura River but nothing like what had been experienced in 1968, 1978 or 1980. However, the Chief Engineer of the paper mill reported he had never seen the Waikana Stream so high. Notwithstanding that, Environment Southland is not aware of any floodwater getting into the mill itself although water did come right up to the offices and carpenter's shop on the east side of Kana St.
17. The proposed Ouvea premix store "A" is located within a few metres of the foot of a high, steep terrace. A shallow drain is located between the foot of the terrace and the storage building, the floor of which is more or less at ground level on the terrace side. The drain intercepts runoff from the terrace face and it also carries roofwater from the storage building. The storage building is vulnerable to shallow inundation in the event of the stormwater drain becoming blocked or having insufficient capacity to carry the flow.
18. Roofwater from Ouvea premix store "C" is in some cases directed to internal downpipes but Environment Southland understands that alterations are occurring to redirect it to external downpipes. The roofs of all proposed storage areas have some minor leaks and given the age of the roofs, more leaks can be expected in the future. Environment Southland understands that the current leaks are being or have been attended to.

On Site Flood Mitigation

19. In the early 1980's the paper mill constructed then raised a steel reinforced concrete wall between the mill and the river at the northern and southern ends of the site as the primary means of protecting the site from flooding. Environment Southland understands that the top of the wall is 600 millimetres above the 1978 flood level. Environment Southland notes that the end of the wall at the north end of the mill is actually at least as high, if not higher than the adjoining stopbank.

It is noted that the Taha application states that the flood wall is "built to withstand 600 millimetres above the highest recorded flood". This is a misrepresentation of the standard of flood protection. The stopbanks, and presumably the flood wall, are built to withstand the highest past flood (1978) with 500 millimetres of freeboard. This freeboard allowance is to take into account variable channel condition and design uncertainties – it is not regarded as an additional level of protection over and above the 1978 flood level.

20. In the early 1980's the paper mill also constructed many steel shutters and some concrete slab panels to place over various openings in or in between mill buildings in the event of floods that either overtopped the upstream flood alleviation works or came from the Waikana Stream. These were erected in the 1987 and presumably 1999 floods.
21. From talking to a former paper mill employee who was specifically charged with maintaining and erecting the shutters, the 1987 and 1999 floods were contained by the flood protection wall and no water came against the shutters.

22. Environment Southland notes and supports the continued use of the steel shutters, some permanently. However, Environment Southland notes that it is now intended to use sandbags and polythene in some areas, rather than the previously constructed concrete shutters. While these may keep the bulk of floodwater out, they are unlikely to be 100% waterproof.
23. The proposal to store the Ouvea Premix on pallets “adjacent to the eastern side doorway” of in “Store A” is noted to prevent contact with any stormwater flooding is noted and supported. However, the extent of such elevated storage is a little vague. If stormwater flooding did occur, it could spread for some distance.
24. The storage of the product in plastic lined bags is also noted. Although the bags themselves have orifices, the size of the bags and the vertical stacking should reduce the chance of water entering the bag. Environment Southland understands that the bags are new and are “single use” as far as storage of the Ouvea Premix is concerned. However, there is currently a degree of uncertainty about just how waterproof the bags are. As such there is potential for a “flood test” to be conducted in an open container to ascertain just how waterproof the bags are.

Flood Risk

25. Risk is not simply probability. Risk is a compound measure of probability (likelihood) and consequences. In this situation the probability or likelihood relates to the potential for flooding of the mill site or parts thereof from four sources – the Mataura River, the Waikana Stream, stormwater and roofwater. The consequences relate to the volume, extent and depth of flooding and the reaction of that water with the stored products.

26. Ouvea premix reacts with water to produce ammonia gas and heat. More particularly the following occurs:

One of the main components of Ouvea premix is aluminium nitride (AlN). AlN + water forms ammonia gas.



1 Ton AlN = 414 kg NH₃ (ammonia gas formed)

Aluminium nitride = 25-40% of Ouvea premix.

Therefore 1 Ton Ouvea = 104 – 166 kg NH₃ produced.

The potential for the above reaction to occur underpins Environment Southland’s concerns about the potential for the site to be affected by riverine or stormwater flooding, or for that matter, moisture.

The ouvea premix is also ecotoxic and it is matter of concern if the product is able to enter the Mataura River via the Waikana Stream or the stormwater system.

27. The application proposes a number of flood risk alleviation measures, those being:
 - storage of the product in plastic lined waterproof bags;
 - monitoring the flood forecast.
28. **Plastic lined waterproof bags** - Environment Southland has read the comments made in the application about the use of the plastic lined waterproof bags as a secondary means of flood protection for the stored product. While in theory the bags should be waterproof, they do have openings and the waterproofness of the bags is only as good as the seal at those openings. There is currently a degree of uncertainty about just how waterproof the bags are. As mentioned above there is potential for a "flood test" in an open container to confirm one way or the other just how waterproof the bags are.
29. **Monitoring the flood forecast and implementing** - This is an option but it is not quite as simple as daily monitoring of Environment Southland's flood warning site. A number of trigger points for action would need to be developed, such as "forecast rainfall" and/or "river level at Parawa", a site well upstream of Mātaura. Environment Southland usually issues flood warnings for the Mātaura River several times a year and in most of those situations it would not be necessary to implement additional flood protection measures at the Paper Mill site that were in preparation for a stopbank overtopping or breach.

While there may be a several hours of potential lead time, some or most of that could be at night when no one is on site.

Other comments on the application

30. The application states:

"On a conservative mass balance basis, reaction of aluminium nitride in Ouvea Premix may generate up to 150 kg of ammonia per tonne of material, which requires up to 300 litres of water per tonne. However, in practice, the ammonia is formed at a very slow rate, with the hydrolysis reaction occurring over a period of days to years. For example, analysis of aluminium dross recovered from the NZAS landfill site has shown that material stored for up to 40 years still contains unhydrolysed aluminium nitride. Any ammonia formed will generally remain in the product due to the high solubility of ammonia in water as aqueous ammonium hydroxide and will not be released as ammonia gas. Any fugitive gas emissions would be detected as an odour.

In addition to the production of ammonia described above, the AIN is heat releasing (exothermal), such that localised heating of the Ouvea Premix occurs. Depending on the amount of water the Ouvea Premix is exposed to; the release of ammonia will dissolve in the water, coating the solid particles and turning the localised matrix alkaline (i.e. to a pH greater than 9). Under the conditions of localised heating and alkaline pH, a secondary reaction starts where tiny, high surface area particles of aluminium metal react with the now alkaline, localised, water conditions to produce small amounts of Hydrogen (H₂), gas. This metal catalysed fission of water, which gives hydrogen gas, is also exothermal and produces more heat.

It is noted that the statement above that "depending on the amount of water the Ouvea Premix is exposed to;" (emphasis added). Does Taha have evidence to confirm what the reaction rate is if the material is exposed to an excess of water (as in a flood) followed by a long period of post flood dampness?

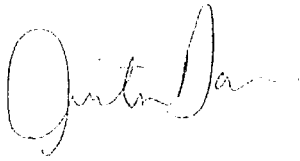
Comparison with the TTA/3 landfill site is not valid because the circumstances surrounding exposure to water and release of ammonia are completely different. This is not a reasonable comparison.

The amount of ammonia gas dissolved in water will be determined by the nature of the water that the material is exposed to. If it is submerged in water for a period of time, some ammonia may dissolve in the water. Ecotoxicity concerns then arise. If the water is present in the form of moisture, the volume of water present is such that there will again be a release of ammonia to the air.

31. **Health and safety risk** - Ammonia gas is a serious health and safety risk to personnel in and around the building. Ammonia gas detectors and alarms should be installed, and evacuation procedures established.

Environment Southland wishes to be heard in support of its submission.

Yours sincerely



Anita Dave
Policy and Planning Manager

CC: Taha Fertilizer Industries Ltd, 162 B Bond Row, Invercargill 9810
Attention: Nathan@tahacorp.com



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Ernie Hanke

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The Ouvea Premix is a dangerous substance
and it should be removed from our community.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

- I wish the application to store this substance be declined.
- We know that when wet, this substance releases ammonia. Because of the buildup of gravel in the river the possibility of flooding is very ^{likely} ~~possible~~ and would be dangerous.
- The building is old and full of asbestos.
- There are gaps in Taha's application and we have not had the chance to question them about those things.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

They should have to pay a large bond; they should be required to have large public liability with a reputable NZ company; they must provide a detailed risk management plan in case of fire, flood, leaking buildings; regular inspections of buildings; detailed plan to remove within ~~the~~ the two years.

~~I wish~~ / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

E R Munroe

Date:

8/4/2015

Address for service of submitter:

9 Oakland St
Mataura.

Telephone number:

Fax number:

Email:

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Fiona Walker

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Class 6 Hazardous Substance being stored at the former Carter Holt Highway building (former Paper mill) 109-130 Kona Street, Mataura

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

- I oppose Taha fertiliser Industries Ltd application for these reasons
- ① The health risk to people in this town, and being 40metres from a preschool
 - ② The courts have found this product is hazardous and a ecotoxin
 - ③ The building they have stored this product in, is inadequate (damaged windows, broken pipes)
 - ④ High earthquake risk (the building)
 - ⑤ Highly dangerous to our main industry (Alliance) if it gets into our water ways
 - ⑥ Fire brigade ill-equipped to handle any fire as no water can be used.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

Decline the application and instant removal of the ouvea p.e.m.s from this site and out of our town

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing. (Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Fiona Walker

Date:

10 April 2015

Address for service of submitter:

1 McKelvie Heights
Mataura 9712

Telephone number:

03) 203 8575

Fax number:

Email:

noelondfiona@slingshot.co.nz

Contact person:
(If applicable)

Fiona Walker

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

PO Box 8, Gore 9740
29 Civic Avenue, Gore 9710
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Maurice Rodway, Fish & Game
New Zealand, Southland Region

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

All of the application.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose the application.

Storage of the Ouvea Premix on this site
risks damage to the Mataura River Trout
Fishery which is recognised by a National
Water Conservation Order. This nationally
important resource should not
be subject to the risks this proposal
carries with it. Although the applicant
is confident the risk is low a spillage would
have severe consequences.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I request that the application be
declined

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

M Rodway

Date:

30 March 2015

Address for service of submitter:

P.O. Box 159
Invercargill

Telephone number:

03 2159 117

Fax number:

03 2159 118

Email:

maurice.rodway@southlandcity.govt.nz

Contact person:
(If applicable)

Maurice Rodway -co.m

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

**To: Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter: *(full name)* **Geoffrey Colvin**

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

2.4 Building Suitability, 3.1 Activity Description – period of storage, 5 Environmental Effects, 5.7 Summary and 9 Conclusion.

My submission is:

I oppose the application based on the following sections:

2.4 Building Suitability; A final building inspection report is not available prior to the submission closing date therefore Taha's claims of suitability for storage of Ouvea premix and work completed to prevent ingress of water cannot be confirmed.

3.1 Activity Description; The expected time frame of storage is not finite as it does not have a commencement date and appears to be dependent on Taha being successful in their proposal to find a suitable site for production of compound fertiliser. The two year consent applied for needs to have defined start and end dates.

5.2.2 Environmental Effects – reaction with water; It is stated that a hydrolysis reaction with water may occur over days to years. Also in the Taha Asia Pacific Environmental Management Plan, section 2, Aspects and Impacts, Table 1 it is noted "*A significant amount of material could be washed away to waterways, particularly the Mataura River located near the Mataura site*". This could have serious consequences for the Mataura River and associated coastal waterways if such an incident were to eventuate.

1.1 *Mitigation Measures, Pollage and Flooding* Parts of this section are factually wrong as it twice refers to "Wolkawa Stream". There is no waterway by this name in the near vicinity. There is a Waikawa River located near the bottom south east corner of the South Island. It could be assumed the applicant is referring to the Waikawa Stream which was identified 9 pages previous however if this is the intent it does raise doubts as to the accuracy of other information contained in the application.

2.4 Mitigation Measures, Other water contact; In this section it is acknowledged that the Aluminium Oxide will naturally absorb water from the air and this is particularly pronounced in humid conditions and can result in odour that may be detectable from neighbouring properties. This is unacceptable in the current location within the Township of Maitara as it would most likely cause offence and /or health issues to residents, neighbouring businesses, pre-school and the general public.

Further in this section it is stated that all internal pipes will be rerouted externally. The word "will" suggests this work is yet to be carried out therefore under present conditions all potential risks from water ingress have not been eliminated or minimised.

5.7 and 9. Summary and Conclusion; The assumption that environmental effects will be minor cannot be confirmed as the Final Building Report and Environmental Risk Assessment are not available for perusal prior to the submission closure date.

I seek the following decision from the consent authority:

I request that the application be declined for the reasons stated above.

I do not wish to be heard in support of my submission.

Signature of submitter: Geoff Colvin
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Date: 13 April 2015

Address for service of submitter: 25 Bangor Street,
Maitara,
9712.

Telephone number: Home 03 203 8120, Work 03 203 6532,
Cell 027 2765 307

Fax number:

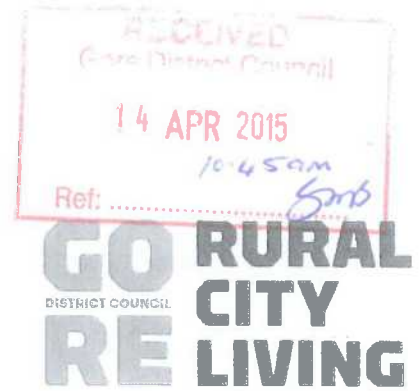
Email: gtcovin@clear.net.nz

Contact person:
(if applicable)

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Or for delivery in person:	29 Civic Avenue, GORE
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Or email:	info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

Greene Simpson

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Health Safety
Construction of Building

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I'm opposed. Taha Can't be trusted.

Taha Stated theres 40 metres of trees between the mill and first neighbouring house which would be ~~there~~ our house there would be lucky to be Sixty metres between our house and first bag of dangerous product.

I have suffered Respiratory problems, eye problems, direct skin irritation, this is stored in a more leaky old building which can be seen by the naked eye. No one informed any of us about the side effects the product has. A lot of smells occurring during night and has no keyholder available. Owner of property living two and half hours away even though I have his cell number.

As Residents and Ratepayers living beside the mill we feel how unjust the Core Council have been treating us.

Myself, my wife and son all have been suffering with eye irritation, sore throats skin irritation, at times we've had to leave our house as repulsive smell of fumes and breathing difficulties. It has also come to our attention that we have broken drains under the road that are not from what we understand until 2018 will be fixed.

I don't know where the council have come up with there are forty metres of trees between the mill and neighbouring properties as in our case that is not true. We have had two outside fish ponds one being beside the mill fence in which the fish all died the other being further away and fish surviving.

We have found dead birds over our property and have watched them just fall out of the sky and die, also so have neighbours had same thing happen.

We had no resource presented to us about the premix going into the mill and feel most of that happened under the cover of darkness and was well on the way before B trains made their appearance in daylight.

We find it very offensive and want the stuff removed, we also feel its affected our health and lifespan, and as ratepayer and neighbour feel the Council should be forking out to get it removed not the ratepayers.

~~After~~ looking at everything ~~the~~ Taha
have stated we feel is totally untrue
and measurements way out.

We are now starting to consult with
a solicitor about taking action against
Taha Paterson group, Jakob group
and more so Gore District Council
and representatives as individuals, ex. town-
planner knowing full well it was going
in there and allowing another four
hundred ton to go in.

Regards Shirley & Graeme Simpson

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): MR HOWETH JAMES JOHNSTONE

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The storage of Fertiliser, at all, at the OLD PAPER MILL

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

① WE don't support the Storage of material in MATAURA.

② WE Require a bond, (to be held in TRUST) OF \$1000-000-000 for MATAURA.

③ Product to be REMOVED from OLD MILL, AS SOON AS POSSIBLE & a plan for it to be taken AWAY.

④ TAHA MUST HAVE PUBLIC LIABILITY/ INS & RISK MANAGEMENT INS (FIRE FLOOD)

⑤ THERE has to BE Public INSPECTIONS, IF THEY GET CONCENT.

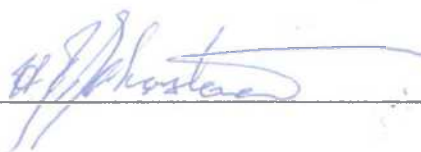
Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

13-4-2015

Address for service of submitter:

164 KANA STREET

MATAURA 9712

Telephone number:

2038788

Fax number:

—

Email:

Jimmy@xtro.co.nz

Contact person:
(If applicable)

Jim Johnstone

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

IAN JOHN SOPER.

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

THE REMOVAL AND TO REFUSAL OF FERTILISER.
(ALUM) TO BE STORED IN OLD PAPER MILL.
(DECLINE OF APPLICATION)

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

- 1/ BOND (\$5 MILLION) TO THE MATAURA COMMUNITY.
- 2/ RISK MANAGEMENT (EARTHQUAKE)
= FLOODING = DUE TO GRAVAL BUILD-UP, UPPER MATAURA RIVER, OLD ROOF IN THE PAPER MILL.
= FIRE = DUE TO OLD BUILDING (100 YEARS OLD)
- 3/ TAHA TO HAVE PUBLIC LIABILITY INSURANCE
- 4/ DATE FOR REMOVAL, TO TAKE AWAY.
- 5/ W.O.F CHECK OF BUILDING, BY REGULAR PUBLIC INSPECTIONS
- 6/ I WANT TO BE HEARD IN PERSON.

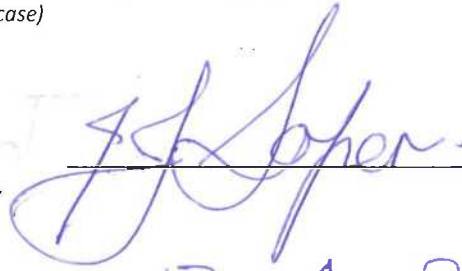
Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

☒ I wish / ☐ do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

13-4-2015

Address for service of submitter:

166 KANA ST
MATAURA

Telephone number:

03-2033662

Fax number:

0274-713313

Email:

IANANDJENNY@XTRA.CO.NZ

Contact person:
(If applicable)



Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

Jackson R arene

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha
Fertilizer (as soon) Remove
as soon as possible.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

14. 4. 15 J. Raman
↓

Date:

Address for service of submitter:

Telephone number:

Fax number:

Email:

Contact person:
(if applicable)

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Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991



To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

JAMES Richardson

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries because of, earthquake risk, flooding, leakage created & by ~~landfall~~ rainfall, asbestos, who's responsible for residue, general emission, building use by date expired.

Decline application, remove offensive residue immediately, Taha have public liability, high risk management.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

G. A. Richardson

Date:

14/4/2015

Address for service of submitter:

151 Main St
Mātaru

Telephone number:

209 8295

Fax number:

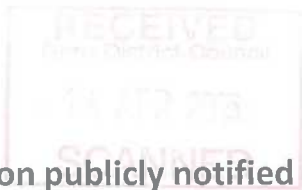
Email:

Contact person:
(if applicable)

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

**To: Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter (full name): JAMES WILLIAM WADDELL

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

THE STORAGE OF A HAZARDOUS
SUBSTANCE.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

SEE ATTACHED

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

THE REMOVAL OF THE OVER
PREMISES FROM THE PAPER MILL
SITE

~~I wish~~ / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

14.4.15

Address for service of submitter:

7 DOCTORS ROAD
MATAURA 9712

Telephone number:

03 203 7996

Fax number:

Email:

jimnyan@xtra.co.nz

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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I oppose the application to store hazardous product in Mataura.

NZAS, the manufacturer of this by product has been very silent since this application has been in the news. Surely they would have been able to inform us whether this product is indeed hazardous.

In their own submission, the applicant acknowledges that the product is hazardous, yet wants to store it in a residential area.

The building is rated industrial – but that was years ago and because it was a paper mill, used to chip timber and produce paper – not hazardous substances.

The applicant must be ignorant of what this product contains, and the safe way of handling it, proven by the upcoming legal case regarding the poisoning of 2 workers in Edendale. Plus the storage of the premix at another illegal site [not for public information. According to Eviro/southland]

The premix contains ammonia [along with other chemicals], and if this gets wet a dangerous toxic gas will be released, and could cover the residential areas of Mataura. This can cause irritations and health risks to the local population. We are assured by Taha that the premix is contained in 1m³ double wrapped plastic bags, but surely they can be easily damaged during transit or storage. The Alliance Freezing Works at Lorneville has been evacuated TWICE in the past 3 months because of ammonia leaks.

NZAS are a multi million dollar International Company, and should have offered Taha an area of land at Tiwai and allowed Taha to build a purpose built facility to produce the fertilizer. Of course NZAS remain silent.

Taha are also a multi million dollar Company, and could easily afford to purchase land several kilometres away from residential areas to erect a building – like most other fertilizer Companies in this Country.

When Taha called a public meeting recently the Managing Director admitted that the product should not have been stored there, and assured all in attendance that it would be removed within 2 weeks. However that Managing Director is no longer with Taha, as it must be that it is expensive to remove 10,000 tonnes of premix [10,000 @ 40 tonnes per truck = 250 truckloads] It is probably cheaper to get resource consent, and he should have kept his mouth shut!

If they ever get approval to build a factory, or convert an existing building, anywhere in Southland they are going to have to transport the premix from Mataura anyway, the same 166 loads.

There were no signs on the Papermill premises advising that hazardous substances were inside. This was pointed out at the public meeting and now they have been erected. This again shows that Taha are incompetent.

But of course both Companies are only interested in making a profit. NZAS has no more room at Tiwai to dump the stuff, so is either giving it to Taha, or paying them to take it away. They do not care about the health of our rivers, air, or the public at large. They are not interested in keeping a good public image.

I can only hope that we do not see a scenario like Union Carbide had in Bhopal – India. But of course Union Carbide were also very silent.

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

JENNY SOPER

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

I OPPOSE TO THE COMPANY Taha Fertilizer Industries Ltd.
APPLICATION TO STORE THEIR CLASS 6/9 HAZARDOUS SUBSTANCE

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

RISK MANAGEMENT =
100 YEAR OLD BUILDING. NOT STRUCTURE PROOF, EARTHQUAKE,
SIGHT OF APPLICATION. IS TO CLOSE TO THE RIVER, FLOODING WOULD.
CAUSE THE PRODUCT TO HAVE A ADVERSE AFFECT ON PEOPLE.
AND ENVOIROMENT.

INSURANCE BOND TO BE SET ASIDE. AND DISCLOSED.
FOR THE MATAURA COMMUNITY. ONLY.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

I wish / ~~do not wish~~ *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

Jenny Soper

Date:

13-4-2015

Address for service of submitter:

*166 KANA ST.
MATAURA.*

Telephone number:

03 2033662

Fax number:

0274-713313

Email:

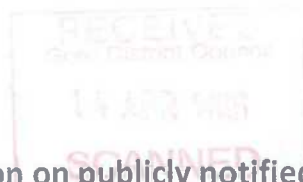
ianandjenny@xtra.co.nz

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): John Gordon Mantell

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Location - Condition of the site. Health - Safety.
Effects on the environment. Lack of knowledge and consults
on future floods and river bed issues.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views) I oppose the application.

I worked at the Papermill building for over 20 years and witnessed water rising through cracks + joins in the floor. Also drains backing up and downpipes leaking or overflowing. Concerns over whether enough prevention work has been carried out to protect their product. Concerns for the community if a disaster occurred ie flood or fire and the safety for residents, nearby school etc if a disaster occurred. The risks for the environment and effects if the product leached into the river or pollution are of concern. I have also lived above the site overlooking the river and have lived there for approx 12 years. I have a clear view ^{approx} 100mbs north of the site, it is very clear the river flow has changed over this time. Concerns the flow has or would change flood levels and little has been outlined about future possible floods.

Attach a separate sheet if required

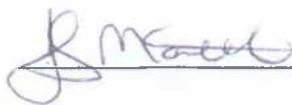
I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought) I seek the application be declined for reasons stated.

If granted I wish to see the following imposed. Date set for removal.
Regular inspections of building and improvements with a community representative present. A considerable bond held by GDC for Matarua community if required for any effects or disasters. Alarm for toxic leaks. Assurance there is adequate liability insurance. Community plan for evacuation for preschool, school + residents should fire or flood occur.

I wish / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

13-4-2015

Address for service of submitter:

7 Hillcrest Avenue

Matarua 9712

Telephone number:

203 8433

Fax number:

Email:

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

PO Box 8, Gore 9740
29 Civic Avenue, Gore 9710
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): John Francis Peck

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

WHOLE SCENARIO

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

THE PROPOSED SITE IS AN OLD BUILDING ON THE BANKS OF A RIVER WITH A PROTECTION ORDER ON IT. AS THE PRODUCT TURN TOXIC WHEN WET, THIS IS UNEXCEPTIBLE TOTALLY AS IT IS A DANGEROUS TO AQUATIC LIFE AND THE TOXIC FUMES WHICH MAY BE GIVEN OFF COULD BE DISASTEROUS TO THE CITIZEN OF MATAMORA
ALSO THE SITE IS JUST ACROSS FROM A EXPORT MEAT PLANT WHICH IS A MASOR EMPLOYER IN EASTERN SOUTHLAND

AND ANY MISHAP COULD BE LETHAL

ALSO THE OLD PAPER MILL IS
SITUATED ON THE BANKS OF
A RIVER WITH A HISTORY OF
FLOODING AND I DON'T
BELIEVE FOR A INSTANT THAT
THE BUILDING CAN BE INSURED
AGAINST FLOODING

LASTLY SIR, THIS PRODUCT HAS A
CHECKERED HISTORY

J.A. Peck

6 KAWA ST

MATARA 9712

03203 8834

Attach a separate sheet if required

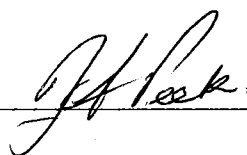
I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

THE COUNCIL TO Decline the
Consent,

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

Address for service of submitter:

1-4-15

6 KAWA ST
MATAURA,

Telephone number:

Fax number:

Email:

Contact person:
(If applicable)

09203 8834

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Or for delivery in person:
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29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

MRS KATHRYN HEARN

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

STORAGE OF OUVEA PREMIX A CLASS 6 HAZARDOUS SUBSTANCE
BY TAHA FERTILISER INDUSTRIES

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I STRONGLY OPPOSE AND DISAGREE WITH THE STORAGE OF
OUVEA PREMIX AT THE OLD CARTER HOLT PAPER MILL SITE OR
IN FACT ANYWHERE IN AN AREA WHERE HOUSING AND FOOD
PREPARATION/MANUFACTURING AND A RIVER RUN THROUGH THAT
AREA FOR THE FOLLOWING REASONS:

- ① MATAURA-GORE ARE PRONE TO FLOODING AND THE BUILDING THE
MIX IS PROPOSED TO BE USED IS ON THE EDGE OF THE MATAURA RIVER.
- ② ENVIRONMENTALLY IT WOULD BE A DISASTER AS IF FLOODING
OCCURRED EVERYTHING FROM THAT POINT DOWNSTREAM WOULD BE
ERADICATED RIGHT TO THE SEAS EDGE.
- ③ THE BUILDING ITSELF IS OLD - IF A FIRE SHOULD OCCUR
NORMAL FIRE FIGHTING - USING WATER OR ANY WET AGENT - WOULD
EXPOSE THE OUVEA TO MOISTURE CAUSING LEAKAGE & DANGEROUS
FUMES TO ALL HOUSES IN THE AREA.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I ASK THE AUTHORITY TO STRONGLY DECLINE CONSENT FOR THE STORAGE OF THIS DANGEROUS PRODUCT. I ALSO ASK THE AUTHORITY TO DIRECT TAHA TO REMOVE THE PRODUCT THEY ALREADY HAVE STORED THERE WITHOUT CONSENT!! IMMEDIATELY THAT A SET COMPLETION DATE FOR REMOVAL IS ADHERED TO OR A FINE TO BE INCURRED.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

KS Hearn

Date:

10/04/2015

Address for service of submitter:

147 MAIN STREET

MATAURA

Telephone number:

032038654

Fax number:

-

Email:

nussnkate@extra.co.nz

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
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29 Civic Avenue, Gore 9710
(03) 209-0357
info@goredc.govt.nz

(4.) THE RISK OF HEALTH PROBLEMS IS A REAL PROBLEM THE OUVEA PRODUCT GIVES OFF DANGEROUS FUMES IF WET AND THE RISK OF MOISTURE IS A REAL DANGER AS I HAVE SEEN FOR MYSELF THAT SOME BAGS ARE STORED RIGHT UP TO A DOOR WHICH HAS A GAP AND I CAN SEE THESE BAGS. WINDY/RAINY DAYS WATER MUST BE GETTING UNDER THAT GAP AND MAKING CONTACT WITH THOSE BAGS.

(5.) THERE ARE NOT ONLY HOMES AND ALLIANCE FREEZER WORKS ADJACENT TO THIS BUILDING BUT ALSO A CHILD DAYCARE CENTRE. SHOULD THESE FUMES ESCAPE THE EFFECT ON VERY YOUNG CHILDREN WOULD BE EXTREMELY DEVASTATING.

(6.) I ASK THAT THE CONSENT AUTHORITY SERIOUSLY CONSIDER THIS MATTER AND REQUEST THAT THEY DECLINE TO GIVE CONSENT.

TAAHA FERTILISER INDUSTRIES SHOULD BE STORING THIS DANGEROUS PRODUCT WELL AWAY FROM ANY COMMUNITY.

THEY SHOULD KEEP IT WHERE IT ORIGINATES FROM - STORE IT ON THE SITE OF ITS ORIGIN !!!!!

- * I WOULD ALSO ASK THE CONSENT AUTHORITY THAT SHOULD THEY DECIDE TO GIVE CONSENT THAT :
1. THEY ENSURE TAHA PUT INTO PLACE A THOROUGH RISK MANAGEMENT IE: FLOOD/FIRE/EARTHQUAKE SET PLAN. THAT THEY ARE LEGALLY BOUND TO.
 2. THAT A REGULAR SITE INSPECTION PLAN BE PUT IN PLACE & THAT A REPRESENTATIVE FROM MATAURA BE PRESENT AT THESE INSPECTIONS TO ENSURE THEY ARE CARRIED OUT CORRECTLY TO THE SPECIFIED PLAN.
 3. THAT TAHA IS TO HAVE A LARGE PUBLIC LIABILITY INSURANCE FOR WHEN THE DISASTER OCCURS WHICH IS NO DOUBT A BIG POSSIBILITY. DUE TO THE BUILDINGS LOCATION.
 4. THAT A BOND IS TO BE PUT INTO A TRUST BY TAHA FOR MATAURA AREA ONLY AND MANAGED BY A NEUTRAL BOARD SO THAT IF THEY LEAVE/BUSINESS FAILS THAT THERE IS MONEY TO REMOVE THE PRODUCT AND CLEAN UP THE SITE SO THE RESIDENTS OF MATAURA ARE NOT LEFT TO FOOT THE BILL. I WOULD ASK THE CONSENT AUTHORITY TO SUGGEST A LARGE SUM, TO COVER COMPLETE COSTS, TO BE PUT INTO THIS FUND. PROBABLY IN THE UPPER RANGE \$5 / \$10 MILLION.
 5. IF CONSENT IS GIVEN FOR STORAGE THAT THE LANDLORD / AND TAHA HAVE A DUTY TO MAKE SURE THE BUILDING IS CODED TO THE CORRECT STANDARD BY CORRECT AUTHORITIES. IT IS A VERY OLD BUILDING THAT HAS BEEN LEFT UNATTENDED AND MAINTAINED FOR A VERY LONG TIME

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Katrina Anne McRae

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Class 6 Hazardous Substance being stored at the former Carter Holt Harvey building (former Paper mill) 109-130 Kana street Matakura.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose Taha Fertiliser Industries Ltd application for these reasons

- ① The health risk to people in this town
- ② The courts have found this product is hazardous and a ecotoxin
- ③ The building they have stored this product in is inadequate (damaged windows, broken pipes)
- ④ High earthquake risk (the building)
- ⑤ Highly dangerous to our main industry (Allisn) if it get into our water ways.
- ⑥ Fire service ill equiped to handle any fire as no water can be used.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

Decline the application and intent removal
of the over mix from this site
and out of our Town

I wish / do not wish *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

K. a. t

Date:

11 April 2015

Address for service of submitter:

11 Culling Trc

metaura 9712

Telephone number:

(03) 2038049

Fax number:

Email:

Katrina.merae94@gmail.com

Contact person:

(If applicable)

Katrina m'rae

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

To: Gore District Council
P O Box 8
Gore 9740

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter: *(full name)* Kerry Anne Malahiki

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

Taha fertiliser Industries application for a Resource consent to store Ouvea premix a class 6 Hazardous substance in the Carter Holt Harvey Paper Mill building in Maitara. _____

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I oppose the above company being given consent to store a hazardous substance in the middle of our town. My concerns are outlined in the following points, because even though this building is zoned an industrial site it is within 100 metres of residential homes, childcare facility-Kia Ngawari Kohanga Reo and a large amount of passing traffic with highway 93 running between the sites buildings. Their previous business practise in the storage of this product alongside no obvious scientific documentation or evidence supplied to the community should indicate that a resource consent should not be given.

