WATERSCHAP
De Aa

aanvraagformulier

ten behoeve van een vergunning op grond van de Wet verontreiniging oppervlaktewateren voor de lozing van afvalwater uit vatenwasserijen

1 TENAAMSTELLING

1.1 Bedrijf of instelling

naam: Custom Powders bv
adres: Grasbeemd 10
postcode: 5705 DG
plaats: Helmond
gemeente: Helmond

1.2 Vestiging

naam: Custom Powders bv
kadastrale aanduiding: sectie R; nr. 128
adres: Grasbeemd 10
plaats: Helmond
gemeente: Helmond

1.3 Contactpersoon

naam: 5.1.2e
functie: bedrijfsleider
adres: Grasbeemd 10
postcode: 5705 DG
plaats: Helmond
gemeente: Helmond
telefoon: 0492-59 85 98

Postadres postbus 385, 5280 AJ Boxtel
Bezoekadres Bosscheweg 56, 5283 WB Boxtel
Telefoon 0411 - 613100
Fax 0411 - 613101
E-mail Info@de-Aa.nl
Postbank 11.01.002

2 BESTAANDE, NIEUWE OF TIJDELIJKE LOZING

2.1 Met ingang van welke datum of in welke periode heeft de lozing plaatsgevonden of zal deze gaan plaatsvinden?

datum: fase 1, vanaf 11-04-1995
fase 2, vanaf 11-04-2002
fase 3 + 4, vanaf 01-09-2004

2.2 Waar vindt de lozing plaats of zal deze gaan plaatsvinden.

⊗-	Op de gemeentelijke riolering
o-	Op oppervlaktewater
o-	Op de riolering van een ander bedrijf

2.3 Indien het een bestaande lozing betreft, wat is dan de reden van de aanvraag?

o-	Vergroting van het volume van de lozing
o-	Andere samenstelling van de lozing
o-	Ander(e) productieprocessen
o-	Andere grond- en hulpstoffen
o-	Ander plaats van de lozing namelijk:
o-	Andere afvalwaterstromen
⊗-	Andere reden namelijk: bezoek Waterschap

2.4 Is er voor de bestaande lozing al eerder een vergunning verleend krachtens enige wet of verordening. (zo ja, gaarne een kopie overleggen)

⊗- nee

o- ja, door . . . . . .

datum . . . . . .

reg.nr . . . . . .

2.5 Wordt/is naast deze aanvraag ook een aanvraag voor deze activiteit ingediend voor een vergunning krachtens de Wet milieubeheer (Wm), of beschikt u reeds over een geldige Wm-vergunning?

o- nee

⊗- ja, door . . Gemeente Helmond

datum . 11-04-1995 . . . . .

reg.nr . HDM/M 214-1994 . (zie bijlage vraag 2.5)

3 BEDRIJFSACTIVITEITEN

3.1 Geef in het kort een beschrijving van alle bedrijfsactiviteiten waarop de aanvraag betrekking heeft.

zie bijlage vraag 3.1

4 PERSONEELSBEZETTING

4.1 Hoeveel personen zijn er in de verschillende bedrijfsonderdelen werkzaam?

Bedrijfsonderdeel		Aantal personen
a.	Directie	fase 1:2 fase 2:2 fase 3/4:2
b.	Management	fase 1:2 fase 2:3 fase 3/4:3
c.	Productie	fase 1:6 fase 2:10 fase 3/4:15
d.		
e.		
f.		

5 UITBREIDINGSPLANNEN

5.1 Bestaan er in de naaste toekomst plannen tot wijziging of uitbreiding, die invloed kunnen hebben op de hoeveelheid en/of samenstelling van het afvalwater?

o- nee

ø- ja, Zo ja, welke en wanneer?

fase 2 (planning 01-04-2002):

- het oprichten van een extra fabriekshal met 4 werkunits

fase 3/4 (planning 01-09-2004):

- het oprichten van een extra fabriekshal met 4 werkunits en kantoorgebouwen

6 AFVALWATER Zie bijlage vraag 6.1/vraag 6.2 (aanvraag Wvo-vergunning)

6.1 Welke soorten afvalwater worden geloosd in de situatie waarvoor vergunning gevraagd wordt? Hoeveel afvalwater betreft dit (m^3/jr.) en waar zal de lozing op plaatsvinden?

		Gemeentelijk regenwaterriool	Gemeentelijk vuilwaterriool	Oppervlakte water	Bepaald volgens
a.	Huishoudelijk	n.v.t.	300	n.v.t.	W
b.	Regenwater	n.v.t.	p.m.	n.v.t.	
c.	Koelwater	n.v.t.	n.v.t.	n.v.t.	
d.	Ketelspuiwater	n.v.t.	n.v.t.	n.v.t.	
e.	Regeneratie-water	n.v.t.	n.v.t.	n.v.t.	
f.	Spoelwater ontijzering	n.v.t.	n.v.t.	n.v.t.	
g.	Laboratorium afvalwater	n.v.t.	0	n.v.t.	S
h.	Overig bedrijfs-afvalwater	n.v.t.	2450	n.v.t.	W
TOTAAL		/	2750	/	

6.2 Wat is de herkomst van het geloosde afvalwater (in m^3/jr.)?

		Drinkwater	Oppervlaktewater	Grondwater
a.	Huishoudelijk	300	n.v.t.	n.v.t.
b.				
c.	Koelwater	n.v.t.	n.v.t.	n.v.t.
d.	Ketelspuiwater	n.v.t.	n.v.t.	n.v.t.
e.	Regeneratiewater	n.v.t.	n.v.t.	n.v.t.
f.	Spoelwater ontijzering	n.v.t.	n.v.t.	n.v.t.
g.	Laboratorium afvalwater	0	n.v.t.	n.v.t.
h.	Overig bedrijfs-afvalwater	2450	n.v.t.	n.v.t.
TOTAAL		2750	/	/

7 HUISHOUDELIJK AFVALWATER

7.1 Is in het bedrijf een kantine of bedrijfsrestaurant aanwezig, waarin warme maaltijden worden bereid?

ø- nee

o- ja

7.2 Wordt daarbij gebruik gemaakt van keukenafval versnijdende apparatuur?

ø- nee

o- ja

8 REGENWATER

8.1 Wilt u onderstaande tabel invullen ten aanzien van het geloosde regenwater?

Type oppervlak	Grootte oppervlak niet verontreinigd (in m²)	Grootte oppervlak verontreinigd (in m²)
Dakoppervlak	6244	0
Verhard terrein	5570	0
Onverhard terrein	3500	0
Totaal oppervlak	10314	0

8.2 Welke verontreinigende stoffen kunnen (mogelijk) worden aangetroffen? Indien mogelijk analyseresultaten in de bijlage opnemen.

Geen . . . . . .

. . . . . .

. . . . . .

8.3 Wordt het regenwater afkomstig van verontreinigde oppervlakken geloosd via een zuiveringstechnische voorziening?

o - niet van toepassing

ø - nee

o - ja, nl. via . . . . . .

9 KOELWATER

9.1 Van wat voor soort koelsysteem wordt gebruik gemaakt? n.v.t.

o - recirculatie

o - doorstroom

9.2 Welke temperatuur heeft het koelwater bij lozing?

n.v.t. . . . °C

9.3 Vindt er verdamping van koelwater plaats?

ø - nee

o - ja

9.4 Is het koelwater mogelijk verontreinigd als gevolg van bijvoorbeeld de van nature aanwezige stoffen in als koelmedium gebruikt water?

ø - nee

o - ja, met . . . . . .

. . . . . .

. . . . . .

gaarne analyseresultaten overleggen in een bijlage.

9.5 Worden er chemicaliën aan het koelwater toegevoegd? Zo ja, welke en hoeveel per jaar. n.v.t.

Chemicaliën		Verbruik (in kg/jaar)
a.		
b.		
c.		

gaarne veiligheidsinformatiebladen of productinformatiebladen bijvoegen.

9.6 Hoeveel bedraagt de hoeveelheid spuiwater uit het systeem?

n.v.t. . . . . m^3/dag

9.7 Op welke wijze en met welke reinigingsmiddelen worden het koelsysteem en de leidingen gereinigd?

n.v.t. . . . . .

. . . . . .

gaarne veiligheidsinformatiebladen of productinformatiebladen bijvoegen.

9.8 Hoe vaak worden het koelsysteem en leidingen gereinigd en hoeveel afvalwater komt hierbij vrij?

n.v.t. ..... m^3 afvalwater/keer

..... keer/jaar

10 KETELSPUIWATER

10.1 Hoe groot is de hoeveelheid spuiwater?

n.v.t. ..... m^3/uur

..... m^3/dag

10.2 Welke chemicaliën worden aan het ketelvoedingswater toegevoegd en hoeveel bedraagt het jaarlijks verbruik hiervan? n.v.t.

Chemicaliën		Verbruik (in kg/jaar)
a.		
b.		
c.		

gaarne veiligheidsinformatiebladen of productinformatiebladen bijvoegen.

10.3 Op welke wijze en met welke reinigingsmiddelen worden de ketels gereinigd?

n.v.t. .....

.....

.....

gaarne veiligheidsinformatiebladen of productinformatiebladen bijvoegen.

10.4 Hoe vaak worden de ketels gereinigd en hoeveel afvalwater komt hierbij vrij?

n.v.t. ..... m^3 afvalwater/keer

..... keer/jaar

11 REGENERATIEWATER ONTHARDINGSINSTALLATIES

11.1 Wat is het aantal ionenwisselaars en de capaciteit per ionenwisselaar?

a. aantal: ...n.v.t.....

b. capaciteit: ..... m^3/uur

11.2 Welke chemicaliën worden gebruikt voor het regenereren en hoeveel bedraagt het jaarlijks verbruik hiervan? n.v.t.

Chemicaliën		Verbruik (in kg/jaar)
a.		
b.		
c.		

gaarne veiligheidsinformatiebladen of productinformatiebladen bijvoegen.

11.3 Hoe vaak worden de ionenwisselaars per jaar geregenereerd en hoeveel afvalwater komt hierbij vrij?

n.v.t..... keer/jaar

..... m^3 afvalwater/keer

12 SPOELWATER ONTIJZERINGSINSTALLATIES

12.1 Wat is het aantal filters?

a. aantal: ...n.v.t.....

12.2 Hoeveel keer per jaar worden de filters gespoeld en hoeveel spoelwater komt hierbij per keer vrij?

n..v..t..... keer/jaar

..... m^3 afvalwater/keer

12.3 Worden vaste delen uit het spoelwater teruggehouden alvorens het wordt geloosd? Zo ja, op welke wijze? n.v.t.

o -nee

o -ja, namelijk: .....

.....

13 LABORATORIUMAFVALWATER

13.1 Welke analyses worden doorgaans uitgevoerd?
Het laboratorium wordt als natuurkundig lab gebruikt voor bijvoorbeeld de analyse van korrelgroot soortelijke massa, vochtpercentage, ph-metingen, oplosbaarheid, zuiverheid en microscopische analysen.

13.2 Welke chemicaliën worden het meest gebruikt en hoeveel bedraagt het jaarlijks verbruik hiervan? n.v.t.

Chemicaliën		Verbruik (in kg/jaar)
a.		
b.		
c.		
d.		
e.		
f.		
g.		
h.		

13.3 Zijn er interne bedrijfsvoorschriften en/of voorzieningen teneinde gebruikte chemicaliën en/of resten van de geanalyseerde monsters afzonderlijk te verzamelen en/of op andere wijze terug te houden? Zo ja, geef dan hieronder een korte beschrijving van deze voorzieningen en voeg een kopie van de interne voorschriften als bijlage bij

o - nee
☒ - ja, namelijk: .....
eventuele restanten uit laboratorium zullen worden opgevangen in houders (tot op heden niet voorgekomen).
.....

13.4 Zijn er bedrijfsvoorschriften met betrekking tot de afvoer en verwerking van laboratoriumafval (door derden en/of in eigen beheer uitgevoerd)? Zo ja, gaarne een kopie van deze voorschriften bijvoegen.

o - nee
☒ - ja, er is geen laboratoriumafval

13.5 Welke stoffen kunnen worden geloosd met het afvalwater?

ten gevolge van de laboratoriumactiviteiten wordt geen afvalwater geloosd, anders dan huishoudelijk afvalwater (handen wassen).

14 OVERIG BEDRIJFSAFVALWATER

14.1 Hoeveel afvalwater wordt er gemiddeld per etmaal en maximaal per uur geloosd, gesplitst in de aard van het afvalwater?

		Gemiddelde afvoer in m³/dag	Maximale afvoer in m³/uur	Bepaald volgens
a.	Procesafvalwater	1	0,15	S
b.	Spoelwater	0	0	
c.	Schrobwater	0	0	
d.	Cleaningwater	5	2	S
e.				
f.				

14.2 Hoe vaak en gedurende welk tijdsbestek doen zich situaties voor waarin de gemiddelde afvoerdebieten in ruime mate worden overschreden?

Incidenteel 2x per jaar

14.3 Waardoor worden deze pieken veroorzaakt?

schoonmaakwerkzaamheden

14.4 Welke verontreinigende stoffen kunnen in het te lozen afvalwater voorkomen en hoeveel? Zo mogelijk recente analyseresultaten overleggen.

Alle stoffen worden behandeld volgens Riza-rapport 98.005

Voor stoffen die in de periode januari 2001/oktober 2001 werden behandeld, wordt verwezen naar de bijlage (support pack).

Tijdens een lozing zal gemiddeld 2-5 kg en niet meer dan 10 kg per schoonmaakbeurt (cleandown) in het afvalwater terecht komen. Bij een schoonmaakbeurt wordt gemiddeld niet meer dan 2 m³ water gebruikt.

14.5 Wat is de herkomst van de verontreinigende stoffen die in de afvalwaterstromen voorkomen?

Deze komen vrij bij het schoonmaken van machines en ruimten

.....

.....

14.6 Zijn er andere omstandigheden dan hiervoor vermeld, die van invloed kunnen zijn op de hoeveelheid of hoedanigheid van het te lozen afvalwater?

ø - nee

o - ja, namelijk: .....

.....

.....

