



Investigation Summary

Reporting ID	Investigation Summary Number	OSHA-36 Number	OSHA-36 Establishment Name
0950621	202492252	361685985	Pacific Coast Producers
Event Date	08/21/11	Event Time	01:00 pm
Type of Event	inhaled chlorine dioxide		

Inspection Number/ Establishment Name	314570169 Pacific Coast Producers
Injured/Deceased Name	Alma Ochoa Oregel
Sex:	F. Female
Age:	40
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Angela Carabez
Sex:	F. Female
Age:	46
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Angelina De Lopez
Sex:	F. Female
Age:	44
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung

Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Blanca De Ayala
Sex:	F. Female
Age:	37
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Carmen Castro
Sex:	F. Female
Age:	47
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	863 - SUPERVISORS; HANDLERS,EQUIP-CLEANERS,LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Ciria De Patino
Sex:	F. Female
Age:	45
Injury:	C. Nonhospitalized
Nature:	21 Other

Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	863 - SUPERVISORS; HANDLERS,EQUIP-CLEANERS,LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name:	Delia Tafolla Ayala
Sex:	F. Female
Age:	37
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name:	Eva Cortez
Sex:	F. Female
Age:	52
Injury:	B. Hospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name:	Eva T Gomez
Sex:	F. Female
Age:	54
Injury:	C. Nonhospitalized

Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Evangelina Madera
Sex:	F. Female
Age:	42
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	485 - SUPERVISORS, RELATED AGRICULTURAL OCCUPATIONS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Griselda Ramirez
Sex:	F. Female
Age:	45
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	489 - INSPECTORS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Gurvinder S Pabla
Sex:	M. Male
Age:	19

Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	863 - SUPERVISORS; HANDLERS, EQUIP-CLEANERS, LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Gurwinder Kaur
Sex:	M. Male
Age:	41
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Irma Saldivar
Sex:	F. Female
Age:	33
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	489 - INSPECTORS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Irma Flores
Sex:	F. Female

Age:	41
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	863 - SUPERVISORS; HANDLERS, EQUIP-CLEANERS, LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria A Ramirez
Sex:	F. Female
Age:	60
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria Morales
Sex:	F. Female
Age:	59
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria B Mendoza

Sex:	F. Female
Age:	60
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria Rosario Ochoa
Sex:	F. Female
Age:	34
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria De Zamora
Sex:	F. Female
Age:	45
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
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Injured/Deceased Name:	Maria De Alvarez
Sex:	F. Female
Age:	32
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name:	Maria Melgoza
Sex:	F. Female
Age:	44
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	863 - SUPERVISORS; HANDLERS,EQUIP-CLEANERS,LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name:	Maria Michel
Sex:	F. Female
Age:	58
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria Pares-Solorio
Sex:	F. Female
Age:	22
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	489 - INSPECTORS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Martha Corona
Sex:	F. Female
Age:	56
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Martha Evelia Cuevas
Sex:	F. Female
Age:	48
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Melva Valdez
Sex:	F. Female
Age:	55
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Ramona Cortez
Sex:	F. Female
Age:	58
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Rebeca Griego
Sex:	F. Female
Age:	52
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE

Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Rosa M Gonzalez
Sex:	F. Female
Age:	57
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Rosalva De Reyes
Sex:	F. Female
Age:	41
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Silvia Valencia
Sex:	F. Female
Age:	26
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned

Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	489 - INSPECTORS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Teresa Ayala
Sex:	F. Female
Age:	44
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Teresa Segoviano
Sex:	F. Female
Age:	50
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Yesenia H Serrato
Sex:	F. Female
Age:	40
Injury:	B. Hospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative

Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	485 - SUPERVISORS, RELATED AGRICULTURAL OCCUPATIONS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Yolanda Jiminez
Sex:	F. Female
Age:	31
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	485 - SUPERVISORS, RELATED AGRICULTURAL OCCUPATIONS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria G L Solorio
Sex:	F. Female
Age:	42
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria C J De Llamas
Sex:	F. Female
Age:	37
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition

Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	863 - SUPERVISORS; HANDLERS,EQUIP-CLEANERS,LABORERS NEC

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Joaquin Cordova
Sex:	M. Male
Age:	37
Injury:	B. Hospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Ivan Cortez Flores
Sex:	M. Male
Age:	27
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Virginia Jimenez
Sex:	F. Female
Age:	31
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between

Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria Mojica
Sex:	F. Female
Age:	44
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
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Inspection Number/ Establishment Name	0
Injured/Deceased Name	Gulmaro Pimentel
Sex:	F. Female
Age:	70
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Maria Sanchez
Sex:	F. Female
Age:	33
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors

Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Veronica Virgen
Sex:	F. Female
Age:	45
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

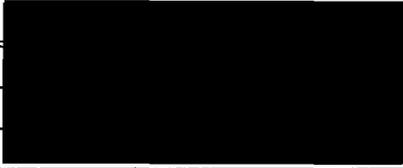
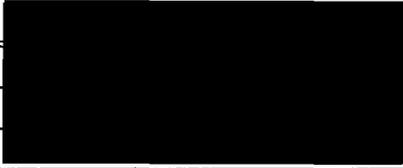
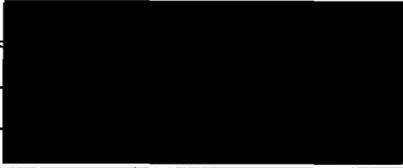
Inspection Number/ Establishment Name	0
Injured/Deceased Name	Ana Damian
Sex:	F. Female
Age:	30
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung
Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Inspection Number/ Establishment Name	0
Injured/Deceased Name	Irma B Sevilla
Sex:	F. Female
Age:	39
Injury:	C. Nonhospitalized
Nature:	21 Other
Part of Body:	28 Lung

Source of Injury:	09 Chemical liquids or vapors
Event Type:	02 Caught in or between
Environmental Factor:	07 Gas, vapor, mist fume, dust, etc. condition
Human Factor:	09 Safety devices removed or inoperative
Task:	A Regularly Assigned
Substance Code:	0614 - CHLORINE DIOXIDE
Occupational Code:	488 - GRADERS AND SORTERS, AGRICULTURAL PRODUCTS

Abstract:

Forty seven employees (38 from the primary employer and 9 from a secondary temporary agency) were sent to hospitals for treatment of respiratory irritation after being exposed to chlorine dioxide released inside a tomato processing plant. Three were admitted for further treatment. The release was due to: equipment failure--one safety switch by-passed (pump running contact switch) and the other clogged (flow sensor); failure by plant and sub-contractor personnel to follow shutdown and restart protocols; and failure to use engineering controls to detect and alert personnel of the harmful exposures in the northeast corner of the plant as was installed and used in the southeast corner of the plant after a similar incident in 2007.

CSHO Signature:		Date:	12/15/11
DM Signature:		Date:	2/19/11
RM Signature:		Date:	

NARRATIVE SUMMARY

Establishment Name	Pacific Coast Producers	Inspection Number	314570169
Management Contacted	Niraj Raj Mona Shulman Mark Chase	Title	Plant Manager V.P. General Counsel Compliance Superintendent

Information on Injured Covered by Workers' Compensation Yes No

Name, Address, and Phone Number	Occupation
See attached listing	

Use additional forms(s) as needed.

Witness Name(s) and Title *Check box preceding name if confidentiality is given.

*	Names and Title(s)	Address	Phone No.	Signed Statement? YES NO

INTRODUCTION

On Sunday, 21 Aug 11, 47 employees of Pacific Coast Producers, (PCP), 1376 Lemen Ave, Woodland, CA, 95776, were exposed to chlorine dioxide (ClO2) vapors and sent to several area hospitals for treatment with three employees being admitted for respiratory tract irritation and related symptoms. The accident was reported to DOSH by Mona Shulman, PCP's V.P. General Counsel, on 21 Aug 11 at 1555 hrs. The District Manager, William Estakhri, assigned Bob Senchy, the undersigned, Associate Safety Engineer, to conduct an investigation on 22 Aug 11. I began the investigation on 22 Aug 11. During the investigation, I interviewed managers, employees, took photos, and requested documentation. This report summarizes the facts and findings of that investigation.