- Health and Safety Certification- what exactly are the public regulations for this type of site and how are these results published to the public. I have requested several official organisations for a summary health page including the scientific information of the product and no one was able to provide this (Environment Southland, Public Health South, Gore District Council)

- Whilst we have been assured that the product requires a high temperature to be a fire risk, we have had no scientific evidence to substantiate these claims. I will submit that without this information a consent should be refused unless appropriate evidence and fire risks have been mitigated
- The consent is a retrospective consent which means they have breached storage for a length of time already which demonstrates a lack of trust that storage conditions will be met when they have not been to this point leading to the credibility and trust our community can not invest with this company
- If the worst case scenario was to occur in regards to a high level flood who's responsibility will it be to clean up and recover the environment, the health implications short term and long term for residents. What assurances would be made that would be legally binding.
- What are the evacuation plans for the site in case of a high level emergency. If a high level flood occurred that will reach the Quvea Premix product what will occur to secure the residents, safety of the Mataura river , safety of the length of the Mataura river residents and habitat including the Fortrose Estuary and the Foveaux Straight fishing beds and Titi Hunting grounds.

I also would like to include that the storage of this product is a high risk to the customary rights of local Iwi under the Treaty of Waitangi. This area is the Mataura Te Awa Mataitai, New Zealand's first freshwater reserve, was opened in October 2006 by the then Minister of Fisheries Jim Anderton. This Mataitai is to protect and preserve with our duty to be sure we continue to hand a pristine and fabulous natural resources to our generations to come including the ability to hunt and gather healthy supplies of Kanakana, Trout, Salmon, whitebait, recreational usage etc,

Mo tatou a, mo nga uri a muri ake nei

For us and our children's children after us

Te toto o te tangata, he kai, te oranga o te tangata, he whenua

Food supplies the blood of the people, their welfare depends on the land

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish /do not wish (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Ka Matahiki

Date:

14.4.15

Address for service of submitter:

32 Bangor Street
Mataura

Telephone number:

03 203 3015

Fax number:

Email:

kerrymatahiki@yahoo.com

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

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info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Laurel Diane Turnbull

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The application from Taha Industries for a resource consent to store 10,000 tonnes of Ourea mix, a class 6 hazard, in the old Taha paper mill buildings.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I am totally opposed to this application being granted for the following reasons.

- 1 This building is not suitable as it has already been identified as an earthquake risk.
- 2 It is subject to Flooding and has been inundated on more than one occasion.
- 3 The risk of another flood as great as or larger than the 1978 one cannot be guaranteed given the extreme weather events being experienced.
- 4 It is a material that absorbs moisture from damp air and residents in the area are already experiencing health issues from the fumes.
- 5 It is too close to residential properties, a pre school, who are already experiencing health issues, and a primary meat producing plant with the risk of contamination from fumes and dust very high.
- 6 They state they don't know if they have public liability insurance or how much it is.
- 7 The bags it is stored in can easily be pierced when being moved with a forklift and the dust from this is already on neighbouring properties killing their gold fish.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I ask that this application be denied and the material be removed before winter, and the building be totally cleared of this substance. In the event of this being approved, I ask that a substantial bond (millions of dollars) be put in place in the event that Taha reneges on their responsibility to remove this product. There also needs to be a date by which this product has to be removed by.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

L.D. Turnbull

Date:

10/04/2015

Address for service of submitter:

*9 Scott St
Mataura*

Telephone number:

03-203-3417

Fax number:

Email:

b.turnbull@tra.co.nz

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

LEORA EDWARDS

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I DO NOT SUPPORT Taha FERTILISER INDUSTRIES BECAUSE OF:
EARTH quake RISK FLOODING
LEAKAGE CREATED BY RAINFALL
ASBESTOS WHO'S RESPONSIBLE
FOR RESIDUE GENERAL EMISSION
BUILDING USE BUY DATE EXPIRED.
DECLINE APPLICATION REMOVE OFFENSIVE
RESIDUE IMMEDIATELY Taha HAVE PUBLIC LIABILITY
A HIGH RISK MANAGEMENT.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / ~~do not wish~~ *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

K Edwards

Date:

14.4.2015

Address for service of submitter:

15 STUART ST
MATAURA 9712

Telephone number:

022 306 5001

Fax number:

Email:

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

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Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991



**To: Gore District Council
P O Box 8
Gore 9740**

**Submissions close
5.00pm Tuesday 14
April 2015**

Name of Submitter: *(full name)* Lisia Ann Barron _____

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

Land Use Consent: Restricted Discretionary Activity: Rule 6.9(2) storage of Class 6 and Class 9 hazardous substances above the amount permitted by Rule 6.9(1): 1000kg class 6, 5000kg class 9.

My submission is: *(include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)*

I oppose storage of the chemicals Taha Fertiliser Industries Limited has illegally deposited in the former paper mill site in Mataura: almost 10,000,000kg class 6 and 9.

My research into these chemicals has been comprehensive and is attached. They are dangerous with many safety concerns and hazards that I think have been understated or not stated at all. These safety and hazard facts are contained in the attached Material Safety Data Sheets (MSDS). The buildings cannot be properly evaluated for structural soundness or water tightness in the event of earthquake, fire, flood or vandalism when occupied by chemicals.

Inconsistencies as per attached documents call into question the accuracy and integrity of Taha Fertiliser Industries Limited. There is a major discrepancy in the composition of Ouvea Premix. Storage sites and amounts are inaccurate.

The Environment Court of New Zealand, Judge J. E. Borthwick, has ruled Ouvea Premix "dangerous to human health and an ecotoxicant."

Taha Fertiliser Industries Limited has failed to state their level and kind of liability insurance.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

The consent application for Taha Fertiliser Industries Limited should be declined and all chemicals removed immediately.

A bond should be imposed to cover all risks to people, the environment and property. _____

I wish to be heard in support of my submission.*

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*



Date:



Address for service of submitter:

20 Culling Terrace _____

Mataura 9712 _____

Telephone number:

(027)203-8087 New Zealand _____

+1(907)299-1148 USA _____

Email:

lisiabarron2@gmail.com _____

*Please Note: I will be in the US at the time submissions are heard. Please contact me. _____

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:

P O Box 8, GORE

Or for delivery in person:

29 Civic Avenue, GORE

Or for fax delivery:

(03) 209-0357

Or email:

info@goredc.govt.nz

RE: Taha Fertilizer Industries Limited Retrospective Application for Consent to Store Class 6 and Class 9 Hazardous Substances in Mataura Township

The consent application by Taha Fertilizer Industries Limited for continued storage of materials illegally deposited at the former Carter Holt paper mill in Mataura should be denied. Taha Fertilizer Industries Limited has illegally exceeded permitted chemical storage amounts and those chemicals should be removed immediately.

The composition and quantities of illegally stored Ouvea Premix as presented by Taha Fertilizer Industries Limited in Part 3 Project Description are staggering! There are almost 10,000 metric tons (10 million kilograms) of volatile, poisonous, ecotoxic, and hazardous materials filling old buildings on and near the banks of the Mataura river and Waikana stream. The buildings cannot be fully evaluated for structural soundness and water tightness while these materials occupy the floor space.

In Part 3, Project Description, Taha Fertilizer Industries Limited states "Ouvea Premix is made up of approximately 30% aluminium oxide, 30% aluminium nitride, and 30% magnesium aluminate. Other components include aluminium fines, sodium and calcium salts, and other trace minerals."

Aluminium Oxide.....3,000,000kg

Aluminium Nitride.....3,000,000kg

Magnesium Aluminate.....3,000,000kg

This does not match the Material Safety Data Sheet (MSDS) for Ouvea Premix dated 10 May 2012 (copy attached) accompanying the current consent application dated 11 March 2015. It does, however, match the MSDS dated 12 August 2013 (copy attached) submitted with the withdrawn consent application dated 17 October 2014. Who verifies which MSD Sheet is correct? In addition, Taha Fertilizer Industries Limited claims 9,951 metric tons of Ouvea Premix on premises, but only locates 2,000 metric tons at 127 Kana Street and 5,000 metric tons at 116-130 Kana Street. There is no note where 8 metric tons of Sulphate of Ammonia is located.

The amounts and composition of chemicals to be stored in Mataura are questioned. The withdrawn consent application stated the following volatile materials were also to be stored at the Mataura site: 100 metric tons of Di-ammonium Phosphate, 500 metric tons of Mono-ammonium Phosphate, and 100 liquid metric tons of Phosphoric Acid. They are not mentioned in the new consent application. Who has verified which materials are present and their amounts?

The MSD Sheets (copies attached) for the above materials, taken together, create an impressive list of hazards to human health and the aquatic environment (see extracts compiled from MSD Sheets). The lives and long term health of our fire fighters and first responders should also be taken into account. The MSD Sheets for the materials listed on site require far more stringent protection, i.e. Self Contained Breathing Apparatus (SCBA) in addition to suitable protective clothing. It is possible, given the quantities

involved, that there could be catastrophic loss of human life if the old paper mill were to catch fire and explode, almost certainly catastrophic loss of all life in the Mataura River, possibly all the way to Stewart Island and beyond were all the material to find its way into the river by a natural or man-made event. It should be readily apparent that these materials should not be stored in any town or on the banks of any river.

These substances, which have been illegally stored, are:

1. A hazard to local residents' health in the event of a disaster, manmade or natural.
2. A hazard to local firefighters and first responders in the event of
 - a) A flood
 - b) A burst water pipe
 - c) A fire
 - d) An earthquake
3. A disastrous biothreat to the Mataura River and Foveaux Strait.

In a 4 August 2014 decision by the Environment Court of New Zealand, Environmental Judge, J. E. Borthwick ruled "I am satisfied that the material (Ouvea Premix) is dangerous to human health and is an ecotoxicant." (copy attached).

Taha Fertilizer Industries, Limited has illegally exceeded permitted chemical storage amounts. They have also failed to give details of liability insurance. A bond should be immediately imposed.

The consent application by Taha Fertilizer Industries Limited should be declined and the chemicals removed.....full stop.

Respectfully submitted,


Lisia Barron

Human Health Hazards, as described in attached MSDS's

Aluminium Oxide*

Hazard statements: causes skin irritation, causes serious eye irritation.

Carcinogenic category 6.7A: known or presumed human carcinogen.

Aluminium Oxide: Aluminium compounds are active chemically and exhibit dangerous and toxic and reactive properties. Inhalation of fine aluminium oxide particles is associated with Shaver's disease, a condition characterized by cough, shortness of breath, a combined obstructive and restrictive breathing pattern, and impairment of diffusing capacity.

Aluminium Nitride*

Ammonia-like odor. Aluminium may be implicated in Alzheimer's disease. Inhalation of aluminium containing dusts may cause pulmonary disease. Aluminium compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties. The details of the toxicity of nitrides as a group are unknown. May be irritating to eyes, skin, and mucous membranes.

Magnesium*

Identified as toxic by EPA and subject to reporting requirements of SARA. Excessive exposure to dusts/fumes may cause irritation of eyes, nose and throat. Inhalation of dusts/fumes may result in metal fumes fever (metallic taste in mouth, dryness and irritation of throat, chills and fever). Prolonged inhalation of fumes or dusts may cause a variety

of adverse health effects to the respiratory system, including (but not necessarily limited to) lesions of the mucous membrane, bronchitis, pneumonia and cancers of the nasal cavity and respiratory tract.

Phosphoric Acid**

Potential Acute Health Effects: Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe overexposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening or occasionally, blistering.

Potential Chronic Health Effects: The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Acute Potential Health Effects: Skin: Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin. Eyes: Corrosive. Liquid or vapor causes severe eye irritation and can cause severe burns leading to permanent corneal damage or chemical conjunctivitis. Ingestion: May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia).

*Per conflicting formulas in consent application

** If present per original materials list provided in withdrawn consent application

Firefighting Hazards As Described In Attached MSDS's

Aluminium Oxide / 3,000 Metric Tons*

Firefighters to wear Self Contained Breathing Apparatus (SCBA) and suitable protective clothing if risk of exposure to products of decomposition. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Aluminium oxide may have an exothermic reaction, above 200 degrees C, with halocarbon vapors and may produce toxic hydrochloric acid and phosgene.

Aluminium Nitride / 3,000 Metric Tons*

Extinguishing Media: **DO NOT USE WATER**

Unusual fire and explosion hazards: Reacts with water to form ammonia, a fire and explosion hazard.

Di-Ammonium Phosphate **/100 Metric tons

Mono-Ammonium Phosphate**/500 Metric Tons

Firefighters should wear SCBA and Protective Clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Prevent material from entering public sewer system or any waterways.

Hazardous Decomposition Materials (Under Fire Conditions) ammonia, oxides of nitrogen, oxides of phosphorus.

Sulfate of Ammonia/8 Metric Tons

Will form flammable and toxic gases at elevated temperatures (greater than 280 degrees C) by thermal decomposition, yielding ammonia, sulfur oxides and nitrogen oxides.

Phosphoric Acid** 100 Liquid Metric Tons

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans and sulfides. **(NEVER ADD WATER TO THIS PRODUCT)**

*Per formula provided from both current and original consent applications

**if present per original materials list in withdrawn consent application

ECOTOXIC HAZARDS, per the attached MSDS's

Ouvea Premix/ Aluminium Oxide/9,951 Metric Tons

Subclass 9.1 Category C – Substances that are harmful in the aquatic environment.

“Harmful to aquatic life with long lasting effects.”

See attached Environmental Court of New Zealand Decision, Southland Regional Council vs Taha Asia Pacific Limited.

In a 4 August 2014 decision, Environmental Judge J. E. Borthwick states:

“I am satisfied that the material (Ouvea Premix) deposited on the site is a contaminant and that it is or is likely to be noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment”.

“I am also satisfied that the material is dangerous to human life and is an aquatic ecotoxificant.”



Environment Court of New Zealand

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Southland Regional Council v Taha Asia Pacific Limited [2014] NZEnvC 169 (4 August 2014)

Last Updated: 26 August 2014

BEFORE THE ENVIRONMENT COURT

Decision No. [\[2014\] NZEnvC 169](#)

IN THE MATTER of the Resource Management Act 1991 and of an application for interim enforcement orders under s 320 of the Act

BETWEEN SOUTHLAND REGIONAL COUNCIL

(ENV-2014-CHC-037)

Applicant

AND TAHA ASIA PACIFIC LIMITED, TAHA FERTILIZER INDUSTRIES LIMITED AND
CRAWFORD ENTERPRISES LIMITED

Respondents

Hearing: In Chambers at Christchurch

Sitting alone pursuant to section 309 of the Act Court: Environment Judge J E Borthwick

Date of Decision: 4 August 2014

Date of Issue: 4 August 2014

DECISION OF THE ENVIRONMENT COURT ON APPLICATION FOR INTERIM ENFORCEMENT ORDERS

(EX PARTE)

A: Subject to directions, the interim enforcement orders are made *ex parte*.

A: Costs are reserved.

REASONS

from one of the piles.

[6] Ms Grant spoke to Mr Bruce Spencer, the site manager, concerning the complaint. He confirmed that the piles comprised aluminium dross that had been brought by "Taha" onto the site and that it was to be used for roading material. He explained that the dross was inert as it had been mixed with gravel. Taha representatives had been coming daily to the site to test the material and had stated that the material was safe to work with.

[6] Mr Spencer advised that an occupant of a neighbouring property had complained about being sick since the dross had been on the site, but that Crawford Enterprises Ltd employees had been working with the material and had shown no symptoms. As a precaution he had ceased work around the pile and asked Worksafe [I interpolate Worksafe New Zealand], to assess the area.

[6] Annexed to Ms Grant's affidavit is a letter dated 18 July 2014 from Crawford Enterprises Ltd's lawyers, Mactodd, to Taha Fertilizer Industries Ltd.⁵ Through their lawyers, Crawford Enterprises Ltd has confirmed that it has taken a considerable tonnage of the material from "Taha". The material was taken with the intention of blending it with gravel aggregate to form a base for the access road to the gravel pit. Crawford Enterprises Ltd took the material on the basis of Taha's assurance that it was



completely harmless and safe. Contrary to the assurance given to Crawford Enterprises Ltd, the material gave off an unpleasant odour and caused irritation to skin eyes and throat. Further, a neighbouring contractor reported two of its employees having to receive hospital treatment for sore eyes and throats. Finally, Crawford Enterprises Ltd had formed the view that the material is not harmless and had requested Taha immediately remove the material from its land.

The respondents

[10] There are three respondents. The first of these is Crawford Enterprises Ltd, the owner of the site.

[11] Taha Asia Pacific Limited and Taha Fertilizer Industries Ltd are related companies. Both companies have the same directors and their registered offices are a firm of accountants in Invercargill. Taha Asia Pacific Limited has industrial premises at Tiwai Peninsula, Bluff, where it processes aluminium dross sourced from Tiwai Aluminium Smelter. Taha Fertilizer Industries Ltd has industrial premises in Invercargill where it manufactures a form of mineral fertiliser using the aluminium dross that has been processed by Taha Asia Pacific Ltd. The fertiliser has the trade name  **Ouvea**  Premix. The applicant has been unable to discover whether the material deposited on the site was from Taha Asia Pacific Limited or Taha Fertilizer Industries Ltd and so orders are sought against both companies.

The law

[12] Section 320(2) of the Act provides that:

- (b) I consider it likely that members of the public have been, and remain exposed to, a dangerous material. Persons who have been exposed to the material report suffering deleterious health effects;
- (b) it is likely there will be an adverse effect on the environment if contaminants emanating from the material are to enter groundwater or surface water;
- (a) the deposition of a contaminant is not permitted under a Regional Plan and the applicant advises that the respondents do not hold resource consent authorising this activity;
- (d) the containment and management of the disposal of this material is a matter that is to be addressed with some considerable care and under urgency; and
- (a) finally, the respondents may apply under s 320(5) of the Act to change or cancel the order. After hearing from the respondent, the applicant and any other person the Judge thinks fit, the interim enforcement order may be confirmed, changed or cancelled. The court will endeavour to expedite any application that is made.

[20] The above matters form part of the court's consideration under s 320(3) and I have also taken into account the fact that the applicant has given an appropriate undertaking as to damages. The Regional Council, through its Chief Executive Mr R A Phillips, has provided an undertaking as to damages stating that it will comply with any

order for the payment of damages to compensate the other parties for damage sustained through any of the interim enforcement orders.⁶

[21] Crawford Enterprises Limited has requested that Taha immediately remove the material from its land. However, the Regional Council, quite rightly, does not want the material to be removed until tests are carried out to assess the degree of hazard and the best method to neutralise it. The Regional Council also notes that the danger of removing the material without assessing it first could mean that the problem is transferred to another area which is even less suitable for its storage. On that basis, I think I must act now rather than wait to hear further from the parties.

[21] While the application for waiver is not strictly necessary — as this forms part of the court's considerations under s 320(2) — the application has been made so I will grant it.

Outcome

[21] Accordingly, I intend to make the interim enforcement orders sought, with some minor amendments.

[21] Pursuant to s 281, the application for waiver of service of the notice of application for interim enforcement orders is granted.

[21] The applicant is to note that I directed it serve the respondents with a copy of the interim enforcement order. I have further directed the applicant report to the court on compliance with the interim enforcement orders.

[21] Finally, I record that the interim enforcement orders are to stay in force until an application for an enforcement order under s 316 is determined, or until cancelled by an Environment Judge or a District Court Judge under subsection 320(5), or cancelled by the Environment Court under s 321.

(b) pursuant to s 314(1)(c) of the Resource Management Act 1991 the named respondents are required to deliver a written report of the assessment made pursuant to order B(i) to the compliance manager of the Southland Regional Council within 7 days of its completion.

C: Pursuant to ss 279(1)(a), 319 and 320 of the Resource Management Act 1991 the Environment Court makes the following order ex parte against the respondents Taha Asia Pacific Limited and Taha Fertilizer Industries Limited (**the named respondents**):

(a) pursuant to s 314(1)(c) of the Resource Management Act 1991 the named respondents are required within 21 days of the service of this order to deliver to the compliance manager of the Southland Regional Council a written list of sites within the Southland Region where the material has been discharged or is stored. The list is to contain accurate GPS coordinates for each site.

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URL: <http://www.nzlii.org/nz/cases/NZEnvC/2014/169.html>

3. Project Description

The following section outlines the project description, and should be read in conjunction with the site layout plan provided in Appendix B of this report.

3.1 Activity description

Taha has developed an aluminium recovery and recycling process on the property of the existing NZAS Smelter. One of the outputs of the process is Ouvea Premix, which has multiple industrial uses including fertiliser, refractory, cement additive, asphalt additive, paint additive and others. Ouvea Premix is made up of approximately 30% aluminium oxide, 30% aluminium nitride and 30% magnesium aluminate. Other components include aluminium fines, sodium and calcium salts, and other trace metals.

Taha currently stores the Ouvea Premix in a number of sites in Invercargill and at the Maitara site. Taha is in the process of identifying a production site where the Ouvea Premix can be converted into a compound fertiliser through a granulation process. Taha proposes to continue to store the Ouvea Premix and other materials at the various storage sites until a suitable site is secured. Taha expects all material to be removed from the site for processing within 2 years.

Taha staff will not be permanently located at the site while it is used for storage. Rather, staff from Invercargill will undertake regular storage checks. While material is being removed from the site, Taha staff will be present provide truck access and load material.

3.2 Storage of hazardous substances

Ouvea Premix, which is a class 6 and 9 hazardous substance, is currently stored at the Maitara site in the buildings marked A, B, C and D in the site layout plan in Appendix B. Table 2 provides a description of the hazardous substances and quantities stored on site.

Table 3 : Hazardous substances stored onsite

Product name	Description	Max volume	Storage type	Spill prevention	HSNO class
Ouvea Premix	Granular/ powder	9,951 T	1-tonne double layer heavy duty bags with mesh-woven outside layer and plastic lining.	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.3A; 6.4A; 9.1C
Sulphate of Ammonia	Granular/ Powder	8 T	1-tonne double layer heavy duty bags with mesh-woven outside layer and plastic lining.	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.1D, 9.1D, 9.3C
Diesel	Liquid	100 litres	20 litre diesel drums	Stored indoors, temperature will be controlled and is not to exceed 50°C.	3.1D, 6.1E, 6.3B, 6.7B, 9.1B.
Citric Acid	Powdered Crystals	350 kg	25kg woven mesh bags	Stored in closed container indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.1E, 6.3B, 8.3A.
Silica Sand	Fine powder	150 T	1-tonne forklift bags	Not hazardous, shovel and wheelbarrow. Return to stock pile if uncontaminated.	Not hazardous

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 10 May 2012

from revised consent application of 11 March 2015

PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Ouvea Premix

DESCRIPTION: Solid grey powder

PRODUCT USE: Ingredient in the preparation of mineral fertiliser

SUPPLIER: Taha Fertilizer Industries Limited

CONTACT INFORMATION: Telephone: 03 218 1002; Address: 162b Bond Row, Invercargill, New Zealand

EMERGENCY PHONE:

HAZARD IDENTIFICATION

DANGEROUS GOODS Not applicable

HSNO CLASSIFICATION 6.3A Skin irritant.
6.4A Eye irritant.
9.1C Aquatic ecotoxicant

SIGNAL WORDS: WARNING

HAZARD STATEMENT: H315 Causes skin irritation.
H320 Causes eye irritation.
H412 Harmful to aquatic life with long lasting effects.

PREVENTION STATEMENTS: P264 Wash hands and eyes thoroughly after handling.
P280 Wear protective gloves.
P273 Avoid release to the environment.

RESPONSE STATEMENTS: P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment: use of specific cleansing agent not required.
P332 + P313 If skin irritation occurs: get medical advice/attention.
P362 Take off contaminated clothing and wash before re-use.
P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes.
P338 Remove contact lenses, if present and easy to do so. Continue rinsing.
P337 + P313 If eye irritation persists; get medical advice/attention.

COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No.	Concentration (%)
Aluminium oxide	1344-28-1	75-95
Metal fluoride salts	Not available	0-15
Copper	7440-50-8	<0.1
Metal nitrides	Not available	<3
Magnesium	7439-95-4	<1
Silicon	7440-21-3	<1
Manganese	7439-89-6	<1
Iron	7439-89-6	<1.5
Nickel	7440-02-0	<0.1
Beryllium	7440-41-7	<0.02

Does not match Ouvea Premix components as stated in Part 3 project description.

FIRST AID MEASURES

SKIN CONTACT: Quickly remove contaminated clothing and wash before re-use. Wash skin with plenty of soap and water. Seek medical attention if irritation persists.

EYE CONTACT: Remove contact lenses if present. Cautiously rinse eye with gently running water for 15 minutes. Do not rub the eye. Seek medical attention if eye irritation persists.

INHALATION: If inhaled, remove to fresh air.

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 10 May 2012

INGESTION: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

FIRE FIGHTING MEASURES

HAZARDS: Non-flammable.
EXTINGUISHING MEDIA: Water fog, foam, Carbon dioxide or dry chemical.
PROTECTIVE CLOTHING: Wear protective gloves.
OTHER INFORMATION: Do not allow washings to reach aquatic environment.

ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHOD: Contain and recover. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid contamination of waterways. If material does enter waterways contact the local authority.
PROTECTIVE CLOTHING: Wear protective gloves.

HANDLING AND STORAGE

HANDLING: Wear gloves. Avoid contact with the skin and eyes
Ecotoxic in the environment, avoid loss into waterways.
STORAGE: Keep containers tightly closed.

EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle in well ventilated area
PERSONAL PROTECTION: Wear gloves.
EXPOSURE LIMITS: No exposure limits have been specifically assigned to this product and there are no Short Term Exposure Limits (STELs).
TWA – Aluminium oxide 10 mg/m³
TWA – Copper (dust) 1 mg/m³
TWA – Silicon 10 mg/m³
TWA – Manganese (dust) 1 mg/m³
TWA – Beryllium 0.002 mg/m³

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid (grey powder)
pH: Not applicable
SOLUBILITY: Negligible
BOILING POINT: 2980°C
MELTING POINT: 2072°C

STABILITY AND REACTIVITY

STABILITY: Stable, will not polymerise
REACTIVITY: Reactive with acids

TOXICOLOGICAL INFORMATION

SKIN CONTACT: May cause skin irritation
EYE CONTACT: May cause eye irritation

ECOLOGICAL INFORMATION

Ecotoxic in the environment. Avoid loss into waterways.

DISPOSAL CONSIDERATIONS

CONTAINER DISPOSAL: Dispose of empty containers safely. Avoid contamination of any water supply with product or empty container.
PRODUCT DISPOSAL: Dispose of product safely. Avoid contamination of any water supply with product or empty container.

TRANSPORT INFORMATION

UN NUMBER: Not applicable
PROPER SHIPPING NAME: Not applicable
DANGEROUS GOODS: Not applicable

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 10 May 2012

CLASS

PACKING GROUP: Not applicable

NZ REGULATORY INFORMATION

HSNO APPROVAL NUMBER: HSR002503

GROUP STANDARD: Additives, Process Chemicals and Raw Materials (Subsidiary hazard)

HSNO CLASSIFICATIONS: 6.3A Skin irritant

6.4A Eye irritant

9.1C Aquatic ecotoxicant

HSNO CONTROLS: Approved handler requirements: Not applicable

OTHER INFORMATION

ISSUE DATE: 22 March 2012

DEFINITIONS: TWA – Time Weighted Average (The 8 hour time-weighted average exposure standard designed to protect the worker from the effects of long term exposure)

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 12 August 2013

from withdrawn consent application dated 17 October 2014

PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Ouvea Premix

DESCRIPTION: Solid grey powder

PRODUCT USE: Ingredient in the preparation of mineral fertiliser

SUPPLIER: Taha Asia Pacific Limited

CONTACT INFORMATION: Telephone: 027 508 9708; Physical Address: NZAS Tiwai Point, Bluff, New Zealand
Mailing Address: PO Box 1784, Invercargill 9840, New Zealand.

EMERGENCY PHONE: 0800 764 766 (National Poison Centre) 24 hour emergency telephone.
044734265 or 0274135699 Nic Conland SKM Senior Environmental Consultant

HAZARD IDENTIFICATION

DANGEROUS GOODS Not applicable

HSNO 6.3A Skin irritant.

CLASSIFICATION 6.4A Eye irritant.
9.1C Aquatic ecotoxicant

SIGNAL WORDS: WARNING

HAZARD STATEMENT: H315 Causes skin irritation.
H320 Causes eye irritation.
H412 Harmful to aquatic life with long lasting effects.

PREVENTION STATEMENTS: P264 Wash hands and eyes thoroughly after handling.
P280 Wear protective gloves.
P273 Avoid release to the environment.

RESPONSE STATEMENTS: P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment: use of specific cleansing agent not required.
P332 + P313 If skin irritation occurs: get medical advice/attention.
P362 Take off contaminated clothing and wash before re-use.
P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes.
P338 Remove contact lenses, if present and easy to do so. Continue rinsing.
P337 + P313 If eye irritation persists; get medical advice/attention.

COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No.	Concentration (%)
Aluminium oxide (Al ₂ O ₃)	1344-28-1	25-50
Aluminium nitride (AlN)	24304-00-5	25-40
Magnesium Aluminate (MgAl ₂ O ₄)	12068-51-8	5-30
Cryolite (Na ₃ AlF ₆)	7429-90-5	2-4
Aluminium (Al)	7429-90-5	2-4
Sodium aluminate (NaAl ₁₁ O ₁₇)	1302-42-7	2-5
Potassium Fluoride (KF)	7789-23-3	<1
Potassium Chloride (KCl)	7447-40-7	<1
Fluorite (CaF ₂)	7789-75-5	<1
Quartz (SiO ₂)	14808-60-7	<1

*Matches Ouvea components
as stated in Part 3
project description
for both consent
applications.*

FIRST AID MEASURES

SKIN CONTACT: Quickly remove contaminated clothing and wash before re-use. Wash skin with plenty of soap and water. Seek medical attention if irritation persists.

EYE CONTACT: Remove contact lenses if present. Cautiously rinse eye with gently running water for 15 minutes. Do not rub the eye. Seek medical attention if eye irritation persists.

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 12 August 2013

INHALATION: If inhaled, remove to fresh air.
INGESTION: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

FIRE FIGHTING MEASURES

HAZARDS: Non-flammable.
EXTINGUISHING MEDIA: Water fog, foam, Carbon dioxide or dry chemical.
PROTECTIVE CLOTHING: Wear protective gloves.
OTHER INFORMATION: Do not allow washings to reach aquatic environment.

ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHOD: Contain and recover. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid contamination of waterways. If material does enter waterways contact the local authority.
PROTECTIVE CLOTHING: Wear protective gloves.

HANDLING AND STORAGE

HANDLING: Wear gloves. Avoid contact with the skin and eyes
Ecotoxic in the environment, avoid loss into waterways.
STORAGE: Keep containers tightly closed.

EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle in well ventilated area
PERSONAL PROTECTION: Wear gloves.
EXPOSURE LIMITS: No exposure limits have been specifically assigned to this product. Exposure limits for individual constituents are provided below:
TWA – Aluminium oxide 10 mg/m³
TWA – Aluminium nitride 2 mg/m³ (as Al)
TWA – Cryolite 2.5 mg/m³ (as F)
TWA – Aluminium 5 mg/m³ (resp)
STEL – Sodium aluminate 2 mg/m³
TWA – Potassium Chloride 3 mg/m³
TWA – Potassium Fluoride 2.5 mg/m³ (as F)
TWA – Fluorite 2.5 mg/m³ (as F)
TWA – Quartz 10 mg/m³

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid (grey powder)
pH: Not applicable
SOLUBILITY: Negligible
BOILING POINT: 2980°C
MELTING POINT: 2072°C

STABILITY AND REACTIVITY

STABILITY: Stable, will not polymerise
REACTIVITY: Reactive with acids

TOXICOLOGICAL INFORMATION

SKIN CONTACT: May cause skin irritation
EYE CONTACT: May cause eye irritation

ECOLOGICAL INFORMATION

Ecotoxic in the environment. Avoid loss into waterways.

DISPOSAL CONSIDERATIONS

CONTAINER DISPOSAL: Dispose of empty containers safely. Avoid contamination of any water supply with product or empty container.

MATERIAL SAFETY DATA SHEET

Ouvea Premix

Date: 12 August 2013

PRODUCT DISPOSAL: Dispose of product safely. Avoid contamination of any water supply with product or empty container.

TRANSPORT INFORMATION

UN NUMBER: Not applicable
PROPER SHIPPING NAME: Not applicable
DANGEROUS GOODS CLASS: Not applicable
PACKING GROUP: Not applicable

NZ REGULATORY INFORMATION

HSNO APPROVAL NUMBER: HSR002503
GROUP STANDARD: Additives, Process Chemicals and Raw Materials (Subsidiary hazard)
HSNO CLASSIFICATIONS: 6.3A Skin irritant
6.4A Eye irritant
9.1C Aquatic ecotoxicant
HSNO CONTROLS: Approved handler requirements: Not applicable

OTHER INFORMATION

ISSUE DATE: 12 August 2013
DEFINITIONS: TWA – Time Weighted Average (The 8 hour time-weighted average exposure standard designed to protect the worker from the effects of long term exposure)
STEL – Short Term Exposure Limit (The acceptable average exposure over a short period of time, usually 15 minutes)

3,000 to 9,400 metric tons per conflicting
formulas in consent application



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Aluminum Oxide



MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Manufacturer/Supplier:

ESPI Metals

1050 Benson Way, Ashland, OR 97520

Toll Free (800) 638-2581 * Fax (541) 488-8313

E-Mail: sales@espimetals.com**Product Name:** Aluminum Oxide**Formula:** Al_2O_3 **CAS Number:** 1344-28-1

II. HAZARDOUS INGREDIENTS

Hazardous Component: Aluminum Oxide**Percent (%):** 0-100**OSHA/PEL:** 5 mg/m³**ACGIH/TLV:** 10 mg/m³**HMIS Ratings:****Health:** 1**Flammability:** 0**Reactivity:** 0



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Aluminum Oxide

Need Help?

Available Mon-Fri 8am to 5pm
Pacific Time

OFFLINE

MATERIAL SAFETY DATA SHEET

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Hazardous Component: Aluminum Oxide

Percent (%): 0-100

OSHA/PEL: 5 mg/m³ACGIH/TLV: 10 mg/m³

HMIS Ratings:

Health: 1

Flammability: 0

Reactivity: 0

III. PHYSICAL DATA

Boiling Point: 2977 °C

Melting Point: 2050 °C

Specific Gravity: 3.965 g/cc @ 25 °C

Vapor Pressure: 1mm @ 2158 °C

Solubility in H₂O: Insoluble

Appearance and Odor: White solid or powder, no odor

IV. FIRE AND EXPLOSION HAZARDS DATA

Flash Point: N/A

Autoignition Temperature: N/A

Explosive Limits: Upper: N/A Lower: N/A

What's New?

Check out our new Rare Earth
Overview Video

Contact

ESPI Metals

1050 Benson Way
Ashland, Oregon 97520541.488.8311 telephone
800.638.2581 toll-free541.488.8313 fax
800.488.0060 toll-free faxsales@espimetals.com

Precious Metal Prices

Jan 21, 2015 at 02:40 New York				
	Price	Change	High	
Gold	1299.80	+5.60	1304.70	
Silver	18.23	+0.20	18.42	
Platinum	1279.00	+2.00	1284.00	
Palladium	779.00	+5.00	786.00	

Conversion Tool

Extinguishing Media: Use suitable extinguishing media for surrounding materials and type of fire.

Special Firefighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire & Explosion Hazards: Aluminum oxide may have an exothermic reaction, above 200 °C, with halocarbon vapors and may produce toxic hydrochloric acid and phosgene.

Try our **conversion tools** by clicking [here](#).

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Since 1950*



V. HEALTH HAZARD INFORMATION

Effects of Exposure:

To the best of our knowledge the chemical, physical and toxicological properties of aluminum oxide have not been thoroughly investigated and recorded.

Aluminum compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties. Inhalation of fine aluminum oxide particles is associated with Shaver's disease, a condition characterized by cough, shortness of breath, a combined obstructive and restrictive breathing pattern, and impairment of diffusing capacity. (Sax, Dangerous Properties of Industrial Materials)

Acute Effects:

Inhalation: Inhalation of finely divided dust may cause coughing, mucous production and shortness of breath.

Ingestion: None recorded.

Skin: May cause irritation.

Eye: Dust may cause eye irritation.

Chronic Effects:

Inhalation: Inhalation of finely divided dust may cause lung damage affecting breathing capacity.

Ingestion: None recorded.

Skin: None recorded.

Eye: None recorded.

Target Organs: May affect the lungs

Medical Conditions Generally Aggravated by Overexposure: Pre-existing respiratory disorders.

Carcinogenicity: NTP: No IARC: No OSHA: No

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.

INGESTION: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

SKIN: Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention.

EYES: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention.

VI. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None

Incompatibility (Material to Avoid): Acids, bases, oxidizing agents, interhalogens, halocarbons.

Hazardous Decomposition Products: Metal oxide fume.

Hazardous Polymerization: Will not occur

VII. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal Waste Disposal Regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved respirator

Ventilation: Use local exhaust to maintain concentration at or below the PEL. General exhaust is not recommended.

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses

Other Protective Clothing or Equipment: Normal lab wear.

IX. SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storing: Store in tightly sealed containers. Store in a cool, dry area. Wash thoroughly after handling.

Work Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. Maintain eyewash capable of sustained flushing, safety drench shower and facilities for washing.

TSCA Listed: Yes

DOT Regulations:

Hazard Class: None

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product.

Issued by: S. Dierks

Revised/Verified: September 2011

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MTI Corporation
2700 Rydin Road, Unit D
Richmond, CA 94804
USA

Telephone: (510) 525-3070
Fax: (510) 525-4705
www.mtixtl.com

I. PRODUCT IDENTIFICATION

Product Name: Aluminum Nitride

Formula: AlN

CAS Number: 24304-00-5

II. HAZARDOUS INGREDIENTS

Hazardous Component: Aluminum Nitride

Percent (%): 0-100

OSHA/PEL: N/E

ACGIH/TLV: N/E

III. PHYSICAL DATA

Melting Point: approx 2200 °C

Boiling Point: 2517 °C

Specific Gravity: 3.26 g/cc

Solubility in H₂O: Decomposes

Appearance and Odor (for powder): White to grey powder, ammonia-like odor; white solid for thin film

IV. FIRE AND EXPLOSION HAZARDS DATA**Flash Point:** N/A**Autoignition Temperature:** No Data**Flammable Limits:** Upper: No Data Lower: No Data**Extinguishing Media:** DO NOT USE WATER. Use carbon dioxide, dry powder extinguishing agents, dry sand, or dry ground dolomite.**Special Fire Fighting Procedures:** No special firefighting procedures needed, use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing, hats boots and gloves. If without risk remove material from fire area.**Unusual Fire and Explosion Hazards:** Reacts with water to form ammonia, a fire and explosion hazard.**V. HEALTH HAZARD INFORMATION****Effects of Exposure:**

To the best of our knowledge the chemical, physical and toxicological properties of aluminum nitride have not been thoroughly investigated and reported.

Aluminum may be implicated in Alzheimer's disease. Inhalation of aluminum containing dusts may cause pulmonary disease. Aluminum compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties.

The details of the toxicity of nitrides as a group are unknown. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Acute and Chronic Effects: May be irritating to eyes, skin, and mucous membranes.**EMERGENCY AND FIRST AID PROCEDURES:****INHALATION:** Remove to fresh air, keep warm and quiet; give oxygen if breathing is difficult and seek immediate medical attention.**INGESTION:** Remove from exposure. Seek prompt, competent medical attention.**SKIN:** Remove any contaminated clothing. Flood skin with large volumes of water for 15 minutes. Seek medical advice.**EYES:** Flush with copious amounts of water for at least 15 minutes. Then consult a doctor.

VI. REACTIVITY DATA

Stability: Stable

Conditions to avoid: Moisture

Incompatibility (Materials to Avoid): Water/moisture, air, acids, oxidizing agents

Hazardous Decomposition Products: Contact with water releases flammable gases; ammonia, nitrogen oxides.

Hazardous Polymerization: Will not occur.

VII. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wearing full protective clothing and respiratory protection, eliminate all sources of ignition. Cover spill with dry sand or dry vermiculite, mix well and carefully transfer to a well-marked container. Close container tightly. Submit or retain for disposal.

Waste Disposal Method: Consult state, Local, and federal regulations for proper disposal of aluminum nitride.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH/MSHA approved dust mask for ordinary use, self-contained breathing apparatus for emergency use.

Ventilation: Glove box or bag under dry inert atmosphere.

Eye Protection: OSHA approved safety goggles

Protective Gloves: Rubber

Other Protective Equipment: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

IX. SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Wash thoroughly after handling. Handle in glove box or bag under dry inert atmosphere. Keep container tightly closed. Store in cool, dry, well-ventilated area

Precautionary Labeling: Warning, moisture sensitive, irritates skin, eyes, lungs.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product. Issued by: T. Yang; Revised/Verified: June 2009



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia

8 METRIC TONS



Section 1 – Identification of the Material and Supplier

Product Name

Sulfate of Ammonia

Other names

Sulphate of ammonia, ammonium sulphate, amsul, CSBP Product Code: 621

Recommended use

Fertiliser, Industrial Applications

Company name

CSBP Limited

Address

Kwinana Beach Road, KWINANA

State

Western Australia

Postcode

6167

Telephone number

(08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas)

Emergency telephone number

1800 093 333 (Australia), +61 8 9411 8444

Section 2 – Hazard Identification

Hazard Classification, including a statement of overall hazardous nature

HAZARDOUS SUBSTANCE.

Sulfate of Ammonia is not classified as hazardous according to Safe Work Australia criteria.

DANGEROUS GOODS.

Sulfate of Ammonia is not classified as a dangerous good according to the ADG Code.

Section 3 – Composition/Information on Ingredients

Chemical identity of ingredients

Ammonium sulfate

Non hazardous Impurities

Proportion of ingredients

99%

Remainder

CAS Number for ingredients

7783-20-2

Section 4 – First Aid Measures

First Aid Facilities

Whenever fertilisers are in regular use ensure drinking water and eyewash facilities are available.

FIRST AID PROCEDURES FOR DEALING WITH THIS PRODUCT AND EXPOSURE TO IT

1. Swallowed

If person is conscious, rinse mouth thoroughly with water immediately, and give water or milk to drink. DO NOT induce vomiting. Seek medical attention, if more than a small quantity has been swallowed, or there is pain or difficulty with swallowing.

2. Eyes

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. Seek medical attention if irritation develops.

3. Skin

Gently flush affected areas with water. Seek medical attention if irritation develops. Remove all contaminated clothing and launder before re-use.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia

SAFE 
PERSON • PROCESS • PLACE

Continuation of Section 4 – First Aid Measures

4. Inhalation

If over exposure occurs remove affected person to a well ventilated area. Keep warm and at rest. In emergency situations, if breathing is difficult give oxygen. If the affected person suffers cardiac arrest commence cardio-pulmonary resuscitation immediately. Seek urgent medical attention.

ADVICE TO DOCTOR.

Treat symptomatically.

Section 5 – Fire Fighting Measures

Product flammability

Non flammable and does not support combustion.

Suitable extinguishing media

Non flammable and does not support combustion.

Hazard from combustion products

- Will form flammable and toxic gases at elevated temperatures ($> 280^{\circ}\text{C}$) by thermal decomposition, yielding ammonia, sulfur oxides and nitrogen oxides.

Hazchem Code

None allocated.

Section 6 – Accidental Release Measures

Methods and Materials for containment and clean up

Any spillage should be cleaned up promptly and swept up. Prevent run-off into drains and waterways.

Section 7 – Handling and Storage

Precautions for safe handling

Keep away from alkalis and hypochlorites when transporting.

Conditions for safe storage, including any incompatibilities

Store in a cool, clean, dry and well ventilated area. Avoid contact with moisture, as it will cause product handling problems.

Store away from oxidizing agents, alkalis and chlorinating agents, such as swimming pool chlorine.

Section 8 – Exposure Controls/Personal Protection

National exposure standards

No specific official limit. ACGIH recommended value for inhalable particulates is 10 mg/m^3 (TLV/TWA).

Engineering controls

Use in well ventilated areas. Avoid high dust concentration

Personal protective equipment

Wear rubber or PVC gloves to prevent skin contact. Where dust is a problem use a P2 type canister Respirator. Wear long sleeves and long trousers to prevent contact. Wear chemical safety glasses to prevent eye contact.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Section 9 – Physical and Chemical Properties

Appearance (colour, physical form, shape)

White or slightly pink crystals.

Odour

Not available.

pH of 10% solution

4 – 6.

Vapour pressure

Does not exert significant vapour pressure.

Vapour density

Not available.

Boiling point/range

Not available.

Freezing/melting point

235-280°C with decomposition.

Evaporation rate

Not available.

Solubility

Soluble in water (76g / 100mL at 20°C), not soluble in alcohol or acetone.

Specific Gravity

1.769.

% Volatiles

Not available.

Flammability

Not Flammable.

Flash point and method of detecting flash point

Not relevant.

Upper and lower flammable (explosive) limits in air

Not relevant.

Ignition temperature

Not available.

Section 10 – Stability and Reactivity

Reactivity

Slightly reactive with oxidizing agents. Sulfate of ammonia is a sensitiser, increasing explosion hazard of ammonium nitrate, potassium nitrate and potassium chlorate, when mixed together. If mixed with pool chlorine, i.e., calcium hypochlorite, or sodium hypochlorite, it can form a spontaneously explosive nitrogen trichloride

Highly corrosive to aluminum, zinc, copper and brass. Slightly corrosive to mild steel and 304 stainless steel. Non-corrosive to 316 steel.

Decomposition products

Contact with alkalis will release ammonia gas.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Section 11 – Toxicological Information

HEALTH EFFECTS

Low toxicity. Use safe work practices to avoid eye or skin contact and dust inhalation.

There is no known effect from chronic exposure to Sulfate of Ammonia.

Inhalation:

High dust concentration of air-borne material may cause irritation to the nose and upper respiratory tract; symptoms may include coughing and sore throat.

Skin:

Prolonged contact may cause some irritation, including redness and itching. No harmful effects from skin absorption have been recorded.

Eye:

May cause irritation, redness and pain following contact.

Swallowed:

Presents little toxicity, unless large amounts are ingested. Large amounts give rise to gastro-intestinal irritation, with symptoms such as nausea, vomiting and diarrhea.

TOXICITY DATA

Ammonium sulfate (7783-20-2)

LD50 (Intraperitoneal): 610 mg/kg (mouse)

TDLo (Ingestion): 1500 mg/kg (man - gastrointestinal effects)

LD50 (Ingestion): 640 mg/kg (mouse)

LDLo (Ingestion): 3500 mg/kg (domestic animal)

Section 12 – Ecological Information

Environment

It is not anticipated to cause any adverse effects to plants or animals.

Section 13 – Disposal Considerations

Disposal methods and containers

Dispose of on a farm, or authorised waste facility in accordance with statutory requirements.

Clean up personnel should vacuum or wet sweep to avoid dust dispersal.

Contact the manufacturer if additional information is required.

Legislation

Dispose of in accordance with relevant local legislation.

Section 14 – Transport Information

UN Number

None allocated.

UN Proper shipping name

None allocated.

Class and subsidiary risk

None allocated.

Packing group

None allocated.

EPG

None allocated.

Hazchem code

None allocated.

Material Name: **Magnesium**

ID:

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Name: **Magnesium**

Product Use:

Manufacturer Information:

OMNISOURCE CORPORATION
1610 North Calhoun Street
Fort Wayne, Indiana 46808

Telephone: (260)422-5541 Safety Department
Emergency #: 800-666-4789

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percent
7439-95-4	Magnesium (Mg)	95-97
7429-90-5	**Aluminum (Al)	0-9
7439-96-5	**Manganese (Mn)	.02-.1
7440-66-6	**Zinc (Zn)	0-1

Note: Those elements identified by an * and those elements capable of generating highly toxic fumes or dusts (identified by a **) are classified as toxic by EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III Section 313 and 40 CFR 372.

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Magnesium alloys in their solid state present no inhalation, ingestion or contact health hazard. However, inhaling dusts, fumes or mists which may be generated during certain manufacturing procedures (burning, melting, welding, sawing, brazing, grinding, and machining) may be hazardous to your health. Dusts may also be irritating to the unprotected skin or eyes.

ACUTE EFFECTS: Excessive exposure to dusts/fumes may cause irritation of eyes, nose and throat, Inhalation of dusts/fumes may result in metal fumes fever (metallic taste in mouth, dryness and irritation of throat, chills and fever).

CHRONIC EFFECTS: Prolonged inhalation of fumes or dusts may caused a variety of adverse health effects to the respiratory system, including (but not necessarily limited to) lesions of the mucous membrane, bronchitis, pneumonia and cancers of the nasal cavity and respiratory tract.

POTENTIAL HEALTH EFFECTS/MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any preexisting chronic respiratory condition (asthma, chronic bronchitis, emphysema).

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

ROUTES OF ENTRY: Inhalation (dust/fumes/mists), contact with skin and eyes (dust/mist), ingestion (dusts).

SECTION 4 - FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If condition persists, consult physician.

EYE CONTACT: Immediately flush with running water to remove particulates, consult physician.

SKIN CONTACT: If irritation develops, remove clothing and wash with soap and water. If condition persists, consult physician.

INGESTION: Consult physician.

NOTE TO PHYSICIAN: None.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT: Nonflammable.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear positive pressure self-contained breathing apparatus.

AUTOIGNITION TEMPERATURE: NA

FLAMABLE LIMITS: Nonflammable

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen gas.

EXTINGUISHING MEDIA: Smother burning magnesium by covering with an extinguishing powder approved for use on magnesium fires such as G1, MET-L-X, etc. Consult national fire protection association standards for other extinguishing media which may be applicable to certain operations such as foundries or heat-treat furnaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated in air to a temperature near its melting point. Magnesium alloys ignite and burn with a white flame. Use of water on burning magnesium will produce hydrogen gas and may cause an explosion.

30% of 10,000 T

= 3,000 Tonnes

MgAl₂O₄

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: No special procedures needed.

SPECIALIZED EQUIPMENT: None.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Minimize activities which may generate dusts, mists or fumes. Keep areas well ventilated. Use suitable equipment to move materials.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store products in a dry location. See National Fire Protection Association bulletins – NFPA 480, "Storage, Handling and Processing of Magnesium."

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: In dusty atmosphere use an approved dust respirator..

EYE/FACE PROTECTION: Face shields (welding or burning), safety glasses (cutting or grinding).

OTHER PROTECTIVE EQUIPMENT: Use appropriate protective clothing for the process being performed.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Metal

ODOR: Odorless

PHYSICAL STATE: Solid

VAPOR PRESSURE: NA

BOILING POINT (C): NA

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY(H₂O=1) 1.77

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None.

HAZARDOUS DECOMPOSITION PRODUCTS (when heated): Hydrogen gas.

MATERIALS TO AVOID: Acid, water. Reacts with acid to form Hydrogen gas. In a finely divided form, will react with water or acids to release Hydrogen.

SECTION 11 - TOXICOLOGY INFORMATION

LETHAL CONCENTRATION (LC50): None established.

REPRODUCTIVE EFFECTS: NA

LETHAL DOSE (LD50): NA

MUTAGENICITY: NA

TERATOGENICITY: NA

CARCINOGENIC BY NTP, IARC OR OSHA: No. (Note: fumes/dusts/mists from this material may be carcinogenic if inhaled over long periods of time).

SECTION 12 - ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

SECTION 13- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Recycle scrap materials through scrap dealers and brokers. Dispose of used non-cyclable materials in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

No special DOT regulations pertaining to this material

SECTION 15 - REGULATORY INFORMATION

SARA: Some components of this product are classified as toxic by the EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III § 313 and CFR 372.45.



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Health	3
Fire	0
Reactivity	0
Personal Protection	

Material Safety Data Sheet

Phosphoric acid, 85% MSDS

Section 1: Chemical Product and Company Identification

Product Name: Phosphoric acid, 85%

Catalog Codes: SLP5569, SLP4555, SLP1732

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Phosphoric Acid; Water

CI#: Not available.

Synonym: Phosphoric Acid 85%; Phosphoric Acid;
Orthophosphoric acid

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Phosphoric Acid	7664-38-2	85-88
Water	7732-18-5	12-15

Toxicological Data on Ingredients: Phosphoric Acid: ORAL (LD50): Acute: 1530 mg/kg [Rat]. DERMAL (LD50): Acute: 2740 mg/kg [Rabbit]. DUST (LC50): Acute: >850 mg/m 1 hours [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated

or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: of metals

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans, and sulfides.

Special Remarks on Explosion Hazards: Mixtures with nitromethane are explosive. (Phosphoric Acid)

Section 6: Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe gas/fumes/ vapor/spray. **Never add water to this product.** In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, combustible materials, metals, alkalis. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Phosphoric Acid TWA: 1 STEL: 3 (mg/m³) from ACGIH (TLV) [United States] TWA: 1 STEL: 3 (mg/m³) from OSHA (PEL) [United States] TWA: 1 STEL: 3 (mg/m³) from NIOSH TWA: 1 STEL: 3 (mg/m³) [Mexico] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Syrupy liquid Viscous liquid.)

Odor: Odorless.

Taste: Acid.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Acidic.

Boiling Point: 158°C (316.4°F)

Melting Point: 21°C (69.8°F)

Critical Temperature: Not available.

Specific Gravity: 1.685 @ 25 C (Water = 1)

Vapor Pressure: 0.3 kPa (@ 20°C)

Vapor Density: 3.4 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Easily soluble in hot water. Soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, combustible materials, metals, alkalis.

Corrosivity:

Extremely corrosive in presence of copper, of stainless steel(304), of stainless steel(316). Highly corrosive in presence of aluminum. Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Reacts with metals to liberate flammable hydrogen gas. Incompatible with sodium tetrahydroborate producing a violent exothermic reaction. Heat generated with: alcohols, glycols, aldehydes, amides, amines, azo-compounds, carbamates, caustics, esters, ketones, phenols and cresols, organophosphates, epoxides, combustible materials, unsaturated halides, organic peroxides. Formation of flammable gases, with aldehydes, cyanides, mercaptins, and sulfides. Formation of toxic fumes with cyanides, fluorides, halogenated organics, sulfides, and organic peroxides. Do not mix with solutions containing bleach or ammonia. Incompatible with nitromethane, chlorides + stainless steel. (Phosphoric Acid)

Special Remarks on Corrosivity:

Minor corrosive effect on bronze. Severe corrosive effect on brass. Corrosive to ferrous metals and alloys.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 1530 mg/kg [Rat]. Acute dermal toxicity (LD50): 2740 mg/kg [Rabbit].

Chronic Effects on Humans: May cause damage to the following organs: blood, liver, skin, eyes, bone marrow.

Other Toxic Effects on Humans:

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin. Eyes: Corrosive. Liquid or vapor causes severe eye irritation and can cause severe eye burns leading to permanent corneal damage or chemical conjunctivitis. Ingestion: May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia). May also

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Phosphoric acid (Phosphoric Acid) UNNA: 1805 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

Connecticut hazardous material survey.: Phosphoric Acid Illinois toxic substances disclosure to employee act: Phosphoric acid Illinois chemical safety act: Phosphoric acid New York release reporting list: Phosphoric acid Rhode Island RTK hazardous substances: Phosphoric acid Pennsylvania RTK: Phosphoric acid Minnesota: Phosphoric acid Massachusetts RTK: Phosphoric acid Massachusetts spill list: Phosphoric acid New Jersey: Phosphoric acid New Jersey spill list: Phosphoric acid Louisiana spill reporting: Phosphoric acid California Director's list of hazardous substances: Phosphoric acid TSCA 8(b) inventory: Phosphoric Acid; Water SARA 313 toxic chemical notification and release reporting: Phosphoric acid CERCLA: Hazardous substances.: Phosphoric acid: 5000 lbs. (2268 kg)

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS E: Corrosive liquid.

DSCL (EEC):

R34- Causes burns. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 3



Material Safety Data Sheet

DIAMMONIUM PHOSPHATE

Date Prepared: 11/01/07

Supersedes Date: 8/13/04

1. PRODUCT AND COMPANY DESCRIPTION

Innophos
PO Box 8000
259 Prospect Plains Road
Cranbury NJ 08512-8000

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) or INNOPHOS ECT (Emergency Communication Team) at 615-386-7816.

For Product Information:

(609) 495-2495

Chemical Name or Synonym:

AMMONIUM PHOSPHATE, SECONDARY; DAP; AMMONIUM PHOSPHATE, DIBASIC

Molecular Formula:

$(\text{NH}_4)_2\text{HPO}_4$

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
DIAMMONIUM PHOSPHATE	7783-28-0	Y	100

3. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:

white powder solid, ammonia-like odor.

Warning Statements:

CAUTION! MAY CAUSE SKIN AND EYE IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:

May cause irritation.

Acute Skin:

Skin absorption not likely. May cause irritation.

Acute Inhalation:

May cause upper respiratory tract irritation.

Acute Ingestion:

Ingestion of large quantities may cause nausea, vomiting, diarrhea, abdominal cramps.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:**Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation:

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion:

Do not induce vomiting, unless directed to do so by a physician. If victim is conscious and alert, give 2-3 glasses of water to drink. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. Also see Note To Physician.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule. The following treatments should be considered for the specific group(s) of phosphate salts found in this product:

--All phosphate salts, except calcium salts, have a hypothetical risk of hypocalcemia, so calcium levels should be

monitored.

--Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored.

--Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia.

--Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Not combustible.

Hazardous Decomposition Materials (Under Fire Conditions):

ammonia
oxides of nitrogen
oxides of phosphorus

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Sweep or vacuum up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent.

Environmental and Regulatory Reporting:

Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling:

Keep containers closed when not being used. Avoid breathing dusts or vapors. Avoid direct or prolonged contact with skin and eyes.

Storage:

Store in an area that is cool, dry, well-ventilated. Store in closed containers. This product is hygroscopic and tends to cake on storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

	Notes	TWA	STEL
OSHA		5 mg/cu m	

PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

	Notes	TWA	STEL
OSHA		15 mg/cu m	

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): dust/mist filtering respirator.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

white powder solid.

Odor:

ammonia-like odor.

pH:

8 at 1 wt/wt%.

Specific Gravity:

Not Available

Water Solubility:

soluble 41 wt/wt% at 20 C (68 F).

Melting Point Range:

Not Available

Boiling Point Range:

Not Available

Vapor Pressure:

Not Available

Vapor Density:

Not Available

Molecular Weight:

132.06

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

dusting conditions
extreme heat
extreme humidity

Materials/Chemicals To Be Avoided:

strong bases
sodium hypochlorite

Decomposition Temperature Range:

155 C (311 F)

The Following Hazardous Decomposition Products Might Be Expected:**Decomposition Type: thermal**

ammonia
phosphoric acid
oxides of nitrogen
oxides of phosphorus

Hazardous Polymerization Will Not Occur.**Avoid The Following To Inhibit Hazardous Polymerization:**

not applicable

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

No test data found for product.

Acute Skin Irritation:**Toxicological Information and Interpretation:**

skin - skin irritation, rabbit. Mildly irritating.

Acute Dermal Toxicity:

No test data found for product.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, > 1000 mg/kg, rat.

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:**Ecotoxicological Information and Interpretation:**

LC50 - lethal concentration 50% of test species, 155 mg/l/96 hr, fish: *Pimephales promelas*.

Chemical Fate Information:

No data found for product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste - NO

14. TRANSPORTATION INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation

Shipping Name:

NOT REGULATED

15. REGULATORY INFORMATION

Inventory Status

Inventory	Status
UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS/ELINCS)	Y

AUSTRALIA (AICS)	Y
JAPAN (MITI)	Y
SOUTH KOREA (KECL)	Y

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS

Inventory Issues:

All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

OTHER FEDERAL REGULATIONS:

FDA Status:

This product meets the compositional requirements of:
21 CFR 184.1141B AMMONIUM PHOSPHATE, DIBASIC

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

1	Health Hazard Rating--Slight
0	Flammability Rating--Minimal
0	Instability Rating--Minimal

National Paint & Coating Hazardous Materials Identification System--HMIS(R):

1	Health Hazard Rating--Slight
0	Flammability Rating--Minimal
0	Reactivity Rating--Minimal

Reason for Revisions:

Change and/or addition made to Section 4, Section 12.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer
ND - Not determined
RPI - INNOPHOS Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

**** End of MSDS Document ****

up to 5000 Metric Tons were to be on site per first materials list
if withdrawn consent application.



Material Safety Data Sheet

MONOAMMONIUM PHOSPHATE

Date Prepared: 9/22/06

Supersedes Date: 8/13/04

1. PRODUCT AND COMPANY DESCRIPTION

Innophos
PO Box 8000
259 Prospect Plains Road
Cranbury NJ 08512-8000

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC
(800-424-9300 within the United States or 703-527-3887 for international collect calls) or INNOPHOS ECT
(Emergency Communication Team) at 615-386-7816.

For Product Information:

(609) 495-2495

Chemical Name or Synonym:

AMMONIUM PHOSPHATE, PRIMARY; AMMONIUM PHOSPHATE, MONOBASIC

Molecular Formula:

$\text{NH}_4\text{H}_2\text{PO}_4$

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
MONOAMMONIUM PHOSPHATE	7722-76-1	Y	100

3. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:
white powder solid, odorless.

Warning Statements:

CAUTION! MAY CAUSE SKIN, EYE AND RESPIRATORY TRACT IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

--Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored.

--Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia.

--Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Hazardous Decomposition Materials (Under Fire Conditions): oxides of nitrogen oxides of phosphorus

Hazardous Decomposition Materials (Under Fire Conditions):

oxides of nitrogen

oxides of phosphorus

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Sweep or vacuum up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent.