15 ZUIVERINGSTECHNISCHE VOORZIENINGEN zie bijlage 15.1/15.2

15.1 Hieronder aangeven welke afvalwaterstromen een zuiveringstechnische voorziening passeren, alvorens ze worden geloosd? zie bijlage 15.1/15.2

Voorziening		Type	Capaciteit	Soort afvalwater
a.	Septictank(s)			
b.	Bezinkput(ten)			
c.	Vetafscheider(s)			
d.	Olie-afscheider(s)			
e.	Zuiveringsinstallatie	in onderzoek		
f.				
g.				

15.2 Van de hiervoor (onder e) aangegeven zuiveringsinstallatie(s) dienen beschrijvingen en tekeningen te worden overlegd, alsmede analyseresultaten van het behandelde afvalwater (indien beschikbaar).
Voorts dient te worden aangegeven hoe bedoelde voorzieningen worden bediend en onderhouden. zie bijlage 15.1/15.2

16 BEDRIJFSRIOLERING

16.1 Op een bij te voegen tekening aangeven hoe het bij vraag 6.1 aangegeven afvalwater wordt afgevoerd en waar de lozingspunten zich bevinden. Voorts eventuele controleputten en/of meetvoorzieningen alsmede de stroominrichting aangeven. Op de tekening dienen de diverse afvalwaterstromen met de verschillende coderingen duidelijk herkenbaar te zijn.

16.2 Zijn er op de bedrijfsriolering andere bedrijven of woningen aangesloten?

⊠ - nee

o - ja, namelijk: .....

.....

17 BEDRIJFSINTERN MILIEUZORGSYSTEEM

17.1 Heeft het bedrijf of instelling reeds een milieuzorgsysteem (BIM) opgezet? Zo ja wilt u dan de relatie tussen BIM en de aangevraagde vergunning aangeven (eventueel op een aparte bijlage)?

⊠ - nee, in voorbereiding (ISO 14001) gereed eind 2001

o - ja, relatie: .....

.....

18 AARD VAN HET BEDRIJF

18.1 Tot welke categorie behoort uw bedrijf?

x behandeling van poeders volgens bijlage bij vraag 3.1

o-	Vatenreconditionering		
o-	(voor)reiniging van vaten t.b.v.	o-	Re-use/hergebruik
		o-	Afvoer naar een vatenrecon-ditioneringsbedrijf

18.2 Welke soorten vaten worden er verwerkt? n.v.t.

o-	Stalen vaten
o-	Kunststof vaten
o-	Gecombineerde verpakkingen (bijvoorbeeld IBC's)

18.3 Welke categorieën stoffen worden onderscheiden bij het reinigingsproces?

Categorie		Aantal vaten/jaar
o-	Alifatische oplosmiddelen	
o-	Aromatische oplosmiddelen	
o-	Alcoholen	
o-	Polyolen	
o-	Acetaten	
o-	Aldehyden/ketonen	
o-	Glycolen	
o-	Minerale oliën	
o-	Plantaardige oliën	
o-	Voedingsmiddelen	
o-	Zepen en cosmetica	
o-	Verven, inkten, harsen	
o-	Polymeren	
o-	Bestrijdingsmiddelen	
o-	Halffabrikaten	
o-		
o-		

19 PROCESVOERING

19.1 Geef in onderstaande tabel aan op welke wijze en op welke plaatsen de te reinigen vaten, grondstoffen, hulpstoffen en afvalstoffen worden opgeslagen of bewaard. De opslagplaatsen dienen voorts genummerd te worden aangegeven op een situatietekening.

Opslag van		Verharde bodem[1)]	Onverharde bodem[1)]	Overdekt [2)]	Open lucht [2)]	Gerioleerd [2)]
1.	gereed product	1943	n.v.t.	overdekt	n.v.t.	n.v.t.
2.	te bewerken product	1725	n.v.t.	overdekt	n.v.t.	n.v.t.
3.						
4.						

[1)] aantal m^2 aangeven

[2)] aankruisen wat van toepassing is

19.2 Welke zijn de in uw bedrijf toegepaste bewerkingen (kolom I)? Welke bewerkingen leiden of kunnen leiden tot lozing van afvalwater (kolom II)? gaarne processchema's bijvoegen. Zie bijlage 19.2

Bewerking				I	II
1.	Sorteren			o	o
2.	Uitlekken			o	o
3.	Leegblazen			o	o
4.	Uitzuigen			o	o
5.	(voor)reinigen met verdunner			o	o
6.	(voor)reinigen door middel van stomen			o	o
7	Inwendige bewerking	a.	Reinigen	o	o
		b.	naspoelen	o	o
		c.	Ontroesten	o	o
		d.	Conserveren	o	o
		e.	Drogen	o	o
		f.		o	o
8.	Uitwendige bewerkingen	a.	Uitdeuken	o	o
		b.	Stralen	o	o
		c.	Spuiten (lakken)	o	o
		d.			

19.3 Geef (op een afzonderlijke bijlage) een beschrijving van de door uw bedrijf toegepaste acceptatieprocedures voor vaten (met betrekking tot de laatste inhoud) en van de in vraag 19.2 aangekruiste bewerkingen. n.v.t.

19.4 Vermeld de bij het reinigen gebruikte chemicaliën c.q. reinigingsmiddelen in kg per jaar. (aangeven met chemische benaming op een aparte bijlage).

20 MAATREGELEN C.Q. VOORZIENINGEN

20.1 Welke maatregelen naast de eventueel bij vraag 15 aangegeven voorzieningen zijn er getroffen ter beperking van de hoeveelheden te lozen stoffen?

ø-	Opvangen resten van producten alvorens te reinigen	
o-	Selectieve voorwassing verdunner, met	
	o-	Regeneratie van verdunner
	o-	
o-	Coagulatie/flocculatie, sedimentatie/flotatie/filtratie	
o-	Overige fasescheidingstechnieken	
o-	Strippen	
o-	Adsorptie aan aktief kool	
o-	Spoelen in tegenstroom	
o-	Recirculatie spoelwater	
o-		

Geef van elk van de aangekruiste maatregelen een volledige beschrijving op een afzonderlijke bijlage, voor zover u dat nog niet bij vraag 15 heeft gedaan.

20.2 Op welke wijze wordt voorkomen dat de afgescheiden (afval)stoffen, die vrijkomen bij de in vraag 15 en 20.1 aangegeven behandelingsmethoden met het afvalwater worden geloosd? In een afzonderlijke bijlage nader omschrijven.

ø - afvoeren naar een verwerkings- of inzamelingsbedrijf
o - behandeling in eigen beheer
o - op andere wijze namelijk: . . . . . .

20.3 Hoeveel van de in vraag 20.2 bedoelde stoffen worden per jaar afgevoerd of behandeld? Zie bijlage nr. 20.3

		m³/jaar	Kg/jaar
1.	Verzamelde restanten fase 1		720
2.	Slib van de waterzuivering		
3.	Afgewerkte loogbaden		
4.	Straalstof		
5	Verzamelde restanten t/m fase 4		1440

21 RISICO'S (ONVOORZIENE GEBEURTENISSEN)

21.1 Is er studie verricht naar de eventuele risicovolle activiteiten die tot (een) onvoorziene gebeurtenis(sen) kunnen leiden

o - nee

ø - ja, zie bijlage nr.: bij vraag 21.1

21.2 Bestaat er de mogelijkheid dat er als gevolg van de onder 21.1 genoemde activiteiten lozingen plaatsvinden?

ø - nee

o - ja

21.3 Geef een overzicht van de mogelijke onvoorziene lozingen met de berekende frequentie (maak hiervoor categorieën naar zeer waarschijnlijk, waarschijnlijk, niet zo waarschijnlijk).

n.v.t.

21.4 Welke CPR-richtlijn is op uw bedrijf van toepassing?

opslag vloeistoffen voor schoonmaakdoeleinden CPR 15-1

opslag gereed product volgens AI14, bedrijfsruimten -inrichting, transport en opslag

21.5 Is de schade welke als gevolg van deze lozing(en) kan optreden vastgesteld?

ø - nee

o - ja

21.6 Welke maatregelen denkt u te nemen om het risico te beperken. Geef van de vermelde maatregelen een uitgebreide beschrijving.

o-	Aanpassen proces(sen)
o-	Vervanging stoffen
o-	Aanpassing onderdelen
o-	Monitoring van stoffen
o-	Aanleg buffer/calamiteitenbassin
x-	Anderszins, zie bijlage nr. 21.6

Ondergetekende verklaart als daartoe bevoegd persoon dit formulier en de daarbij behorende bescheiden, te weten . . . . . bijlage(n), naar waarheid te hebben ingevuld.

plaats: . . . . . Helmond . . . . . .

datum: . . . . . 25-10-2001 . . . . . .

handtekening: . . . . . 5.1.2e . . . . . .

naam en functie (in blokletters): . . . . . ation director . . . . . .

telefoon: . . . . 0492-59 85 98 . . . . . .

Bijlagen bij het aanvraagformulier d.d. 25-10-2001 ten behoeve van een vergunning op grond van de Wet verontreiniging oppervlaktewateren

Uitbreiding bedrijfsruimte a/d Grasbeemd 10 te Helmond

Opdrachtgeefster: Custom Powders bv

Werknr. 9648

architektenburo joosten b.v. b.n.a.
marktstraat 13a - 5731 hs mierlo
tel. 0492-663621 - fax 663195
E-mail: buro@archjoosten.nl

Gemeente Helmond

DIENST STADSBEHEER

HMD/M214-1994

BESCHIKKING

Aanvraag
Door P Colyer is op 14 december 1994 een aanvraag ingediend om vergunning ingevolge de Wet Milieubeheer tot het oprichten en in werking hebben van een inrichting bestemd voor het vermalen, drogen, mengen, zeven en verpakken van poeders op een perceel gelegen aan de Grasbeemd te Helmond. De aanvraag maakt deel uit van de vergunning tenzij dit in de voorschriften behorende bij de vergunning anders is aangegeven.

Procedure
Op 24 januari 1995 is de ontwerpbeschikking vastgesteld. De aanvraag en de ontwerpbeschikking zijn met ingang van 30 januari 1995 ter visie gelegd conform de bepalingen van de Wet Milieubeheer.

Adviezen/bezwaren
Naar aanleiding van het bekendmaken van de aanvraag en de ontwerpbeschikking zijn geen adviezen of bedenkingen ingekomen.

Algemene toetsing
Gelet op de aanvraag en de daarin aangegeven middelen om de nadelige gevolgen voor het milieu zoveel mogelijk te beperken, zijn wij van mening dat de gevraagde aktiviteit op de omschreven lokatie toelaatbaar is, mits wordt voldaan aan de voorschriften die aan de vergunning worden verbonden (Bijlage I en II).

Beschikking
Wij besluiten om aan P. Colyer de gevraagde vergunning ingevolge de Wet Milieubeheer te verlenen, onder de bij deze beschikking gevoegde en als zodanig gewaarmerkte voorschriften.

Burgemeester en Wethouders
van Helmond,
De burgemeester,

11 APR. 1995

5.1.2e

De secretaris,

5.1.2e

Afschrift:
Belanghebbende
Regionaal Inspecteur Volksgezondheid
en Milieuhygiëne
Provincie Noord-Brabant (afdeling Geluid)
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Bijlage: 1

HMD/M 214-94

9900509

II. Water

1. Het is verboden stankverspreidende en verstopping veroorzakende stoffen te lozen op de bedrijfsriolering.

2. Het bedrijfsafvalwater moet door middel van vloeistofdichte leidingen naar buiten de inrichting worden afgevoerd conform de gemeentelijke lozingsverordening.

3. De in de bedrijfsriolering opgenomen bezinkbakken, slibvangers en olie-afscheiders moeten zo dikwijls dit voor de goede werking daarvan noodzakelijk is, worden ontdaan van olie- of slibafzetting. Het afscheidingsprodukt moet op deugdelijke wijze naar buiten de inrichting worden afgevoerd conform de hierop van toepassing zijnde wetgeving.

4. De putten voor de opvang van afvalwater moeten vloeistofdicht zijn en naadloos aansluiten op de vloer van de werkruimten.

5. Het wassen van emballage of motorvoertuigen op het buitenterrein van de inrichting mag alleen plaatsvinden op een speciaal daarvoor bestemde wasplaats; de vloer hiervan moet vloeistofdicht zijn en afwaterend zijn gelegd naar een of meer putten, die zijn aangesloten op de bedrijfsriolering. Het wassen dient op zodanige wijze plaats te vinden dat alle (verontreinigd) water wordt opgevangen en dat zich geen nevel buiten de inrichting kan verspreiden.

Bijlage vraag 3.1 (aanvraag Wvo-vergunning)

Custom Powders behandelt poeders op contract basis. Dat houdt in, dat het moeilijk aan te geven is welke processen er in de toekomst plaats zullen vinden. Hieronder een opsomming van de processen, die tot nu toe hier hebben plaatsgevonden of plaats kunnen vinden.

A. **Het Compacteren.**
Dit is een bewerking, waarbij poeders of een mengsel van poeders, tussen twee "walsen" door wordt gedrukt. Hierdoor ontstaat een harde koek, die dan weer door een molen gaat en waar Custom Powders dan door de snelheid en maasgrootte van de molen wand, de grootte van de uiteindelijke korrel bepalen. Hierbij ontstaat geen afvalwater.

B. **Het mengen.**
Dit is een bewerking waarbij de menger wordt gevuld met verschillende poeders. Het inwendige van deze machine bestaat uit een ploegschaar rotor, die door rond te gaan (axiale beweging) de poeders mengt. Er is hier ook de mogelijkheid om vloeistof te injecteren. Ook hier ontstaat geen afvalwater.

C. **Het malen.**
Custom Powders heeft verschillende molens. Zij kunnen hiermee van grove korrels fijne korrels maken en nog fijner malen. Dat laatste wordt microniseren genoemd. Hierbij komt wederom geen afvalwater vrij.

D. **Het drogen.**
Op een van de molens kan ook een brander aangesloten worden. Er kan dan gemalen en/of gedroogd worden. Hierbij komt waterdamp vrij. Sommige grondstoffen laten ze eerst uitlekken om zodoende minder water te hoeven verdampen. Hierbij komt een zeer geringe hoeveelheid afvalwater (enkele liters) vrij uit het product. Afvoer via de goten in de units 2.