FACTORS AND CONDITIONS LEADING TO THE ACCIDENT

- PCP in Woodland has been in business many years as a tomato canner and packer.
- The tomatoes are water driven from the trucks into the plant's outdoor conveyor and flume system and then indoors at two entry points for processing in the plant.
- The processing season runs from July to October depending on the weather and tomato ripening.
- ClO2 is injected into the flume water as a disinfectant to kill any micro-organisms and clean the tomatoes.
- ClO2 is generated onsite by combining sodium chlorite, sodium hypochlorite, and hydrochloric acid.
- The ClO2 generating equipment is owned, operated, and maintained by International Dioxide, Inc., (IDI) a subsidiary of DuPont.
- Previously on 3 Sep 07, PCP had 39 employees overexposed to ClO2 and sent to hospitals when a monitoring probe clogged, resulting in excess ClO2 generated into the flume entering the southeast corner of the building.
- Citations were issued; the sub-contractor who operated the ClO2 system was replaced by IDI in 2008; and a ClO2 monitoring system was installed at the SE flume entry to detect excess ClO2 and if found, to shut the pump off and turn a red flashing light on.

-On 14 Aug 11 an IDI Field Service Technician wrote on a Field Service Report for PCP Woodland, "4) Checked unpeeled flume it was 0 / Checked the ORP panel it was not working / found the flume pump contactor was not / working for the Clo2. Fixed the contactor / Clo2 working set at .4 ppm"

-On 20 Aug 11 about 0800, the Unpeeled Flume System at the northeast corner entry into the plant was shut down (pump turned off) because there was no need for the unpeeled product at the time.

--The Unpeeled Flume System consists of: a flume after a grate going ~60' to another grate (after which the tomatoes are transferred onto a conveyor belt); a water return line from the second grate; into a 1700 holding tank; a big water pump that draws water from the holding tank; and pushes it up to the flume after the first grate.

---The first grate stops the dirtier water from the main conveyor system from mixing with the cleaner water in the unpeeled system.

---The first grate is outside of the processing plant and the second grate is inside the plant.

---There is an oxidation reduction potential (ORP) probe in the flume just inside the building to monitor the concentration of ClO₂ in the water.

----The probe is connected to a control panel and pump at the central ClO₂ generator site just outside the plant.

----If the concentration is below the set point, the control panel runs the pump; if above, the pump is turned off.

---The ClO₂ is injected into the holding tank and mixed with returning and fresh water.

----The holding tank has a fresh water feed for make-up water if the float falls below the set level.

----The holding tank also has a drain into the sewage system for use as needed or required.

---There are two safety switches on the system which are run in series to the control panel

----The pump has a contactor switch to indicate that it is running

----The pipe from the pump to the flume has a flow paddle switch saddled on it to indicate water flowing

----If either switch indicates no flow, the control panel will shut of the ClO₂ pump to stop that injection.

----NOTE: In the contract between PCP and IDI, PCP was to run separate lines for each switch to IDI's control panel which would activate a different light if there was a fault. IDI did not bring this deficiency up.

-PCP did not inform IDI of the temporary shutdown as required by contract, so the shutdown protocol was not followed, which is:

--1. PCP notifies IDI 3-6 hours prior to temporary shutdown

--2. IDI turns ORP panel off prior to turning the flume off

--3. PCP turns flume off

--4. IDI closes ClO₂ dosing valve

--5. PCP closes return tank make up water valve

--6. PCP drain return tank - leave drain open

--7. PCP/IDI verify tank is empty, ClO₂ ORP panel is off, tank is not filling with ClO₂

--8. PCP verifies primary interlock is tripped (flow switch indicates no flow), Aux 1 Lt off on ORP panel)

--9. Verify secondary interlock is tripped (pump dry contact is open). (Aux 1 or 2 Lt off on ORP panel).

-On 21 Aug 11 about 1200 a PCP EE began filling the holding tank with water

--He stated that there was no need to close the drain valve to the tank because it was already closed.

-After the tank was about half full, he started the pump from the operator's panel indoors, ~100' from the pump

-When he returned to the tank, he noticed a green mist coming from the tank and the flume

-He ran back to the operators panel and turned the pump off

- PCP did not inform IDI of the restart as required by contract, so the Restart protocol was not followed, which is:

--1. PCP notifies IDI 3-6 hours prior to startup

--2. PCP inspect for empty return tank prior to turning flume on. Note: Tank must be empty prior to restart. This insures only water is present upon start-up.