Environmental and Regulatory Reporting:

Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name) Lorraine Elizabeth Webster

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries because of earthquake risk, flooding, leakage created by rainfall, asbestos, who's responsibility for residue, general emission, building use by date expired.
Decline application, remove offensive residue immediately. Taha have public liability, high risk management.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

L E Webster

Date:

14.4.2015

Address for service of submitter:

198 Kama Street

Mataura

Telephone number:

032033528

Fax number:

Email:

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Lynette June Sharp

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

1. Danger to the river
2. Possible deterioration of production.
3. Cleanup.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

1. If the old papermill storage building caught fire, the premix would not burn. However, the premix is stored in plastic bags. Plastic melts. Water flow from hose or sprinkler would sweep loose premix into the river with dire consequences!
I oppose the current storage location for that reason and also for the ammonia fumes which escape the building from time to time.

2. Our fertile pastures and clean green image will be irreversibly damaged if the premix is sold as fertiliser. The aluminium level in the fertiliser will be 2 to 3%. Aluminium binds with and ties up important minerals, and in dry conditions it shrivels roots causing plant die-off.
Attached notes detail testing done in Australia.

3. If Taha Fertiliser folds and leaves, the council will be left with a real mess to clean up.

*To sum up, here we have a poison giving off ammonia fumes next to an export meat processing plant and family residences. It is stored in an unstable building vulnerable to flooding of a top class fishing river.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

Get rid of the premix - Taha Fertilisers to remove it before
the end of the month (May).

I ~~wish~~ / do not ~~wish~~ *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

L. / Sharp

Date:

7/4/15

Address for service of submitter:

75 Norton Street
Gore 9710

Telephone number:

03 2085799

Fax number:

03 2084561

Email:

lens@maxnet.co.nz

Contact person:

(If applicable)

Lyn.

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

Or for delivery in person:

Or for fax delivery:

Or email:

P O Box 8, GORE

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Aluminium is present in soils in a variety of forms and bound to the soil constituents, particularly onto clay particles and organic matter. When soil becomes more soluble and the amount of aluminium in the soil solution increases. As a rule of thumb, soil aluminium concentration between 2 and 5 ppm is toxic to the roots of sensitive plant species, and above 5 ppm is toxic to tolerant species.

Soil acidity and aluminium toxicity**Aluminium toxicity**

Aluminium is present in soils in a variety of forms and bound to the soil constituents, particularly clay particles and organic matter. When soil pH drops, aluminium becomes soluble and the amount of aluminium in the soil solution increases. As a rule of thumb, soil aluminium concentration between 2 and 5 ppm (mg/kg) is toxic to the roots of sensitive plant species, and above 5 ppm is toxic to tolerant species.

In most Wheatbelt soils, aluminium will reach toxic levels when subsurface pH falls below 4.8. Generally, there is sufficient organic matter in topsoil so that aluminium can remain bound and does not become toxic to plant roots even though it is extractable in laboratory analysis.

Toxic levels of aluminium in the soil solution affect root cell division and the ability of the root to elongate. The root tips become deformed and brittle. Root growth and branching is reduced. Poor crop and pasture growth, yield reduction and smaller grain size occur as a result of inadequate water and nutrition. The effects of aluminium toxicity are most noticeable in seasons with a dry finish. Roots are unable to effectively grow through acidic subsurface soil which forms a barrier and restricts access to stored subsoil water for grain filling.

Liming soil to increase the soil pH is effective in reducing the availability of aluminium to nontoxic levels.

Measurement of soil aluminium

The measurement of aluminium in the soil solution is complicated and is affected by many factors. Depending on the methods used it is not always possible to distinguish between toxic and non-toxic forms of aluminium. A rough guide to the levels of aluminium can be achieved by measuring aluminium concentration in a 0.01 M CaCl₂ solution used to measure the soil pH. The measurement of aluminium in topsoil is further complicated by the presence of organic matter because aluminium can be bound to the organic matter (and therefore in a non-toxic form) but is released when extracted with the 0.01 M CaCl₂ solution. In most cases, the subsurface soil pH will be a good indicator of toxic aluminium levels.

See also:

[Soil acidity science](#)
[Soil acidity — diagnosing the problem](#)

Other links

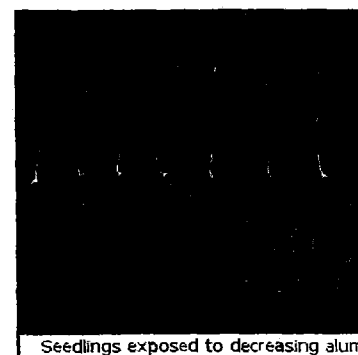
[Soil acidity: a guide for WA farmers and consultants](#)

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Phone: 08 9690 2104

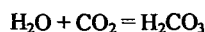
Average:

Seedlings exposed to decreasing aluminium toxicity

Soil Acidity and Aluminium

1. INTRODUCTION

Simple acidification of the soil occurs as a result of rainfall. The basic principle is that rain is acid due to the presence of dissolved carbon dioxide. This, plus water, gives carbonic acid (H_2CO_3):

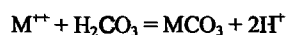


The carbonic acid reacts with / dissolves metals found within the soil along the lines of:

$\text{M}^+ + \text{H}_2\text{CO}_3 = \text{MHCO}_3 + \text{H}_2\text{O}$ - where M^+ is a Monovalent metal (cation) such as sodium (Na^+) or potassium (K^+) - and in an acid system this undergoes further transformation or hydrolysis:



Of course one can have divalent and trivalent metals such as calcium (Ca^{2+}), magnesium (Mg^{2+}) and aluminium (Al^{3+}). The reaction would be, in the case of a divalent cation;



Note that in both cases you have a surplus of hydrogen ions (H^+).

Soil pH expresses the effective concentration of H^+ (Hydrogen) ions in the soil solution. Soil reaction or acidity level, measured by pH, is of considerable importance in all soils, and is one of the routine laboratory determinations done during a soil survey.

2. SOURCES OF METAL CATIONS

The source of the metal cations is either the existing exchange complex and / or the weathering of soil minerals. As leaching with 'acid' rainfall continues the exchange complex will release metal cations to buffer the hydrogen ions produced during the reactions above. That gives you an increasingly acid exchange complex and as the basic cations (Ca, Mg and K) become used up you get a hydrogen (H^+) enriched soil and pH falls

In the soil, the various anions and cations are held on the exchange complex, charged sites within the mineral fraction of the soil. The various anions and cations then pass to and fro between the exchange complex and the soil solution – water being the solvent for the soil solution.

The concentration of the soil solution is a function of the kinds and proportions of the exchangeable ions in the soil. The exchangeable ions found in the soil solution, where water is the solvent and the cations and anions the solute, normally comprise:

Table 2.1 Cations and Anions found in soil

Cations (Positively charged)	Calcium Ca^{2+}	Magnesium Mg^{2+}	Potassium K^+	Sodium Na^+	Hydrogen H^+	Ammonium NH_4^+	Aluminium Al^{3+}
Anions (Negatively charged)	Carbonate CO_3^{2-}	Oxygen O^{2-}	Bicarbonate HCO_3^-	Sulphate SO_4^{2-}	Chloride Cl^-	Hydroxyl OH^-	

The various cations and anions are normally combined to form such compounds as:

Water	Calcium Carbonate	Sodium Chloride	Magnesium Chloride	Calcium Oxide
H_2O	CaCO_3	NaCl	MgCl_2	CaO

3. SOIL ACIDITY and ALUMINIUM

Through natural selective uptake by plants, and solution and removal by the leaching action of rainfall, the more important, and more soluble and basic, cations are gradually removed from the exchange complex of the soil – notably the removal of calcium.

Aluminium is a component of many rocks and hence occurs naturally in most soils. Aluminium comes into the picture through mineral weathering and attack of the mineral surfaces of the aluminosilicates. Aluminosilicates cover clay minerals, feldspars, ferromagnesian minerals and, in particular, the micas. Hydrolysis of the mineral surface goes through several stages:

The mineral surface act as an alkali against acid and gives rise to species such as: $[\text{Al}(\text{H}_2\text{O})_3(\text{OH})_2]$

Increased leaching gives further hydrolysis, and the aluminium species behave as anions (negatively charged), and you get this: $[\text{Al}(\text{H}_2\text{O})_2\text{OH}_3]^-$

This continues through a sequence of ionic forms of Al as the pH gradually decreases as explained above in Section 1. Finally you get things like: $\text{Al}(\text{H}_2\text{O})_n^{y+}$, where n can be 6 and y can be 3.

Note that these ions are positively charged because the pH is now acid.

These complex Al ions can form part of the exchange complex so you can have an acid, Al soil, and some of the Al will remain in solution, which is why you get toxicity to plants. The precise pH at which these changes occur depends a bit on the system, but some release of Al begins at around pH5.5, is quite noticeable around pH5, and becomes a distinct problem from about pH4.5 downwards.

However, these reactions do not normally occur unless the soil is already acidic with a pH of 5.5 or less. The natural acidification through rainfall, removal of calcium and its replacement by hydrogen in the exchange complex can reduce pH values to this level of 5.5.

4. Soil Acidity Classes and Relationships with Aluminium

Table 4.1 Soil Acidity / Reaction Classes

Acidity / Reaction pH (water)	>7.6	7.5 - 6.6	6.5 - 5.6	5.5 - 4.6	< 4.5
Soil Reaction Class	alkaline	neutral	slightly acid	very acid	extremely acid

A recent literature search indicates that in upland or dryland soils in the Aceh provinces there is a soil acidity problem and aluminium is involved. Further, experience in other areas have shown that the aluminium saturation percent (ASP = Exchangeable aluminium/ Cation Exchange capacity x 100) increases quite dramatically once soil pH reaches a level of 6.0 and less – and in future all samples with pH (water) of 6.0 or less should have exchangeable aluminium measured. This is to ensure that, if there are erroneous pH values being quoted by the laboratory, soils that might be more acid than it appears are checked for aluminium.

This increase in ASP with falling pH is illustrated for topsoil data in Figure 1 below and for subsoil data in Figure 2. Note that there are relatively few data included in these figures but the pattern is extremely clear and that these data are NOT from Aceh but elsewhere but are used for illustrative purposes.

Figure 4.1 Aluminium Saturation Percent Against pH Water for Topsoils

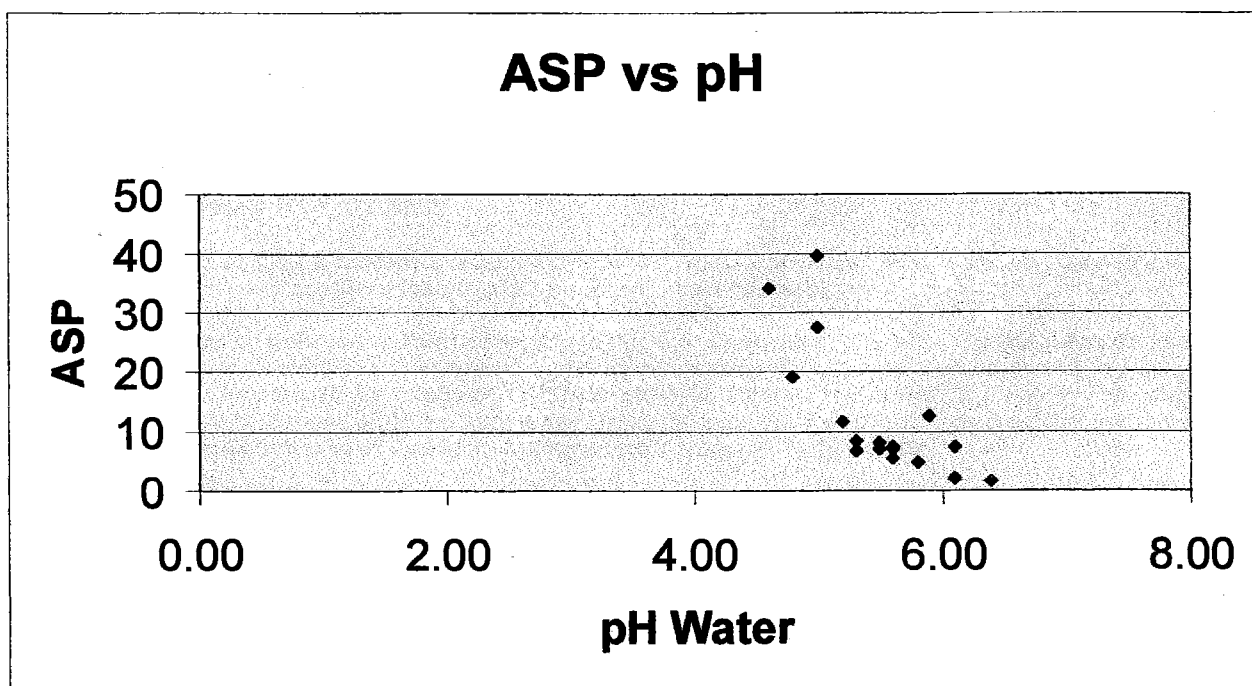


Table 5.2 Formula for Lime Requirement Based on ASP

$$\text{Lime Requirement} \\ \text{Tonnes / Hectare CaCO}_3 \text{ equivalent} = 1.8 \times \{ \text{Al} - \text{RAS} \times (\text{Al} + \text{Ca} + \text{Mg}) / 100 \}$$

Where:

RAS	Required Aluminium Percentage (ASP)	Refer to crop tolerances to ASP
ASP	Aluminium Saturation Percentage	Exchangeable Al / Cation Exchange Capacity X 100
Al	Exchangeable Al as me / 100g	From laboratory data
Ca	Exchangeable Ca as me / 100g	From laboratory data
Mg	Exchangeable Mg as me / 100g	From laboratory data

A worked example of the above formula is given below.

Table 5.3 Data for Lime Requirement Calculation

Site	Depth	PH Water	Ca	Mg	Al	CEC	ASP
PH076	0 – 10cm	5.0	4.40	0.60	3.80	9.60	40

Aim: To reduce the ASP from 40% to 20%, a level which would be tolerated by field beans or soybean.

A worked example of using the formula in Table 5.2 is given below.

As with the rates suggested in the “Generalised Calculation” presented previously the amounts of liming material are quite considerable at something over 3 tonnes per hectare. The advantage of the Cochrane formula is that it is based on known data, but field trials would have to be conducted to verify the effectiveness of such an application of liming material.

Table 5.4 Worked Example of Lime Requirement Based on ASP

$$\begin{aligned} \text{Lime Requirement} \\ \text{Tonnes / Hectare CaCO}_3 \text{ equivalent} &= 1.8 \times \{ 3.80 - 20(3.80 + 4.40 + 0.60) / 100 \} \\ &= 1.8 \times \{ 3.80 - 1.76 \} \\ &= 1.8 \times 2.04 \\ &= 3.67 \text{ tonnes / ha} \end{aligned}$$

6. ALTERNATIVE AMELIORATION

On a practical side, the scattered distribution of farms and the cost plus difficulty of transport to anywhere more than 0.5km from a roadside means that it is totally impracticable to recommend lime applications running into tonnes / hectare.

The standard procedure of application of farmyard manure (FYM) may already be helping ameliorate the aluminium problem. Organic matter does have the ability to form complexes with aluminium and basically take it out of play in the soil. Application of large amounts of FYM have recently been shown to significantly effect the properties of soils used for strawberry cultivation - by increasing the electrical conductivity of the soil and altering nutrient balances. Hence, there is every possibility that significant applications of FYM could have a desired (ameliorative) effect on acidic arable soils in that it might:

Increase the basic nutrients – NPK;
Improve soil structure, and
Form complexes with aluminium and help reduce possible aluminium toxicity and acidity.

Some studies investigating the interactions between pH, aluminium and organic matter could well be beneficial to arable agriculture in Aceh.

7. ALUMINIUM TOLERANCES

There is not a great deal of data published on the tolerance of various crops to aluminium. The following are what data have been located:

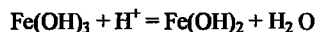
Table 7.1 Aluminium Tolerances

Source	Publication	ASP Range %	Tolerant Crops (Suitable Varieties)
Sanchez P.A. 1976	Properties and Management of Soils in the Tropics, Wiley and Sons	10 – 20 20 – 40 40 – 60 60 – 80	Alfalfa, Sorghum Soybean, field beans Maize, cowpea Upland rice, pigeon pea, coffee, mango, cashew, citrus, pineapple
Source	Publication	Exch-Al Me / 100g	Statement
FAO, 1979	Soils Bulletin No 42, FAO, Rome	>2.00	If all other factors are favourable for plant growth then this level of Al in the exchange complex considered toxic for plant growth.

8. WETLAND SOILS

When acidic soils are flooded or puddled, such as for wetland rice cultivation, the pH will rise, in time, to near neutral – around 6.5. The reactions are very complicated but, in general, there are reactions in flooded soils which consume protons (hydrogen ions - H^+) and so the pH rises.

The most common chemical reaction is reduction and the most normally quoted reaction is the one involving the reduction of ferric iron to ferrous forms:



Hence, in this case, some of the hydrogen ions, or protons, H^+ are used up and the soil pH rises. In addition, with increasing hydrolysis the aluminium hydroxy compounds formed are not exchangeable and hence the aluminium falls out of play as far as acidity is concerned

However, as soon as wetland soils start to dry out, such as when left un-irrigated for fallow, they rapidly re-acidify. Sulphur is also very involved in the acidification process of wetland soils when they dry out but, to date, the presence of sulphurous compounds in soils in Aceh is known and this could be an additional problem that may need to be addressed.

The pH of sawah top-soils can be influenced by the quality of the irrigation water applied. Most data seen on water quality suggest that there is unlikely to be a problem from this source in Aceh.

9. CONCLUSIONS and RECOMMENDATIONS

- There is a soil acidity problem in parts of Aceh and this is associated with exchangeable aluminium.
- Some soils may be acidifying further due to the addition of sulphur compounds deposited by the tsunami.
- Before any new developments or expansion of existing dryland agriculture is implemented there should be a rapid assessment of the acidity of the soils to be used.
- During all future surveys and soil sampling exercises careful attention will be paid to soil acidity and possible aluminium effects.
- Field trials to test any calculated liming rates must be designed and installed in susceptible areas to establish accurate rates of liming.
- Field trials should be established to investigate the links and relationships between soil pH, aluminium and organic matter (FYM).
- Tolerances of local crop varieties to aluminium should be established.

ABBREVIATIONS and GLOSSARY

(Simple metric units and chemical element symbols not included)

AmOAc	Ammonium acetate (extractant for exchangeable cations and for measuring CEC)
asl	Above sea level
ASP	Aluminium Saturation Percentage
AvP, AP	Available Phosphate
AWC / AWHC	Available water capacity (amount of water held in soil at suctions low enough for root uptake, = MC% FC – MC% WP)
BS%	Base saturation percentage
C	Clay (finest mineral particles in soils, < 2µm in diameter, important store for some nutrients and water, make soils sticky & heavy to work)
ca	Approximately
CEC	Cation exchange capacity
CL	Clay loam
cm	Centimetre
EBS%	Effective base saturation (= TEB/ECEC)
EC	Electrical conductivity
ECEC	Effective cation exchange capacity (=TEB + Extr Al + Extr H)
ET	Evapotranspiration
Evapotranspiration	Sum of evaporation from soil and other surfaces, and transpiration from leaves
Exch	Exchangeable (for cations)
Extr	Extractable (for soil nutrients)
FAO	Food & Agriculture Organisation, Framework for Land Evaluation
FC	Field capacity (MC% at suction of 0.1 atmospheres)
FeMn	Ferri-manganiferous, dark red - reddish brown - black stains and soft concretions with high contents of ferric iron and manganese in horizons with seasonally impeded drainage
Freely drained	Soils in which most large pores drain their water soon after rain or irrigation at all times of the year. Identified by moist or dry feel, and warm brown, reddish or yellowish colours and absence or grey, rust or orange mottles
FYM	Farmyard manure
GIS	Geographical information system
GPS	Global positioning system
ha	Hectare
HCl	Hydrochloric acid
Horizon	Soil layer
ID	Imperfectly drained (soil)
Imperfectly drained	Soils in which most large pores drain their water soon after rain or irrigation for much of the year, but remain filled for long spells in summer. Identified by moist or wet feel, and grey or brown colours and many grey, rust or orange mottles.
<i>In situ</i>	In original position or place (Latin)
L	Loam (Mixed soil with substantial quantities of all three particle size classes, i.e. clay, silt and sand)
LS	Land Suitability
MD / MWD	Moderately well drained (soil)
Munsell	System of standard soil colour notation, operated by matching soil against standard charts. Colour described by 'hue' (Spectral composition, red, yellow, blue, green); 'value' (dilution with white), & 'chroma' (darkness)
NA	Not applicable / Not applied
ND	No data / Not Determined

NS	Not sampled (in soil profile descriptions)
OC	Organic carbon
OM	Organic matter
P	Phosphate
PD	Poorly drained (soil)
PM	(Soil) Parent Material
Pptn	Precipitation, rainfall
pH	Measure of acidity - alkalinity
Si	Silt (intermediate sized mineral particles in soils, 2 - 50 um in diameter, important store for plant available water, make soils slippery & vulnerable to surface erosion and capping, aka Z, Zi)
SMR	Soil Moisture Regime, defined in Soil Taxonomy
SMU	Soil mapping unit
ST	Soil Taxonomy (USDA system of soil classification)
STR	Soil temperature regime, defined in Soil Taxonomy
Surface wash	Movement of individual surface soil particles by running surface water.
SWXD / SXD	Somewhat excessively well drained (soil)
Tr	Trace
TEB	Total exchangeable bases (= exchangeable Ca + Mg + Na + K)
Tot-N	Total nitrogen
USDA	United States Department of Agriculture
VPD	Very poorly drained (soil)
WD	Well drained (soil)
WT	Water table
XD / XWD	Excessively well drained (soil)
Z, Zi	Silt (intermediate sized mineral particles in soils, 2 - 50 um in diameter, important store for plant available water, make soils feel slippery & vulnerable to surface erosion and capping, aka Si)

1/

15/04/2015

To: Gore District Council

PO Box 8

Gore 9740

Submitter Maitara Landcare Group 5/04/2015

Submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of Class 6 Hazardous Substances for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

Our submission is to oppose Taha Fertilizer's application for consent, and will enclose our reason for our views to specific parts, requirements or amendments to application in our view. We believe declining application is in the best interests for our meat exports and Maitara Community. Our exports are fragile and it's common sense for stockpile to be in more appropriate location.

Thankyou for giving us the pleasure to give feedback in this consultation, public notification is a concern currently and from actions of the past. Storing of 10,000 tonnes of Ouvea Premix and eight tonnes of ammonia sulphate mentioned.

The application has errors and feel it's prepared by a junior level with Jacobs in our opinion also the pages aren't numbered to simplify replies to specific areas to comment. Spelling errors are throughout especially for such a professional party and poor detail.

Firstly this product originates from Tiwai Smelter NZ this toxic by-product should stay close to the production site rather than be trucked to numerous destinations and transported often putting people and eco-systems at risk. Fertiliser plant that is supposedly to be built in our opinion, is a hoax and therefore should be exported to a Country that is able to use this toxic substance for industry.

1. Flood Zone – Inundation – Climate disruption

Firstly the area is in flood zone and in the recently classed inundation policy by Gore District Council proving that it is a HIGH RISK area for flood. With Climate disruption even in the last several year's more culverts have been replaced due to the quantity of precipitation that's falling in a short period where we've viewed residential township dwellings are unable to manage the flow off roofs. Mitigating factors aren't sufficient for the quantity stockpiled and risk due to flooding which is on the increase. Floods don't come with a plan and we are due for a flood sooner than later and quakes are understood to be more often GNS said on TV recently and a significant quake is expected within the next 50 year's.

2. Taonga – Water Conservation Order – Maori Perspective

Maitara River is culturally respected and the eco-systems have already been threatened like the Kana Kana (eel). The river is an economic benefit for fishing which numerous overseas travellers buying houses in districts from Clinton south from destinations commonly from Australia and America.

In the likeliness of damage the impact would be long term and devastating to surrounding districts and rural city living Gore. Accumulation impact on the water way is too risky. Will Taha provide for the damage to Kai or provide bond for those whom naturally benefit of the eco-system if they were too loose their Kai, animals and people have the right to safe water. The risk is too great for those whom all benefit from Mataura River and its lower tributaries south of the toxic stockpile in a built up area.

Quite insulting the Business title and Taha meaning has had little reflection on the relationship and respect. **Taha Māori** is a New Zealand phrase, used in both Māori and New Zealand English. It means "the Māori side (of a question)" or "the Māori perspective" as opposed to the Pākehā or European side or perspective. The Taha Māori refers not to their ancestry so much as to the customs of their Māori ancestors and appropriateness of both acknowledging and following these customs. However since about the 1980s the place of Māori custom in New Zealand society has been increasingly recognized, albeit reluctantly, by many sections of the populace. A person who accepts their Taha Māori will often try to live according to Tikanga Māori. Mistakes from the Companies past show little respect for hazardous substance and people. How many individuals pay the price for lack of safety measures, very strict conditions and monitoring may not be enough as you are playing with probability and that seems likely in this location.

3. Consultation - Only at the request by GDC and media have we been highlighted the risk acknowledgement of toxic storage in built up area next to State Highway really.

Company has shown a very limited credibility and as Nigel Latta says too often, look at the past behaviour for determining the future behaviour (risk). Respect has been lacking from the start, due to media highlighting and core group's working behind this to get consultation and at the last hurdle congratulated by paid consultant for communicating with residents.

Gore Council maybe requiring more training or peer consultation with Councils like sister cities to get more education on similar companies acknowledgements as historically Company promises or word's we've done this or that need's absolute proof. So an absolute full documentation to verify everything, no hearsay as in Goodwin Road Solid Energy battle with locals for example and SOE briquette plant.

4. Building Act Earthquake Strengthening - Must comply with new Act. Substantial reinforcing would imagine due to Hazardous Goods Class 6 & 9 also due to emergency response evacuation of toxic stock pile. The risk is great so to evacuate 10,000 tonnes of ammonia sulphate etc requires a very calculated strengthening and evacuation plan needs to be carried out, this is a new consent and change of business operation n so the building MUST fully comply with rules or be demolished. In Australia they seem to build storage ponds from CSG (Coal Seam Gas) in flood prone rural areas and in a time of a disaster little can be done to protect it from. Quality of maintenance is questionable and needs a fully report not a given, it's been in a poor state of repair for quite sometime and deterioration isn't fully understood.
5. Accountability - is vital for local community to have a response plan being a worker available on standby nearby this toxic by-product stockpile in an emergency or general callout. Taha's past conduct shows that it limited and delayed with action and communication. Fire brigade especially need a bond held in a Trust for total cost of clean up. Solid Energy has allowed approximately \$35 million to be dumped on NZ tax payers and local businesses out of pocket due to the failure of that white elephant's promises. There is a high chance the Taha Company will dissolve or be sold leaving little accountability and another party earring the costs.

6. Economic's - As we are numerous shareholders in specifically Alliance and we are also concerned as MG Marketing on potential food contamination. It's a fragile substance too risky for our Industry due to potential risk of contamination to air and water when mixed. It's a substantial stockpile and the full understanding of impact hasn't been identified if our worse fear's of H2O contamination.
7. Monitoring and baseline measurements of toxic product – concerned the product has been reclassified but with this Company lack of credibility it seems as early as 1991 therefore then **baseline measurements** of the product should be taken regularly to match safe standards, trust isn't guaranteed. Regular site visits to see if Taha is following safe practices and also video surveillance for many reasons, especially for quick action. The tonnes need regularly verified also in our opinion. Peace of mind for nearby residents especially at great risk firstly and then rural partners whom would have much longer impacts. Would the **Mataura River have to be dammed**, with a planned new diversion excavated for the potential unpolluted waterway to be diverted up stream to protect it from spillage incident so that ecosystems are protected and public. A new pathway for Mataura River needs addressing if such a large contamination were to happen as mention plan for the worst this is a large stockpile of hazardous material.

Mataura often seems a target for dirty businesses with larger corporations, whereby Corporation's are devaluing the land due to accumulated industry, so does our local government see that it's a risk to our rates and rate increases if this carries on for the small population or is there a plan to make this a satellite township only for industry. What township grows jobs due to high industry growth involving questionable air and water discharges so therefore potential future residents paying more in accumulation of rates towards township than commercial? Promises made with jobs and Community Hall. Particle board Company originally promised initially 800 jobs and less than a quarter came to fruition. There is no major benefit for storing this toxic by-product but all to RISK which is rather like poker.

Substantial reparation **of total potential damage needs a feasibility study**, so a bond is held in Trust to give some credibility that's been lacking for sometime that they will make good. One party benefits with great numbers of individuals and commercial businesses too lose from contamination and long term impacts. A final report seems we aren't privy too which is incredibly unfair to residents till after the submission's close which is very dubious and misleading. Plastic can easily dissolve even with two bags. What grade is this plastic and is it the highest grade, if damp the weight also increases making a challenge to move potentially? **No** guarantee that this product will find an end use and therefore in doubt the fertiliser plant. Rural parties have to build a bung for 1000+ tanks and this stockpile needs a considerable bung or diversion for River prior to storage to protect everyone rather than benefit a very small minority. The majority of community and nearby districts shouldn't have to contend with the risk. Why not proceed with building on NZAS site so a specifically designed bung as Petroleum operations are required to do so. Distance from the waterway is too close and this hasn't been quantified and the terrain leads to leaks etc travelling its way down to river due building on this specific site.

Our **opinion to DECLINE the consent** the conditions that need to be imposed should far out weigh the affordability for parties to proceed, therefore a more appropriate storage facility close to resources or end parties needs building at Ravensdown, Tiwai or near the South Port for export options these are the greatest potential and common sense for safety and security and win/win partnership. Keep it simple seriously at leave near NZAS or Industry it's related to for a win/win.

Thankyou for opportunity and YES request to speak

Mataura Landcare Group Chairman Mr Duncan, Vice Chair Mike Dunbar
Secretary Mrs R Johnston

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Michael Anthony KIRBY

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Storage of twice the permitted limit (5000kg)

What does less than minor mean Page 4 Executive Summary.
with local people already needing to go to the doctor we suspect this
is not correct. 6.3 A
6.4 A
9.1 C
Rule 6.9(2)

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose the submission on consent of use
of the buildings for Overa storage.

Material Safety Data Sheet 10 May 2012
Composition of Overa Premix includes Metal Fluoride
Salts with no CAS No. 0 to 15% Fluoride

is a very dangerous Halogen and can cause severe
damage to Teeth thus I believe that it is too
toxic to work with in a town area. See Hazard 6.3 A

- ① I want a Bond in the name of Mataura Residents
sufficient to pay for the safe removal of the Overa if Taha fails to remove it.
- ② Taha to have a Public Liability Insurance
- ③ Regular Public Inspections
- ④ Earthquake Risk of buildings
- ⑤ Health Risk of Emissions.
- ⑥ Date of removal of all illegal material stored.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

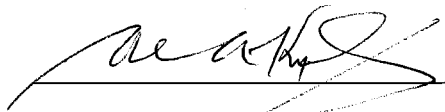
I want the immediate removal of all the
illegal material from Mataura.

I wish ~~/do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)


11/4/15

Date:

Address for service of submitter:

13 Doctors Rd
Mataura ~~9712~~
9712

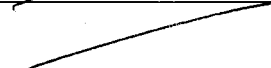
Telephone number:

(03) 203 8938

Fax number:



Email:



Contact person:

(If applicable)

Self

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

Or for delivery in person:

Or for fax delivery:

Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name) Monique Armande Macartney

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

the entire application

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I am absolutely opposed to having this dangerous, toxic material stored in the centre of our town, so close to homes, our local kindergarten, etc.

It appears that contact with water will cause the emission of toxic gases into the air and any product (as little as one bag) flushing into the river will poison fish life, etc, for miles and miles . There is absolutely no way so much dangerous material should have been allowed to be stored in an old, unsafe building which can be easily broken into (broken windows have been witnessed and attested to by locals), next to a river which can flood (and has flooded on more than one occasion). The building itself has, historically, had water seep through the floors.. I fear for the health of all our residents, farm and other animals, river life, etc, as well as the disastrous negative impact on the local economy...