E. **Het Nat Granuleren.**
Dit is een bewerking waarbij poeder of een mengsel van poeders door een cilindrische molen wordt gevoerd waarbij een vloeistof wordt geïnjecteerd. (Gedistilleerd water, was, polymeren etc..) Door de rotatie ontstaat er een granulaat dat vochtig is. Dit gaat door de droger, waarbij weer waterdamp vrijkomt. Geen afvalwater.

F. **Het Extruderen.**
Deze bewerking (tot op heden nog niet uitgevoerd in Helmond) bestaat uit het door een mal persen van een vloeibare brij, waardoor er slierten materiaal ontstaan, die dan weer in een molen op de gewenste afmeting worden gebracht. Ook hier komt alleen water-damp vrij.

G. **Het Classificeren.**
Dit is een bewerking waarbij fijne poeders van grove poeders worden gescheiden. Dit is een droge bewerking.

H. **Het Schoonmaken.**
Alle gebruikte machinerieën en de ruimte moeten aan het eind van een productierun schoongemaakt worden. De machines en de ruimte worden daarvoor uitgeborsteld, gedemonteerd en afgeborsteld. De vrijkomende poeders en andere productierestanten worden opgevangen, verpakt, gewogen en teruggestuurd naar de klant (eigenaar). Vervolgens worden de machines en de ruimte met de hogedruk en stoomspuit gereinigd. Soms wordt er gebruik gemaakt van schoonmaakmiddelen (licht alkalisch). Hierbij komt wel afvalwater vrij.

Hierna volgt een lijst met daarop namen van alle, in de periode januari 2001/oktober 2001 verwerkte stoffen/chemicaliën. De veiligheidsbeoordeling en veiligheidsbladen zijn opgenomen in een separaat toegevoegde support-pack.

Materialen geproduceerd door Custom Powders bv gedurende de periode januari 2001/oktober 2001

Bedrijf	Product
Akzo	Armeen HT
Albemarle France	Saytex BCL 462
Uniqema	Atmer 700
Akzo	Vitaal Salt
McBrides	STTP830
Dupont	Teflon MP1600 Teflon 5069AN
Impextraco	Gran salinomycin Flavophospholipol
Albemarle Belgium	Saytex S9006
Campina Melkunie	salt
Purac	PP Fine PP10-12
Tifomo	salt
Croda	Crodamide ER
Kemin	Acid lac agg
FMC	Nilyn

Bijlage vraag 6.1/vraag 6.2 (aanvraag Wvo-vergunning)

In fase 1

Waterverbruik 1999

Hiervan voor:

huishoudelijk gebruik	100	m³	
bedrijfsafvalwater	510	m³	
tuin/vijver	28	m³	
	638	m³	(aflezing watermeter)

In eindfase 1, 2, 3/4

Indien rechtlijnig geëxtrapoleerd voor:

huishoudelijk gebruik	200	m³
bedrijfsafvalwater	1.870	m³
tuin/vijver	60	m³

Door extra bedrijvigheid in aanvrage op te nemen voor:

huishoudelijk gebruik	300	m³
bedrijfsafvalwater	2.500	m³
tuin/vijver	100	m³

Bijlage vraag 15.1/vraag 15.2 (aanvraag Wvo-vergunning)

Om meteen aan de wetgeving te voldoen, maar niet meteen met hoge investeringskosten geconfronteerd te worden, zal alle in aanmerking komend afvalwater (conform het schema uit Riza-rapport 98-005) opgevangen gaan worden en afgevoerd naar een afvalwaterverwerker. Momenteel wordt met een viertal bedrijven overleg gevoerd op welke wijze de "beste" oplossing gevonden kan worden. De oplossing voor afvalwaterzuivering zal uiteraard ter goedkeuring aan het waterschap worden voorgelegd. De nadere uitwerking van het afvalwaterzuiveringssysteem met bijbehorend rioolstelsel zal nadien met een meldingsprocedure worden afgehandeld. Uiterlijk bij de realisering van de 2e fase zal de waterzuiveringsinstallatie functioneel gemaakt worden.

Bijlage vraag 19.1 (aanvraag Wvo-vergunning)

Opslag van gereed product			Opslag van te bewerken product
Fase	Ruimte nr.	Opp. in m²	Opp. in m²
1	102*	114	114
	104*	182	182
	106*	117	117
2	202*	163	163
	204*	165	165
	206*	165	165
	208*	163	163
	212	28	-
	213	28	-
	214	28	-
	215	28	-
3	302*	163	163
	304*	165	165
	306*	165	165
	308*	163	163
	312	28	-
	314	28	-
	315	28	-
	324	11	-
	325	11	-
	Totaal in m²	**1.943**	**1.725**

* Bij de berekening is uitgegaan van een gangpad met een breedte van 3 meter.

Bijlage vraag 19.2 (aanvraag Wvo-vergunning)

De bij in vraag 3.1 aangegeven processen komt afvalwater vrij:

- bij het drogen (D) kom een geringe hoeveelheid afvalwater vrij uit het product (enkele liters). Dit afvalwater wordt via de goten in units 2 afgevoerd.

- bij het schoonmaken (H) van de gebruikte machinerieën en de ruimte aan het eind van een productierun. In eerste instantie worden de vrijgekomen poeders en productieresten verzameld en verpakt. Daarna worden de machines en de ruimte met hogedruk- en stoomspuit gereinigd. Somt met toevoeging van licht alkalische schoonmaakmiddelen.

Bijlage vraag 20.3 (aanvraag Wvo-vergunning)

Fase 1

Schatting maximaal 6 cleandowns per maand (maximaal 10 kg per cleandown)

6 x 10 x 12 = 720 kg per jaar.

Fase 1 t/m 4

Schatting maximaal 12 cleandowns per maand (maximaal 10 kg per cleandown)

12 x 10 x 12 = 1440 kg per jaar.

CUSTOM POWDERS PROCEDURES FOR CONTROL OF EFFLUENT DISCHARGE

To demonstrate the methods of control, attached are documents that give details of procedures that are in place at Custom Powders BV, Helmond. It should be noted that the procedures are encompassed into our quality ISO9002 system and the company is currently installing the environmental ISO14001. The quality system is regularly audited and approved by the British Standards Institute.

Document 1

This document details the decision tree and the process that is undertaken from initial enquiry by the customer to final despatch of the product. It should be noted from page 2 titled " Customer ", that a significant number of chemical compounds are not processed at Custom Powders. This is supported by a list of materials attached in the appendix that are, as a matter of policy, not handled by Custom Powders. Also in the appendix is a list of prescribed processes that are not undertaken by Custom Powders. Page 3 Item " 3 Environmental Risk " identifies the need for formal risk assessments with respect to the environment.

Document 2 - Extract from CPBV Production Manual

This is an extract from our Production Manual, which is a controlled document under our ISO9002 system. The document details Standard Production Procedures that are in place. With respect to the control of effluent discharge, attention should be brought to sections 3.7, 3.8, 3.9 - Item 2, and Section 4.4 - Item 3. These are specific procedures that are in place to ensure that Custom Powders BV handles and processes material in an environmentally safe way. A further section, Section 5, deals with the procedures in case of an emergency. Given in Section 5.2 - Item 6, is the procedure to prevent discharge of effluent to the public sewer if an emergency situation arises.

Document 3 - Description of Training

This document demonstrates our commitment to training. Our operators undergo intensive training, which includes a training period in the UK to a national standard of NVQ 2/3. Specific training for the protection of the environment, in particular, effluent discharge has been implemented. This training has been undertaken to ensure that the standards that are in place are understood clearly by all personnel. Continuing training will follow as a matter of course.

Document 4 – Guidance Note for Assessment for Discharge of Water Washings to the Municipal Sewer.

This document has been written to allow the company to interpret the assessment process by RIZA. The document has been written as guidance for a graduate Chemist or Chemical Engineer. Firstly it provides guidance on how to categorise materials. And secondly it establishes how the data is interpreted and integrated into the Safety, Quality and Environmental systems within the company.

Support Pack - Summary of Environmental Assessment of Discharge of Water Washings for

The final set of documents deals with assessments made on 17 materials processed at Custom Powders BV between January 2001 and October 2001. The risk for each material has been assessed. Attached to the assessment is the company internal control document called a ' COSHH' sheet. This is a recording of the environmental risk and is available for all company employees to read. Also attached are the a Material Safety Data Sheets for the materials processed. Where appropriate there is environmental support documentation.

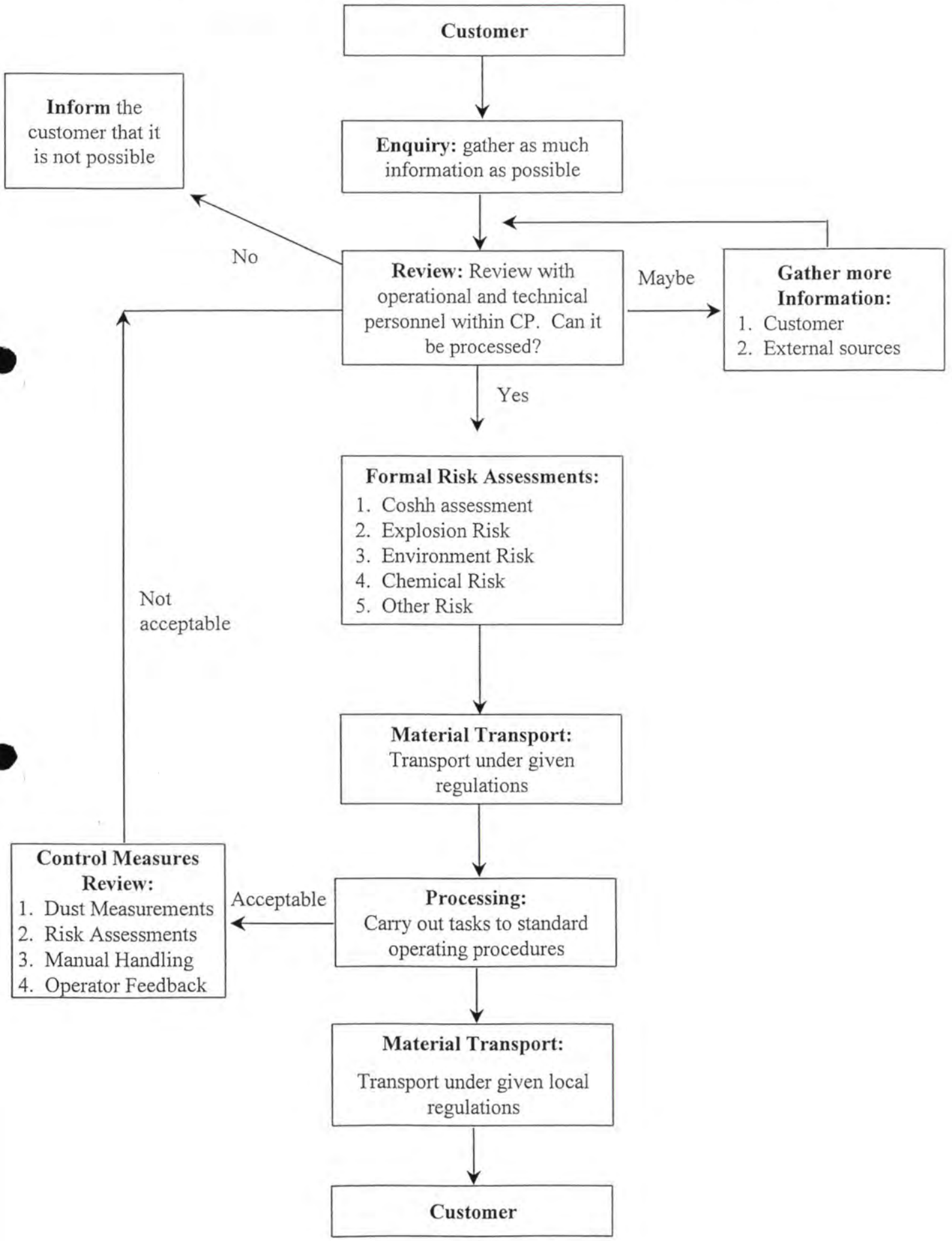
The above documents are provided as support material to show the controls that are in place and are believed to be sufficiently adequate to control effluent discharge. Custom Powders would welcome the opportunity for our systems to be audited with an opportunity for improvement.

5.1.2e

Technical Director
26 October 2001

Document 1 - Decision Tree

Risk Assessment and Minimisation Plan - Materials Processing



Risk Assessment and Minimisation Plan - Materials Processing

Customer:

Custom Powders typically deals with companies from the Chemical, Food Additive and allied industries. Materials handled are of medium to low toxicity. The company specialises in the handling of powders or solids. A relatively low quantity of water-based liquids is handled in association with the powder processing activity. The current process systems are not designed for handling solvent based liquids.

As a general statement the company has a policy of not handling black listed substances, materials that cause genetic damage, carcinogenic, radioactive, and similar highly toxic substances. The company does not undertake prescribed processes as detailed in appendix 1. Similarly the company has a policy of not handling prescribed substances given in appendix 2 and appendix 3

Enquiry

As part of the enquiry process as much information as possible is collected that relates to the safe handling of the material. Typically the customer will be asked to provide samples of the raw material and finished product. It is also mandatory that the customer provides us with a 16-point Materials Safety Data Sheet (MSDS) as well as the information about the explosion characteristics of the product (KSt-value & Minimum Ignition Energy) and any environmental restrictions. Information will also be sought from the customer on the handling precautions and controls that are undertaken from known processing activities.

Review:

The gathered information will be discussed with the Custom Powders technical personnel in order to establish whether the material can be processed in a safe manner within the processing constraints that exist. If the answer is no the customer will be informed. Sometimes more information is needed or clarification is required. In such circumstances further discussions will take place and if necessary, with the permission of the customer, third party advice from specialist organisations may be sought. When sufficient information has been obtained that satisfies the processing constraints then the customer will be given a quotation. If the customer is satisfied with the proposal then a formal order will be raised and the risk minimisation process progressed.

