



Terry Tamminen
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Edwin F. Lowry, Director
1001 "I" Street, 25th Floor
P.O. Box 806
Sacramento, California 95812-0806

Chua



Arnold Schwarzenegger
Governor

January 7, 2004

Mr. Dennis R. Keller
Consulting Civil Engineer
209 South Locust Street
P.O. Box 911
Visalia, California 93279-0911

REQUEST TO DISPOSE OF BIOSOLIDS WASTE IN AN AGRONOMIC FASHION – STRATHMORE PUBLIC UTILITY DISTRICT (SPUD)

Dear Mr. Keller:

The Department of Toxic Substances Control (DTSC) acknowledges the receipt of your letter of September 15, 2003, in which SPUD seeks approval from DTSC to dispose of copper-containing biosolids waste in an agronomic fashion. (SPUD had previously requested approval from DTSC to classify and manage the biosolids waste as "special waste." DTSC presumes that since SPUD has not responded to the draft contract for DTSC to process the application to classify and manage this waste as "special waste" that SPUD is no longer considering that option.) In your letter, you contend that "recycling and reuse regulations" allow for the disposal of the "Class A equivalent biosolids" in an "agronomic fashion" and that disposal in a landfill facility "does not appear to be a rationale approach to solving the problem at hand."

As described in your letter, the biosolids waste exhibits the characteristic of toxicity due to copper and is intended to be placed on land. Therefore, the biosolids waste is a "recyclable material" as defined in Section 25120.5 of the Health and Safety Code (H&SC). Recyclable materials include materials that are non-RCRA hazardous waste and are "used in a manner constituting disposal or used to produce products that are applied to land as a fertilizer, soil amendment, agricultural mineral, or an auxiliary soil and plant substance" (Section 25143.2(e)(2) of the H&SC). If the biosolids waste is a recyclable material, then State regulations expressly prohibit its use in agriculture "as a fertilizer, soil amendment, agricultural mineral, auxiliary soil and plant substance, or animal feed" (Section 66266.21(b)(3) of Title 22 of the California Code of Regulations).

Mr. Keller
January 7, 2004
Page 2

Should you have any questions regarding this matter, please contact
Mr. James Frampton of my staff at (916) 327-2522.

Sincerely,



Karl Palmer, Chief
Regulatory and Program Development Division
Hazardous Waste Management Program

cc: Mr. Joel Martens, CUPA Program Manager
Tulare County Environmental Health
5957 South Mooney Boulevard
Visalia, California 93277

Mr. Charles Corcoran, Chief
Waste Identification and Recycling Section
Hazardous Waste Management Program
Department of Toxic Substances Control
1001 "I" Street, 11th Floor
P.O. Box 806
Sacramento, California 95812-0806

Mr. James Frampton, Research Program Specialist II (Soil)
Waste Identification and Recycling Section
Hazardous Waste Management Program
Department of Toxic Substances Control
1001 "I" Street, 11th Floor
P.O. Box 806
Sacramento, California 95812-0806

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CONSULTING ENGINEERS

209 SOUTH LOCUST STREET
P.O. BOX 911
VISALIA, CALIFORNIA 93279-0911
PHONE 559/732-7938
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September 15, 2003

Mr. James Frampton
Regulatory Program Development Branch
Hazardous Waste Management Program
Department of Toxic Substances Control
P. O. Box 806
Sacramento, CA 95812-0806

Dear Mr. Frampton:

We are in receipt of a letter from the Department, under the signature of Mr. Carl Palmer, acknowledging the receipt of an application of the Strathmore Public Utility District. The application is for the purpose of requesting that the Department undertake procedures leading to a special waste determination allowing for onsite copper laden biosolids and shallow soils to be disposed in a manner other than in a Class 1 landfill.

The letter indicates, however, that the only alternative being evaluated for the determination is that which would allow for the disposal in a facility that is operating under waste discharge requirements issued by the Regional Water Quality Control Board and further providing that the waste discharge requirements for such facility have had to have been revised to accept the subject waste.