Attach a separate sheet if required

I seek the following decision from the consent authority: (give precise details, including the general nature of any conditions sought)

Complete removal of all this hazardous product to a landlocked area, with no possibility of endangering human or animal life. Taha to front up immediately with a significant financial bond, dedicated to the Mataura area, to prevent this company backing out of its responsibilities

I wish ~~/do not wish~~ (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

(See note on left)

Date:

14 April 2015

Address for service of submitter:

11 Crawford Road, Mataura

RD 2

GORE 9772

Telephone number:

03 2033554

Fax number:

Email:

rmmac@xtra.co.nz

Contact person:
(if applicable)

Myself

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Newton v Winifred Wills

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

~~We~~ We would consider one year long enough for storage of the most - sooner if possible for the building to be emptied.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

We oppose its storage in this building. If the river floods it will destroy the lower part of the river vegetation & fish etc.

We live on the hill just above the building - any fumes would come up to us. This will be detrimental to ours & others health. Already we have had to close our window one night because of choking fumes.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

That the product be removed as quickly
as possible from the building.
We would definitely not give permission to
process this product as its too close to
neighbouring homes

~~I wish~~ / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

W. A. Wills.

Date:

14th March 2015

Address for service of submitter:

9 Culling Tce
Mataura 9712

Telephone number:

03 2038151

Fax number:

Email:

canaanmin@clear.net.nz

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Ngairi Elizabeth McEwan

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The timeframe Taha Industries wants to
remove Class 6 Hazardous Substance

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

24 months is far too long for Taha Industries
to expect to store class 6 Hazardous
Substance in the OHD Carter Holt paper mill.
Why do they need that time frame to take
it out?

Carter Holt paper mill is an old building, and
we don't know what weather conditions we will
have during the next 24 months. I consider that
period of time unacceptable.

Mataura citizens deserve assurance that
the time frame is a lot shorter than the
24 months they want.

Accidents do happen, and we don't want our health
put at risk.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

To allow two to Four weeks
for removal of material

~~I wish~~ / do not wish *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

W E McGowan

Date:

17th March 2015

Address for service of submitter:

15 Doctors Rd

Mataura.

Telephone number:

203 8791

Fax number:

Email:

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Noel Walker

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Class 6 Hazardous Substance being stored
at the former Carter Holt Harvey building (former
Paper mill) 109-130 Kana Street, Mataura

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

- I oppose Taha fertiliser Industries Ltd
application for these reasons
- ① The health risk to people in this town
 - ② The courts have found this product is
hazardous and a ecotoxin
 - ③ The building they have stored this product
in, is inadequate - (damaged windows,
broken pipes)
 - ④ High earthquake risk (the building)
 - ⑤ Highly dangerous to our main industry
(Allimce) if it gets into our water ways
 - ⑥ Fire Service ill equipped to handle any
fire as no water can be used

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

Decline the application and instant
removal of the Quvea pre-mix from
this site and out of our town

I wish / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Noel Walker

Date:

10 April 2015

Address for service of submitter:

1 McKelvie Heights
Mataura 9712

Telephone number:

(03) 203 8575

Fax number:

Email:

noelendfiona@slingshot.co.nz

Contact person:

(If applicable)

Noel Walker

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

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Or email:

PO Box 8, Gore 9740

29 Civic Avenue, Gore 9710

(03) 209-0357

info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Patricia Bastiaansen

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The storage of Ouvea pre-mix in the former paper mill (109-130 Kana street, Mataura)

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose Taha Fertiliser Industries Ltd's application for these reasons:

a) This company has been found by the courts that their product is hazardous to human health and an exo-toxin. This company has been found by the courts that they damaged people's health by incorrect storage.

b) The building they ^{have} stored this product in is inadequate, as it has broken windows and damaged pipes underneath the building.

c) High earthquake risk of the building.

d) Flood risk (gravel build-up ^{North} of the building increases flood risk).

e) Local fire-brigade ill-equipped to handle fire within the building.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To decline the application and order the instant removal of the Aurea pre-mix from this site. Also, a bond to be paid to the Mataura community for clean-up if need be.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

10/4/2015

Address for service of submitter:

23 Culling Terrace
Mataura

Telephone number:

03 203 7036

Fax number:

Email:

Contact person:

(If applicable)

Patricia Bastiaansen

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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(03) 209-0357

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The Company must have public liability insurance to pay out for incident detrimental to people or property of Malawi

The two year consent must start from that date the consent is issued if the Company is successful

P. Bostwick

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Peter Endres

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Total unsuitability of site for storage of such a high risk material.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I do not support the storage of this material for these reasons

- ① High risk of spillage into waterways
- ② This building has flooded in the past & due to non extraction of gravel above falls the next flood will be much larger so any material stored will wash into the Mataura River killing all life. This is a world class brown trout fishery so short term gain for a few shouldn't outweigh long term economic benefits from people fishing this river.
- ③ Building is 100 yrs old so risk of rainwater leaking & earthquake damage are very real concerns
- ④ A substantial public liability policy, min \$50 million to cover cost of removing material & clean up site of residual toxins
- ⑤ Regular Public inspections
- ⑥ Taha has illegally stored these materials from day 1 & should be prosecuted & fined
- ⑦ Taha should immediately remove materials as they present 3 months ago they can not be trusted

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To decline the application & immediate removal
of materials stored. Also a large bond or insurance
policy taken out in case of spillage of materials. This
should be enough to cover costs of any toxic material spill.

I wish / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

Peter K Eide

Date:

9-4-2015

Address for service of submitter:

45 KAWA STREET

MATAURA

Telephone number:

022 359 4045

Fax number:

Will be in Australia till October 2015

Email:

email for any
communication

peter.troutburn@hotmail.com

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

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Or for fax delivery:

Or email:

PO Box 8, Gore 9740

29 Civic Avenue, Gore 9710

(03) 209-0357

info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name)

Rawiri Blum Edwards

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

I do not support Taha Fertiliser Industries because of earthquake risk, flooding, leakage created by rainfall, asbestos, who's responsible for residue, general emission, building use by date expired.

Decline application, remove offensive residue immediately, Taha have public liability, high risk management.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

I wish / do not wish *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*



Date:

14: 1: 2015

Address for service of submitter:

15 STUART ST
MATAURA

Telephone number:

Fax number:

Email:

Contact person:
(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

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info@goredc.govt.nz



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Rawiri Rulon Edwards

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Whole Consent.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

08.04.15 I oppose the application & would like to be contacted once this has been reviewed.

* Earthquake Risk

* Flood Risk - Broken windows

* Building

* Genital emissions - health Risk

* Asbestos in current building.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I hereby would like to see Taha application declined in full.

☒ I wish / ☐ do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

08.04.2015

Address for service of submitter:

37 Forth Street

Mataura

9712

Telephone number:

0272031955

Fax number:

Email:

rulon@mataura.org

Contact person:
(If applicable)

Rulon

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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PO Box 8, Gore 9740
29 Civic Avenue, Gore 9710
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Robert Brian Meikle

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

As per attached document

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Totally oppose Tahas application for the Storage of Ouvea Pre Mix.

The application states that an environment risk assessment is being prepared as part of the application but was not attached to the resource application. So I reserve the right under section 92 of the Act to review and provide comments on the environment risk assessment prior to any hearing for this application. And I also reserve the right to review and provide comments on any other part of Tahas application where information is still to be provided but wasn't attached to the application at the time of Tahas resource application being lodged.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

That Tahas application be declined in full and the
Oave a Pre Mix be removed from the building

I wish ~~delete one~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

RB Meike - Bert

Date:

13th April 2015

Address for service of submitter:

22 Seibourne Street

No 2.R.D

GORE

Telephone number:

2038762

Fax number:

Email:

Kalista@extra.co.nz

Contact person:
(If applicable)

As Above

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
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info@goredc.govt.nz

***Re: Jacobs – Taha Fertiliser Industries Limited – Application
for land use consent and assessment of environmental
impacts – Review 02, 11 March 2015***

1. The site for the Ouvea Premix is too close to the Mataura River and the Waikana Stream that flows under the building. And, should flooding occur, there is a significant risk to both the Mataura River, the Southland coast line and the Waikana Stream. As well as vapour emissions if the products comes in touch with water on the Mataura residents. The area is within the Gore District Plan, Planning Map MAT04 as a Flood Hazard Area.
2. Taha states that it wishes to store 10,000 tonnes in the old Paper Mill for two years. Yet it does not have a date for the start of the storage nor a date for it to be removed from the building. It also states Taha wishes to store the Ouvea Premix in the old Paper Mill until it finds a site for a processing factory and that factory to be fully operational – Will this be within the two-year storage timeframe? The buildings which the hazardous substance has been stored in are old and poorly maintained. They are not considered suitable for the storage of Class 6 and Class 9 Hazardous Substances. Storage of these types of substances should be in a purpose-built building that can be fully sealed to prevent water entering the buildings and to prevent air emissions escaping the buildings. Alternatively, a thorough assessment of the buildings' suitability for this activity should be provided as part of the Resource Consent application. And, if the Council has signed off the buildings as being suitable, how have they been able to do that as there are 10,000 tonnes of Ouvea Premix stored in the buildings at present and ALL OF THE OUVEA PREMIX WOULD HAVE TO BE REMOVED FROM THE BUILDINGS FOR A FULL INSPECTION of the floor for cracks and holes to be carried out.
3. There can be no guarantee given that water will not enter the buildings because the buildings are not purpose-built. And Taha have stated they have no public liability insurance to cover any effects of water entering the buildings and the product becoming contaminated. This is of major concern and I suggest public liability of a minimum of \$60 million to mitigate any effects of water entering the buildings and contaminating the Ouvea Premix.
4. There have to be major concerns as to Taha carrying out flood-protection measures at the buildings when a flood warning has been issued by Environment Southland and the Gore District Council. Because of no staff living at Mataura and Taha staff

having to travel from Invercargill to carry out the work. And, if the Mataura site needs flood-protection work after a flood warning, it is more likely that the Kennington site will require flood-protection work at the same time. Who says there will be enough Taha staff to carry out the work – what happens if staff are away on leave or unable to be contacted? Taha are now on their third manager since 2014 until now, April 2015. This would indicate to me a question-mark around Taha's management being able to organise or carry out flood-protection work at short notice.

5. Taha state in its application that it is proactively involved with the Mataura community. At a meeting on 21 January 2015, the then-manager, Mark Egginton, stated that Taha would remove the Ouvea Premix from the Paper Mill site immediately. They have now gone back on their word and not removed it, and also stated they would hold another meeting to address the concerns of the abovementioned meeting within three weeks of 21 January 2015. No further meeting was called by Taha to address these concerns.
6. There needs to be a bond placed on Taha if consent is given to the storage of the Ouvea Premix in the old Paper Mill site. The sum needs to be as such that, if Taha cease to exist or went out of operation for whatever reason and walked away from the Mataura site while the Ouvea Premix was still in the buildings, there are enough monies available for the full clean-up of the site. My opinion is that it should be no less than \$5 million, to be held only to be spent in Mataura if Taha walked away and left any product in the buildings. Any monies left over from the sum, if such a clean-up did occur, should be forfeited to the Mataura community.
7. If consent is granted, a full building inspection should be carried out every two months, with a representative of Taha, a Gore District Council building inspector, Mataura's elected councillor and a representative of the wider Mataura community, as nominated by the Mataura Action Group; and any costs of this inspection incurred by these people to be met in full by Taha.
8. The Mataura River is internationally recognised for its brown trout fishery and, as such, this must be given major consideration when judgement is given on Taha's application for Resource Consent.

Also, the 2005 Mataitai Reserve is another reason Taha's application should be declined.

The Crown has formally acknowledged the association and values which the river

holds for Ngai Tahu whanau by giving effect to the status of Deed of Recognition as set out in Ngai Tahu's Claim Settlement Act 1998.

9. In August 2014 a decision by the Environment Court of New Zealand; Southland Regional Council vs Taha Asia Pacific; Environmental Judge J.E. Borthwick ruled: "I am satisfied that the material (Ouvea Premix) is dangerous to human health and is an eco toxicant."
10. The application is contrary to Part 2 Resource Management Act 1991 and should be declined.



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

ROBIN MATTHEW MCGOWAN

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Entire Application.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Decline application in its entirety. Building is in poor repair, proximity to Mataura River (Conservation Order and food gathering site) and Waikana Stream, adjacent to residential area and importantly Kia Ngawari Te Kohanga Reo, AGC Export Beet Plant. No containment fire fighting water. No fence. But if storage only consent is to be granted.

- * Removal of product only. No additional product to come in.
- * Limited for 2yr only. Not 2 years after processing plant built.
- * Absolute stipulation there be no right of renewal.
- * Consent to be in owner G. Patterson's name as well so Taha do not just disappear.
- * Bond up front sufficient to clean up site and transport 10,000T to Kings Bend Landfill in Taha & Patterson name.
- * GDC to advise Patterson no further retrospective consents will be issued

Submission on Land Use Consent LU 2014/95 to Paper mill site this being the second such breach and further breaches will be prosecuted.

I wish to be heard in support of my submission.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

Decline application in its entirety

OR Limited consents as outlined.

I am apalled consent committee is being bullial into agreemat
by Taha, Patterson & GDC by illegally allowing 10000T of
hazardous waste to be brought into town without consent (this being second
occasion).

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

I request this application be heard by an independent commissioner
given the inaction of GDC
in prosecuting the illegal storage.

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

DM McHown

Date:

14 April, 2015

Address for service of submitter:

209 CRAWFORD RD.

MATAURA

RD2 GORE 9772.

Telephone number:

evenings

03 203 8372 or 021 1816635

Fax number:

—

Email:

—

Contact person:
(If applicable)

—

as above.

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
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Or email:

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Roslyn Jackie Glenn

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

The storage of Ouvea pre-mix in the former paper mill (109-130 Kana street, Mataura)

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose this consent for these reasons:

- a) The Ouvea pre-mix stored can be seen and accessed by the public.
- b) Broken pipes underneath the factory.
- c) Broken windows.
- d) Earthquake risk of the building.
- e) Flood risk, as the gravel build up south of the building increases flood risk.
- f) Local fire service ill-equipped to handle a fire within the building.
- g) Moisture damaged product has already been removed from the building with no explanation as to how the bags was damaged.
- h) The company has already proven that they are unable to keep the public safe from their product.

Submission on Land Use Consent LU 2014/95

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To decline the application and order the instant removal of the ouvea pre mix from this site. Obtain a Liability clause of not less than 10 million dollars in case of clean-up of toxins to be kept in the Matakura bough exclusively.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

~~If others make a similar submission, I will consider presenting a joint case with them at a hearing.~~
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

13 April 2015

Address for service of submitter:

24 Riverhead Lane
Matakura

Telephone number:

03 203 8918

Fax number:

Email:

rglenn88@gmail.com

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Mr Russell Hearn

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Storage of class 6 Hazardous substance.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I TOTALLY OPPOSE THE STORAGE OF OUREA
PREMIX at the OLD CARTER HOLT Paper mill site
MY REASONS FOR THIS ARE
1/ Building on FLOOD PLANE
2/ FIRE DANGER AS old building is old electrical etc
Plus cannot apply water or water-based fire fighting
and as stored in 1 ton Nylon bags if fire occurred it
would be a total mess with unbagged product exposed
to the elements if fire bad enough to burn away roof.
3/ Environmental concerns as stored on riverbank. if leakage
occurred would travel down river into the sea, killing
everything as it went.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)


I won't be at all satisfied until all the product is totally removed from its storage site IF consent is given a bond of high millions should be held by a ~~state~~ trust independent of Gore Council to cover any clean up.

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)



Date:

10/4/2015

Address for service of submitter:

147 MAIN ST
MATAURA

Telephone number:

032038654

Fax number:

-

Email:

rossnkat@xtra.co.nz

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Shari Day-Smith % Southern Estate Properties.

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

No consent to be issued, the town is already struggling without having a highly toxic substance in the town.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I oppose any resource consent given due to public health reasons-causing major illness.
- Far too close to neighbouring properties.
- Far too close to the river which is prone to flooding - Would kill all fish in river if ever got in the water.
- Mataura will have no-one ever moving into the town - which affects the whole community (jobs, schools, population).
- I feel if the Gore District Council do issue a resource consent they need to look at having it in their own backyard (which would never happen), it would cause too much uprsear in the town.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

I wish the GDC not to issue any resource consent
and we need a date given to remove the
hazardous substance from the premises and away
from the town altogether.

I **wish** / do not wish *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

SE Kay-Smith

Date:

13/4/15.

Address for service of submitter:

Southern Estate
Properties.

10 Bridge Street

Telephone number:

203-7734.

Fax number:

203-7735.

Email:

seprop@xtra.co.nz.

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.



Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Sharon Elspeth Argyle

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Taha Industries Application for Resource Consent to
store Ovea mix for 24 months in the old Nabara Paper Mill

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I am absolutely opposed to this consent being granted because

1 The building is an earthquake risk and flood prone.

2 This is toxic to human health and also fish + game if it comes into contact with water.

3 People are already having health issues from fumes in damp weather.

4 It is too close to residential buildings, a pre school + a freezing industry.

5 This company cannot be trusted to do as they say

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

I ask that this consent application be declined

In the event of it being granted that a bond be put in place to cover cost of removal if Taha fail to do this

I wish / do not wish (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

S. E. Angu

Date:

8/04/2015

Address for service of submitter:

77 Main St
Mataura 9712

Telephone number:

03-203-8696

Fax number:

Email:

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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PO Box 8, Gore 9740

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14 APR 2015

10-45 am

Ref: JMB



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name):

Shirley Simpson

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Health and safety to ourselves and our community.

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I am totally opposed to fertiliser being stored at the Maitua Paper mill.

I do believe it's a health risk as my family have been suffering from eye irritation, skin irritation, breathing problems, noisiness and dirtiness.

I also believe the fertiliser is really a time bomb that would wipe out Maitua and residents.

I believe we should have been advised of fertiliser being stored in the papermill which did not happen.

All parties act in a very irresponsible manner. Feel real let down by the Gore District Council.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(Give precise details, including the general nature of any conditions sought)*

Take the Fertiliser away from our
district.

I wish / ~~do not wish~~ *(Delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case)

Signature of submitter:
*(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

BA Simpson

Date:

12-4-2015

Address for service of submitter:

123 Kana St
Mataura

Telephone number:

0278726927

Fax number:

Email:

action3@windows10e.com

Contact person:
(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Sonia + Dennis, Rutter/
More Photos to come



Dennis + Senia Rutter
14 Dover Street Materials



Dennis + Shirley Rutter
14 Dover Street
Mataura



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

Decline The Application.

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): *Sonia Christine Rutter*

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

*Rapid Removal Health Risks on all of the community
Flooding. Everything in my husbands, Dennis Rutter.*

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

*Long term effect on community's health. (cancers)
Flooding and effect on river and water ways.
Fire and vandalism.
Gas into air - Ground contaminating.
Credibility of Taha Asia, As have been nothing but
Disheart from the word Go Broken promises.
Taha Asia to be hold accountable for not having
Consent. Allowed to get sample any where in mill to test.
Bags already leaking, Photo proof of how they
are keeping this safe? Were are those reinforced
mesh bags. Property is unsafe. This affects the whole
town ship of Mataura not just buildings next to mill.
The Schools.*

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

Decline the Application To be heard in person.
Rapid Removal.

Taha or Gore Council to buy our property so we can move from
that area.
I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(Delete if you would not consider presenting a joint case) with my husband.

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

SPR

Date:

12-4-2015

Address for service of submitter:

114 Dore St Matamoras

Telephone number:

03 203 3019 0210401621

Fax number:

Email:

Contact person:
(If applicable)

0210401621

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

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Or email:

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29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

SUBMISSION ON AN APPLICATION FOR RESOURCE CONSENT UNDER SECTION 96 (1) OF THE RESOURCE MANAGEMENT ACT 1991

To: Gore District Council
P O Box 8
Gore 9740

Submitter's name: Public Health South (PHS) on behalf of Southern District Health Board

1. This is a submission on an application by Taha Fertiliser Industries Limited for retrospective land use consent. The application is to store Ouvea Premix and Ammonia Sulphate at 109 and 116 – 130 Kana Street, Mataura.
2. The specific parts of the application that this submission relates to are discharges to air and the potential adverse effects on public health.
3. In our opinion, the application provides inadequate information and does not satisfactorily address key issues with respect to potential emissions to air or risk to public health.

Ouvea premix is classified as both a Class 6 (Toxic Substance) and a Class 8 (Corrosive Substance)

In our opinion there is a public health risk associated with the Ouvea premix and to a lesser extent, ammonium sulphate. The key public health concerns are: exposure to Ouvea premix dust; storage of Ouvea premix is not airtight; bags of Ouvea premix are not waterproof; inadequate site and incident management; close proximity of additional sensitive receptors to the storage site and storage of ammonium sulphate in unsuitable receptacles.

Human exposure to Ouvea premix dust can cause skin irritation and serious eye irritation. Dust can be generated when handling the Ouvea premix. The mitigation measures contained in the Environmental Management Plan (EMP) do not alleviate concerns around exposure to dust emissions. The storage of Ouvea premix is not in 100% airtight containers (cable tied plastic bags in woven mesh bags). Ouvea premix is a hazardous substance that forms ammonia gas when it comes into contact with water directly, or through absorption from air. Given that the site is in a high-humidity location (i.e. next to the Mataura River and Waikana stream), in our opinion, this poses a very real potential health risk to workers onsite/immediate neighbours and is a potential odour risk to neighbours further away.

The reaction that produces ammonia gas also has the potential to create hydrogen gas in a secondary reaction with aluminium. Hydrogen is highly combustible and may pose a potential explosion risk. The means of ventilation, or ventilation rates, are not clearly stated in this application. If the applicant proposes to employ passive air ventilation, there may be insufficient ventilation to effectively disperse generated hydrogen gas.

The storage facilities at Mataura appear to be in poor condition and the integrity of the roof to prevent ingress of rainwater remains uncertain. In addition, the Assessment of Environmental Effects (AEE) contains no details on fire protection, nor is a building report currently available.

The environmental management plan places full responsibility for transport of the Ouvea premix onto the transport companies. It is unclear as to any requirement for trucks to cover Ouvea premix during transport, loading or handling.

The incident procedure for odour complaints, outlined in the EMP, is not in accordance with the process outlined in Table 4.1 of the Ministry for the Environment Odour Guide.¹

The proposal is unclear as to exactly where and in what quantities, the Ouvea premix will be stored in stores A, B, C and D.

The AEE does not identify potential sensitive receptors in the community including residential properties and a Kohanga Reo, approximately 100 metres to the South West.

The storage of ammonia sulphate is neither fully airtight (cable tied plastic bags in woven mesh bags), nor is it waterproof. Contact with moist air could potentially release a strong acidic odour and in the event of flooding potentially poses a major risk to public health.

4. The reasons for this submission are to promote the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956. These statutory obligations are the responsibility of the Ministry of Health and in the Southern District are obligations carried out under contract by Public Health South under Crown funding agreements, on behalf of the Southern District Health Board.

The Ministry of Health requires this submitter to reduce potential health risks by means including submissions on resource consents to ensure the public health significance of potential adverse effects are adequately considered by consent authorities.

Southern District Health Board (Southern DHB) presents this submission through its Public Health Service. This Service is the principal source of expert advice within Southern DHB regarding matters concerning Public Health. Southern DHB has responsibility under the New Zealand Public Health and Disability Act 2000 to improve, promote and protect the health of people and communities. Additionally there is a responsibility to promote the reduction of adverse social and environmental effects on the health of people and communities. With 4,250 staff, we are located in the lower South Island (South of the Waitaki River) and deliver health services to a population of 306,500.

Public health services are offered to populations rather than individuals and are considered a "public good". They fall into two broad categories – health protection and health promotion. They aim to create or advocate for healthy social, physical and cultural environments.

5. Public Health South neither supports nor opposes this application, as we are only concerned that, in the event that consent is granted, conditions are imposed that are adequate to protect public health and include adequate monitoring. We are of the view that all the following matters would have to be adequately addressed in order to effectively mitigate the public health risk:
 - That the building is fit for purpose and provides adequate prevention for ingress of water.
 - That the applicant has investigated alternative options for the receptacles for Ouvea premix that minimise the risk of it coming into contact with water and humid air.
 - That there is contingency in place in the event of fire in the proposed building. This must include potential for discharges to air.
 - Additional detail on material handling and storage protocols including how the bags of premix would be safely unloaded into the storage facility is provided.
 - Additional detail on the management of projected fugitive emissions including ammonia should the premix get damp.

¹MFE (2003), Good Practice Guide for Assessing and Managing Odour in New Zealand, Wellington.

- A contingency plan covering all possible scenarios in the event of water coming into contact with the Ouvea premix.
 - Additional detail regarding standards and methods of monitoring for odour, dust and noise.
 - A review of the incident procedure following an odour complaint as per the Ministry for the Environment *Good Practice Guide for Assessing and Managing Odour in NZ*.
6. This submitter is not a trade competitor of the Applicant for the purposes of s.308 of the Act.
7. This submitter will wish to be heard in support of this submission but will not be prepared to consider presenting a joint case on with others. The submitter is willing to consider participation in any pre-hearing conferences, or mediation.

Dated at Invercargill this 9th day of April 2015



Trish Aitken

Designated by the Director General of Health under s.7A of the Health Act 1956 for Public Health South on behalf of Southern District Health Board

Address for service:

Public Health South

P O Box 1601

Invercargill 9840

Attention: Trish Aitken

Contact numbers: 03 2110900

E-mail: trish.aitken@southerndhb.govt.nz

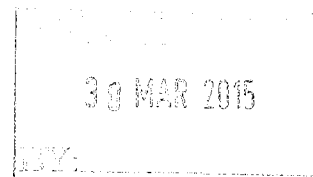
**SUBMISSION ON AN APPLICATION
PUBLICLY NOTIFIED UNDER SECTION 95A CONCERNING
RESOURCE CONSENT**

SECTION 95A RESOURCE MANAGEMENT ACT 1991

**TO: Planning Department
Gore District Council
PO Box 8
Gore 9740**

**Email: info@goredc.govt.nz
Telephone: 03 209 0330
Fax: 03 209 0357**

Attention: Howard Alchin Senior Planner



Full name of submitter: **Southland District Council**

Address of submitter: **PO Box 903, Invercargill 9840**

Postal address (if different from above): **As above**

Contact telephone number: **0800 732 732** Fax: **0800 732 329**

Email: **ian.evans@southlanddc.govt.nz**

This is a submission on an application from: **Taha Asia Pacific Limited**

Details of the application:

The application is for the storage of up to 10,000 tonnes of Ouvea Premix, which is classified as a Class 6 Poisonous Substance, and 8 tonnes of ammonia sulphate at its storage facility on Kana Street, Mātaura.

The location of the application is: 116-128 Kana Street Mātaura

My submission is:

The Southland District Council (SDC) is submitting on this application in its capacity as territorial local authority; and in terms of its statutory duty to its residents under the provisions of the Health Act 1956.

While the site of the application is located within the Gore District Council (GDC) area, the common boundary between SDC and GDC is approximately 6 kilometres south of the site of the application, and the Mātaura River traverses the common territorial boundary.

The Southland District Council neither supports nor opposes the application but wishes to submit in comment only.

The Southland District Council wishes to ensure that the residents of the Southland District are suitably protected from any potential adverse effects of the storage of what is a significant quantity of Ouvea Premix - a substance with the potential to have adverse health and environmental effects if it is not suitably managed.

In addition SDC undertakes a number of activities downstream of the applicant's site, notably the Edendale/Wyndham water supply and wastewater treatment plant that could be impacted on in the event of any incident or accident. Council is concerned that such an incident may cause a restriction to those activities and the knock on effect to those communities.

SDC's concern with this proposed activity is the potential for a major industrial accident, given the significant quantities of the hazardous substance, emission of ammonia gas, and possible exothermic reactions (and potential combustion) of the Ouvea Premix during storage, as well as the impact on surface and groundwater in the event of an accidental release of material.

Accordingly, the Southland District Council would wish to see the following measures incorporated into the decision-making process for this application and/or imposed as conditions on any consent:

1. Provision by Taha Asia Pacific Limited of a "safety report" and documentation prepared by a suitably qualified person advising of compliance with the Approved Code of Practice for Managing Hazards to Prevent Major Industrial Accidents, 1994.

This COP is current and may be downloaded from the WorkSafe New Zealand website. In preparing this documentation, reference should be made to AS/NZS 3833:2007 - The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers.

2. Provision by Taha Asia Pacific Limited of a compliant safety data sheet for Ouvea Premix; the sheet provided is 'draft', and does not comply with either the data sheet requirements of either the Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006 or the Hazardous Substances (Identification) Regulations 2001.

(Safety data sheet accuracy is of concern, with a recent EPA audit showing a number being non-compliant, some critically so.)

3. Provision by Taha Asia Pacific Limited of comment with regard to approved handler compliance at the Ouvea processing sites in Invercargill, and comment on ongoing managerial oversight of this storage.
4. Imposition by Gore District Council of suitable monitoring conditions so as to ensure that the conditions imposed on any resource consent are complied with fully, and (where appropriate) on an ongoing basis.
5. Submission of a detailed Emergency Management Plan specifically detailing incident management procedures in the event of an accidental release of chemicals to air and/or water.

The reasons for my submission are:

As outlined above, to ensure that any risks to the health of residents of and the activities undertaken by Southland District Council from the storage of this material are suitably mitigated.

My submission would be met by the Gore District Council making the following decision:

Imposing suitable conditions on any resource consent and/or requiring provision of suitable information during the RMA decision-making process, as suggested above, to mitigate any potential adverse health effects from the storage of this substance.

I do not wish to be heard in support of my submission.

SIGNATURE OF SUBMITTER



(Signature of submitter or person authorised to sign on behalf of submitter)

24 March 2015

(Date submitted)

Copy to:

**Taha Fertilisers Ltd
162 B Bond Row
Invercargill 9810**

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

*Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991*

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: *(full name)* Terri McCurdy _____

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: *(give details)*

Entire proposal _____

My submission is: *(include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)*

I oppose the storage of this hazardous substance in the former paper mill at Mataura.

This substance is significantly hazardous to human health in its dry form and even more toxic when damp or wet and is not suitable to be stored near a residential area.

The area proposed is at risk of flooding even with the measure of flood protection. A significant flood would still affect this area, and with this volume of product the movement of material or protection by sandbagging does not seem feasible.

The consequences of this product entering waterways is severe and longlasting and puts the whole of the lower Mataura river and potentially southern coastline including Stewart Island at risk with this aquatic ecotoxin.

I am not convinced this company has any interest in southland outside their own profits and I am concerned they could leave us with a very significant cleanup bill if things go wrong at any stage.

I don't think they have a genuine end use for this toxic substance- I don't think any farmer would knowingly use this product as fertiliser considering the aluminium and fluoride it contains.

Attach a separate sheet if required

I seek the following decision from the consent authority: *(give precise details, including the general nature of any conditions sought)*

This application should be denied _____

I do **wish** *(delete one)* to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
*(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)*

Date:

14 April 2015 _____

Address for service of submitter:

T McCurdy

43 Second street, RD 1
Invercargill _____

Telephone number:

03 2304212 _____

Fax number:

Email:

kahikatea@woosh.co.nz _____

Contact person:

(if applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:

P O Box 8, GORE

Or for delivery in person:

29 Civic Avenue, GORE

Or for fax delivery:

(03) 209-0357

Or email:

info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: **Gore District Council**
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Vanessa Edwards

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

Totally oppose Taha application for the
Storage of olive pre mix.

See attached comment.