Formal Risk Assessments:

1. COSHH Assessments

A COSHH assessment (Control of Substances Hazardous to Health) is undertaken to provide a formal written record of the hazard associated with the product. This assessment is undertaken for every product handled. The COSHH sheet is designed to provide information for employees to see and understand information provided by the customers. It is an assessment of the information and its consequences in the processing of materials at Custom Powders.

The COSHH sheet is intended to be supported by as much information as possible from the customer. A Chemist or a Chemical Engineer, typically a person with ten years of experience in powder processing and interpreting these kinds of data, will translate the customer's safety information into a recognisable form.

A process will not be allowed to run if a completed and signed off COSHH sheet relevant to the process is not available.

The sheet will be supported by continued assessments of exposure, which will be published and made available to individual operators on a regular basis.

2 Explosion risk:

Many of the organic type powders processed have a potential hazard from the ignition of a dust cloud and resultant explosion. This explosion can occur either in the processing equipment or within the processing area under the prevailing conditions that would support such an explosion. The severity of the dust explosion and the ease by which an explosion can occur can be categorised by specialist laboratories. If a powder has the slight possibility of exhibiting explosion properties Custom Powders will insist that the Customer supplies full explosion characteristics. If necessary, Custom Powders can arrange for the product to be tested.

When the explosion characteristic are known Custom Powders will designate the product as Low Risk - Explosion, Medium Risk - Explosion or High Risk - Explosion. Where the product is classified as a High Risk with respect to explosion, then a risk assessment will be undertaken and formally recorded in writing. The risk assessment will identify the necessary control measures needed to ensure the risk is tolerable.

The category of explosion risk assigned to the processing of a material will be recorded on the COSHH sheet under the heading 'Explosion Risks'

3 Environmental risks

Environmental assessments are required on all materials processed at Custom Powders. To undertake the assessment environmental data needs to be determined either published in the MSDS information by the customer from a third party source such as web sites.

The assessment process uses the document published by the Directorate-General for Public Works and Water Management, RIZA report 98.005 and is detailed in the internal document '**GUIDANCE NOTE FOR ASSESSMENT FOR DISCHARGE OF WATER WASHINGS TO THE MUNICIPAL SEWER**'. As already stated the company has a policy of not handling materials that are highly toxic such as black listed substances. Materials therefore fall into 4 categories as detailed below and are evaluated in accordance with the RIZA guide.

1 Acute toxicity <1 mg/l	Very toxic to the environment	Would normally be rated R50
2 Acute toxicity 1-10mg/l	Toxic to the the environment	Would normally be rated R51
3 Acute toxicity 10-100mg/l	Harmful to the environment	Would normally be rated R52
4 Acute toxicity >100mg/l **or** no/can not be determined	Not harmful to the environment	Would not be given a rating

The material will be designated an environmental low risk, medium risk or high risk to the environment. A formal record of the environmental risk will be recorded on the COSHH sheet under the heading 'Environment Risks'.

Environmental high risk materials will have an additional specific process documentation detailing the appropriate actions, which will be authorised by a senior manager to ensure that the risk is tolerable. The water washings generated from an environmental high risk cleandown will ~~either~~ be collected.

Environmental medium risk materials will be closely controlled with respect to cleandown with controlled release of the washings.

A formal record of the environmental risk will be recorded on the COSHH sheet under the heading 'Environment Risks'

4 Chemical risk

Materials handled typically have a low volatility and are low in reactivity. As a general rule Custom Powders do not handle oxidising agents, self-combusting materials and solvents. However in certain circumstances there are material incompatibilities that can result in a higher processing or storage risk. Where such materials are handled a risk assessment will be undertaken and formally recorded in writing. The risk assessment will identify the necessary control measures to ensure the risk is tolerable. These control measures for example might include the provision of dedicated storage.

The category of chemical risk assigned to the processing of a material will be recorded on the COSHH sheet under the heading 'Chemical Risks'

5 Other risks

Where materials have characteristics that render the processing to be a high risk to the business then a formal record will be made of how that risk has been made tolerable low to allow the processing to proceed. Examples of other high risks are the processing of high value materials.

Any other identified risk will be recorded on the COSHH sheet as 'Any Other Risks'

Material Transport:

Generally the customer controls the transport delivering material to Custom Powders under the local regulations (VLG - Netherlands CHIP- UK)

Processing:

Trained operators who work to Standard Operating Procedures as detailed by the company's ISO 9002/ISO14001 quality and environmental system carry out the processing. The operating procedures associated with High Risks for example are detailed in the company's Production Manual.

The procedures are given to ensure that the processes are operated in a controlled manner safely producing product to the customer's specification.

Control Measures Review

During the processing activity there are a series of reviews undertaken to ensure that the control measures and standard operating procedures are effective and delivering the minimisation of risk. These reviews include dust measurements, manual handling and risk assessments. Information is also sought from the experiences of the operators during processing.

Should the control measure review identify any shortcomings then a process of formal review is reinitiated. The actions from the review will be to the level of shortcoming.

Material Transport:

Custom Powders will ensure that the product is packaged and labelled in accordance with the local transport regulations (VLG - Netherlands CHIP- UK). The packaging and labelling requirements will be discussed with the customer at the commercial stage and prior to the processing of the material. Generally the customer will undertake transport of material from site. Where Custom Powders is responsible for transport a suitable carrier will be selected.

Customer:

The customer receives product. Any appropriate or relevant feedback will be given to the customer.

APPENDIX 1 Prescribed Processes

(Reference: Schedule 1 Environmental Protection Regulations 1991 - United Kingdom)

1. The Production of Fuel and Power and Associated Processes.

2. Metal Production and Processing.

3. Mineral Industries i.e. cement, lime, asbestos, ceramic, glass, lignite.

4. Chemical Industry

a) Petrochemical Processes

b) Manufacture of organic chemicals - styrene, vinyl chloride, actylene, aldehyde, amine, isocyanate, nitrile, organic acid, anhydride, organic sulphur, phenol, carbon disulphide, pyridine, metallic compound, acrylate.

c) Acid processes - sulphuric acid, oleum, oxide of sulphur, nitric acid, acid forming oxide of nitrogen, phosphoric acid.

d) Processes involving halogens.

e) Inorganic processes - hydrogen cyanide, hydrogen sulphide, antimony, arsenic, beryllium, gallium, indium, lead, palladium, platinum, selenium, tellurium, thallium, chromium, magnesium, manganese, nickel, zinc, ammonia, phosphorus oxide, hydride halide.

f) Chemical fertiliser production.

g) Pesticide production - release into water of Schedule 5 or creation of 500 ts of special waste per year.

h) Pharmaceutical - release into water of Schedule 5 or creation of 1000 ts of special waste per year.

i) Storage of chemicals - acrylates, acrylonitrile, anhydrous ammonia, anhydrous hydrogen fluoride, toluene di-isocyanate, vinyl chloride monomer.

5. Waste Disposal and Recyling - incineration recovery processes, production of fuel from waste.

6. Other Industries - paper, pulp, di-isocyanate, tar and bitumen, uranium, coating processes and printing dye stuffs, ink and coating materials, timber processes involving rubber, animal or vegetable matter.

APPENDIX 2 Prescribed Substances

Substances become excluded if:-

1. Release into air so trivial that it is incapable to cause harm.

2. Release into water so that it is no greater than the background concentration.

3. Release into land so trivial that it is incapable to cause harm.

Release into the air: prescribed substances (reference: SCHEDULE 4 Regulation 6(2) Environmental Protection Regulations 1991 - United Kingdom)

Oxides of sulphur and other sulphur compounds
Oxides of nitrogen and other nitrogen compounds
Oxides of carbon
Organic compounds and partial oxidation products
Metals, metalloids and their compounds
Asbestos (suspended particulate matter and fibres), glass fibres and mineral fibres
Halogens and their compounds
Phosphorus and its compounds
Particulate matter

Release into water: prescribed substances (reference: SCHEDULE 5 Regulation 6(3) Environmental Protection Regulations 1991 - United Kingdom)

Mercury and its compounds
Cadmium and its compounds
All isomers of hexachlorocylohexane
All isomers of DDT
Pentachlorophenol and its compounds
Hexachlorobenzene
Hexachlorobutadiene
Aldrin
Dieldrin
Endrin
Polychlorinated Biphenyls
Dichlorvos
1, 2 - Dichloroethane
All isomers of trichorobenzene
Atrazine
Simazine
Tributyltin compounds
Triphenyltin compounds
Trifluralin
Fenitrothion
Azinphos-methyl
Malathion
Endosulfan

Release into land: prescribed substances (reference: SCHEDULE 6 Regulation 6(3) Environmental Protection Regulations 1991 - United Kingdom)

Organic solvents
Azides
Halogens and their covalent compounds
Metal carbonyls
Organo-metallic compounds
Oxidising agents
Polychlorinated dibenzofuran and any congener thereof
Polychlorinated dibenzo-p-dioxin and any congener thereof
Polyhalogenated biphenyls, terphenyls and naphthalenes
Phosphorus

Pesticides, that is to say, any chemical substance or preparation prepared or used for destroying any pest, including those used for protecting plants or wood or other plant products from harmful organisms; regulating the growth of plants; giving protection against harmful creatures; rendering such creatures harmless; controlling organisms with harmful or unwanted effects on water systems, buildings or other structures, or on manufactured products; or protecting animals against ectoparasites.

Alkali metals and their oxides and alkaline earth metals and their oxides

APPENDIX 3

(reference: Annex I van EG-richtlijn 76/464/EG - Netherlands)

1.	Aldrin	
2.	Amino-4-Chlorophenol, 2-	
3.	Anthracene	
4.	Arsenic (and compounds)	
5.	Azinphos-Ethyl	
6.	Azinphos-Methyl	
7.	Benzene	
8.	Diaminodiphenyl, 4,4'-	Benzidine
9.	Chlorotoluene, Alpha-	Benzylchloride
10.	Dichlorotouene, Alpha-	Alpha-Benzylidenechloride
11.	Biphenyl	
12.	Cadmium (and compounds)	
13.	Tetrachloromethane	Carbon tetrachloride
14.	Trichlordethanal Chloral	Trichlordacetaldehyde
15.	Chlorade	
16.	Chloroacetic Acide	
17.	Chloroaniline, 2-	
18.	Chloroaniline, 3-	
19.	Chloroaniline, 4-	
20.	Chlorobenzene	
21.	Chloro-2, 4-Dinitrobenzene, 1-	
22.	Chloroethanol, 2-	
23.	Trichloromethane	Chloroform
24.	Chloro-3-Methylphenol, 4-	
25.	Chloronapthalene, 1-	
26.	Chloronaphtalene (all isomers)	
27.	Chloro-2-Nitroaniline, 4-	
28.	Chloronitrobenzene, 2-	
29.	Chloronitrobenzene, 3-	
30.	Chloronitrobenzene, 4-	
31.	Chloro-2-Nitrotoluene, 4-	
32.	Chloronitrotoluene (all isomers)	
33.	Chlorophenol, 2-	
34.	Chlorophenol, 3-	
35.	Chlorophenol, 4-	
36.	Chloro-1,3-Butadiene, 2-	Chloroprene
37.	Chloropropene, 3-	Allychloride
38.	Chlorotoluene, 2-	
39.	Chlorotoluene, 3-	
40.	Chlorotoluene, 4-	
41.	Chloro-4-Aminotoluene, 2-	Chloro-4-Toluidine, 2-
42.	Chloroaminotoluene (all isomers)	Chlorotoluidine
43.	Cumafos	
44.	Trichloro-1, 3, 5-Triazine, 2,4,6-	Cyanuricchloride
45.	Dichlorophenoxyacetic Acid, 2,4-	D, 2,4-
46.	DDT	
47.	Demeton	
48.	Dibromoethane, 1,2-	
49.	Dibutyltinchloride	
50.	Dibutyltinoxide	
51.	Dibutyltin Salt (all)	
52.	Dichloroanuline (all isomers)	
53.	Dichlorobenzene, 1,2-	
54.	Dichlorobenzene, 1,3-	

55.	Dichlorobenzene, 1,4-	
56.	Dichlorooiaminooiphenyl (all)	Dichlorobenzidine
57.	Bis (2-Chloroisopropyl) ether	
58.	Dichloroethane, 1,1-	
59.	Dichloroethane 1,2-	
60.	Dichloroethene, 1,1-	Vinylideenchloride
61.	Dichloroethene, 1,2-	
62.	Dichloroethane	Methylenechloride
63.	Dichloronitrobenzene (all isomers)	
64.	Dichlorophenol, 2,4-	
65.	Dichloropropane, 1,3-	
66.	Dichloro-2-propane, 1,3-	
67.	Dichloropropene, 1,3-	
68.	Dichloropropene, 2,3-	
69.	Dichlorophgenoxypropanoic Acid, 2,4-	Dichlorprop
70.	Dichlorvos	
71.	Dieldrin	
72.	Diethylamine	
73.	Dimethoate	
74.	Dimethylamine	
75.	Disulfoton	
76.	Endosulfan	
77.	Endrin	
78.	Epichlorohydrine	
79.	Ethylbenzene	
80.	Fenitrothion	
81.	Fenthion	
82.	Heptachlor	
83.	Hexachlorobenzene	
84.	Hezachlorobutadiene	
85.	Hexachlorocyclohexane	
86.	Hexachloroethane	
87.	Isopropylbenzene	Cumene
88.	Linuron	
89.	Malathion	
90.	Methyl-4-Chlorophenoxyacetic Acid, 2-	Mcpa
91.	Methyl-4-Chlorophenoxypropanoic Acid, 2-	Mcpp
92.	Mercury (and compounds)	
93.	Methamidophos	
94.	Mevinphos	
95.	Monolinuron	
96.	Naphtalene	
97.	Omethoate	
98.	Oxydemeton-Methyl	
99.	Pah (6 of Borneff)	
100.	Parathion-Ethyl	
101.	Pcb	
102.	Pentachlorophenol	
103.	Foxim	
104.	Propanil	
105.	Pyrazone	Chloridazon
106.	Simazine	
107.	Trichlorophenozyacetic Acid, 2,4,5-	2,4,5-T
108.	Tetrabutyltin	
109.	Tetrachlorobenzene, 1,2,4,5-	
110.	Tetrachloroethane, 1,1,2,2-	
111.	Tetrachloroethylene	
112.	Toluene	
113.	Triazophos	

114.	Tributylphosphate	
115.	Tributyltinoxide	
116.	Trichlorofon	
117.	Trichlorobenzene (all isomers)	
118.	Trichlorobenzene, 1,2,4-	
119.	Trichloroethane, 1,1,2-	
120.	Trichloroethane, 1,1,2-	
121.	Trichloroethylene	
122.	Trichlorophenol (all isomers)	
123.	Trichlorotrifluoroethane, 1,1,2-	
124.	Trifluralin	
125.	Triphenyltin Acetate	
126.	Triphenyltin Chloride	
127.	Triphenyltin Hydroxide	
128.	Chloroethene	Vinylchloride
129.	Xylene (all isomers)	
130.	Isoorin	
131.	Atrazine	
132.	Bentazone	

PRODUCTION MANUAL

1 Company Quality Standards

1.1 Food and Pharmaceutical Hygiene Standards

1 Clothing - Whilst processing food chemicals and other related materials, dedicated white overalls must be worn together with hats incorporating a hair net. Body warmers must be worn under overalls. Overalls must be worn in full. Persons entering a process unit must be suitably clothed.