--3. IDI verify ORP panel is off prior to turning flume on - light "off", Aux 1 and 2 Lts off

--4. IDI authorize customer to restart flume

--5. PCP fill tank - make up valve open

--6. PCP turn flume pump on - verify proper operation

--7. PCP Wait till tank is full - make up operational

--8. PCP/IDI check liquid level in the flume - ORP probe in water

--9. IDI verify ORP level is above dosing "on" level. Clean water should at the low end of ORP range. Use test solution - insure probe is responsive

--10. IDI when ORP drops to "on" level turn ORP level on, open ClO₂ valve

--11. IDI turn on ORP panel

-NOTE: There is no extra charge for the IDI Field Service Technician to come out to the plant to turn on/off the system

-Several employees in the area began experiencing respiratory irritation; some began evacuating the area and called supervisors

-Within 5 minutes the shift and plant managers were on the scene, initiated a full plant evacuation and shut down the ClO₂ system generator by pressing the emergency stop

-The unpeeled flume system was then flooded with water from the main conveyor system by blinding (covering) the first grate and sending the dirtier water into the holding tank and opening the tank drain

-The IDI Field Service Technician was then called in and arrived within 20 minutes

- Highly affected EEs went to the first aid area for treatment and the contract EMTs on duty called 911
- Less affected EEs first went to their designated assembly area outside of the plant and then were directed back to the first aid area
- Initially 45 EEs were sent to area hospitals either by ambulances (23) or bus (22) with 2 more going the next day after their symptoms did not resolve
- 3 EEs were admitted for further treatment
- The Woodland Fire Department and Plant management declared the plant safe for re-entry by 1600 and operations were resumed at 1800.
- An immediate investigation found that:
 - The pump contact switch had been jumped with the wires connected to each other to show the pump running all the time
 - The switch wires should have been connected to the wires leading to the motor control center (MCC) to show when power was sent to the pump
 - The junction box at the pump had two red wires that ran to the MCC but they were not connected to the MCC
 - The MCC had been moved from its previous location since the end of last season
 - PCP electricians said they did not jump the switch as they said it was IDI's responsibility
 - This was the pump switch the IDI Field Service Technician fixed on 14 Aug.
 - The flow control switch was jammed with vines in the flow position, so it indicated flowing water to the controller
 - The monitoring probe in the flume was clean and was hanging suspended in air during the temporary shutdown
 - IDI said the probe in the air would be sending a low concentration signal to the control panel
- IDI said the pump would put out 12-18 gallons per hour of ClO2 at a concentration of 1800 ppm in liquid
- So with the probe indicating low concentration, the flow with clogged on, the pump switch jumped on, the control panel sent 12-18 gallons per hour or 330-500 gallons of ClO2 in 28 hours into the holding tank
- With a liquid density of 1.64 for ClO2, when the pump started, it would be pumping an 1800 ppm solution of ClO2 into the plant instead of the normal 0.4 ppm
- At grate 2 inside the plant, the solution would be agitated and release ClO2 into the plant
- ClO2 is a severe respiratory and eye irritant with an odor threshold and PEL of 0.1 ppm.
- No ClO2 monitoring and alarm/shutdown system was installed on the NE flume entry into the plant as was done in the SE flume entry after the 2007 incident

ACCIDENT DESCRIPTION

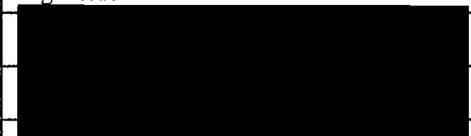
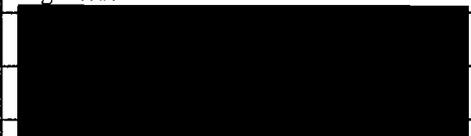
Forty seven employees were sent to hospitals after being exposed to chlorine dioxide released inside a tomato processing plant. The release was due to equipment failure-one safety switch by-passed and the other clogged, failure by plant and sub-contractor personnel to follow shutdown and restart protocols, and failure to use engineering controls to detect, and alert personnel of the harmful exposures.