***Re: Jacobs – Taha Fertiliser Industries Limited – Application
for land use consent and assessment of environmental
impacts – Review 02, 11 March 2015***

1. The site for the Ouvea Premix is too close to the Mataura River and the Waikana Stream that flows under the building. And, should flooding occur, there is a significant risk to both the Mataura River, the Southland coast line and the Waikana Stream. As well as vapour emissions if the products comes in touch with water on the Mataura residents. The area is within the Gore District Plan, Planning Map MAT04 as a Flood Hazard Area.
2. Taha states that it wishes to store 10,000 tonnes in the old Paper Mill for two years. Yet it does not have a date for the start of the storage nor a date for it to be removed from the building. It also states Taha wishes to store the Ouvea Premix in the old Paper Mill until it finds a site for a processing factory and that factory to be fully operational – Will this be within the two-year storage timeframe? The buildings which the hazardous substance has been stored in are old and poorly maintained. They are not considered suitable for the storage of Class 6 and Class 9 Hazardous Substances. Storage of these types of substances should be in a purpose-built building that can be fully sealed to prevent water entering the buildings and to prevent air emissions escaping the buildings. Alternatively, a thorough assessment of the buildings' suitability for this activity should be provided as part of the Resource Consent application. And, if the Council has signed off the buildings as being suitable, how have they been able to do that as there are 10,000 tonnes of Ouvea Premix stored in the buildings at present and ALL OF THE OUVEA PREMIX WOULD HAVE TO BE REMOVED FROM THE BUILDINGS FOR A FULL INSPECTION of the floor for cracks and holes to be carried out.
3. There can be no guarantee given that water will not enter the buildings because the buildings are not purpose-built. And Taha have stated they have no public liability insurance to cover any effects of water entering the buildings and the product becoming contaminated. This is of major concern and I suggest public liability of a minimum of \$60 million to mitigate any effects of water entering the buildings and contaminating the Ouvea Premix.
4. There have to be major concerns as to Taha carrying out flood-protection measures at the buildings when a flood warning has been issued by Environment Southland and the Gore District Council. Because of no staff living at Mataura and Taha staff

having to travel from Invercargill to carry out the work. And, if the Mataura site needs flood-protection work after a flood warning, it is more likely that the Kennington site will require flood-protection work at the same time. Who says there will be enough Taha staff to carry out the work – what happens if staff are away on leave or unable to be contacted? Taha are now on their third manager since 2014 until now, April 2015. This would indicate to me a question-mark around Taha's management being able to organise or carry out flood-protection work at short notice.

5. Taha state in its application that it is proactively involved with the Mataura community. At a meeting on 21 January 2015, the then-manager, Mark Egginton, stated that Taha would remove the Ouvea Premix from the Paper Mill site immediately. They have now gone back on their word and not removed it, and also stated they would hold another meeting to address the concerns of the abovementioned meeting within three weeks of 21 January 2015. No further meeting was called by Taha to address these concerns.
6. There needs to be a bond placed on Taha if consent is given to the storage of the Ouvea Premix in the old Paper Mill site. The sum needs to be as such that, if Taha cease to exist or went out of operation for whatever reason and walked away from the Mataura site while the Ouvea Premix was still in the buildings, there are enough monies available for the full clean-up of the site. My opinion is that it should be no less than \$5 million, to be held only to be spent in Mataura if Taha walked away and left any product in the buildings. Any monies left over from the sum, if such a clean-up did occur, should be forfeited to the Mataura community.
7. If consent is granted, a full building inspection should be carried out every two months, with a representative of Taha, a Gore District Council building inspector, Mataura's elected councillor and a representative of the wider Mataura community, as nominated by the Mataura Action Group; and any costs of this inspection incurred by these people to be met in full by Taha.
8. The Mataura River is internationally recognised for its brown trout fishery and, as such, this must be given major consideration when judgement is given on Taha's application for Resource Consent.

Also, the 2005 Mataitai Reserve is another reason Taha's application should be declined.

The Crown has formally acknowledged the association and values which the river

holds for Ngai Tahu whanau by giving effect to the status of Deed of Recognition as set out in Ngai Tahu's Claim Settlement Act 1998.

9. In August 2014 a decision by the Environment Court of New Zealand; Southland Regional Council vs Taha Asia Pacific; Environmental Judge J.E. Borthwick ruled: "I am satisfied that the material (Ouvea Premix) is **dangerous to human health and is an eco toxicant.**"
10. The application is contrary to Part 2 Resource Management Act 1991 and should be declined.



Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter: (full name) WALTER ALLAN JAMES HANSEN

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be brought to the site for storage.

The specific parts of the application that my submission relates to are: (give details)

TITLE STORAGE OF OLIVEA PREMIX WITHOUT CONSENT FOR THIS AMOUNT IN THE OLD PAPER MILL BUILDING IN KAPA ST THIS IS A HAZARDOUS SUBSTANCE
CRASES 6.3A 6.4A 9.1C

My submission is: (include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended, and the reasons for your views)

PECUNIE THIS APPLICATION I DO NOT SUPPORT HAVING THIS SUBSTANCE STORED IN THIS TOWN OF 1500 PEOPLE WOULD LIKE TO BE HEARD IN PERSON
DATE FOR REMOVAL: PLANS TO TAKE IT ALL AWAY SAFELY TAHA TO HAVE PUBLIC LIABILITY INS AND PAY SUBSTANTIAL BOND INTO C.D.C FOR DISPOSAL AND CLEAN UP COSTS IF COMPANY DEFAULTS. THEY APPEAR TO BE LESS THAN MONIST RISK MANAGEMENT PLAN FLOOD FIRE EARTHQUAKE
STATE OF BUILDING DOES IT HAVE A SAFTY CERT WE KNOW THIS BUILDING HAS A LOT OF ASBESTOS IN IT OWNER HAS SAID COSTS TO MUCH TO REMOVE BUILDING TO OLD
EMISSIONS TO AIR: AMMONIA GASS & DUST DO THEY HAVE CONSENT THIS BUILDING DOES LEAK AFTER ANY HEAVY RAIN I SEE PEOPLE ON THE ROOF TRYING TO NAIL IT DOWN AGAIN
TAHA'S ANSWER TO ALL QUESTIONS IS: LESS THAN MINIMAL OR NO ANSWER AT ALL THIS IS NOT GOOD ENOUGH

Attach a separate sheet if required

I seek the following decision from the consent authority: (give precise details, including the general nature of any conditions sought)

DECLINE THIS CONSENT TO STORE THIS SUBSTANCE
TAKA TO PAY SUBSTANTIAL BOND TO G.P.C TO BE HELD TO COVER ALL
CLEAN UP COSTS IN CASE OF DEFAULT
TAKA TO HAVE LARGE PUBLIC LIABILITY INS WITH REPUTABLE N.Z. COMP,
DEFINING PLAN FOR REMOVAL NO MORE THAN SIX MONTHS

I wish / ~~do not wish~~ (delete one) to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at a hearing.
(delete if you would not consider presenting a joint case)

Signature of submitter:
(or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

A. J. Hansen

Date:

08-04-2015

Address for service of submitter:

24 MAIN STREET

MITIKURIA 9712

Telephone number:

03 203 8040

Fax number:

Email:

Contact person:
(if applicable)

Aileen Hansen

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810, or email to nathan@tahacorp.com.

The address for service of the Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)

Resource Management Act 1991

To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Wayne James McGowan

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

THE LENGTH of time Taha Industries wants to remove Class 6 Hazardous Substance

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

I want to oppose first of all for the hazardous substance for being in our town in the first place and they must have known that would have opposition to get consent. So they moved it in very quickly, hoping nobody would notice. They were going to remove it, now they want 24 months "NO"
THE community does NOT WANT it here so remove it. I don't want our Council to give that time frame.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

To Remove Hazardous Material
in 24 days not 24 months

~~I wish~~ / do not wish (Delete one) to be heard in support of my submission.

~~If others make a similar submission, I will consider presenting a joint case with them at a hearing.~~
(Delete if you would not consider presenting a joint case)

Signature of submitter:

(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

WJ Mcgowan

Date:

17/3/15

Address for service of submitter:

15 DOCTORS RD
Mataura.

Telephone number:

03 203 8791

Fax number:

Email:

Contact person:

(If applicable)

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:

Or for delivery in person:

Or for fax delivery:

Or email:

P O Box 8, GORE

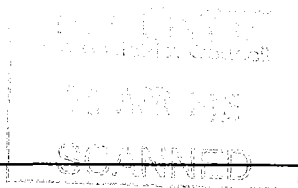
29 Civic Avenue, GORE

(03) 209-0357

info@goredc.govt.nz

Form 13 – Submission on publicly notified resource consent application by Taha Fertiliser Industries Limited (On behalf of Taha Asia Pacific and Taha Fertiliser Industries Limited) to store a Class 6 Hazardous Substance for a period of up to two years.

Sections 95A, 95B, 96, 127(3), 136(4), 137(5)(c) and 234(4)
Resource Management Act 1991



To: Gore District Council
P O Box 8
Gore 9740

Submissions close
5.00pm Tuesday 14
April 2015

Name of Submitter (full name): Wyndham Angling Club (Inc)

This is a submission on an application from Taha Fertiliser Industries Ltd seeking approval to store 10,000 tonnes of a Class 6 Hazardous Substance for a period of up to two years in industrial buildings on the former Carter Holt paper mill site. No further product will be bought to the site for storage.

The specific parts of the application that my submission relates to are: (give details):

Incomplete consent application, conflicting details in application, danger to the Mataura River

My submission is: (Include whether you support, oppose or are neutral on the specific parts of the Notice of Requirement or wish to have them amended and the reasons for your views)

that the Wyndham Angling Club totally oppose any short term or long term storage of the substance known as Ouvea Premix, which we emphasise is presently being stored illegally in the buildings in the town of Mataura known as the old paper mill buildings.

Reasons for our views are accompanied by a detailed document.

Attach a separate sheet if required

I seek the following decision from the consent authority: (Give precise details, including the general nature of any conditions sought)

that the consent authority compel the applicants to immediately remove the Oaxca Premix which has been described by the Environment Court of New Zealand (04-Aug-2014) as "dangerous to human life and is an aquatic ecotoxin."

I wish / ~~do not wish~~ (Delete one) to be heard in support of my submission.

~~If others make a similar submission, I will consider presenting a joint case with them at a hearing.~~
(Delete if you would not consider presenting a joint case)

Signature of submitter:
(Or person authorised to sign on behalf of submitter.
Signing of electronic submissions not required.)

AJ Leitch pp Wyndham Angling Club

Date:

09-APRIL-2015

Address for service of submitter:

2 Pera St
Wyndham 9831
Southland

Telephone number:

03-206-4623

Fax number:

Email:

cw.aj.leitch@xtra.co.nz

Contact person:
(If applicable)

A.J. LEITCH

Note to Submitter: You must serve a copy of your submission on the applicant as soon as reasonably practicable after you have served your submission on the consent authority. The address for service is 162B Bond Row, Invercargill 9810 or by email to nathan@tahacorp.com

The address for service of Council:
Or for delivery in person:
Or for fax delivery:
Or email:

P O Box 8, GORE
29 Civic Avenue, GORE
(03) 209-0357
info@goredc.govt.nz

Submission against Taha Asia Pacific's (TAP) application for retrospective consent to store Ouvea Premix in the buildings in the town of Mataura (Bridge) known as the Old Paper Mill Buildings.

The first three sheets following this introduction and reasons for objecting (item 3, through and including item 3.3) are the Project Description from the original TAP application to store and manufacture. These three sheets outline the composition of Ouvea Premix and the stated quantities that are stored at the site.

Separately, find the Material Safety Data Sheets (MSDS) for some of the more volatile materials that are stored at the old paper mill buildings in Mataura.

The quantities of stored materials are staggering! There are 10,000 metric tonnes, supposedly, (10 million kilograms) of Ouvea Premix.

For some reason TAP feels that the best place to store these dangerous materials is on the banks of the Mataura River, in the middle of a housing area and across the river from a food factory (Alliance Group, Mataura Plant)

Could that be a straight commercial decision because a 100 year plus old building was the cheapest place they could find?

At 10,000 metric tonnes there would be at least the following quantities of dangerous materials stated to be stored at the site. An independent audit of materials **actually** stored might be illuminating.

Aluminium Oxide.....	7,500,000kg-9,500,000kg
Magnesium.....	less than 100,000kg
Manganese.....	less than 100,000kg
Beryllium.....	less than 2,000kg
Sodium Fluoride.....	0-1,500kg

In addition to the dangerous components of the premix itself, there are stated quantities of the following materials.

DiAmmonium Phosphate.....	100,000kg
Balance 10.....	1,000,000kg
Sulphate of Ammonia.....	400,000kg
Mono Ammonium Phosphate.....	500,000kg
Phosphoric Acid.....	100,000kg

The MSDS's for the above materials, taken together, create a frightening list of hazards to human health and the aquatic environment. It is possible, given the quantities involved, that there could be catastrophic loss of human life if the old paper mill were to catch fire and explode, almost certainly complete loss of all life in the Mataura River, possibly all the way to Foveaux Strait, Stewart Island and beyond were all the material to find its' way into the river by way of a natural or man-made event (fire, explosion, earthquake or flood).

In a 04 August 2014 decision by the Environment Court of New Zealand; Southland Regional Council vs. Taha Asia Pacific; Environmental Judge J.E.Borthwick ruled " I am satisfied that the material (Ouvea Premix) is dangerous to human health and is an ecotoxicant".

While we have no problem with Taha Asia Pacific manufacturing fertiliser out of aluminium dross materials, it should be readily apparent that these materials should not be stored in any town or on potentially floodable areas anywhere.

The substances which have been illegally stored are:

1. A hazard to local residents' health in the event of a disaster, either man-made or natural.
2. A hazard to local fire-fighters in the event of
 - (a) A flood
 - (b) A burst water pipe or sprinkler system
 - (c) A fire
 - (d) An earthquake
3. A potentially disastrous bio threat to the Mataura River and Foveaux Strait

These assertions are backed up by the facts in the accompanying Material Safety Data Sheets which detail the human hazards and the threat to the environment.

The Wyndham Angling Club has many misgivings over this application and the first starts with the actual consent application wording, which is to store a class 6 Hazardous Substance for up to two years. All very fine.

Read through the Application for land use consent and assessment of environmental effects and what do we find?

3.3 “Taha proposes to remove the material from the site once the processing site is fully operational and within 2 years of the resource consent being granted”

To our knowledge, resource consent has not been granted for any processing plant capable of dealing with large quantities of Ouvea and we do not even know if resource consent has been applied for. The two years quoted by Taha is ambiguous and it is not made clear if it is two years from consent to process, or two years to store Ouvea.

Another disturbing part of the wording from 3.3 is “fully operational”. A further quote from 3.3 “when the plant is in full operation in 4-5 years”

It could be assumed that Taha can say “Oh dear, what a shame, the plant is not fully operational and the Ouvea can stay in Maitara”. So in a worst case scenario the Ouvea could actually be stored in Maitara for many more than the two years applied for in the application. Scary stuff.

Our next point is actual quantities of Ouvea stored at Maitara.

Taha is seeking a consent to store 10,000 tonnes of Ouvea.

In Appendix A, Figure 2, Taha state there are 2,000 tonnes at 127 Kana Street and 5,000 tonnes at 116-127 Kana Street.

Simple maths tells us that comes to 7,000 tonnes.

Back to 3.3, “Taha does not intend to store any additional materials at the site. As such, there will be no further inward truck movements for unloading materials.” If consent were to be granted for 10,000 tonnes, would inward truck movements start again?

So it appears Taha does not even know what Ouvea it has stored at Maitara. Even scarier stuff.

Incomplete data does not give us confidence.

2.3 Flood modelling will be too late for submitters to comment on.

2.4 Final building report will also be too late for submitters to comment on.

We would make the point that every flood that comes down the Mataura River is different.

Gravel does build up in different places in the river bed and can change currents quite significantly.

Flood banks in the town of Mataura have been breached before and in a scenario where the east bank is breached only we have deep concerns about the viability of the proposed flood protection measures for the building.

Finally, without minimizing the threat to human life and property, as an angling club we are appalled that such a threat to the Mataura River should have happened through an illegal act which the perpetrators now seek to make legal.

We consider any of the man made or natural events we have listed are capable of destroying the Mataura river ecosystem through release of the Ouvea.

Indeed if the worst happens the affects will reach the coastal waters.

For an overseas based company to put our clean green image at risk is deplorable and for any New Zealander to condone it should be unthinkable.

We strongly urge that no consent to store Ouvea at Mataura be granted and that the present tonnage, whatever it is, be removed as swiftly as possible.

Wyndham Angling Club (Inc)

3. Project Description

The following section outlines the project description, and should be read in conjunction with the site layout plan provided in Appendix B of this report.

3.1 Process description

Taha has developed an aluminium recovery and recycling process on the property of the existing NZAS Smelter. One of the outputs of the process is Ouvea Premix, which has multiple industrial uses including fertiliser, refractory, cement additive, asphalt additive, paint additive and others. This process makes use of a waste product and presents a substantial cost saving to NZAS for waste disposal.

Each week, around 250 tonnes (approximately 8-10 truck pickups) of refined Ouvea Premix is transported from the recycling plant at NZAS to Taha's storage and blending facilities in Invercargill and Maitauro, where it will be processed and blended into mineral fertiliser. The Maitauro facility consists of storage areas for hazardous substances, and will include a production area containing processing and blending equipment. Currently, the Maitauro site is only used for storage, however Taha proposes to use the site for the processing and blending of Ouvea Premix into the mineral fertilisers for the next 2-5 years. Taha's other sites in the region are located on Bond Row, Annan Street and Liddel Street in Invercargill.

When the Ouvea Premix arrives at the site from NZAS, it consists of approximately 30% aluminium oxide, 30% aluminium nitride and 30% magnesium aluminate. Other components include aluminium fines, sodium and calcium salts, and other trace metals. The Ouvea Premix (and other materials) is stored on site. When the plant becomes operational, the material will be transferred to the processing and blending areas on site. Taha proposes to process and blend up to 50 tonnes of Ouvea Premix per day. The Ouvea Premix will be converted through adding water and phosphoric acid in a large mixing vessel into a nitrogen and phosphate based fertiliser. The product will then be blended and granulated in a separate system with other material to make compound fertilizers specific to farmers' needs. There will be no retail stores onsite; however, some customers may pick up the fertiliser produced directly from the site.

Taha is in the process of applying for resource consents required from Environment Southland under the Regional Air Quality Plan for the air discharges produced by the processing of the Ouvea Premix. The processing and batch blending component of the plant is not currently operational. Until the necessary resource consents are obtained from Environment Southland, the plant will only be used for the storage of hazardous substances. The fully operational plant will employ 10 full time equivalent (FTE) staff in year round employment. While the plant is only used for storage, there will be no onsite staff, but there will be weekly storage checks.

3.2 Storage of hazardous substances

The operation described above requires storage of a number of hazardous substances on site for periods of time. Currently, the Ouvea Premix is stored in the facilities located at 116-130 Kana Street, which are now at capacity. However, it is anticipated that once this building has been emptied (the blending and stabilisation process starts) it will cease to be used for storage, unless necessary. Ouvea Premix will be stored in the buildings marked B, C and D and in the site layout plan in Appendix B. Table 2 outlines the substances and quantities proposed to be stored on site.

Table 2 : Hazardous substances stored onsite

Product name	Description	Max volume	Storage type	Spill prevention	HSNO class
Ouvea Premix	Granular/ powder	10000 T	1-tonne plastic-lined woven mesh forklift bags or bulk straight into the system	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.3A; 6.4A; 9.1C

Ouvea	Granular	400 T	Bulk and bagged (1T forklift bags)	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.3A; 6.4A; 9.1C
Di-Ammonium Phosphate	Granular	100 T	Bulk and bagged (1T forklift bags)	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.1E, 6.3A, 6.4A, 9.1D
Balance 10	Granular	1000 T	Bulk and bagged (1T forklift bags)	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.1D, 6.3A, 6.4A, 6.9B, 9.1D, 9.3C
Sulphate of Ammonia	Granular/Powder	400 T	Bulk and bagged (1T forklift bags)	Stored indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C.	6.1D, 9.1D, 9.3C
Muriate of potash (KCl)	Granular/Powder	300 T	Bulk and bagged (1T forklift bags)	Stored in closed container indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C	6.1D, 6.3B, 6.4A, 9.3B
Mono Ammonium Phosphate	Powder	500 T	Bulk and bagged (1T forklift bags)	Stored in closed container indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C	6.1E, 6.3A, 6.4A, 9.1D
Lime	Granular/powder	100 T	Bulk	Not hazardous, shovel and wheelbarrow. Return to stock pile if uncontaminated.	Not hazardous
Silica	Fine powder	200 T	Bulk and bagged (1 T forklift bags)	Not hazardous, shovel and wheelbarrow. Return to stock pile if uncontaminated.	Not hazardous
Serpentine	Granular/powder	60 T	Bulk and bagged (1 T forklift bags)	Not hazardous, shovel and wheelbarrow. Return to stock pile if uncontaminated.	Not hazardous
Soil conditioner (humate)	Mineralised organics as charcoal compounds	60 T	Bulk and bagged (1 T forklift bags)	Not hazardous, shovel and wheelbarrow. Return to stock pile if uncontaminated.	Not hazardous
Guano	Granular	30 T	Bulk and bagged (1 T forklift bags)	Stored in closed container indoors to prevent contact with moisture. Temperature will be controlled and is not to exceed 50°C	6.3B, 6.4A
Clover One	Granular	500 T	Bulk and bagged (1 T forklift bags)	Stored indoors to prevent contact with moisture. Temperature will be	6.1E, 6.3A, 6.4A, 9.1D

				controlled and is not to exceed 50°C	
Phosphoric Acid	Liquid	100 T	1000L IBC's (International Bulk Containers)	Stored within a bunded area sufficient to hold >2000L (i.e 2 full IBC's)	6.1D, 6.1E, 8.1A, 8.2C, 8.3A, 9.1D, 9.3C

3.3 Transportation of materials

Initially, there will be an average of one truck in and out of the site per day for the first year of operation. This will increase by an average of one truck in and out over the second, third and fourth years of operation, with a likely maximum of four trucks in and out per day when the plant is in full operation in 4-5 years. Access to the site will occur between 6am – 8pm on weekdays only.

The site has existing truck access off Kana Street. The 109 Kana Street site has three main site access points, which are indicated in the site layout plan in Appendix B:

- Bulk bag deliveries and outwards goods loading will occur at the south-end of the site. The loading and unloading area is external to the building but off-road and includes a truck turning bay.
- The bulk inwards goods area is located in the main building on 109 Kana Street. Trucks will enter the building, unloading materials then manoeuvre inside the building before exiting out the same point in a forward motion. The building interior provides adequate space for manoeuvring.
- Additional deliveries are made to the storage building at the north of the site (marked "Ouvea Premix Store D" in the site layout plan). Trucks can access this building through an off-road area.

The 116-130 Kana Street site (marked "Ouvea Premix Store A" on the site layout plan) has one access area at the north of the building. Although this site is now at capacity, trucks accessed this site by pulling off the road at the north of the building, before being off-loaded by a forklift. Prior to the processing and blending, substances stored in "Ouvea Premix Store A" will need to be transferred across the road to the mixing room and granulation plant. There are options being considered by Taha to do this – transfer using a forklift or load a trailer with 8-10 bulk bags at a time and transfer over. Trailers are the preferable option and will be loaded at the south end corner of the building where there is a concrete loading area. This transfer will only occur 6-8 times a month and will not happen in the first year of operation.

3.4 Parking

Taha will provide onsite car parking for the 10 additional PTE to the north and south of the office area (as indicated in the site layout plans in Appendix B). There is also a large yard to the south of the 109 Kana Street complex, which can be used for parking if required. There are no other parties using the complex, so there is no competition for these car parks. Also, while the facility is only used for storage, there will be no FTE's on site requiring parking, other than temporary parking for staff conducting the regular storage checks.

Human Health Hazards, as described in attached MSDS's

Ouvea Powder, also known as aluminium oxide

Hazard statements: causes skin irritation, causes serious eye irritation.

Carcinogenic category 6.7A: known or presumed human carcinogen.

Aluminium Oxide: Aluminium compounds are active chemically and exhibit dangerous and toxic and reactive properties. Inhalation of fine aluminium oxide particles is associated with Shaver's disease, a condition characterized by cough, shortness of breath, a combined obstructive and restrictive breathing pattern, and impairment of diffusing capacity.

Aluminium Nitride

Ammonia-like odor. Aluminium may be implicated in Alzheimer's disease. Inhalation of aluminium containing dusts may cause pulmonary disease. Aluminium compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties. The details of the toxicity of nitrides as a group are unknown. May be irritating to eyes, skin, and mucous membranes.

Magnesium

Identified as toxic by EPA and subject to reporting requirements of SARA. Excessive exposure to dusts/fumes may cause irritation of eyes, nose and throat. Inhalation of dusts/fumes may result in metal fumes fever (metallic taste in mouth, dryness and irritation of throat, chills and fever). Prolonged inhalation of fumes or dusts may cause a variety

of adverse health effects to the respiratory system, including (but not necessarily limited to) lesions of the mucous membrane, bronchitis, pneumonia and cancers of the nasal cavity and respiratory tract.

Manganese

The substance may be toxic to blood, lungs, brain, central nervous system. Repeated or prolonged exposure to the substance can produce target organs damage. Manganese can cross the placenta. May cause cancer (tumorigenic) based on animal data.

Acute Potential Health Effects:

Skin: May cause skin irritation. Eyes: Dust may cause mechanical irritation. Inhalation: Dust may cause respiratory tract irritation. May cause "Metal Fume Fever" which may include flu-like symptoms (fever, chills, upset stomach, vomiting, weakness, headache, body aches, muscle pains, dry mouth and throat, coughing, tightness of the chest). May affect behavior/Central Nervous system (change in motor activity, torpor, nervousness, tremor, yawning, mood swings, irritability, restlessness, fatigue, headache, apathy, languor, insomnia then somnolence, hallucinations, delusions, uncontrollable laughter followed by crying, compulsions, aggressiveness, weakness in legs, memory loss, decreased libido, impotence, salivation, hearing loss, slow gait), and respiration (dyspnea, shallow respiration, cyanosis, alveolar inflammation. Ingestion: Repeated or prolonged exposure from ingestion may affect brain (degenerative changes), blood and metabolism. Ingestion: May cause digestive tract irritation. There is a low gastrointestinal absorption of manganese.

Chronic Potential Health Effects:

Inhalation: Repeated or prolonged exposure from inhalation may affect brain (degenerative changes), behavior/Central Nervous system with symptoms to acute exposure. May also affect liver (chronic liver disease, jaundice). Ingestion: repeated or prolonged exposure from ingestion may affect brain, blood and metabolism.

Beryllium

Carcinogenic to humans.

Acute and Chronic Effects: Some people inhaling low concentrations of beryllium develop chronic beryllium disease, a granulomatous lung disease characterized by dyspnea, cough, reduced pulmonary function, and a variety of other symptoms including weight loss. The lack of a dose-response relationship between the extent of exposure and development of the disease, long latency period between exposure and onset, and the low incidence among beryllium-exposed individuals suggest that the disease is immune mediated.

Sodium Fluoride

DOT classification: Poisonous material

Hazardous in case of skin contact (irritant), of eye contact (irritant, corrosive), of ingestion, of inhalation. Severe over-exposure can result in death.

The substance may be toxic to kidneys, lungs, the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may

produce general deterioration of health by an accumulation in one or many human organs.

Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, lungs, the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth.

May cause adverse reproductive effects(fertility, fetotoxicity), and birth defects based on animal data. May cause cancer based on animal data. May cause genetic (mutagenic) and tumorigenic effects.

Acute Potential Health Effects: Skin: Causes skin irritation and possible burns, especially if skin is wet or moist. Eyes: Causes eye irritation and burns. May cause chemical conjunctivitis and corneal damage.

Ingestion: Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation and burns. May cause severe and permanent damage to the digestive tract. Ingestion of large amounts may cause salivation, thirst, nausea, vomiting, hypermotility, diarrhea, and abdominal pain. May affect behavior/central nervous system (headache, nervousness, dizziness, seizures, convulsions, tremor, muscle weakness, somnolence), respiration (respiratory depression, dyspnea), cardiovascular system (weak pulse, hypotension, dysrhythmias, cardiac arrest), liver, urinary system (polydypsia) brain, metabolism (loss of appetite, hypocalcemia, hyperkalemia, hypomagnesia), teeth, bones, and blood (changes in red and white blood cell count, interference in blood coagulation). Inhalation: Causes irritation and chemical burns of the respiratory tract with coughing, breathing difficulty and possibly nasal septum perforation and coma. May affect bones.

Chronic Potential Health Effects: Chronic ingestion may cause fluorosis. Effects of fluorosis may include joint pain, weakness, limited joint mobility, brittle bones, ossifications on X-ray, thickening of long bone cortices, calcification of ligaments, osteomalacia, osteosclerosis (skeletal (bone and teeth) abnormalities) and mottled tooth enamel. Other symptoms may include anemia, nausea, vomiting, diarrhea or constipation, kidney damage and weight loss/anorexia. Chronic inhalation may cause bronchitis to develop with cough, phlegm, and/or shortness of breath, liver (hepatic enzymes increased, jaundice).

Phosphoric Acid

Potential Acute Health Effects: Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe overexposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening or occasionally, blistering.

Potential Chronic Health Effects: The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a

highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Acute Potential Health Effects: Skin: Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin. Eyes: Corrosive. Liquid or vapor causes severe eye irritation and can cause severe burns leading to permanent corneal damage or chemical conjunctivitis.

Ingestion: May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia).

Firefighting Hazards As Described In Attached MSDS's

Ouvea Thermal Powder (Aluminium Oxide)

Firefighters to wear Self Contained Breathing Apparatus (SCBA) and suitable protective clothing if risk of exposure to products of decomposition. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Aluminium oxide may have an exothermic reaction, above 200 degrees C, with halocarbon vapors and may produce toxic hydrochloric acid and phosgene.

Aluminum Nitride

Extinguishing Media: **DO NOT USE WATER**

Unusual fire and explosion hazards: Reacts with water to form ammonia, a fire and explosion hazard.

Diammonium Phosphate

Firefighters should wear SCBA and Protective Clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Prevent material from entering public sewer system or any waterways.

Hazardous Decomposition Materials (Under Fire Conditions) ammonia, oxides of nitrogen, oxides of phosphorus.

Sulfate of Ammonia

Will form flammable and toxic gases at elevated temperatures (greater than 280 degrees C) by thermal decomposition, yielding ammonia, sulfur oxides and nitrogen oxides.

Phosphoric Acid

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans and sulfides. (NEVER ADD WATER TO THIS PRODUCT)

Sodium Fluoride

Slightly Explosive in presence of heat. Containers may explode when heated. Prevent entry into sewers, basements or confined areas. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

Manganese

Moderate explosion potential, in the form of dust or powder, when exposed to flame.

Beryllium

May emit toxic fumes of beryllium oxide under fire conditions. Contact with acids and strong bases generate flammable hydrogen gas.

ECOTOXIC HAZARDS, per the attached MSDS's

Ouvea Thermal Powder/ Aluminium Oxide

Subclass 9.1 Category C – Substances that are harmful in the aquatic environment.

“Harmful to aquatic life with long lasting effects.”

See attached Environmental Court of New Zealand Decision, Southland Regional Council vs Taha Asia Pacific Limited.

In a 4 August 2014 decision, Environmental Judge J. E. Borthwick states:

“I am satisfied that the material (Ouvea Premix) deposited on the site is a contaminant and that it is or is likely to be noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment”.

“I am also satisfied that the material is dangerous to human life and is an aquatic ecotoxicant.”