2 No jewelry or watches apart from a wedding band are to be allowed in units processing food or pharmaceutical materials i.e. bicarb, salt, husk. Visitors or other personnel entering the processing area are required to remove jewelry and watches prior to entering. Earring, chains and rings containing stones are not allowed.

3 Housekeeping - It is important that Housekeeping and General Standards of Workmanship are maintained to prevent contamination. The use of brown tape and cardboard are materials that lend themselves to potential contamination sources. Their use must be restricted for packaging and clean-downs.

4 Smoking - The company employs a smoking policy that restricts smoking to the canteen.

5 Glass - No types of glass are allowed in the process areas. Where glass is part of a fixture then it will be checked monthly.

6 Personal Hygiene - It is important that hands are washed prior to and after working in the process areas.

7 Consumption of Food - Food consumption is restricted to the canteen. Drinking is not allowed in Process Areas. Similarly chewing of gum is not permitted.

1.2 Standards of Workmanship in Process Areas

1 No process area should have loose tools, nuts, bolts, washers, surplus machine parts contaminating the mill room.

2 Each mill room will contain a brush, shovel, sacks for debris/waste materials, dirty sweepings, clean sweepings with a hoover also available.

3 Each process area should be regularly brushed or hoovered. Any debris e.g.wood, paper, etc. should be picked up and disposed of immediately and the aisle and warehouse area should be regularly cleaned with particular attention paid to the window ledges, extinguishers, door traps, etc.

4 Sweepings are to be packed and stored as per instructions on Product

Sheet and they must be sealed, weighed and clearly identified. Weight of sweepings to be recorded at end of run on the summary sheet. Sweepings sacks must never be the same type as that of the product being processed.

5 Disposal of sweepings will be given on Product Sheet or by Management.

6 Empty sacks and suitable pallets may be stored in the process area but must be kept clean and tidy. Any damaged sack or pallet must be removed immediately.

7 Samples are to be taken as instructed and stored in sample container for collection.

8 Test equipment is to be kept clean and tidy. All samples must be removed after testing. Unused test sieves are to be returned to the storage area.

9 Adequate supplies of sample bags/labels/bag ties are to be stored neatly within the vicinity of the test equipment.

10 Pallets - instruction will be given on type of pallet for each job on the job sheet. Only good quality clean pallets must be used. Pallets with broken bearers or boards must not be used. Pallets should be brushed off prior to use, checked for any nails or splinters that may be protruding which may damage any packaging materials. If the pallet is wet then layer boards must be positioned prior to use.

11 Instructions will be given for pallets/sack/batch marking on the Job Sheet. Clear legible markings are to be used at all times.

12 Scales must be checked, using the clean weights provided at the start of each shift and regularly throughout. Ensure scales are cleaned regularly and that no items are touching or resting against the scales as this will give errors.

13 Emptying Procedures for Sacks, Drums and Big Bags:

a. Clean dirt, etc. off the container prior to tipping out the product.

b. Empty the container with a minimum of dust and spillage by:

i) Lifting the sack onto the mesh or feeder and slitting it when it is in position, ensuring that no spillage occurs. When the sack is nearly empty carefully tease it away from the product without creating dust. Dispose of the sack as per instruction.

ii) Position big bags over the feeder to the correct height, untie the cord, and carefully open the neck and guide the product into the feeder. When the bag is empty, knock residue out of the bag and store as per instruction.

14 Products are to be packed as per instructions on Product and Job Sheet with minimum spillage of dust. A top up sack may be required which must be stored close to the packing equipment. No tools, must, bolts, pens, sample bags, ties, etc. must be stored above the level of this sack.

15 Ensure prior to packing into big bags that they contain no contaminates.

16 Product container sealing instructions will be given on the Job Sheets.

17 Instructions will be given to checkweigh raw materials and finished product. Normally 2 batches per shift will be checked and recorded on supplementary Product and Raw Materials Sheet.

18 Fitting or Gortex Filter Bags is only permitted by Grade 4 and Grade 5 Operators and Fitters, provided training has been given.
Grade 1, 2 and 3 employees are not permitted to fit or remove Gortex Filter Bags.

19 Screen/Mesh Failures:

Kibbler disc, nibbler screen, grater grinder screen, kek sieve mesh, locker sieve mesh.

In the event of any of the above failing due to damage to the screen or sieve mesh, the operator must trace back to the point of failure. Any material not conforming to product acceptance range on product sheet must be reworked as instructions on product sheet. If for any reason this product can not be reworked it must be marked with a red QC label, isolated and Management informed.

20 Screen/Meshes Blinding:
Kibbler disc, nibbler screen, grater grinder screen, kek sieve mesh, locker sieve mesh.

If any of the above blind/block up the following procedure must be carried out:

1. Tie off big bag inlet or remove big bag from its position beneath the equipment. In the event of packing direct to sack or sacks via a packer, remove product sacks or packer. This is to prevent over-size material/tramp material contaminating product.
2. Dismantle and clean the equipment and rebuild.
3. Reposition big bags, product sacks or packer.

21 ACM Failures:

If for any reason the rotor plate pins shear in any ACM mill then the following instructions must be carried out to ensure all tramp metal and damaged pins are removed prior to start up.

1. Strip mill parts, remove or slide over the air intake, rotate mill screw feed. If screw will not rotate by hand then it must be removed. (There is a high probability that broken pins or tramp material has rebounded back up the screw feed).
2. Collect broken pins and any tramp material that may have caused the failure. Then hoover out air intake and mill chamber. Save any tramp material and pass on to a Manager.
3. Inspect for other damage to classifier blades and liners. Rebuild mill parts when above is completed.

1.3 Standards of workmanship Storage Areas:

a. Instructions are given on the Job Sheet for sack layout and quantity per pallet. Sacks must be stored within the perimeter of the pallet and any spillage or excess dust must be brushed off.

b. Shrink-wrapping must be done outside the process area. One fire extinguisher must be positioned on shrink-wrap trolley and another in the shrink-wrap area. The floor area must be clean of dust and debris to reduce fire risk. No more than one hole of between 50 mm to 75 mm (2"-3") in size is permitted on the shrink-wrap. The pallet must be allowed to stand for five minutes and examined for any signs of fire prior to storage.

c. No shrink-wrapping will take place for 2 hours before factory closedown. (i.e. No shrink-wrapping after 0400 hours on Friday 10-6 shift and holidays).

d. Stretchwrapping can be carried out in the process area or shrink-wrap area. When stretchwrapping, the whole pallet must be covered.

e. Materials are to be stored as per instruction via the Job Sheet or Log Book.

f. Instructions will be given on how to stack pallets via the Job Sheet or Log Book.

g. In the warehouse, pallets must be stored within the yellow perimeter lines to allow access. Adequate space between lanes about 75 to 150 mm (3"-6") must be allowed to prevent damage to materials when moving, unless other instructions are given on the Job Sheet. Any debris such as wood, paper, etc. shall be picked up and disposed of immediately, and any spillage of material swept up immediately. Any unit where production or movement of material is taking place must be brushed out once per shift. This includes the doorway and aisle.

h. Pallets are to be stored in lanes in chronological order.

1.4 Storage Instructions for Hazardous Materials

1 Generally all materials if possible are to be returned immediately back to the customer. If this is not possible then store as instructed.

2 The COSHH sheets will include instructions on how to store hazardous products.

3 For production tonnage if it is an oxidising or reducing agent the storage area is to have all other materials removed prior to receipt of hazardous materials.

4 Use the chemical names on storage labelling.

5 For products with hazardous nature such as oxidising and reducing agents, or a low occupational exposure level special instructions on storage and labelling will be given on COSHH sheets.

6 Retained samples if kept, are to be stored in nominated areas.

1.5 Loading/Off-loading of Materials

a. Goods In:

1. Materials are to be stored in units as per Management instructions which will depend upon where it is to be used except where it is incompatible due to odour, toxicity, etc.

2. A Goods Inward Label is to be secured to the front pallet/big bag stating quantity, product and Operator for items that are not clearly identified.

3. Record materials in the Goods Receipt Book stating:- product, customer, quantity and unit stored in. Report to Management if you discover any discrepancies.

4. When recording this information, check the stated quantity against the actual quantity and if necessary adjust the customer receipt notes.

5. Special Instructions will be given if materials need check weighing, sampling,

and placing in quarantine.

6. When all goods are off-loaded, the vehicle driver must ensure that the vehicle is clean and tidy from any spillage before leaving CPL.

7. Goods will not be accepted if they are poorly packed, damaged or contaminated, without Management approval.

8. Vehicles will not be unloaded without Management permission if the contents are not fully sheeted and secured. Drivers must not un-sheet materials in the rain until they are authorised to do so.

b. Goods Out:

1. Ascertain order numbers or other relevant information from the driver/haulage company, and check the details against Delivery Orders which are located in the office.

2. Complete a Delivery Order Sheet recording Batch numbers. Pallets despatched from stock shall be loaded in chronological order, i.e. the oldest material is despatched first.

3. If no Delivery Orders are available ask Management for instruction and ensure the driver completes a Collection Note.

4. No materials are to be despatched if damaged or if on damaged pallets.

5. Prior to loading into tankers, ISO containers or flat vehicles the Operator shall check that there is no contamination present (i.e. Residue of material from previous delivery, water, etc.)

6. The vehicle must be clean and tidy from spillage and must be adequately sheeted before leaving CPL.

5 Use of Scales

i) Lab Scales:
ii) Sack Scales:
iii) Pallet Weighing Loadcells:

See Laboratory Manual ,Section 1 Inspection Measuring and Testing, Scales for operation

iv) Tolerances:

1. 10g test sample, tolerance is +/-0.01g. (I.e.. 9.99g or 10.01g)
2. 25kg sacks, tolerance is -0 to +0.10 kg
3. 50 kg sacks, tolerance is -0 to +0.20 kg
4. 10-100 kg containers, tolerance is -0 to +0.20 kg
5. 100-200 kg containers, tolerance is -0 to +0.20 kg
6. 200-1000 kg containers, tolerance is -0 to +2 kg

3 STANDARD OPERATING PROCEDURES - PROCESSING ACTIVITIES

The following Processing Activities are standard procedures that are generic to all process functions undertaken at Custom Powders. These procedures are given to ensure that the operation is undertaken safely, to a high quality standard and within environmental guidelines.

3.1 Dust Control

Dust is a potential health hazard that is continually monitored. Its potential hazard is controlled by:-

1. Ensuring the operator is trained in the techniques of handling powders, granules and solids.

2. Potential sources of dust generation are minimised during set up.

3. That interconnections between pieces of key plant are complete and effective.

4. That seals area complete and not leaking.

5. Dust extraction is utilized to remove dust generated at the filling point or at the packing point. Extraction is also used where venting of plant generates dust. Where dust extraction is utilised, the operator is responsible for:-

   i) Checking the integrity of the extraction system
   ii) Effective suction is available i.e. by placing hand over extraction points and feeling suction
   iii) That pressure indicator lights, where fitted, indicate that the system is working effectively
   iv) That where shakers are fitted, the system is shaken at least once a shift or more frequently as required.
   v) That where a bucket is used that the bucket is emptied at the end of the shift

6. Ultimate protection against dust hazards is provided by a comprehensive utilisation of dust masks

Problems	Reason	Remedy
Repeated high dust reading	Operator dependent Material dependent	Requires further training Dust extraction lacking or ineffective Ensure seals are complete and effective
High levels of dust at joints	Ineffective seal Poor joint Leakage at joint	Stop system - effect repair Seek assistance from fitter if effective seal cannot be achieved

Problems	Reason	Remedy
Personal irritation	High exposure Ineffective dust extraction Material dependent	Seek assistance

3.2 Materials

Packaging Emptying Procedures
This Emptying Procedures can be used for Sacks, Drums and Big Bags

1. Inspect packaging , clean dirt etc. off the container prior to tipping out the product. If wet or damp, report to management.

2. Empty the container with a minimum of dust and spillage by:-

   i) Sack Packaging - lifting the sack onto the mesh or feeder and slitting the sack as wide as the hopper/sack, ensuring that no spillage occurs. Dispose of the sack as per instruction.

   ii) Position big bags over the feeder to the correct height, untie the cord, and carefully open the neck and guide the product into the feeder. When the bag is empty, gently knock residue out of the bag, roll up, tie and store as per instruction.

   iii) De-lid keg if lined, fold liner over keg. Tip keg into hopper creating minimum dust, stand inverted keg in hopper, gently tap to ensure all product is removed. Remove liner and dispose of as instructed. Replace keg lid and store for disposal or return.

Manual Handling

Manual Handling assessments are carried out on a wide range of activities within Custom Powders.

1. These assessments are made by trained personnel only and take place to establish any risk associated with the task, and to identify any need to change the operation to ensure reduced/safe manual handling is carried out, or to identify training requirements. All operators will be given training in best manual handling practices.