CONCLUSION

PCP failed to follow the proper shutdown and start up protocols on the unpeeled line flume system on 20-21 Aug 11.
 PCP failed to install a monitoring system for ClO2 for the same type exposure risk on the NE corner of the plant as it did for the SE corner of the plant after a similar mass exposure in 2007 .
 IDI failed to verify PCP's improper installation of the pump safety switch line.
 IDI failed to properly connect the pump safety switch.
 47 EEs went to hospitals for treatment after exposed to the ClO2 released.

REGULATORY ACTION

PCP was issued two serious accident related citations for failing to maintain equipment in service in a safe condition and failing to use engineering controls to prevent harmful exposures.
 IDI was issued one serious accident related citations for failing to maintain equipment in service in a safe condition.

		Signature	Date
Prepared by:	CSE, IH		12/15/11
Reviewed by:	DM/SR. IH		2/14/12
	Regional Manager		

Pacific Coast Producers Employees Sent to Hospitals

	NAME	ADDRESS	CITY	STATE	ZIP	PHONE	OCCUPATION (ASSIGNMENT ON 8/21)
1	ALMA BERONICA OCHOA OREGEL						SORTER
2	ANGELA VASQUEZ CARABEZ						PREPARATION GENERAL LABOR
3	ANGELINA SOLORIO DE LOPEZ						CANNING SEAMER
4	BLANCA EDITH URBANO DE AYALA						SORTER
5	CARMEN J CASTRO						SANITATION
6	CIRIA URIOSTEGUI DE PATINO						SANITATION
7	DELIA TAFOLLA AYALA						SORTER
8	EVA CORTEZ						DEPALLETIZER
9	EVA T GOMEZ						CANNING SEAMER-HIGH SPEED
10	EVANGELINA L MADERA						YIELD CONTROL SUPERVISOR
11	GRISelda RAMIREZ						QC CREW LEADER
12	GURVINDER SINGH PABLA						SANITATION
13	GURWINDER KAUR						SORTER
14	IRMA CHAPA SALDIVAR						QC PROCESS CHECKER
15	IRMA FLORES						SANITATION
16	MARIA A RAMIREZ						R-CN SEAMER-HIGH SPEED
17	MARIA AMPARO MORALES						DEPALLETIZER
18	MARIA B MENDOZA						CANNING SEAMER
19	MARIA DEL ROSARIO OCHOA						SORTER
20	MARIA DOLORES MORA DE ZAMORA						SORTER
21	MARIA G MARES DE ALVAREZ						SORTER
22	MARIA GUADALUPE MELGOZA						SANITATION
23	MARIA MICHEL						SORTER
24	MARIA SANDRA PAREDES-SOLORIO						QC PROCESS CHECKER
25	MARTHA CORONA						R-CN SEAMER-HIGH SPEED
26	MARTHA EVELIA CUEVAS						DEPALLETIZER
27	MELBA VALADEZ						SORTER
28	RAMONA CORTEZ						PASTE DECK SEAMER
29	REBECA GRIEGO						SORTER
30	ROSA M GONZALEZ						DEPALLETIZER
31	ROSALVA MORENO DE REYES						CANNING SEAMER
32	SILVIA MEDINA VALENCIA						PRODUCTION CLERK
33	TERESA DELGADO AYALA						DEPALLETIZER
34	TERESA HERRERA SEGOVIANO						SORTER
35	YESENIA H SERRATO						EMPTY CAN SUB SUPERVISOR
36	YOLANDA MARGARITA JIMENEZ						CANNING SUB SUPERVISOR
37	MARIA G LUNA SOLORIO						SORTER
38	MARIA GUADALUPE JIMENEZ DE LLAMAS						SANITATION
39-RUSH	JOAQUIN CORDOVA						SANITATION
40-RUSH	IVAN CORTEZ FLORES						SANITATION
41-RUSH	VIRGINIA JIMENEZ						SORTER
42-RUSH	MARIA MOJICA						SORTER
43-RUSH	GULMARO PIMENTEL						SORTER
44-RUSH	MARIA SANCHEZ						SORTER
45-RUSH	VERONICA VIRGEN						SORTER
46-RUSH	ANA DAMIAN						SORTER
47-RUSH	IRMA BARAJAS SEVILLA						SORTER