Environment Court of New Zealand

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Southland Regional Council v Taha Asia Pacific Limited [2014] NZEnvC 169 (4 August 2014)

Last Updated: 26 August 2014

BEFORE THE ENVIRONMENT COURT

Decision No. [\[2014\] NZEnvC 169](#)

IN THE MATTER of the Resource Management Act 1991 and of an application for interim enforcement orders under s 320 of the Act

BETWEEN SOUTHLAND REGIONAL COUNCIL

(ENV-2014-CHC-037)

Applicant

AND TAHA ASIA PACIFIC LIMITED, TAHA FERTILIZER INDUSTRIES LIMITED AND
CRAWFORD ENTERPRISES LIMITED

Respondents

Hearing: In Chambers at Christchurch

Sitting alone pursuant to section 309 of the Act Court: Environment Judge J E Borthwick

Date of Decision: 4 August 2014

Date of Issue: 4 August 2014

DECISION OF THE ENVIRONMENT COURT ON APPLICATION FOR INTERIM ENFORCEMENT ORDERS

(EX PARTE)

A: Subject to directions, the interim enforcement orders are made *ex parte*.

A: Costs are reserved.



REASONS

Introduction

[1] The Southland Regional Council has applied for ex parte interim enforcement orders against Taha Asia Pacific Ltd, Taha Fertilizer Industries Ltd and Crawford Enterprises Ltd.'

[2] The application is supported by an affidavit of Aurora June Grant, a compliance officer employed by the Southland Regional Council² and an undertaking as to damages provided by the Chief Executive of the Southland Regional Council.³



The orders

[3] Material containing aluminium dross or  **Ouvea**  Premix (**the material**) has been deposited at a site located in Coalpit Road near Edendale (**the site**).⁴

[4] In summary, the orders sought are to:

- (a) require the cessation of any further discharge of the material to the site;
- (a) prohibit the removal of any material on the site without the consent of the Regional Council's compliance manager or further order of the court;
- (a) require the engagement of a suitably qualified person to test and report on the material; and
- (a) require a list of all sites within the Southland Region where the material has been discharged or is stored.

Grounds of the application

[5] Aluminium dross when mixed with water reacts to release flammable and noxious gas, and is a hazard to human health. While  **Ouvea**  Premix is less hazardous than aluminium dross, it retains some of its hazardous properties. The applicant is

The application was filed 1 August 2014 with draft interim enforcement orders being filed 4 August 2014.

² Dated 29 July 2014.

³ Dated 28 July 2014.

Sec 40E Edendale Settlement Lot 1 Deposited Plan 13437.

concerned that the material is a contaminant and that it may enter groundwater and surface water. Ms Grant deposes that no rule in a Regional Plan permits the discharge of any contaminant from an industrial or trade premise onto or into land, or secondly, the discharge of any contaminant onto land in circumstances which may result in that contaminant entering water.

[6] On 17 July 2014 Ms Grant visited the site to investigate a complaint that aluminium dross may have been dumped there. At the site she discovered two large piles consisting of gravel and small lumps of metallic grey matter. The piles were sitting on unsealed ground at the bottom of an excavated gravel pit. The pit is near the level of the water table and water was ponding around the base of one of the piles. The nearest waterway is a small tributary of the Ota Creek, approximately 100m away

from one of the piles.

[6] Ms Grant spoke to Mr Bruce Spencer, the site manager, concerning the complaint. He confirmed that the piles comprised aluminium dross that had been brought by "Taha" onto the site and that it was to be used for roading material. He explained that the dross was inert as it had been mixed with gravel. Taha representatives had been coming daily to the site to test the material and had stated that the material was safe to work with.

[6] Mr Spencer advised that an occupant of a neighbouring property had complained about being sick since the dross had been on the site, but that Crawford Enterprises Ltd employees had been working with the material and had shown no symptoms. As a precaution he had ceased work around the pile and asked Worksafe [I interpolate Worksafe New Zealand], to assess the area.

[6] Annexed to Ms Grant's affidavit is a letter dated 18 July 2014 from Crawford Enterprises Ltd's lawyers, Mactodd, to Taha Fertilizer Industries Ltd.⁵ Through their lawyers, Crawford Enterprises Ltd has confirmed that it has taken a considerable tonnage of the material from "Taha". The material was taken with the intention of blending it with gravel aggregate to form a base for the access road to the gravel pit. Crawford Enterprises Ltd took the material on the basis of Taha's assurance that it was

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completely harmless and safe. Contrary to the assurance given to Crawford Enterprises Ltd, the material gave off an unpleasant odour and caused irritation to skin eyes and throat. Further, a neighbouring contractor reported two of its employees having to receive hospital treatment for sore eyes and throats. Finally, Crawford Enterprises Ltd had formed the view that the material is not harmless and had requested Taha immediately remove the material from its land.

The respondents

[10] There are three respondents. The first of these is Crawford Enterprises Ltd, the owner of the site.

[11] Taha Asia Pacific Limited and Taha Fertilizer Industries Ltd are related companies. Both companies have the same directors and their registered offices are a firm of accountants in Invercargill. Taha Asia Pacific Limited has industrial premises at Tiwai Peninsula, Bluff, where it processes aluminium dross sourced from Tiwai Aluminium Smelter. Taha Fertilizer Industries Ltd has industrial premises in Invercargill where it manufactures a form of mineral fertiliser using the aluminium dross that has been processed by Taha Asia Pacific Ltd. The fertiliser has the trade name  **Ouvea**  Premix. The applicant has been unable to discover whether the material deposited on the site was from Taha Asia Pacific Limited or Taha Fertilizer Industries Ltd and so orders are sought against both companies.

The law

[12] Section 320(2) of the Act provides that:

If an Environment Judge or a District Court Judge considers it necessary to do so, the Judge may make an interim enforcement order—

- (a) without requiring service of notice in accordance with section 317; and
- (a) without holding a hearing.

[13] Counsel for the applicant, Mr Slowley, has made an application for waiver, under s 281 of the Act, seeking an order under s 320(2), that the interim enforcement

orders are made without requiring service of the notice of the application and without holding a hearing.



[14] In addition, Mr Slowley seeks an order under s 281 that "this notice need not be served on the other parties to the application for enforcement orders". This last order sought presumably means that Mr Slowley seeks a waiver for the service of the notice of the application on anyone who becomes a party to the proceeding. These applications form part of my overall consideration under s 320 of the Act which follows.

[15] In accordance with s 320(3) of the Act, before making an interim enforcement order an Environment Judge is to consider:

- (a) what the effect of not making the order would be on the environment; and
- (a) whether the applicant has given an appropriate undertaking as to damages; and
- (a) whether the Judge should hear the applicant or any person against whom the interim order is sought; and
- (a) such other matters as the Judge thinks fit.

[16] I deal with each of these considerations below.



Discussion and findings

[17] I am satisfied that the material deposited on the site is a contaminant and that it is or is likely to be noxious, dangerous, offensive, or objectionable to such an extent that it has or is likely to have an adverse effect on the environment. From the information contained in the annexures to Ms Grant's affidavit, including Annexure B: being a Material Safety Data Sheet published by RioTintoAlcan for Aluminium Dross and Annexure C: a Material Safety Data Sheet watermarked "draft" for  **Ouvea**  Premix (publisher not stated), I am also satisfied that the material is dangerous to human life and is an aquatic ecotoxicant.

[18] In accordance with s 320(2) I have considered whether to:

- (a) require service of the notice in accordance with s 317; and
- (a) to hold a hearing.

[19] For the following reasons I consider it necessary to make the interim enforcement orders without requiring service of the notice and without holding a hearing:

- (a) Crawford Enterprises Ltd has confirmed that the material deposited on the site is aluminium dross or  **Ouvea**  Premix, sourced from one of the other two respondents;

- (b) I consider it likely that members of the public have been, and remain exposed to, a dangerous material. Persons who have been exposed to the material report suffering deleterious health effects;
- (b) it is likely there will be an adverse effect on the environment if contaminants emanating from the material are to enter groundwater or surface water;
- (a) the deposition of a contaminant is not permitted under a Regional Plan and the applicant advises that the respondents do not hold resource consent authorising this activity;
- (d) the containment and management of the disposal of this material is a matter that is to be addressed with some considerable care and under urgency; and
- (a) finally, the respondents may apply under s 320(5) of the Act to change or cancel the order. After hearing from the respondent, the applicant and any other person the Judge thinks fit, the interim enforcement order may be confirmed, changed or cancelled. The court will endeavour to expedite any application that is made.

[20] The above matters form part of the court's consideration under s 320(3) and I have also taken into account the fact that the applicant has given an appropriate undertaking as to damages. The Regional Council, through its Chief Executive Mr R A Phillips, has provided an undertaking as to damages stating that it will comply with any

order for the payment of damages to compensate the other parties for damage sustained through any of the interim enforcement orders.⁶

[21] Crawford Enterprises Limited has requested that Taha immediately remove the material from its land. However, the Regional Council, quite rightly, does not want the material to be removed until tests are carried out to assess the degree of hazard and the best method to neutralise it. The Regional Council also notes that the danger of removing the material without assessing it first could mean that the problem is transferred to another area which is even less suitable for its storage. On that basis, I think I must act now rather than wait to hear further from the parties.

[21] While the application for waiver is not strictly necessary — as this forms part of the court's considerations under s 320(2) — the application has been made so I will grant it.

Outcome

[21] Accordingly, I intend to make the interim enforcement orders sought, with some minor amendments.

[21] Pursuant to s 281, the application for waiver of service of the notice of application for interim enforcement orders is granted.

[21] The applicant is to note that I directed it serve the respondents with a copy of the interim enforcement order. I have further directed the applicant report to the court on compliance with the interim enforcement orders.

[21] Finally, I record that the interim enforcement orders are to stay in force until an application for an enforcement order under s 316 is determined, or until cancelled by an Environment Judge or a District Court Judge under subsection 320(5), or cancelled by the Environment Court under s 321.

⁶ Undertaking as to damages dated 28 July 2014, attached to application for interim enforcement orders dated 30 July 2014.

Directions

[27] The interim enforcement orders are subject to the following directions:

- (a) the applicant shall forthwith serve a copy of these orders on the respondents; and
- (a) subject to there being no application to change or cancel the interim enforcement orders by **29 August 2014** the applicant is to serve and file a report to the court as to compliance with the interim enforcement orders and is to apply for final enforcement orders as may be necessary.



SRC v Taha Asia Pacific Ltd & Ors- Interim Enforcement.doe

INTERIM ENFORCEMENT ORDERS

A: Pursuant to ss 279(1)(a), 319 and 320 of the Resource Management Act 1991 the

Environment Court makes the following orders *ex parte* against Taha Asia Pacific Limited, Taha Fertilizer Industries Limited and Crawford Enterprises Limited (**the respondents**):

In respect of the site at Coalpit Road, Edendale described as sec 40E Edendale Settlement and Lot 1 Deposited Plan 13437 (**the site**):

- (a) pursuant to s 314(1)(a)(i) and (ii) of the Resource Management Act 1991 the respondents are required to cease immediately any further discharge of material containing aluminium dross or  **Ouvea**  Premix (**the material**) on to the site; and
- (a) pursuant to s 314(1)(b)(i) and (ii) of the Resource Management Act 1991 the respondents are prohibited from removing any of the material already on the site without the consent of the compliance manager of the Southland Regional Council or further order of this court.

B: Pursuant to ss 279(1)(a), 319 and 320 of the Resource Management Act 1991 the

Environment Court makes the following orders *ex parte* in respect of the site against the respondents Taha Asia Pacific Limited and Taha Fertilizer Industries Limited (**the named respondents**):

(a) pursuant to s 314(1)(c) of the Resource Management Act 1991 the named

respondents are required within 14 days of the service of this order to engage a suitably qualified person approved by the compliance manager of the Southland Regional Council to carry out testing of the material already on the site to ascertain the proportion of aluminium dross that it contains, the level of toxicity and hazard and the safest method for neutralising or lawfully disposing of it; and

(b) pursuant to s 314(1)(c) of the Resource Management Act 1991 the named respondents are required to deliver a written report of the assessment made pursuant to order B(i) to the compliance manager of the Southland Regional Council within 7 days of its completion.

C: Pursuant to ss 279(1)(a), 319 and 320 of the Resource Management Act 1991 the Environment Court makes the following order *ex parte* against the respondents Taha Asia Pacific Limited and Taha Fertilizer Industries Limited (**the named respondents**):

(a) pursuant to s 314(1)(c) of the Resource Management Act 1991 the named respondents are required within 21 days of the service of this order to deliver to the compliance manager of the Southland Regional Council a written list of sites within the Southland Region where the material has been discharged or is stored. The list is to contain accurate GPS coordinates for each site.

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URL: <http://www.nzlii.org/nz/cases/NZEnvC/2014/169.html>

Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: OUVEA THERMAL POWDER

Other name(s): Aluminium oxide.

Recommended Use: Additive.

Supplier: Orica New Zealand Limited

Street Address: Orica Chemnet House
Level four, 123 Carlton Gore Road
Newmarket, Auckland
New Zealand

Telephone Number: +64 9 368 2700

Facsimile: +64 9 368 2710

Emergency Telephone: 0 800 734 607 (ALL HOURS)

2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.



Subclasses:

Subclass 6.3 Category A - Substances that are irritating to the skin.

Subclass 6.4 Category A - Substances that are irritating to the eye.

Subclass 9.1 Category C - Substances that are harmful in the aquatic environment.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006

Hazard and Precautionary Information:

Signal Word: Warning.

Hazard Statements:

Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Read Safety Data Sheet before use. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. Take off contaminated clothing before re-use. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. Specific treatment: use of specific cleansing agent not required. If skin irritation occurs: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Description: Also contains 0-15% Metal fluoride salts and <3% Metal nitrides.

Product Name: OUVEA THERMAL POWDER
Substance No: 000000050799

Issued: 05/09/2012
Version: 1

Safety Data Sheet



Components	CAS Number	Proportion	Risk Phrases
Aluminium oxide	1344-28-1	75-95%	-
Iron	7439-89-6	<1.5%	-
Magnesium	7439-95-4	<1%	R15 R16 R17
Silicon	7440-21-3	<1%	-
Manganese	7439-96-5	<1%	Hazardous
Copper	7440-50-8	<0.1%	R50/53
Nickel (metal)	7440-02-0	<0.1%	R40, R43, R48/23, R52/53
Beryllium	7440-41-7	<0.02%	R25, R26, R36/37/38, R43, R48/23, Carc. Cat.2 R49

4. FIRST AID MEASURES

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Medical attention and special treatment:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:

Non-combustible material.

Precautions for fire fighters and special protective equipment:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

Product Name: OUVEA THERMAL POWDER
Substance No: 000000050799

Issued: 05/09/2012
Version: 1

Safety Data Sheet



Methods and materials for containment and clean up:

Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation.

Conditions for safe storage: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). However, Workplace Exposure Standard(s) for constituent(s):

Aluminium oxide: 8hr WES-TWA = 10 mg/m³

Copper dusts & mists, as Cu: WES-TWA 1 mg/m³

Silicon: WES-TWA 10 mg/m³

Manganese dust & compounds, as Mn: WES-TWA 1 mg/m³

Beryllium & compounds, as Be: WES-TWA 0.002 mg/m³, 6.7A Known or presumed human carcinogen

As published by the New Zealand Occupational Safety and Health Service (OSH).

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

Carcinogen Category 6.7A - Known or presumed human carcinogen.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:

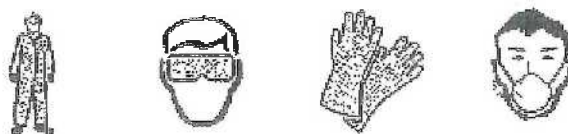
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Orica Personal Protection Guide No. 1, 1998: F - OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Safety Data Sheet



Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Colour:	Grey
Solubility:	Negligible solubility in water.
Specific Gravity:	Not available
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	Not available
Melting Point/Range (°C):	2072
Boiling Point/Range (°C):	2980
pH:	Not applicable

10. STABILITY AND REACTIVITY

Chemical stability:	Stable.
Conditions to avoid:	Avoid dust generation.
Incompatible materials:	Incompatible with acids.
Hazardous decomposition products:	None known.
Hazardous reactions:	Reacts with acids.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	No adverse effects expected, however, large amounts may cause nausea and vomiting.
Eye contact:	An eye irritant.
Skin contact:	Contact with skin will result in irritation.
Inhalation:	Breathing in dust may result in respiratory irritation.

Long Term Effects:
No information available for the product.

Toxicological Data: No LD50 data available for the product.

Product Name: OUVEA THERMAL POWDER
Substance No: 000000050799

Issued: 05/09/2012
Version: 1

12. ECOLOGICAL INFORMATION

Ecotoxicity

Avoid contaminating waterways.

Aquatic toxicity:

Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses:

Subclass 6.3 Category A - Substances that are irritating to the skin.

Subclass 6.4 Category A - Substances that are irritating to the eye.

Subclass 9.1 Category C - Substances that are harmful in the aquatic environment.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006

16. OTHER INFORMATION

This safety data sheet has been prepared by Orica SDS Services.

Reason(s) for Issue:

First Issue Primary SDS



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Aluminum Oxide

A row of small, faint icons for social media or other digital links.

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Manufacturer/Supplier:

ESPI Metals

1050 Benson Way, Ashland, OR 97520

Toll Free (800) 638-2581 * Fax (541) 488-8313

E-Mail: sales@espimetals.com**Product Name:** Aluminum Oxide**Formula:** Al_2O_3 **CAS Number:** 1344-28-1

II. HAZARDOUS INGREDIENTS

Hazardous Component: Aluminum Oxide**Percent (%):** 0-100**OSHA/PEL:** 5 mg/m³**ACGIH/TLV:** 10 mg/m³**HMIS Ratings:****Health:** 1**Flammability:** 0**Reactivity:** 0



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Aluminum Oxide

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II. HAZARDOUS INGREDIENTS

Hazardous Component: Aluminum Oxide**Percent (%):** 0-100**OSHA/PEL:** 5 mg/m³**ACGIH/TLV:** 10 mg/m³**HMIS Ratings:****Health:** 1**Flammability:** 0**Reactivity:** 0

III. PHYSICAL DATA

Boiling Point: 2977 °C**Melting Point:** 2050 °C**Specific Gravity:** 3.965 g/cc @ 25 °C**Vapor Pressure:** 1mm @ 2158 °C**Solubility in H₂O:** Insoluble**Appearance and Odor:** White solid or powder, no odor

IV. FIRE AND EXPLOSION HAZARDS DATA

Flash Point: N/A**Autoignition Temperature:** N/A**Explosive Limits:** Upper: N/A Lower: N/A

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Pacific Time**OFFLINE**

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Contact

ESPI Metals1050 Benson Way
Ashland, Oregon 97520541.488.8311 telephone
800.638.2581 toll-free541.488.8313 fax
800.488.0060 toll-free faxsales@espimetals.com

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Silver	▲ 18.23	+0.20	18.42	
Platinum	▲ 1279.00	+2.00	1284.00	
Palladium	▲ 779.00	+5.00	786.00	

Conversion Tool

Extinguishing Media: Use suitable extinguishing media for surrounding materials and type of fire.

Special Firefighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire & Explosion Hazards: Aluminum oxide may have an exothermic reaction, above 200 °C, with halocarbon vapors and may produce toxic hydrochloric acid and phosgene.

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V. HEALTH HAZARD INFORMATION

Effects of Exposure:

To the best of our knowledge the chemical, physical and toxicological properties of aluminum oxide have not been thoroughly investigated and recorded.

Aluminum compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties. Inhalation of fine aluminum oxide particles is associated with Shaver's disease, a condition characterized by cough, shortness of breath, a combined obstructive and restrictive breathing pattern, and impairment of diffusing capacity. (Sax, Dangerous Properties of Industrial Materials)

Acute Effects:

Inhalation: Inhalation of finely divided dust may cause coughing, mucous production and shortness of breath.

Ingestion: None recorded.

Skin: May cause irritation

Eye: Dust may cause eye irritation.

Chronic Effects:

Inhalation: Inhalation of finely divided dust may cause lung damage affecting breathing capacity.

Ingestion: None recorded.

Skin: None recorded.

Eye: None recorded.

Target Organs: May affect the lungs

Medical Conditions Generally Aggravated by Overexposure: Pre-existing respiratory disorders.

Carcinogenicity: NTP: No IARC: No OSHA: No

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.

INGESTION: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

SKIN: Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention.

EYES: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention.

VI. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None

Incompatibility (Material to Avoid): Acids, bases, oxidizing agents, interhalogens, halocarbons.

Hazardous Decomposition Products: Metal oxide fume.

Hazardous Polymerization: Will not occur

VII. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal Waste Disposal Regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved respirator

Ventilation: Use local exhaust to maintain concentration at or below the PEL. General exhaust is not recommended.

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses

Other Protective Clothing or Equipment: Normal lab wear.

IX. SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storing: Store in tightly sealed containers. Store in a cool, dry area. Wash thoroughly after handling.

Work Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. Maintain eyewash capable of sustained flushing, safety drench shower and facilities for washing.

TSCA Listed: Yes

DOT Regulations:

Hazard Class: None

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product.

Issued by: S. Dierks

Revised/Verified: September 2011

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MTI Corporation
2700 Rydin Road, Unit D
Richmond, CA 94804
USA

Telephone: (510) 525-3070
Fax: (510) 525-4705
www.mtixtl.com

I. PRODUCT IDENTIFICATION

Product Name: Aluminum Nitride

Formula: AlN

CAS Number: 24304-00-5

II. HAZARDOUS INGREDIENTS

Hazardous Component: Aluminum Nitride

Percent (%): 0-100

OSHA/PEL: N/E

ACGIH/TLV: N/E

III. PHYSICAL DATA

Melting Point: approx 2200 °C

Boiling Point: 2517 °C

Specific Gravity: 3.26 g/cc

Solubility in H₂O: Decomposes

Appearance and Odor (for powder): White to grey powder, ammonia-like odor ; white solid for thin film

IV. FIRE AND EXPLOSION HAZARDS DATA**Flash Point:** N/A**Autoignition Temperature:** No Data**Flammable Limits:** Upper: No Data Lower: No Data**Extinguishing Media:** DO NOT USE WATER. Use carbon dioxide, dry powder extinguishing agents, dry sand, or dry ground dolomite.**Special Fire Fighting Procedures:** No special firefighting procedures needed, use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing, hats boots and gloves. If without risk remove material from fire area.**Unusual Fire and Explosion Hazards:** Reacts with water to form ammonia, a fire and explosion hazard.**V. HEALTH HAZARD INFORMATION****Effects of Exposure:**

To the best of our knowledge the chemical, physical and toxicological properties of aluminum nitride have not been thoroughly investigated and reported.

Aluminum may be implicated in Alzheimer's disease. Inhalation of aluminum containing dusts may cause pulmonary disease. Aluminum compounds have many commercial uses and are commonly found in industry. Many of these materials are active chemically and thus exhibit dangerous toxic and reactive properties.

The details of the toxicity of nitrides as a group are unknown. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Acute and Chronic Effects: May be irritating to eyes, skin, and mucous membranes.**EMERGENCY AND FIRST AID PROCEDURES:****INHALATION:** Remove to fresh air, keep warm and quiet; give oxygen if breathing is difficult and seek immediate medical attention.**INGESTION:** Remove from exposure. Seek prompt, competent medical attention.**SKIN:** Remove any contaminated clothing. Flood skin with large volumes of water for 15 minutes. Seek medical advice.**EYES:** Flush with copious amounts of water for at least 15 minutes. Then consult a doctor.

VI. REACTIVITY DATA

Stability: Stable

Conditions to avoid: Moisture

Incompatibility (Materials to Avoid): Water/moisture, air, acids, oxidizing agents

Hazardous Decomposition Products: Contact with water releases flammable gases; ammonia, nitrogen oxides.

Hazardous Polymerization: Will not occur.

VII. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wearing full protective clothing and respiratory protection, eliminate all sources of ignition. Cover spill with dry sand or dry vermiculite, mix well and carefully transfer to a well-marked container. Close container tightly. Submit or retain for disposal.

Waste Disposal Method: Consult state, Local, and federal regulations for proper disposal of aluminum nitride.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH/MSHA approved dust mask for ordinary use, self-contained breathing apparatus for emergency use.

Ventilation: Glove box or bag under dry inert atmosphere.

Eye Protection: OSHA approved safety goggles

Protective Gloves: Rubber

Other Protective Equipment: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

IX. SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Wash thoroughly after handling. Handle in glove box or bag under dry inert atmosphere. Keep container tightly closed. Store in cool, dry, well-ventilated area

Precautionary Labeling: Warning, moisture sensitive, irritates skin, eyes, lungs.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product. Issued by: T. Yang; Revised/Verified: June 2009

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Name: **Magnesium**

Product Use:

Manufacturer Information:

OMNISOURCE CORPORATION

1610 North Calhoun Street

Fort Wayne, Indiana 46808

Telephone: (260)422-5541 Safety Department

Emergency #: 800-666-4789

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percent
7439-95-4	Magnesium (Mg)	95-97
7429-90-5	**Aluminum (Al)	0-9
7439-96-5	**Manganese (Mn)	.02-.1
7440-66-6	**Zinc (Zn)	0-1

Note: Those elements identified by an * and those elements capable of generating highly toxic fumes or dusts (identified by a **) are classified as toxic by EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III Section 313 and 40 CFR 372.

SECTION 3 – HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Magnesium alloys in their solid state present no inhalation, ingestion or contact health hazard. However, inhaling dusts, fumes or mists which may be generated during certain manufacturing procedures (burning, melting, welding, sawing, brazing, grinding, and machining) may be hazardous to your health. Dusts may also be irritating to the unprotected skin or eyes.

ACUTE EFFECTS: Excessive exposure to dusts/fumes may cause irritation of eyes, nose and throat, Inhalation of dusts/fumes may result in metal fumes fever (metallic taste in mouth, dryness and irritation of throat, chills and fever).

CHRONIC EFFECTS: Prolonged inhalation of fumes or dusts may caused a variety of adverse health effects to the respiratory system, including (but not necessarily limited to) lesions of the mucous membrane, bronchitis, pneumonia and cancers of the nasal cavity and respiratory tract.

POTENTIAL HEALTH EFFECTS/MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any preexisting chronic respiratory condition (asthma, chronic bronchitis, emphysema).

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

ROUTES OF ENTRY: Inhalation (dust/fumes/mists), contact with skin and eyes (dust/mist), ingestion (dusts).

SECTION 4 - FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If condition persists, consult physician.

EYE CONTACT: Immediately flush with running water to remove particulates, consult physician.

SKIN CONTACT: If irritation develops, remove clothing and wash with soap and water. If condition persists, consult physician.

INGESTION: Consult physician.

NOTE TO PHYSICIAN: None.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT: Nonflammable.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear positive pressure self-contained breathing apparatus.

AUTOIGNITION TEMPERATURE: NA

FLAMABLE LIMITS: Nonflammable

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen gas.

EXTINGUISHING MEDIA: Smother burning magnesium by covering with an extinguishing powder approved for use on magnesium fires such as G1, MET-L-X, etc. Consult national fire protection association standards for other extinguishing media which may be applicable to certain operations such as foundries or heat-treat furnaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated in air to a temperature near its melting point. Magnesium alloys ignite and burn with a white flame. Use of water on burning magnesium will produce hydrogen gas and may cause an explosion.

30% of 8,000 Tonnes
= 2400 Tonnes
MgAL₂O₄

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

SECTION 6 – ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: No special procedures needed.

SPECIALIZED EQUIPMENT: None.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Minimize activities which may generate dusts, mists or fumes. Keep areas well ventilated. Use suitable equipment to move materials.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store products in a dry location. See National Fire Protection Association bulletins – NFPA 480, "Storage, Handling and Processing of Magnesium."

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: In dusty atmosphere use an approved dust respirator..

EYE/FACE PROTECTION: Face shields (welding or burning), safety glasses (cutting or grinding).

OTHER PROTECTIVE EQUIPMENT: Use appropriate protective clothing for the process being performed.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Metal

ODOR: Odorless

PHYSICAL STATE: Solid

VAPOR PRESSURE: NA

BOILING POINT (C): NA

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY(H₂O=1) 1.77

MATERIAL SAFETY DATA SHEET

Material Name: **Magnesium**

ID:

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None.

HAZARDOUS DECOMPOSITION PRODUCTS (when heated): Hydrogen gas.

MATERIALS TO AVOID: Acid, water. Reacts with acid to form Hydrogen gas. In a finely divided form, will react with water or acids to release Hydrogen.

SECTION 11 – TOXICOLOGY INFORMATION

LETHAL CONCENTRATION (LC50): None established.

REPRODUCTIVE EFFECTS: NA

LETHAL DOSE (LD50): NA

MUTAGENICITY: NA

TERATOGENICITY: NA

CARCINOGENIC BY NTP, IARC OR OSHA: No. (Note: fumes/dusts/mists from this material may be carcinogenic if inhaled over long periods of time).

SECTION 12 – ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

SECTION 13- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Recycle scrap materials through scrap dealers and brokers. Dispose of used non-cyclable materials in accordance with local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

No special DOT regulations pertaining to this material

SECTION 15 – REGULATORY INFORMATION

SARA: Some components of this product are classified as toxic by the EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III § 313 and CFR 372.45.



Health	1
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Manganese MSDS

Section 1: Chemical Product and Company Identification

Product Name: Manganese

Catalog Codes: SLM2245

CAS#: 7439-96-5

RTECS: OO9275000

TSCA: TSCA 8(b) inventory: Manganese

CI#: Not available.

Synonym:

Chemical Name: Manganese

Chemical Formula: Mn

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Manganese	7439-96-5	100

Toxicological Data on Ingredients: Manganese: ORAL (LD50): Acute: 9000 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, lungs, brain, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Moderate fire potential, in the form of dust or powder, when exposed to flame. When manganese is heated in the vapor of phosphorus at a very dull red heat, union occurs with incandescence. Concentrated nitric acid reacts with powdered manganese with incandescence and explosion. Powdered manganese ignites in chlorine.

Special Remarks on Explosion Hazards: Moderate explosion potential, in the form of dust or powder, when exposed to flame.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.1 (mg/m³) from ACGIH (TLV) [United States] TWA: 5 (mg/m³) [Canada] TWA: 1 STEL: 3 (mg/m³) from NIOSH [United States] TWA: 5 (mg/m³) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Odorless.

Taste: Not available.

Molecular Weight: 54.94 g/mole

Color: Grayish white.

pH (1% soln/water): Not applicable.

Boiling Point: 2095°C (3803°F)

Melting Point: 1244°C (2271.2°F)

Critical Temperature: Not available.

Specific Gravity: 7.44 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, reducing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Superficially oxidized on exposure to air. Reacts with aqueous solutions of sodium or potassium bicarbonate. Reacts with dilute mineral acids with evolution of hydrogen and formation of divalent manganous salts. Reacts with fluorine and chlorine to produce di or tri fluoride, and di and tri chloride, respectively. In the form of powder, it reduces most metallic oxides on heating. On heating, it reacts directly with carbon, phosphorus, antimony, or arsenic. Also incompatible with hydroxides, cyanides, carbonates.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 9000 mg/kg [Rat].

Chronic Effects on Humans: May cause damage to the following organs: blood, lungs, brain, central nervous system (CNS).

Other Toxic Effects on Humans:

Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant), of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

Manganese can cross the placenta. May cause cancer (tumorigenic) based on animal data.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation Eyes: Dust may cause mechanical irritation. Inhalation: Dust may cause respiratory tract irritation. May cause "Metal Fume Fever" which may include flu-like symptoms (fever, chills, upset stomach, vomiting, weakness, headache, body aches, muscle pains, dry mouth and throat, coughing, tightness of the chest). May affect behavior/Central Nervous system (change in motor activity, torpor, nervousness, tremor, yawning, mood swings, irritability, restlessness, fatigue, headache, apathy, languor, insomnia than somnolence, hallucinations, delusions, uncontrollable laughter followed by crying, compulsions, aggressiveness, weakness in legs, memory loss, decreased libido, impotence, salivation, hearing loss, slow gait,), and respiration (dyspnea, shallow respiration, cyanosis, alveolar inflammation). Ingestion: Repeated or prolonged exposure from ingestion may affect brain (degenerative changes), blood and metabolism. Ingestion: May cause digestive tract irritation. There is a low gastrointestinal absorption of manganese. Chronic Potential Health Effects: Inhalation: Repeated or prolonged exposure from inhalation may affect brain (degenerative changes), behavior/Central Nervous system with symptoms to acute exposure. May also affect liver (chronic liver disease, jaundice) Ingestion: Repeated or prolonged exposure from ingestion may affect brain, blood and metabolism

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.