2. The assessment is broken down into four sections, they are as follows:-
   i) the load
   ii) the task
   iii) the environment
   iv) the individual

3. Each section has elements which are scored to give a risk total. The risk is then classed as either Low, Medium or High.
   All assessments are available for all personnel to view.
   Procedural instructions are held in the Production Manual.
4. All documented manual handling assessments are reviewed by the management

team.

5. All assessments are available for personnel to view.

3.3 Waste Packaging Disposal

1. Instructions for disposal of waste packaging are given on the Product Sheet.

2. Sack packaging must be bailed to a manageable size and weight, approximately 20kg and tied.

3. Packaging that has held dusty or hydroscopic materials must be placed into a polythene liner before disposal.

4. Waste packaging is to be disposed of into the **Skip** (paper sacks) or into the **Restaval Skip** (plastic sacks) as detailed on the Product Sheet

3.4 Powder Waste Handling and Disposal

1. Instructions for the handling of waste powder, **(Sweepings**) are given on the Product Sheet.

2. Sweepings sacks must be filled to a manageable size and weight, approximately 25kg and stitched.

3. Sweepings sacks must be clearly marked with the product name and weight.

4. Sweepings must be stored neatly on pallets in the process area.

5. Sweepings will be returned to the customer or stored in a controlled area then disposed of by Custom Powders. Instructions are given on the product sheet.

3.5 General Process Cleaning

1. General Process Cleaning is carried out at regular intervals during the shift, wearing protective clothing, as detailed in the following sections.

2. All cleaning will be done with a general vacuum cleaner unless it is a high risk job. Jobs where there is a high risk from explosion will preferably vacuumed using explosion resistant vacuum cleaner or if circumstances prevail carefully brushed.

3. If brushing down equipment, attempt to do so creating as little dust as possible.

4. The operator will brush/vacuum all accessible ledges.

5. Ensure that all equipment is clean and dust free.

6. At the end of each shift, the system must be left in a clean and safe condition with all

debris and sweepings stored in a sweepings sack and marked with the product name.

7. The system will be inspected by the operator prior to the start of the shift to ensure that the system is clean and safe to operate. This is formally recorded on the system/mill room check section on the down time sheet.

3.6 Selection and use of Personal Protective Equipment (PPE)

1. Dust Masks - All employees must wear a dust mask when instructed on the COSHH sheets. For key tasks, it is compulsory to wear a mask. These tasks are: entering filter cabinets to inspect, checking silos, dismantling equipment during a production run i.e. any operation where dust exposure is likely to be high.

   The type of masks available are:-.

   i) Air Hood - (Pureflo/Cobra) to be worn for noxious dust, odours and to give full facial protection against irritating powders.

   ii) Dust Mask Type 8822 - this can be worn for dust levels up to ten times the occupational exposure level.

   iii) Dust Mask Type 8812 - this can be worn for dust levels up to four times the occupational exposure level.

   iv) Fly Mask Type 4251 - for solvent based products.

   v) Carbon Dust Mask Type 9913 - gives the same protection as 8812 and eliminates nuisance odours.

   vi) Dust Mask Type 8835 - this can be used for dust levels up to fifty times the occupational exposure level.

2. Ear Protection - Ear protectors are issued to all Operators and shall be worn in all units where instructed or signs displayed indicating they should be worn. Sound levels will be continually monitored and results fed back to all employees. Operators are encouraged to ask for additional tests to be carried out.

3. Foot Protectors - Safety boots and shoes are provided for each Operator and must be worn at all times.

4. Overalls - Overalls are provided for each Operator and must be worn at all times. Freshly cleaned overalls must be worn for stated processes to ensure that no cross contamination occurs.

5. Protective Headwear - Protective headwear is available for use at the operator's discretion but must be worn during any construction work. Cloth caps must be worn by all personnel and visitors while in processing rooms or warehouses.

6. Eye Protection - Safety glasses, goggles and pureflo helmets are available for use at the operator's discretion but must be worn when instructed on COSHH sheets. Note when operating the crusher or hammer mill with an open feed area, eye protection must be worn to avoid eye impact from material. Similarly, when operating high pressure cleaners, powered tool or drills eye protection is mandatory.

7. Gloves - Gloves are available for protection against chemicals and engineering hazards and will be worn at the operators discretion or when instructed on the COSHH sheets.

8. Barrier Cream - is available for use at the operators discretion or when specifically instructed to do so on the COSHH sheets.

9. Cleaning Facilities - adequate facilities for cleaning are available and when necessary, special cleaning soaps/detergents are provided.

10. Protective Overclothing - is available for the use at the operators discretion, but should be worn when instructed. Protective overclothing includes acid suits, waterproofs and body warmers.

3.7 Process Room - Drainage Isolation

When processing High Risk products such as environmentally hazardous materials then it is necessary to prevent entry of materials into the drainage system. The need for isolation will be clearly given on the Job Sheet. The process rooms are serviced by a channel drain at the rear of the process room. Isolation of the process room drain is undertaken as follows:-

1. A 100mm bung can be found on the environmental board adjacent to the workshop entrance.

2. Remove the drain cover and place the bung in the hole.

3. Expand the rubber bellows by tightening the thumb screws.

4. Check for leakage by placing 1 litre of water in the hole and observing over an hour period that no water is lost.

5. Should the water leak, then the cause needs to be investigated and the test repeated.

6. Only when the above test is satisfied can the processing proceed. The system will be signed off as passed and recorded on the Set Up Sheet.

3.8 Process Room and Warehouse - Material Containment

When processing High Risk products such as environmentally hazardous materials then it is necessary to provide secure containment of materials. The need for containment will be clearly given on the Job Sheet. The following control measures will be undertaken:-

1 The integrity of the building will be checked to ensure there is no means of material escape to surrounding areas or adjacent processing areas. The integrity of the building will be recorded on the Job Set Up sheet.

2 The personnel entrance to the process room will be bunded with sand bags. preventing spillage or water washing from leaving designated area.

3 A pallet of sand bags will be kept within the warehouse. These sand bags will be

used in the event of spillage to bund the warehouse door. The warehouse door will be bunded prior to the start of the cleandown

4 A Fork Lift Truck will be dedicated to the contained area. It will not be allowed to leave unless decontaminated and downgraded.

5 The contained area will be restricted to trained personnel. Third party personnel will be supervised by a trained member of CPBV staff.

6 An area immediately on entering the warehouse will be designated for PPE. The operator will change into this equipment immediately prior to entering and leaving the contained area. The PPE used is disposable and needs to be treated as special waste.

3.9 High Risk-Processing

At the enquiry stage the customer is asked to supply sufficient information including a Material Safety Data Sheet (MSDS). From this information an assessment of the risks is undertaken. In certain circumstances the material will be classed as high risk.

1 High Risk Process - Dust Explosion Risk

All materials must be supplied with all explosion data associated with the expected particle size and will cover the Minimum Ignition Energy value (MIE) measured in mJ, the Kst value measured in bar/m/sec, St Class, and the maximum explosion pressure (Pmax) measured in m barg as these relate to the severity of the explosion.

i) From the information gained the material is then classified as High, Medium, or Low Risk

ii) Below is the table used to determine the Risk associated with the material

	Kst Value	**MIE Value**	**Control Measures**
HIGH RISK	Greater than 200 bar/m/sec	Less than 10 mJ	Earthing Anti-static Filters Suppression Equipment with venting Metal detection Magnets Specifically trained operators Emergency controller always on site Controlled dust emissions
MEDIUM RISK	Less than 200 bar/m/sec	Greater than 10 mJ	Suppression Equipment with venting Magnets Trained operators Controlled dust emissions
LOW RISK	Nil	Nil	Trained operators Controlled dust emissions

When reviewing the risk the highest value is the controlling factor ie; Kst 175, MIE less than 10mJ = High Risk.

iii) From the results of the assessment a list of recommendations are given to ensure that every effort is put into operating the systems as safely as possible. Where the material is identified as a high risk a written risk assessment is approved by management.

Dependent on the findings of the risk assessment, the following control measures will normally be employed.

a) filters to be earthed
b) ensure no plastic is present in the system
c) check the system for earth continuity
d) protect the system with Kidde suppression equipment
e) metal detection and magnet for infeed material
f) ensure operators are protected from producing static.
g) only operators that have received training on high risk materials will be allowed to operate this system.
h) emergency controller to be on site whilst processing
i) hourly checking of control measures

2 High Risk Processing - Water Pollution Risk

Materials supplied to Custom Powders are not processed unless the customer provides an up to date Material Safety Data Sheet (MSDS). From this and any other relevant information received from the customer, an assessment is made reviewing the possible environmental hazards.

i) From the information gained, the material is classified as a none hazardous Low Risk or a hazardous High Risk material.

ii) If the material is classed as a Low Risk(by a manager trained to graduate level in chemistry or chemical engineering) then normal processing controls will apply. The recording that the material is a low risk will be made on the COSHH sheet.

iii) If the material is classed as a Medium Risk(by a manager trained to graduate level in chemistry or chemical engineering) then normal processing controls will apply. However if the material is designated a medium risk the Operations Manager will inspect the system before any wet cleaning commences. This will ensure that the discharge to sewer of any compounds is kept to a minimum.
The recording that the material is a medium risk will be made on the COSHH sheet.

iv) If the material is classed as a High Risk (by a manager trained to graduate level in chemistry or chemical engineering) then the material will be processed using specific control measures to minimise risk. A formal written risk assessment will be made and approved by management.

v) When the material is classified as a High Risk, the following control measures will be employed.

a) The process room drain will be sealed with a bung before production commences.
b) The process room personnel door will be bunded with sand bags before production commences.
c) Sand bag will be available in the warehouse area in case of spillage.
d) The warehouse enterance will be bunded prior to the start of a cleandown.
e) All sweepings will be collected in sacks sealed and weight recorded for return to customer or disposed of as special waste.
f) All waste water washings will be collected in sealed drums and stored for return to customer or disposed of as special waste.
g) All waste packaging will be collected and stored for return to customer or disposed of as special waste.
h) Disposable PPE used during processing will be stored in liners for return to customer or disposal as special waste.
i) The process area will be classed as a restricted zone and operators or fitters will only enter wearing designated PPE.
j) Visitors or third party personnel (except trained employees of the customer) will normally not be allowed into the restricted zone unless supervised by a CPBV representative.
k) Only trained operators will be allowed to operate high risk environmental systems.

v) The Operations Manager will ensure the material is disposed of in accordance with local regulations and will maintain records for 5 years.

3 High Risk Processing - Risks of Reactivity / High Toxicity

All materials supplied to Custom Powders must be supplied with a Material Safety Data Sheet (MSDS). From this and any other relevant information received from the customer then an assessment is made reviewing the possible chemical hazards. As a matter of course and a precondition to a job starting then a COSHH assessment is undertaken.

In a very limited number of cases there may be a higher than normal risk associated with the chemical nature of the material. This risk may for instance be due to its reactivity or its toxicological properties. In such cases a further detailed written risk assessment is undertaken and approved by management.

As an outcome from the assessment then a series of additional control measures over and above standard operating procedures will be employed. These additional procedures will be approved by a senior manager before implementing. Details of the procedures in place are given on the Job Sheet under Special Instructions.

4 High Risk Processing - Others.

It may be necessary to process materials that pose a significant threat to the business if sufficient control is not employed. These materials, such as very high value products, will be treated as high risk when designated by a senior manager. As with other high risk processing a written risk assessment will be undertaken and approved, and additional control measures above the norm will be utilised as detailed on the Job Sheet.

4 STANDARD OPERATING PROCEDURES - NONE PROCESSING ACTIVITIES

The following Processing Activities are standard procedures that are generic to all operational activities undertaken at Custom Powders. These procedures are given to ensure that the operation is undertaken safely, to a high quality standard and within environmental guidelines.

4.1 Entry Permits

For safety reasons, entry permits are in operation and must be completed prior to and after work has been completed. They are designed to give a step by step method for understanding the task and also to ensure the system is safe prior to any work being carried out.

Below are the entry permits in operation:

1. Filter cabinet
2. Cyclone
3. Fluid bed drier
4. Ploughshare blender (Morton)
5. Electrical panel

When completed, the permit must be returned to the office.

4.2 Powerwash Operation

1. The power washers must be plugged into a socket that has a circuit breaker fitted.

2. Connect up all hoses and ensure adequate supply with no kinks

3. PPE must be worn during washing. Eye protection is compulsory.

4. Care must be taken when washing so that the jet does not come into contact with clothing or skin.

5. Before finishing the water supply must be turned off and the header tank emptied on the cold water setting.

6. The power washer must have all hoses and cables wrapped neatly before putting away. Care must be taken during cold periods to ensure that the Power Washers are put away to prevent freezing

4.3 General Cleaning Procedure

1. General cleaning is carried out prior to any work being done on the system by the operator or maintenance engineer.

2. Before starting cleaning, the operator/engineer must read the COSHH sheets.

3. Follow any instructions given in regard to PPE or dust control.

4. All equipment being worked on must be in a clean condition.

5. Clean around the area to be worked on if "Hot Work" is being carried out.

6. Ensure area is left clean and tidy with all sweepings put to a sweepings sack and marked with product name.

4.4 Cleandown Procedures

Cleandowns are carried out at Custom Powders on a regular basis. There are four different standards of cleandowns which take place. The type of cleandown that is selected depends on the material that has been processed and customer requirements. It is also dependent upon the type of material that will be next used on the system.

All cleandowns requiring water including cleaning portable equipment will utlise a portable powerwash. Portable equipment will be cleaned either in the process room or in the designated wet cleaning area. The high pressure cleaning is undertaken at varying temperatures dependent on cleandown or the material being cleaned. The procedures for operating the powerwash is given above.

Cleandown sheets are issued prior to any cleandown being started. These give specific instructions about any requirements that need to be met and state the standard of cleandown that is to be followed. The cleandown standards are as follows:-

1 CLASS 1 CLEANDOWN (PHARMACEUTICAL / FOOD)
2 CLASS 1 CLEANDOWN (INDUSTRIAL)
3 CLASS 1 CLEANDOWN (ENVIRONMENTALLY SENSITIVE PRODUCTS)
4 DRY CLEANDOWN

Water from items 1 and 2 will be released to the local municipal foul sewer drain. Water from item 3 will be collected and disposed of as Special Waste. No water is used in item 4. The process rooms and the designated cleaning area are connected to the local municipal foul sewer drain.