Given that the nature of the subject waste is Class A equivalent biosolids containing defined levels of copper, we are also requesting that the Department evaluate the waste for disposal in an agronomic fashion. Existing statutes allow for the disposal of Class A equivalent biosolids in an agronomic fashion. The testing of receiving lands for deficiency characteristics which can be satisfied, at least in part, by the biosolids is a common and accepted practice. Likewise, the application of copper to farmland soils deficient in the element is an accepted agricultural practice. Commercially purchased bulk copper for application to agricultural lands is available on an over-the-counter basis. The primary requirement for application is a determination of the level of deficiency of the soil to which the copper is to be applied, with agronomic certification of the poundage to be applied being made.

Mr. James Frampton
Page -2-
September 15, 2003

We are therefore restating the request of the District that the Department also examine a determination under the recycling constituting reuse regulations to allow for disposal of this material in an agronomic fashion. Occupying space in a landfill facility does not appear to be a rational approach to solving the problem at hand if the material can be recycled to meet land demand conditions. In addition, growers who have indicated a willingness to accept this material will simply substitute the availability of this material with a commercially purchased product. Lack of such a substitution will thus deplete natural resources, while at the same time forcing this material into occupying landfill space. It is our belief that the recycling constituting reuse provisions available to the Department were specifically designed to allow for the procedures which are being requested to be evaluated.

We appreciate your consideration of this clarification of the determination request and would be happy to respond to any questions which you may have with regard to same.

Very truly yours,



Dennis R. Keller
Consulting Civil Engineer

DRK:mc

- cc: Strathmore Public Utility District
Mr. J. Patrick Sullivan, Attorney at Law
Mr. Steven R. Williams, Attorney at Law
Mr. Stephen Klein, RWQCB - Fresno
Mr. Tom Kovac, DTSC - Clovis
Mr. Carl Palmer, DTSC - Sacramento
Ms. Peggy Harris, DTSC - Sacramento
Mr. Charles Corcoran, DTSC - Sacramento

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Given that the nature of the subject waste is Class A equivalent biosolids containing defined levels of copper, we are also requesting that the Department evaluate the waste for disposal in an agronomic fashion. Existing statutes allow for the disposal of Class A equivalent biosolids in an agronomic fashion. The testing of receiving lands for deficiency characteristics which can be satisfied, at least in part, by the biosolids is a common and accepted practice. Likewise, the application of copper to farmland soils deficient in the element is an accepted agricultural practice. Commercially purchased bulk copper for application to agricultural lands is available on an over-the-counter basis. The primary requirement for application is a determination of the level of deficiency of the soil to which the copper is to be applied, with agronomic certification of the poundage to be applied being made.

Mr. James Frampton
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Very truly yours,



Dennis R. Keller
Consulting Civil Engineer

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- cc: Strathmore Public Utility District
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Mr. Steven R. Williams, Attorney at Law
Mr. Stephen Klein, RWQCB - Fresno
Mr. Tom Kovac, DTSC - Clovis
Mr. Carl Palmer, DTSC - Sacramento
Ms. Peggy Harris, DTSC - Sacramento
Mr. Charles Corcoran, DTSC - Sacramento

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January 9, 2004

Mr. Charles Corcoran
Department of Toxic Substances Control
P. O. Box 806
Sacramento, CA 95814

RE: STRATHMORE PUBLIC UTILITY DISTRICT

Dear Mr. Corcoran:

We have prepared this letter as an instrument to update you on the status of the volume of copper laden sludge which has been generated by the Strathmore Public Utility District. You have requests on file which we have made on behalf of the District requesting the Department undertake procedures to classify the waste and also a request to determine if the waste can be disposed of in an agronomic fashion under the Reuse Constituting Recycling Guidelines.

This letter is to confirm that the District has completed the quantification of sludge subject to either of those two actions as a result of having just voided the clarifier and digester unit of accumulated sludge. Test results taken on material which has been removed show that all of the removed material has concentrations of copper at significantly less than the hazardous threshold. Therefore, the volume of material subject to the prior requests for determination made to the Department are unchanged and represent the final volume subject to the determination requests.