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Beryllium

SAFETY DATA SHEET

1. PRODUCT AND SUPPLIER IDENTIFICATION

Product Name: Beryllium - pieces, rod, sheet, foil, target

Formula: Be

Supplier: ESPI Metals

1050 Benson Way

Ashland, OR 97520

Telephone: 800-638-2581

Fax: 541-488-8313

Email: sales@espi Metals.com

Emergency: Infotrac 800-535-5053 (US) or 352-323-3500 (24 hour)

Recommended Uses: Scientific Research

2. HAZARDS IDENTIFICATION

GHS Classification (29 CFR 1910.1200): Carcinogenicity, category 1. Specific target organ toxicity, repeated exposure, category 1

GHS Label Elements:



Signal Word: Danger

Hazard Statements: H350 May cause cancer, H372 Causes damage to lungs through prolonged or repeated inhalation exposure.

Precautionary Statements: P260 Do not breathe dust or fume, P280 Wear protective gloves/protective clothing/eye protection/face protection, P284 Wear respiratory protection.

NOTE: In the solid form in which it is provided, this material does not pose a health hazard. Subsequent operations performed by the end user, such as exposure to high temperatures, melting or grinding, may produce beryllium oxide dust or fume. ESPI Metals does not warranty this material for any specific application and all precautions must be taken by the end user to prevent and protect against exposure to inhalable particulate. See section 8 for information on exposure controls and personal protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Beryllium

CAS#: 7440-41-7

%: >99

EC#: 231-150-7

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1050 Benson Way
Ashland, Oregon 97520

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800.638.2581 toll-free

541.488.8313 fax
800.488.0060 toll-free fax

sales@espi Metals.com

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Platinum	▼	1245.00	-4.00	1265.00
Palladium	▼	791.00	-2.00	801.00

Conversion Tool

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4 FIRST AID MEASURES

General Measures: Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce potentially hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes.

INHALATION: Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek medical attention.

INGESTION: Rinse mouth with water. Do not induce vomiting. Seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

SKIN: Thoroughly wash skin cuts or wounds to remove all particulate debris from the wound. Seek medical attention for wounds that cannot be thoroughly cleansed. Treat skin cuts and wounds with standard first aid practices such as cleansing, disinfecting and covering to prevent wound infection and contamination before continuing work. Obtain medical help for persistent irritation. Material accidentally implanted or lodged under the skin must be removed..

EYES: Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation. See section 11 for more information.

Indication of Immediate Medical Attention and Special Treatment: No other relevant information available.

5 FIREFIGHTING MEASURES

Extinguishing Media: Use extinguishing media appropriate to the surrounding fire.

Unsuitable Extinguishing Media: N/A

Specific Hazards Arising from the Material: Non-combustible as a solid. May emit toxic fumes of beryllium oxide under fire conditions.

Special Protective Equipment and Precautions for Firefighters: Full face, self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: In solid form this material poses no health or environmental risk. If spilled material is a particulate, establish a restricted entry zone based on the severity of the spill. Wear appropriate respiratory and protective equipment specified in section 8. Avoid dust formation. Avoid contact with skin and eyes. Avoid breathing dust or fume. Eliminate all sources of ignition.

Methods and Materials for Containment and Cleaning Up: Sweep or scoop solid product and place in a properly labeled closed container. Cleanup particulate spills with a vacuum system utilizing a HEPA filtration system. Special precautions must be taken when changing filters on HEPA vacuum cleaners used to clean up hazardous materials.

Caution should be taken to minimize airborne generation of particulate and avoid contamination of air and water. Use only non-sparking tools. Place in properly labeled closed container for further handling and disposal.

Environmental Precautions: Do not allow to enter drains or to be released to the environment.

7 HANDLING AND STORAGE

Precautions for Safe Handling: Avoid creating dusts. Protect against physical damage. Protect from sources of ignition. Avoid contact with skin and eyes. Wash thoroughly before eating or smoking. See section 8 for information on personal protection equipment.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a sealed container. Store in a cool, dry area. See section 10 for more information on incompatible materials.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: Beryllium

OSHA/PEL: 0.002 mg/m³

ACGIH/TLV: 0.00005 mg/m³

Appropriate Engineering Controls: Whenever possible the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne dust and fume to meet established occupational exposure limits. Use vacuum and wet cleaning methods for particulate removal from surfaces. Be certain to de-energize electrical systems as necessary before beginning wet cleaning. Use vacuum cleaners with high efficiency



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particulate air (HEPA) filters. Do not use compressed air, brooms, or conventional vacuum cleaners to remove particulate from surfaces as this activity can result in elevated exposures to airborne particulate. Follow the manufacturer's instructions when performing maintenance on HEPA filtered vacuums used to clean hazardous materials. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Individual Protection Measures, Such as Personal Protective Equipment:

Respiratory Protection: When potential exposures are above the occupational limits, approved respirators must be used. Exposure to unknown concentrations of fumes or dusts requires the wearing of a pressure-demand self-contained breathing apparatus.

Eye Protection: Safety glasses or goggles

Skin Protection: Wear impermeable gloves, protective work clothing as necessary. Protective overgarments or work clothing must be worn by persons who may become contaminated with particulate during work activities.

Contaminated work clothing and overgarments must be managed in a controlled manner to prevent secondary exposure to workers of third parties, to prevent the spread of particulate to other areas, and to prevent particulate from being taken home by workers.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Solid in various forms

Color: Gray metallic

Odor: Not determined

Odor Threshold: Not determined

pH: N/A

Melting Point: 1278±5 °C

Boiling Point: 2970 °C

Flash Point: N/A

Evaporation Rate: N/A

Flammability: No data

Upper Flammable Limit: No data

Lower Flammable Limit: No data

Vapor Pressure: No data

Vapor Density: N/A

Relative Density (Specific Gravity): 1.85 g/cc at 20 °C

Solubility in H₂O: Insoluble

Partition Coefficient (n-octanol/water): Not determined

Autoignition Temperature: No data

Decomposition Temperature: No data

Viscosity: N/A

10 STABILITY AND REACTIVITY

Reactivity: No data

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Contact with acids and strong bases generate flammable hydrogen gas.

Conditions to Avoid: Avoid creating or accumulating fines or dusts.

Incompatible Materials: Acids, bases.

Hazardous Decomposition Products: Beryllium oxides.

11 TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, skin, eyes. Product as shipped does not present an inhalation hazard; however subsequent operations may create dusts or fumes which could be inhaled.

Symptoms of Exposure: Dust may cause irritation to upper respiratory tract, skin or eyes.

Acute and Chronic Effects: Some people inhaling low concentrations of beryllium develop chronic beryllium disease, a granulomatous lung disease characterized by dyspnea, cough, reduced pulmonary function, and a variety of other symptoms including weight loss. The lack of a dose-response relationship between the extent of exposure and development of the disease, long latency period between exposure and onset, and the low incidence among beryllium-exposed individuals suggests that the disease is immune mediated.

Acute Toxicity: No data

Carcinogenicity: NTP: K - Known to be carcinogenic IARC: 1 - Carcinogenic to humans

To the best of our knowledge the chemical, physical and toxicological characteristics of the substance are not fully known.

12 ECOLOGICAL INFORMATION

Ecotoxicity: No data

Persistence and Degradability: No data

Bioaccumulative Potential: No data

Mobility in Soil: No data

Other Adverse Effects: Do not allow material to be released to the environment No further relevant information available.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Product: Dispose of in accordance with Federal, State and Local regulations.

Packaging: Dispose of in accordance with Federal, State and Local regulations.

14 TRANSPORT INFORMATION

DOT/ADR/IATA/IMDG Regulations: Not regulated

UN Number: N/A

UN Proper Shipping Name: N/A

Transport Hazard Class: N/A

Packing Group: N/A

Marine Pollutant: No

Special Precautions: N/A

15 REGULATORY INFORMATION

TSCA Listed: All components are listed.

Regulation (EC) No 1272/2008 (CLP): Carcinogenicity, category 1, Specific target organ toxicity, repeated exposure, category 1.

Canada WHMIS Classification (CPR, SOR/88-66): Class D, Division 2, Subdivision A - Very toxic material causing other toxic effects, Class D, Division 2, Subdivision B - Toxic material causing other toxic effects.

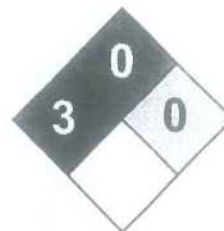
HMIS Ratings: Health: *(Chronic) Flammability: 0 Physical: 0

NFPA Ratings: Health: 2 Flammability: 0 Reactivity: 0

Chemical Safety Assessment: A chemical safety assessment has not been carried out.

16 OTHER INFORMATION

Beryllium is corrosion resistant in air and water up to 600 °C. This is attributed to the formation of an adherent oxide layer on the surface. The presence of salts in water, particularly chloride, dramatically accelerates the corrosion of beryllium. This corrosion can be further accelerated (galvanic corrosion) if beryllium is in contact with a less reactive metal. Contrarily, beryllium can be protected from corrosion by contact with a more reactive metal (anodic protection). Generally some corrosion protection should be applied to beryllium. Salts from handling beryllium without gloves along with humidity in the air are sufficient to cause 'finger print' corrosion on a bare beryllium part.



Health	2
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Sodium fluoride MSDS

Section 1: Chemical Product and Company Identification

Product Name: Sodium fluoride

Catalog Codes: SLS2260, SLS3682

CAS#: 7681-49-4

RTECS: WB0350010

TSCA: TSCA 8(b) inventory: Sodium fluoride

CI#: Not available.

Synonym: Sodium Fluoride Powder, Reagent ACS;
Sodium Fluoride Powder, USP, EP, BP; Sodium
Hydrofluoride; Sodium Monofluoride

Chemical Name: Sodium Fluoride

Chemical Formula: NaF

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sodium fluoride	7681-49-4	100

Toxicological Data on Ingredients: Sodium fluoride: ORAL (LD50): Acute: 52 mg/kg [Rat]. 57 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant, corrosive), of ingestion, of inhalation. Slightly hazardous in case of skin contact (corrosive). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys, lungs,

the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Containers may explode when heated

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 2.5 (mg/m³) from NIOSH Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid. crystalline powder.)

Odor: Odorless.

Taste: Salty

Molecular Weight: 41.99 g/mole

Color: White.

pH (1% soln/water): Not available.

Boiling Point: 1704°C (3099.2°F)

Melting Point: 993°C (1819.4°F)

Critical Temperature: Not available.

Specific Gravity: 2.78 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Soluble in cold water, hot water. Solubility in water: 5g/100 ml @ 100 deg. C, 4.3 g/100 @ 25 deg C, 4.0 g/100 ml @ 15 deg. C. Very slightly soluble in alcohol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, dust generation, excess heat

Incompatibility with various substances: Reactive with oxidizing agents, metals, acids, alkalis.

Corrosivity: Not available.

Special Remarks on Reactivity:

Contact with metals may evolve flammable hydrogen gas. Sodium reacts with acids to form hydrogen fluoride. Alkali fluorides (except lithium salt) absorb Sodium Fluoride to form acid fluorides.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 52 mg/kg [Rat].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, lungs, the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of eye contact (corrosive), of ingestion, of inhalation. Slightly hazardous in case of skin contact (corrosive).

Special Remarks on Toxicity to Animals:

Lowest Published Lethal Dose: LDL [Human] - Route: Oral; Dose: 71 mg/kg LDL [Woman] - Route: Oral; Dose: 90 mg/kg LDL [Woman] - Route: Oral; Dose: 360 mg/kg LDL [Mouse] - Route: Skin; Dose: 300 mg/kg

Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects (fertility, fetotoxicity), and birth defects based on animal data. May cause cancer based on animal data. May cause genetic (mutagenic) and tumorigenic effects.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes skin irritation and possible burns, especially if skin is wet or moist. Eyes: Causes eye irritation and burns. May cause chemical conjunctivitis and corneal damage. Ingestion: Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation and burns. May cause severe and permanent damage to the digestive. Ingestion of large amounts may cause salivation, thirst, nausea, vomiting, hypermotility, diarrhea, and abdominal pain. May affect behavior/central nervous system/nervous system (headache, nervousness, dizziness, seizures, convulsions, tremor, muscle weakness, somnolence), respiration (respiratory depression, dyspnea), cardiovascular system (weak pulse, hypotension, dysrhythmias, cardiac arrest), liver, urinary system (polyuria, polydypsia) brain, metabolism (loss of appetite, hypocalcemia, hyperkalemia, hypomagnesia,), teeth, bones, and blood (changes in red and white blood cell count, interference in blood coagulation) Inhalation: Causes irritation and chemical burns of the respiratory tract with coughing, breathing difficulty and possibly nasal septum perforation and coma. May affect bones. Chronic Potential Health Effects: Chronic ingestion may cause fluorosis. Effects of fluorosis may include joint pain, weakness, limited joint mobility, brittle bones, ossifications on x-ray, thickening of long bone cortices, calcification of ligaments, osteomalacia, osteosclerosis (skeletal (bone and teeth) abnormalities) and mottled tooth enamel. Other symptoms may include anemia, nausea, vomiting, diarrhea or constipation, kidney damage and weight loss/anorexia. Chronic inhalation may cause bronchitis to develop with cough, phlegm, and/or shortness of breath. , liver (hepatic enzymes increased, jaundice), .

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Sodium fluoride UNNA: 1690 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found. Connecticut hazardous material survey.: Sodium fluoride Illinois chemical safety act: Sodium fluoride New York release reporting list: Sodium fluoride Rhode Island RTK hazardous substances: Sodium fluoride Pennsylvania RTK: Sodium fluoride Massachusetts RTK: Sodium fluoride Massachusetts spill list: Sodium fluoride New Jersey: Sodium fluoride New Jersey spill list: Sodium fluoride Louisiana spill reporting: Sodium fluoride California Director's List of Hazardous Substances: Sodium fluoride TSCA 8(b) inventory: Sodium fluoride TSCA 8(a) PAIR: Sodium fluoride CERCLA: Hazardous substances.: Sodium fluoride: 1000 lbs. (453.6 kg)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):

R25- Toxic if swallowed. R32- Contact with acids liberates very toxic gas. R36/38- Irritating to eyes and skin. S22- Do not breathe dust. S36- Wear suitable protective clothing. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/11/2005 12:34 PM

Last Updated: 05/21/2013 12:00 PM

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Material Safety Data Sheet

DIAMMONIUM PHOSPHATE

Date Prepared: 11/01/07

Supersedes Date: 8/13/04

1. PRODUCT AND COMPANY DESCRIPTION

Innophos
PO Box 8000
259 Prospect Plains Road
Cranbury NJ 08512-8000

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) or INNOPHOS ECT (Emergency Communication Team) at 615-386-7816.

For Product Information:

(609) 495-2495

Chemical Name or Synonym:

AMMONIUM PHOSPHATE, SECONDARY; DAP; AMMONIUM PHOSPHATE, DIBASIC

Molecular Formula:

$(\text{NH}_4)_2\text{HPO}_4$

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
DIAMMONIUM PHOSPHATE	7783-28-0	Y	100

3. HAZARDS IDENTIFICATION**A. EMERGENCY OVERVIEW:****Physical Appearance and Odor:**

white powder solid, ammonia-like odor.

Warning Statements:

CAUTION! MAY CAUSE SKIN AND EYE IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:

May cause irritation.

Acute Skin:

Skin absorption not likely. May cause irritation.

Acute Inhalation:

May cause upper respiratory tract irritation.

Acute Ingestion:

Ingestion of large quantities may cause nausea, vomiting, diarrhea, abdominal cramps.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:**Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation:

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion:

Do not induce vomiting, unless directed to do so by a physician. If victim is conscious and alert, give 2-3 glasses of water to drink. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. Also see Note To Physician.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule. The following treatments should be considered for the specific group(s) of phosphate salts found in this product:

--All phosphate salts, except calcium salts, have a hypothetical risk of hypocalcemia, so calcium levels should be

monitored.

--Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored.

--Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia.

--Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Not combustible.

Hazardous Decomposition Materials (Under Fire Conditions):

ammonia
oxides of nitrogen
oxides of phosphorus

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Sweep or vacuum up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent.

Environmental and Regulatory Reporting:

Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling:

Keep containers closed when not being used. Avoid breathing dusts or vapors. Avoid direct or prolonged contact with skin and eyes.

Storage:

Store in an area that is cool, dry, well-ventilated, Store in closed containers. This product is hygroscopic and tends to cake on storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

	Notes	TWA	STEL
OSHA		5 mg/cu m	

PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

	Notes	TWA	STEL
OSHA		15 mg/cu m	

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): dust/mist filtering respirator.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

white powder solid.

Odor:

ammonia-like odor.

pH:

8 at 1 wt/wt%.

Specific Gravity:

Not Available

Water Solubility:

soluble 41 wt/wt% at 20 C (68 F).

Melting Point Range:

Not Available

Boiling Point Range:

Not Available

Vapor Pressure:

Not Available

Vapor Density:

Not Available

Molecular Weight:

132.06

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

dusting conditions
extreme heat
extreme humidity

Materials/Chemicals To Be Avoided:

strong bases
sodium hypochlorite

Decomposition Temperature Range:

155 C (311 F)

The Following Hazardous Decomposition Products Might Be Expected:**Decomposition Type: thermal**

ammonia
phosphoric acid
oxides of nitrogen
oxides of phosphorus

Hazardous Polymerization Will Not Occur.**Avoid The Following To Inhibit Hazardous Polymerization:**

not applicable

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

No test data found for product.

Acute Skin Irritation:**Toxicological Information and Interpretation:**

skin - skin irritation, rabbit. Mildly irritating.

Acute Dermal Toxicity:

No test data found for product.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, > 1000 mg/kg, rat.

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:**Ecotoxicological Information and Interpretation:**

LC50 - lethal concentration 50% of test species, 155 mg/l/96 hr, fish: Pimephales promelas.

Chemical Fate Information:

No data found for product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste - NO

14. TRANSPORTATION INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation

Shipping Name:

NOT REGULATED

15. REGULATORY INFORMATION

Inventory Status

Inventory	Status
UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS/ELINCS)	Y

AUSTRALIA (AICS)	Y
JAPAN (MITI)	Y
SOUTH KOREA (KECL)	Y

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS

Inventory Issues:

All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

OTHER FEDERAL REGULATIONS:

FDA Status:

This product meets the compositional requirements of:
21 CFR 184.1141B AMMONIUM PHOSPHATE, DIBASIC

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

1	Health Hazard Rating--Slight
0	Flammability Rating--Minimal
0	Instability Rating--Minimal

National Paint & Coating Hazardous Materials Identification System--HMIS(R):

1	Health Hazard Rating--Slight
0	Flammability Rating--Minimal
0	Reactivity Rating--Minimal

Reason for Revisions:

Change and/or addition made to Section 4, Section 12.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
TLV - Threshold Limit Value
PEL - Permissible Exposure Limit
TWA - Time Weighted Average

STEL - Short Term Exposure Limit
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer
ND - Not determined
RPI - INNOPHOS Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

**** End of MSDS Document ****



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Section 1 – Identification of the Material and Supplier

Product Name

Sulfate of Ammonia

Other names

Sulphate of ammonia, ammonium sulphate, amsul, CSBP Product Code: 621

Recommended use

Fertiliser, Industrial Applications

Company name

CSBP Limited

Address

Kwinana Beach Road, KWINANA

State

Western Australia

Postcode

6167

Telephone number

(08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas)

Emergency telephone number

1800 093 333 (Australia), +61 8 9411 8444

Section 2 – Hazard Identification

Hazard Classification, including a statement of overall hazardous nature

HAZARDOUS SUBSTANCE.

Sulfate of Ammonia is not classified as hazardous according to Safe Work Australia criteria.

DANGEROUS GOODS.

Sulfate of Ammonia is not classified as a dangerous good according to the ADG Code.

Section 3 – Composition/Information on Ingredients

Chemical identity of ingredients

Ammonium sulfate

Non hazardous Impurities

Proportion of ingredients

99%

Remainder

CAS Number for ingredients

7783-20-2

Section 4 – First Aid Measures

First Aid Facilities

Whenever fertilisers are in regular use ensure drinking water and eyewash facilities are available.

FIRST AID PROCEDURES FOR DEALING WITH THIS PRODUCT AND EXPOSURE TO IT

1. Swallowed

If person is conscious, rinse mouth thoroughly with water immediately, and give water or milk to drink. DO NOT induce vomiting. Seek medical attention, if more than a small quantity has been swallowed, or there is pain or difficulty with swallowing.

2. Eyes

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. Seek medical attention if irritation develops.

3. Skin

Gently flush affected areas with water. Seek medical attention if irritation develops. Remove all contaminated clothing and laundry before re-use.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Continuation of Section 4 – First Aid Measures

4. Inhalation

If over exposure occurs remove affected person to a well ventilated area. Keep warm and at rest. In emergency situations, if breathing is difficult give oxygen. If the affected person suffers cardiac arrest commence cardio-pulmonary resuscitation immediately. Seek urgent medical attention.

ADVICE TO DOCTOR.

Treat symptomatically.

Section 5 – Fire Fighting Measures

Product flammability

Non flammable and does not support combustion.

Suitable extinguishing media

Non flammable and does not support combustion.

Hazard from combustion products

Will form flammable and toxic gases at elevated temperatures ($> 280^{\circ}\text{C}$) by thermal decomposition, yielding ammonia, sulfur oxides and nitrogen oxides.

Hazchem Code

None allocated.

Section 6 – Accidental Release Measures

Methods and Materials for containment and clean up

Any spillage should be cleaned up promptly and swept up. Prevent run-off into drains and waterways.

Section 7 – Handling and Storage

Precautions for safe handling

Keep away from alkalis and hypochlorites when transporting.

Conditions for safe storage, including any incompatibilities

Store in a cool, clean, dry and well ventilated area. Avoid contact with moisture, as it will cause product handling problems.

Store away from oxidizing agents, alkalis and chlorinating agents, such as swimming pool chlorine.

Section 8 – Exposure Controls/Personal Protection

National exposure standards

No specific official limit. ACGIH recommended value for inhalable particulates is 10 mg/m^3 (TLV/TWA).

Engineering controls

Use in well ventilated areas. Avoid high dust concentration

Personal protective equipment

Wear rubber or PVC gloves to prevent skin contact. Where dust is a problem use a P2 type canister Respirator. Wear long sleeves and long trousers to prevent contact. Wear chemical safety glasses to prevent eye contact.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Section 9 – Physical and Chemical Properties

Appearance (colour, physical form, shape)

White or slightly pink crystals.

Odour

Not available.

pH of 10% solution

4 – 6.

Vapour pressure

Does not exert significant vapour pressure.

Vapour density

Not available.

Boiling point/range

Not available.

Freezing/melting point

235-280°C with decomposition.

Evaporation rate

Not available.

Solubility

Soluble in water (76g / 100mL at 20°C), not soluble in alcohol or acetone.

Specific Gravity

1.769.

% Volatiles

Not available.

Flammability

Not Flammable.

Flash point and method of detecting flash point

Not relevant.

Upper and lower flammable (explosive) limits in air

Not relevant.

Ignition temperature

Not available.

Section 10 – Stability and Reactivity

Reactivity

Slightly reactive with oxidizing agents. Sulfate of ammonia is a sensitiser, increasing explosion hazard of ammonium nitrate, potassium nitrate and potassium chlorate, when mixed together. If mixed with pool chlorine, i.e., calcium hypochlorite, or sodium hypochlorite, it can form a spontaneously explosive nitrogen trichloride

Highly corrosive to aluminum, zinc, copper and brass. Slightly corrosive to mild steel and 304 stainless steel. Non-corrosive to 316 steel.

Decomposition products

Contact with alkalis will release ammonia gas.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Ammonia



Section 11 – Toxicological Information

HEALTH EFFECTS

Low toxicity. Use safe work practices to avoid eye or skin contact and dust inhalation.

There is no known effect from chronic exposure to Sulfate of Ammonia.

Inhalation:

High dust concentration of air-borne material may cause irritation to the nose and upper respiratory tract; symptoms may include coughing and sore throat.

Skin:

Prolonged contact may cause some irritation, including redness and itching. No harmful effects from skin absorption have been recorded.

Eye:

May cause irritation, redness and pain following contact.

Swallowed:

Presents little toxicity, unless large amounts are ingested. Large amounts give rise to gastro-intestinal irritation, with symptoms such as nausea, vomiting and diarrhea.

TOXICITY DATA

Ammonium sulfate (7783-20-2)

LD50 (Intraperitoneal): 610 mg/kg (mouse)

TDLo (Ingestion): 1500 mg/kg (man - gastrointestinal effects)

LD50 (Ingestion): 640 mg/kg (mouse)

LDLo (Ingestion): 3500 mg/kg (domestic animal)

Section 12 – Ecological Information

Environment

It is not anticipated to cause any adverse effects to plants or animals.

Section 13 – Disposal Considerations

Disposal methods and containers

Dispose of on a farm, or authorised waste facility in accordance with statutory requirements.

Clean up personnel should vacuum or wet sweep to avoid dust dispersal.

Contact the manufacturer if additional information is required.

Legislation

Dispose of in accordance with relevant local legislation.

Section 14 – Transport Information

UN Number

None allocated.

UN Proper shipping name

None allocated.

Class and subsidiary risk

None allocated.

Packing group

None allocated.

EPG

None allocated.

Hazchem code

None allocated.



Material Safety Data Sheet

MONOAMMONIUM PHOSPHATE

Date Prepared: 9/22/06

Supersedes Date: 8/13/04

1. PRODUCT AND COMPANY DESCRIPTION

Innophos
PO Box 8000
259 Prospect Plains Road
Cranbury NJ 08512-8000

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) or INNOPHOS ECT (Emergency Communication Team) at 615-386-7816.

For Product Information:

(609) 495-2495

Chemical Name or Synonym:

AMMONIUM PHOSPHATE, PRIMARY; AMMONIUM PHOSPHATE, MONOBASIC

Molecular Formula:

$\text{NH}_4\text{H}_2\text{PO}_4$

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
MONOAMMONIUM PHOSPHATE	7722-76-1	Y	100

3. HAZARDS IDENTIFICATION**A. EMERGENCY OVERVIEW:****Physical Appearance and Odor:**

white powder solid, odorless.

Warning Statements:

CAUTION! MAY CAUSE SKIN, EYE AND RESPIRATORY TRACT IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

--Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored.

--Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia.

--Sodium salts have a hypothetical risk of hyponatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Hazardous Decomposition Materials (Under Fire Conditions): oxides of nitrogen oxides of phosphorus

Hazardous Decomposition Materials (Under Fire Conditions):

oxides of nitrogen
oxides of phosphorus

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under Cleanup and Disposal of Spill.

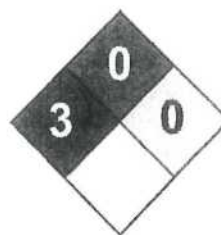
Cleanup and Disposal of Spill:

Sweep or vacuum up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent.

Environmental and Regulatory Reporting:

Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE



Health	3
Fire	0
Reactivity	0
Personal Protection	

Material Safety Data Sheet

Phosphoric acid, 85% MSDS

Section 1: Chemical Product and Company Identification

Product Name: Phosphoric acid, 85%

Catalog Codes: SLP5569, SLP4555, SLP1732

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Phosphoric Acid; Water

CI#: Not available.

Synonym: Phosphoric Acid 85%; Phosphoric Acid; Orthophosphoric acid

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Phosphoric Acid	7664-38-2	85-88
Water	7732-18-5	12-15

Toxicological Data on Ingredients: Phosphoric Acid: ORAL (LD50): Acute: 1530 mg/kg [Rat]. DERMAL (LD50): Acute: 2740 mg/kg [Rabbit]. DUST (LC50): Acute: >850 mg/m 1 hours [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated

or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: of metals

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptans, and sulfides.

Special Remarks on Explosion Hazards: Mixtures with nitromethane are explosive. (Phosphoric Acid)

Section 6: Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary; Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Do not ingest. Do not breathe gas/fumes/ vapor/spray. **Never add water to this product.** In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, combustible materials, metals, alkalis. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Phosphoric Acid TWA: 1 STEL: 3 (mg/m³) from ACGIH (TLV) [United States] TWA: 1 STEL: 3 (mg/m³) from OSHA (PEL) [United States] TWA: 1 STEL: 3 (mg/m³) from NIOSH TWA: 1 STEL: 3 (mg/m³) [Mexico] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Syrupy liquid Viscous liquid.)

Odor: Odorless.

Taste: Acid.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Acidic.

Boiling Point: 158°C (316.4°F)

Melting Point: 21°C (69.8°F)

Critical Temperature: Not available.

Specific Gravity: 1.685 @ 25 C (Water = 1)

Vapor Pressure: 0.3 kPa (@ 20°C)

Vapor Density: 3.4 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Easily soluble in hot water. Soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, combustible materials, metals, alkalis.

Corrosivity:

Extremely corrosive in presence of copper, of stainless steel(304), of stainless steel(316). Highly corrosive in presence of aluminum. Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Reacts with metals to liberate flammable hydrogen gas. Incompatible with sodium tetrahydroborate producing a violent exothermic reaction. Heat generated with: alcohols, glycols, aldehydes, amides, amines, azo-compounds, carbamates, caustics, esters, ketones, phenols and cresols, organophosphates, epoxides, combustible materials, unsaturated halides, organic peroxides. Formation of flammable gases, with aldehydes, cyanides, mercaptins, and sulfides. Formation of toxic fumes with cyanides, fluorides, halogenated organics, sulfides, and organic peroxides. Do not mix with solutions containing bleach or ammonia. Incompatible with nitromethane, chlorides + stainless steel. (Phosphoric Acid)

Special Remarks on Corrosivity:

Minor corrosive effect on bronze. Severe corrosive effect on brass. Corrosive to ferrous metals and alloys.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 1530 mg/kg [Rat]. Acute dermal toxicity (LD50): 2740 mg/kg [Rabbit].

Chronic Effects on Humans: May cause damage to the following organs: blood, liver, skin, eyes, bone marrow.

Other Toxic Effects on Humans:

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin. Eyes: Corrosive. Liquid or vapor causes severe eye irritation and can cause severe eye burns leading to permanent corneal damage or chemical conjunctivitis. Ingestion: May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia). May also

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Phosphoric acid (Phosphoric Acid) UNNA: 1805 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

Connecticut hazardous material survey.: Phosphoric Acid Illinois toxic substances disclosure to employee act: Phosphoric acid Illinois chemical safety act: Phosphoric acid New York release reporting list: Phosphoric acid Rhode Island RTK hazardous substances: Phosphoric acid Pennsylvania RTK: Phosphoric acid Minnesota: Phosphoric acid Massachusetts RTK: Phosphoric acid Massachusetts spill list: Phosphoric acid New Jersey: Phosphoric acid New Jersey spill list: Phosphoric acid Louisiana spill reporting: Phosphoric acid California Director's list of hazardous substances: Phosphoric acid TSCA 8(b) inventory: Phosphoric Acid; Water SARA 313 toxic chemical notification and release reporting: Phosphoric acid CERCLA: Hazardous substances.: Phosphoric acid: 5000 lbs. (2268 kg)

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS E: Corrosive liquid.

DSCL (EEC):

R34- Causes burns. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 3