1 Class 1 Cleandown (Pharmaceutical / Food)

This standard of cleandown is broken down into four sections, they are as follows:-

Section A - Strip, hoover/brush clean

i) All mobile equipment used on the process is systematically stripped and hoovered or brushed to remove all loose powder.

ii) The equipment is then stored ready for inspection by Shift Leader/Operations Manager

Section B - Hot wash - maximum temperature 50°C

The mobile equipment is brought back into the process room and pressure washed to remove all traces of powder.

i) It is then removed for inspection by Shift Leader/Operations Manager.

ii) The cleaning is then continued on all static equipment and process room.

iii) The system is again visually inspected by the Shift Leader/Operations Manager.

Section C - Steara Cleanse

i) A sterilising additive is used on all equipment and process room and pressure washed to remove any traces of chemical contamination there may be.

ii) Once this has been completed, the system is again visually inspected by Shift Leader/Operations Manager.

Section D - Steam Clean minimum temperature 90°C

i) All equipment and process room are steam pressure washed to remove any traces of steara cleanse.

ii) Swab tests are available if required to check for chemical contamination.

iii) Once this has been passed by Shift Leader/Operations Manager, the system is then released for set up

2 Class 1 Cleandown (Industrial)

This cleandown has two sections. Any other special requirements would be added to the cleandown sheet which is issued prior to the cleandown taking place.

Section A - Strip, hoover/brush clean

All mobile equipment used on the processes systematically dismantled and hoovered or brushed to remove all loose powder.

The equipment is then stored ready for inspection.

The process room and all static equipment is then cleaned to the same standard.

The system and equipment is visually inspected prior to the introduction of water by Shift Leader/Operations Manager.

Section B - Hot wash - maximum temperature 50°C

The mobile equipment is brought back into the process room and hot washed to

remove all traces of powder.

i) It is then removed ready for inspection by Shift Leader/Operations Manager.

ii) Once this has been passed, then the process room and static equipment are cleaned to the same standard.

iii) The system is then visually inspected and released for set up by Shift Leader/Operations Manager.

3 Class 1 Cleandown (Environmentally Sensitive Products)

The cleandown starts in the same way as a Class 1 (industrial), however the following additional precautions are incorporated into the above procedure.

i) The screw type bung is found on the Environmental Storage Board adjacent to the workshop entrance and is to be fitted by lifting the process room drain cover and positioning and fixing the bung to prevent any powders and washings going to drain. The bung must be in place prior to processing, and as instructed on the Job Sheet.

ii) The personnel door to the process room must be bunded with sand bags prior to processing and as instructed on the Job Sheet. The warehouse door will be bunded prior to the cleandown commencing as instructed on the cleandown sheet.

iii) Instructions will be given by management on the Job Sheet when this type of cleandown is required. Check before cleandown commences that the drain bung is in place and that the entrances are bunded.

iv) It is very important that all sweepings and waste water washings are not released to the environment, as instructed on the Cleandown sheet.

v) All equipment will be hoovered/brushed and will be inspected by a Shift Leader/Operations Manager before any washing is carried out. The objective is to minimise the generation of waste water whilst ensuring high standards of cleaning.

vi) All waste water washings will be wet vacuumed / transferred to drums and stored.

vii) The cleandown will be inspected and passed off by the Shift Leader/Operations Manager before the bung and the bund wall is removed. The system is then down rated from being classed as high risk.

viii) Washings from the cleandown will be returned to the customer or disposed of by an approved route in accordance with local regulations. The Operations Manager will be responsible for disposal of all waste water, and will maintain a record of the disposal for five years.

4 Dry Cleaning-Milling Systems

i) Shut down system and allow filters to clean for 5 minutes.

ii) Open filter cabinet, remove filters and hoover off.

iii) Open mill, inspect for build up. Clean if required.

5 EMERGENCY PROCEDURES

5.1 Site and Plant Emergency Procedures

1 Raising the Alarm

If an incident occurs the operator should hit the emergency stop button and activate the alarm. These call points are situated by the fire door in the process room and at other strategic points around the site. All personnel should leave by the safest and quickest route and go immediately to the assembly point.

Once at the assembly point it is up to the person raising the alarm to give as much information about the incident to the emergency controller. The first Emergency Controller /BHV to arrive at the assembly point will take control. He will identify himself with a red jacket , obtain the emergency phone together with the signing in book.

THE ASSEMBLY POINT IS THE FACTORY SIDE OFFICE DOORS

Training in raising the alarm is given at least six monthly.

2 Actions of the emergency controller/BHV

If an incident has occurred the site emergency controller will take control. The following is a list of objectives the emergency controller will carry out.

i) Ensure all personnel are gathered at the assembly point

ii) Conduct a role call using a responsible person . The Emergency Controller will appoint a person to ensure that all the operators and lab staff and also any contractors /drivers that are on site are accounted for.

iii) Identify in which unit the incident has occurred. If it is a fire, attempt to identify type of fire.

iv) Call the emergency services giving brief but accurate details of the type of incident, the unit number and the full company address.

v) If a person is found to be missing, only under the direct order of the Controller and only if the situation is known to be safe, will a two man rescue team attempt any rescue.

vi) Gather all the relevant information i.e. COSHH and MSDS for when the emergency services arrive, this can be found in the entrance way.

vii) When the emergency services arrive the emergency controller will liase directly with them, giving all relevant information about the incident.

viii) Isolation of the site services may be required, this will only be carried out under the strict instruction of the emergency controller.

5.2 Emergency Isolation Of Services

1 Gas

i) There is one isolation point for the site, located on the right handside of the factory
ii) Access is via keys kept in the key safe in the telephone centraal cupboard
iii) Isolate supply by turning the valve marked "Site Supply Isolator"

Burners

i) There are two burner points for the site
ii) Burner 1. Unit 1 situated outside the building to the left of the burner house
iii) Burner 2. Unit 2 situated outside behind the protection cage.
iv) Isolate both supplies by turning the valve.

2 Water

The water supply to the office complex and the factory can be isolated, at the assembly point inside the doors under the floor.

3 Air

The compressor can be found in Unit 1 at the far left of the internal rooms

i) Isolate compressor by turning "isolation switch"

4 Electric

i) Location of the mains panel is at the side of the factory marked "Electrical Supply Isolator".
ii) The switch isolators are situated behind the door and to the left, to isolate site turn "site isolator" to the off position.

The switches are marked:-

Site isolator	Isolates whole site.
Unit 1	Isolates Unit 1
Unit 2	Isolates Unit 2
Unit 3	Isolates Unit 3

6 Effluent

i) There is one isolation point for the site.
ii) It is situated outside in front left of burner 1 housing.
iii) The grid is painted yellow.
iv) Grid key, PPE, the inflatable plug and foot pump are stored on the Environmental Board adjacent to the workshop entrance.
v) All PPE must be worn prior to entering the sump.
vi) A second person must be present whilst inserting the plug.
vii) Remove the grid cover.
viii) Insert bung and inflate to 1.5 bar using the foot pump.

6 MAINTENANCE

6.1 Pre and Post Maintenance

1. Personal protective equipment must be worn as instructed by the product COSHH sheet assessment.

2. Ensure the correct use of the appropriate safety and maintenance equipment i.e. FLT cages, safety harness.

3. If maintenance is required inside any of the following, ensure the correct entry procedure is followed and written documentation is completed.

    1. Filter cabinet
    2. Fluid bed drier
    3. Ploughshare blender (Morton)
    4. Electrical panels
    5 .Cyclone

4. Do not work on live panels - Electrical panel Entry Permits need to be completed for work inside panels.

5. If hot work is required outside the fitting shop i.e. welding, grinding, ensure a hot work permit is completed.

6. Ensure the equipment and work area to be worked on is clean. If product cannot be removed, take precautions to avoid contamination. All the relevant PPE must be worn if working under equipment.

7. Ensure all equipment is empty of material before stripping, keep dust level down to a minimum. All nuts and bolts and associated equipment must be collected in the trays which are situated in each unit entrance way.

8. Ensure when rebuilding that all parts have been replaced the system must not be released back to production until this has happened.

9. When the work has been completed, the area must be left clean and tidy.

10. Any permits must be signed off on completion of work and returned to the office.

11. Inform the supervisor of operator when the work has been completed.

6.2) Planned productive maintenance procedure

1 The Operations Manager will complete one site walk round each day which will include all process areas and warehousing on site. Signing on downtime sheet that a visit has been completed, if downtime sheet available.

2 The checks will include:-

a) New set ups are running correctly
b) Equipment is undamaged and without leaks
c) Noise levels are acceptable
d) No bolts or guards missing
e) Lighting is working and adequate for the job
f) Sockets are securely fixed to the wall
g) Cable and plugs are in good order
h) Roof in good order
i) NDC ducting is in good order
j) Discuss with operators any problems that may arise

3 The object of the exercise is to try to pre-empt any breakdowns so that routine maintenance can be carried out.

6.3 Planned maintenance

As a matter of routine equipment is checked against a planned maintenance schedule. The schedule is generated on a regular basis identifying equipment requiring attention. In addition to the above schedule the performance of FLT's and a weekly equipment check is undertaken on key equipment.

Document 3

DESCRIPTION OF TRAINING

Quality Systems

The Quality Systems training is a formal session where the principles of the quality system are discussed with operators. All manuals are reviewed including the quality policy. Some of the manuals are "heavy" and difficult to comprehend. However the broad aspects were put over to the operator. Where items were more relevant and applicable, greater focus was placed on these aspects, i.e. the need for testing every hour/every batch. Training Session Time 2 to 3 hours.

NVQ

Formal training to NVQ level 2 standard is undertaken in Crewe. This is a formal measure of the competence's of an individual. The operator will normally undertaken formal and informal on the job training prior to him undertaking the NVQ course. Management will also assess his ability prior to him attending the course.

Laboratory Operator Duties

Laboratory operator duties covers the back up inspection system necessary for the ISO9002.
As a matter of daily routine the weights and scales are checked. The training includes the need to determine tolerances and the placement of the weights on the scale. An independent check on the actual analysis undertaken by the operator is undertaken by Crewe. However, it is necessary to organise and collect the samples, arrange for them to be sent to Crewe. Following the analysis co-ordination of the results is necessary. On a weekly basis the sieves are checked for damage and condition. This inspection includes cleaning where necessary, inspection of the status of the mesh and a review of stock status. Every 3 months the sieves undergo calibration. The training has included all aspects of this task including, how to assess dirty sieves, damage to sieves, reason for damage and calibration.

Dust Explosion Theory

This is the first stage in an operator understanding the risks associated with dust explosions. Topics covered include the principles of combustion, why explosions occur, the severity of a dust explosion i.e. ST1, ST2, ST3, ignition sources, minimum ignition energy, how CPL controls the risk, explosion suppression equipment, venting, earthing, secondary explosion, and the need for good housekeeping.

Compaction

The first days training was a theoretical explanation for setting up of the Unit 3 compaction system, followed by some practical exercises building the equipment.
Also during the first day of training covered the basic concept of the compaction process, including the milling, sieving and recycle of process material.
The second day covered in more detail, process parameters in order to run the equipment to its maximum efficiency.

First Aid & Fire Training NL

Bedrijfs **H**ulp **V**erlener. (Certificate of competence in First Aid and Fire fighting)
The training is given by a national approved body and consists of:
First Aid: To provide immediate medical assistance given in an emergency situation prior to the emergency services arriving and taking control of the situation.

DESCRIPTION OF TRAINING

First aid & Fire Training NL Cont.

Fire fighting: Training in this area covered how fires and explosion can occur, prevention of this type of incident, and how to respond if such an incident is witnessed.

First Aid UK

This is a formal training session undertaken by a UK approved body.
Normally this is 4 days for someone previously with no experience, followed by a 2 day refresher course each 12 months.
This is a comprehensive course, recognised by the UK Health and Safety Executive.

Introduction to High Risk Systems

The training session includes dust explosion and how they are categorised into high risk. Why earthing and magnets are used in systems for protection, how continuity is checked. Other reasons associated with high risk products, whether it is value of product, environmental risks are also covered.
Explanation and reasoning behind the use of high grade operators are also given.

Sympatec Measurement

Basic training is given to Operators in the use of the Sympatec laser particle size analyser.
This training covers a single analysis of a sample.
Further training has also been given to senior staff, of which includes problem solving, lens changing, changes of feeding systems.

FLT Training

Fork lift training and examination is completed by a national approved company.
Training was given using CPBV counter balance front fork lift trucks covering the correct method of use and practical exercises to complete.
Theoretical exercises were required as part of the training.
The training was followed by a practical and also theoretical examination.

Unit 1 Wet Granulation System

One days training was a theoretical explanation for setting up of the Unit 1 wet granulation system, followed by some practical exercises in building the equipment.
Also during the first day of training covered the basic concept of the wet granulation process, including the milling, sieving and recycle of process material.
The second day covered in more detail, process parameters in order to run the equipment to its maximum efficiency.
Further training was given to Senior Operators, including basic use of Rospen feeders and chart recorder also problem solving of possible equipment failure.

Principles of Blending

The topics discussed included how the fill volume is calculated, the correct method of blending, different types of blending systems, and in more detail the characteristics of the ploughshare blender in use at CPBV, this was followed by the practicalities of blending, batching out and the importance of the independent checking of each formulation.

DESCRIPTION OF TRAINING

Setting of Manufacturing Specifications

A short session of approximately 15 minutes identifying the reasons and need for setting manufacturing specifications. Also discussed acceptance ranges, problems that occur when outside the acceptance range, the need to discuss with the customer out of specification product including the request for a concession.

Amendments to Laboratory Manuals

Training is undertaken in the word processing skills associated with updating the lab manual. The need to ensure appropriate methods are included in the manual together with the manufacturing specifications and acceptance range. Training in the issue of updated pages and the withdrawal of old pages is undertaken.

Tiny Tag Monitoring equipment.

Training was given to senior staff in order to program and download information stored to this equipment. Tiny Tag computer software was explained and practical exercises completed.