In addition, the District has completed in-place characterization of the North Sludge Stockpile (page 4 of Application). The results are summarized in Table 1. Although the total copper concentrations are below the TTLC, the soluble copper concentrations exceed the STLC level of 25 mg/l. The volume of material in the North Sludge Stockpile, therefore, remains included as part of the District's application.

Mr. Charles Corcoran

Page -2-

January 9, 2004

If we can provide you with additional information necessary to accomplish your task, please let us know.

Very truly yours,



Dennis R. Keller
Consulting Civil Engineer

DRK:mc

cc: Strathmore Public Utility District
Mr. Stephen Klein, P.E. - RWQCB, Fresno
Mr. J. Patrick Sullivan, Attorney at Law
Mr. Steven R. Williams, Attorney at Law

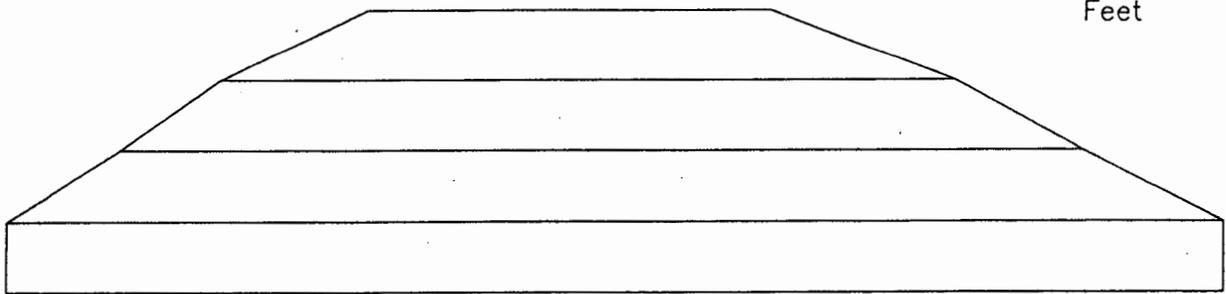
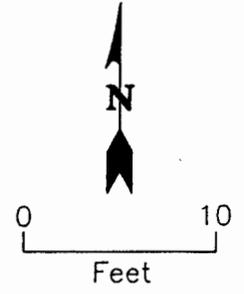
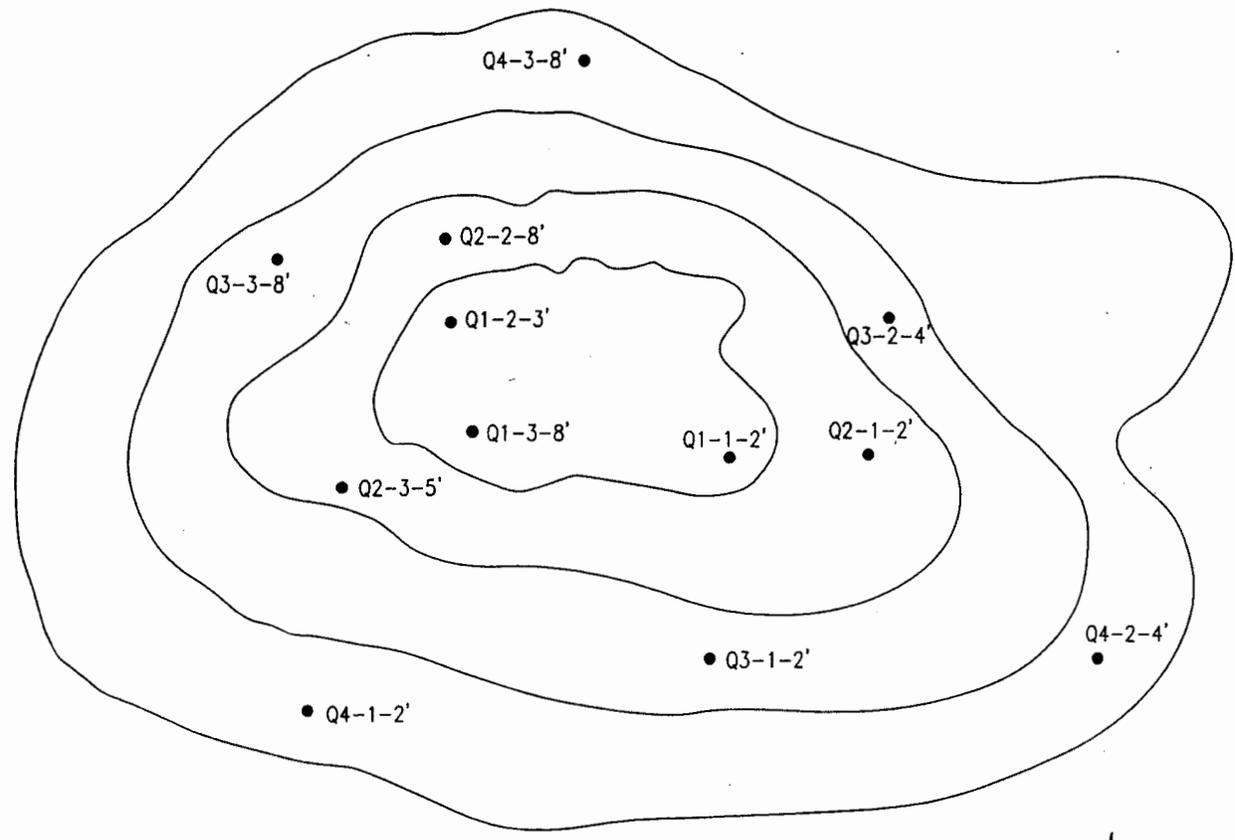
TABLE 1
SUMMARY OF NORTH STOCKPILE SLUDGE COPPER CONCENTRATIONS
APPLICATION FOR SPECIAL WASTE DESIGNATION
STRATHMORE PUBLIC UTILITY DISTRICT

Sample Location (1)	Total Copper Concentrations	Total Threshold Limit Concentration (TTLIC) (mg/kg)	Soluble Copper Concentrations	Soluble Threshold Limit Concentration (STLC) (mg/L)
	(mg/kg)		(mg/L)	
Center (Q1)	2,100	2,500	84	25
Inside Middle Ring (Q2)	1,900		73	
Outside Middle Ring (Q3)	1,800		180	
Outside Ring (Q4)	1,100		100	

Note:

1. See BSK Sampling Locations drawing. Each sample consisted of material collected at three depths which was composited prior to analyses.

J:\40\01\0800 -05 Strathmore\ -04\cad\800A01.dwg User: jthornburgh Plot: Dec 01, 2003 - 2:18pm Last Saved: Dec 01, 2003 - 2:18pm



NOTES:
 Q3 & Q4 - AUGER WAS ANGLED TO STOCKPILE

Project No. 0140-0800-04	STOCKPILE SAMPLE LOCATIONS City of Strathmore, California BSK	Date: 12/01/03
Drawn By: JGT		Scale: As Shown
Checked By:		Drawing No. 800-A-01
Approved By:		Fig. 1 Rev. 1

BSK ANALYTICAL LABORATORIES

Mark Pomaville
 BSK and Associates - Geotechnical
 567 W Shaw, Suite B
 Fresno, CA 93704

Certificate of Analysis

ELAP Certificate #1180

Report Issue Date: 12/15/2003

BSK Submission #: 2003111078

BSK Sample ID #: 390598

Project ID:

Project Desc: Strathmore PUD

Submission Comments:

Sample Type: Solid

Date Sampled: 11/17/2003

Sample Description: S-Comp. QUAD 1

Time Sampled:

Sample Comments:

Date Received: 11/17/2003

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Copper (Cu)	EPA 6020A	2100	mg/Kg	5	1	5	11/26/03	12/02/03
Copper (Cu) - WET	EPA 6010A	84	mg/L	0.5	1	0.5	12/09/03	12/12/03

mg/L: Milligrams/Liter (ppm)
 mg/Kg: Milligrams/Kilogram (ppm)
 µg/L: Micrograms/Liter (ppb)
 µg/Kg: Micrograms/Kilogram (ppb)
 %Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
 DLR: Detection Limit for Reporting
 : PQL x Dilution
 ND: None Detected at DLR

H: Analyzed outside of hold time
 P: Preliminary result
 S: Suspect result. See Cover Letter for comments.
 E: Analysis performed by External laboratory.
 See External Laboratory Report attachments.

Report Authentication Code:

[REDACTED]

Page 1 of 4

BSK ANALYTICAL LABORATORIES

Mark Pomaville
 BSK and Associates - Geotechnical
 567 W Shaw, Suite B
 Fresno, CA 93704

Certificate of Analysis ELAP Certificate #1180

Report Issue Date: 12/15/2003

BSK Submission #: 2003111078

BSK Sample ID #: 390602

Project ID:

Project Desc: Strathmore PUD

Submission Comments:

Sample Type: Solid
 Sample Description: S-Comp. QUAD 2
 Sample Comments:

Date Sampled: 11/17/2003

Time Sampled:

Date Received: 11/17/2003

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Copper (Cu)	EPA 6020A	1900	mg/Kg	5	1	5	11/26/03	12/02/03
Copper (Cu) - WET	EPA 6010A	73	mg/L	0.5	1	0.5	12/09/03	12/12/03

mg/L: Milligrams/Liter (ppm)
 mg/Kg: Milligrams/Kilogram (ppm)
 µg/L: Micrograms/Liter (ppb)
 µg/Kg: Micrograms/Kilogram (ppb)
 %Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
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Report Authentication Code: 

BSK ANALYTICAL LABORATORIES

Mark Pomaville
BSK and Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

Certificate of Analysis ELAP Certificate #1180

Report Issue Date: 12/15/2003

BSK Submission #: 2003111078

BSK Sample ID #: 390610

Project ID:

Project Desc: Strathmore PUD

Submission Comments:

Sample Type: Solid

Date Sampled: 11/17/2003

Sample Description: S-Comp. QUAD 4

Time Sampled:

Sample Comments:

Date Received: 11/17/2003

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Copper (Cu)	EPA 6020A	1100	mg/Kg	5	1	5	11/26/03	12/02/03
Copper (Cu) - WET	EPA 6010A	100	mg/L	0.5	1	0.5	12/09/03	12/12/03

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00

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January 9, 2004

Mr. James Frampton
Regulatory Program Development Branch
Hazardous Waste Management Program
Department of Toxic Substances Control
P. O. Box 806
Sacramento, CA 95812-0806

RE: STATUS OF REQUEST
CONTAMINATED SLUDGE DISPOSAL
STRATHMORE PUBLIC UTILITY DISTRICT

Dear Mr. Frampton:

On September 15, 2003, we submitted a request on behalf of the Strathmore Public Utility District to examine disposal of the District's copper laden sludge under the recycling constituting reuse regulations. We have not received a response to this request at this time.

We respectfully request an update regarding the status of our request. The District has completed characterizing the copper concentrations in stockpiled sludge and soil. The District is ready to proceed with disposal of this material and complete its associated responsibility under a Regional Water Quality Control Board Cleanup Abatement Order.

We look forward to your attention to our request. If you have any questions regarding our request, please do not hesitate to contact us.

Very truly yours,



Dennis R. Keller
Consulting Civil Engineer

DRK:mc

cc: Strathmore Public Utility District
Mr. J. Patrick Sullivan, Attorney at Law
Mr. Steven R. Williams, Attorney at Law
Mr. Stephen Klein, RWQCB - Fresno
Mr. Tom Kovac, DTSC - Clovis
Mr. Carl Palmer, DTSC - Sacramento
Ms. Peggy Harris, DTSC - Sacramento
Mr. Charles Corcoran, DTSC - Sacramento