Overload Checks

As part of the Set Up procedure, there is a requirement for the overload protection for electric motors to be checked. For this purpose a written instruction has been established. The electrical systems have been designed and modified to facilitate the electrical checks.

The basic of these checks is to ensure that the mechanical overloads and overloads in the inverters are checked to ensure they comply with the motor being driven. The persons being trained are the shiftleaders because of the importance of this activity.
Theoretical training was given, followed by practical exercises where proof of competence was established.

Risk Assessments

The need to undertake risk assessments identification of hazards and the evaluation of likely events occurring was presented. The importance of controlling risks was discussed in particular the fact that every 100 minor accidents prevented is 10 major accidents prevented is 1 very serious incident/death. The use of a table was discussed to evaluate; risk firstly the need to identify a hazard secondly the likely hood of the incident occurring. This then provides a phrase that gives the risk an effective score. From the risks a series of actions are generated or the operation is stopped if the risk is identified as being too high. Further practical training is required to back up this training session.

Quality System Training - Corrections to none conformities

An explanation of what IS0 9002 represents, how the standard relates to CPBV and the outcome of the initial assessment was discussed.
The none conformities from the first ISO assessment were pointed out, and further training was given in the following areas. Teflon documentation was used as a guide.

DESCRIPTION OF TRAINING

Quality System Training - Corrections to none conformities Cont.

Customer raw material check weighing and reasons why we check weigh.
The use of tippex on production documents and how the amendment procedure works.
Production documents must always be, signed, completed, and the reasons for doing this.
Importance of recording all information on production sheets.
The procedure and principles of Manufacturing Range and Acceptance Range including red labelling
The new heading re traceability requirements on Job Sheet

Training time 1.5 hours.

Safety: System Entry Permits.

New system entry permits were explained, and the function of the documents outlined.
Operators will undergo real event training, where they will go through each entry permit, with the presence of a shift leader to arm and disarm explosion suppression systems.

Safety: System Entry Permit real event training.

This training exercise is an extensive explanation of the explosion suppression systems.
The use of the equipment, its dangers, costs, and the correct procedures that have to be followed.
This training was followed by a supervised practical session, where the senior staff gave proof of competence.

Training Environmental Standards.

The training will be based on the following references given in the Production Manual as at 16.07.99.

Section 3.7	Process Room - Drainage Isolation
Section 3.8	Process Room and Warehouse - Material Containment
Section 3.9	Item 2 - High Risk Processing - Water Pollution Risk
Section 4.4	3 Class 1 Cleandown (Environmentally sensitive products)

During the training an explanation will be given on why we need to ensure materials cannot enter the drain. Practical training will be given on the insertion of the bung into the mill room. An assessment of the operator's ability to effectively isolate the drains will be undertaken.

The need for containment and the control measures employed will be discussed with the operator. This will include the need for restricted access, use of dedicated FLT and the provision of bunding.

The special requirements of an environmentally sensitive cleandown will be discussed. This will include the importance of ensuring that the bung is in place, the need to keep powder and water washings to a minimum, and the correct method in the collection of powders and washings. The methods of disposal will also be discussed with the operator, as well as the important role of the Operations Manager in controlling the waste streams.

This is a theoretical training session that will be supported by further practical training.

DESCRIPTION OF TRAINING

Training in Emergency Procedures

This training session included raising the alarm, and the correct procedures to follow in the event of the alarm being activated and emergency isolation of plant services.
Practical training will be given in isolation of electricity, gas, water supply and effluent.
Training will encompass identifying appropriate switches and valves, as well as the insertion of an inflatable plug into the drainage system to prevent discharge of waters to the public sewer.

Repeated practical training practice of the procedures will be undertaken at least six monthly

Standard Operating practices. Production sheets.

After an Internal quality audit, some none conformities resulted in an extra training session.
The extra training session involved further instructions to fill in Production sheets associated with each production run.
Training was again given regarding any changes that have to made to production sheets.
Also included in this session covered further instructions concerning warehouse yellow line boarders and the use of material sweepings bags.

Chart recorder

This training session included extensive instructions on the use of the chart recorder equipment and computer software.
Also a study of the manufactures equipment manual is also part of the training session.

Training

Because of the long interlude between the last training session it was decided to devote the day to training. The training was based on the standard format of safety, quality, environment and operations. The following is a copy of the agenda

Safety

1	Risk Minimisation Plan
2	COSHH
3	Dust Explosion (video Deadly Dusts) Suppression Equipment
4	Practical I. ripping tipping sacks II. sack stitching III. securing equipment

DESCRIPTION OF TRAINING

Quality

1	ISO 9002
2	Standard including food
3	Past quality issues
4	Standards in Crewe
5	Practical I. Sieve brush settings II. Filter fitting unit 1

Environment

1	ISO 14001 and Waterschap
2	Practical I. Cleandowns and the drains II. Airco

Operational

1	Company performance and future prospects
2	Day to day issues ie telephone, cleandown costs
3	Individuals responsibility
4	Processes:Videos Fitzpatrick and Shugi
5	Open discussion

3M Dust mask training

A one hour session with a representative from 3M, explained the correct use of dustmasks. Also included in the session we discussed comfort problems, range of masks available and the P1, P2, P3 standards which apply to each model of dust mask.

SUMMARY OF TRAINING

		BY WHO	PvW	CM	TN	RB	JM	RM	
Quality Systems Training	Quality Manual & Policy	NH/CM	09.09.98	07.01.99	05.11.98	05.11.98	08.01.99	01.02.01	
	Comm Manual	NH/CM	090.9.98	07.01.99	05.11.98	05.11.98	08.01.99	01.02.01	
	Test & Cal Manual	NH/CM	N/A	05.11.98	05.11.98	05.11.98	08.01.99	01.02.01	
	Prod Manual	NH/CM	N/A	05.11.98	05.11.98	05.11.98	08.01.99	01.02.01	
	Lab Manual	NH/CM	N/A	05.11.98	05.11.98	05.11.98	08.01.99	01.02.01	
	NVQ	Crewe	N/A	01.10.98	01.09.98	01.10.98	Need	16.03.01	
	Laboratory Oper. Duties	NH/CM	N/A	01.01.98	17.05.00	17.05.00			
	Dust Explosion Theory	NH/CM		06.10.98		02.06.99			
	Compaction System Set Up	DM/CM		01.01.95	24.09.98	24.09.98	24.09.98	Need	
	Compaction Training Day 1	DM/CM		01.01.95	28.09.98	28.09.98	28.09.98	Need	
	Compaction Training Day 2	DM/CM		01.01.95	29.09.98	29.09.98	Need	Need	
	First Aid & Fire	External	N/A	06.04.99	09.10.98	06.04.99			
	Intro to high risk systems	NH/CM		01.10.98	Need	02.06.99			
	Sympactec measure	DM/CM		01.01.97	07.10.98	Need			
	FLT	External	N/A	12.01.94	20.10.98	20.10.98	25.01.99	25.09.00	
	Unit 1	S/L		01.01.98	21.10.98	21.10.98	21.10.98	Need	
	Principles of blending	NH	Need	20.08.98	20.08.98	21.08.98	21.08.00	Need	
	Setting manufacturers specs	NH	08.01.99	08.01.99					
	Amendments to lab manual	NH	N/A	08.01.99	N/A	N/A	N/A	N/A	
	Tiny Tag	NH/CM	N/A	01.01.97	02.03.99	02.03.99			
	Overloads	HB/CM	N/A	16.06.99	16.06.99	16.06.99			
	Risk Assessments	NH	08.04.99	08.04.99	Need	Need			
	QS Corrections to none conformities	NH	16.07.99	23.06.99	23.06.99	23.06.99	23.6.99		
	Safety:System Entry Permits	CM	N/A	07.09.99	Need	Need			
	Safety:System Entry Permit real event	CM	N/A	16.09.00	Need	Need			
	Training Environment Standards	NH/HB	21.07.99	21.07.99	21.07.00	21.07.00	21.07.00		
	Emergency Procedures	CM	21.07.99	21.7.99	21.7.99	21.7.99	21.7.99	01.02.01	
	S.O.P Production Sheets	HB	N/A	20.03.00	20.03.00	20.03.00	20.03.00	20.03.00	
	Chart recorder	NH/CM	N/A	17.04.00					

Document 4

GUIDANCE NOTE FOR ASSESSMENT FOR DISCHARGE OF WATER WASHINGS TO THE MUNICIPAL SEWER

This document is written as a guidance note for managers within Custom Powders. A graduate Chemical Engineer or Chemist will undertake the environmental risk assessment. Guidance is given on the risk assessment method used to determine and evaluate the impact on release of water washings to the municipal sewer. This evaluation is undertaken using a document published by the Directorate-General for Public Works and Water Management, RIZA report 98.005.

As a matter of company policy Custom Powders does not handle black listed, carcinogenic or mutagenic materials. This therefore eliminates the first three categories given in the guidance document. To undertake the risk assessment on all other materials the following criteria is required:

1. Acute toxicity
2. Biodegradeability
3. Log P_{ow} (partition coefficient for n-octanol and water)
4. BCF (bioaccumulation factor)
5. Solubility

The MSDS information is usually the first source of data. The information on the MSDS is not always available. 'Not determined' quite often features. It is not sufficient to say that the material is therefore safe for the environment. To satisfy the criteria given then data needs to be obtained from the customer or determined from alternative sources. The alternative sources are typically American websites. An element of discretion should also be applied during the risk assessment process but where information is not available it should be considered worst case.

Risk Assessment

The risk assessment needs to be undertaken utilising a decision tree. From the tree the material can be assessed into environmental **High Risk**, **Medium Risk**, and **Low Risk**.

If the material is classed as **High Risk** then the 'Best Technical Means' for handling the material will be employed. If the material is classed as **Medium Risk** then 'Best Available Means' for handling the material will be employed

To follow the tree the first criteria required is the acute toxicity. Reference to acute toxicity will normally allow the material to be put into 4 categories

1 Acute toxicity <1 mg/l	Very toxic to the environment	Would normally be rated R50
2 Acute toxicity 1-10mg/l	Toxic to the the environment	Would normally be rated R51
3 Acute toxicity 10-100mg/l	Harmful to the environment	Would normally be rated R52
4 Acute toxicity >100mg/l	Not harmful to the environment	Would not be given a rating
or no/ can not be determined		

Category 1

If the material falls into category 1 then it should be classed as **high risk** and the water washings collected from the clean down. Despite there being certain circumstances where materials can be classified as being acceptable to discharge to sewer Custom Powders considers these materials to be a sufficient risk to the local environment that they will fall into the category **high risk**. It is anticipated that materials that fall into this category will represent a very limited number.

Category 2

If the material falls into category 2 then the material needs to be reviewed to determine whether it is biodegradable. If it is not biodegradable then it should be classed as **high risk** and the water washings collected.

If it is readily biodegradable, then the Log P_{ow} needs to be determined. If the value is less than 3 the material can be classed as **medium risk** and under controlled conditions released to the municipal sewer.

If the value of Log P_{ow} is greater than 3, the BCF value needs to be determined. Where the BCF value is less than 100 the material can be classed as **medium risk** and under controlled conditions released to the municipal sewer.

Where the BCF value is greater than 100 the material will be classed as **high risk** and the water washings collected.

Category 3

If the material falls into category 3, then the material needs to be reviewed to determine whether it is biodegradable. If it is not readily biodegradable then the material should be classed as **high risk** and the water washings collected.

If it is readily biodegradable then the material can be classed as **medium risk** and under controlled conditions released to the municipal sewer.

Category 4

When a material is classified as 'no' or 'can not be determined' then it should be considered the worst case. It will then be classed as **high risk** until the criteria below proves otherwise.

Firstly consideration needs to be given to the solubility of the material. If the material has a solubility of greater than 1 mg/l then a technical view of the hazard of the product being released to drain needs to be considered. A material that occurs naturally in water for instance would be classed as **low risk** a more synthetic material for instance would be classed as **medium risk** and under controlled conditions be released to the municipal sewer.

If the material is not readily soluble as indicated by a value of less than 1 mg/l then the first consideration is whether it is biodegradable. If it is biodegradable then the material will be classed as **low risk** or **medium risk** based on a technical judgement

If the material is not readily biodegradable then the value of Log P_{ow} needs to be determined. If the value is less than 3 then the material will be classed as **low risk** or **medium risk** based on a technical judgement.

If the material has a determined value of Log P_{ow} of greater then 3 the BCF value needs to be determined. If the value is less than 100 then the material will be classed as **low risk** or **medium risk** based on a technical judgement.

Reference to a 'technical judgement' given above necessitates the experience of materials handling and material properties. In particular the materials natural occurrence in surface water will be considered. Material occurring naturally in surface water will render the material a lower risk.

If the material has a value greater than 100 then albeit slightly harmful to the aquatic environment it may cause long-term adverse effect to the environment. In such cases the material should be classed as **high risk**.

Control of the Risk

Every time a job is run then a new COSHH (Control of Substances Hazardous to Health) sheet needs to be signed off and authorised. The data relating to the environment and the associated risk will be recorded on the COSHH sheet. For Custom Powders this data is compulsory and must be in place prior to any material being processed. As has become the norm a job will not run without a COSHH sheet

Where the material falls into the **high risk** category additional specific process documentation detailing the appropriate actions will be authorised by a senior manager. The senior manager, trained to graduate level in Chemistry or Chemical Engineering, will sign off the process documentation ensuring that the risk is kept to a minimum. The material will be handled in accordance with 'best technical means'. Water washings will not be discharged to the municipal sewer.

Where the material falls into **medium risk** the cleandown will be carefully controlled and will require a member of the management team to inspect and release the system prior to the introduction of cleaning water. The material will be handled in accordance with 'best practical means'

Where the material falls into **low risk** no specific control measures will apply other than Custom Powders standards to minimise the amount of discharge.

The operating procedures associated with High Risk Processing – Water Pollution Risk feature in the Custom Powders ISO9002/ISO14001 Production Manual.

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Legenda toegepaste uitzonderingsgrondslagen

In dit document zijn gegevens geanonimiseerd op grond van:

Wet	Artikel	Omschrijving	Pagina's
Wet open overheid	Art. 5.1 lid 2 sub e	De eerbiediging van de persoonlijke levenssfeer	1, 17, 19, 28