

Attachment #16 Environmental Assessment

1. **Date:** November 29, 2017
2. **Submitter:** Enviro Tech Chemical Services, Inc.
3. **Address:** 500 Winmoore Way, Modesto, CA. 95358
4. **Description of Proposed Action:**
 - a. Description of the Requested Action: The FCS proposed in the Food Contact Notification is composed of peroxyacetic acid (PAA), hydrogen peroxide (H_2O_2), acetic acid, 1-hydroxy ethylidene-1,1-diphosphonic acid (HEDP) and optionally sulfuric acid. The intended use is as an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging. The maximum proposed use concentration of the FCS is 4500 ppm as PAA at $65^\circ \pm 1^\circ C$. A 4500 ppm ceiling for PAA also equates to 6600 ppm as H_2O_2 and 180 ppm as HEDP.
 - b. The Need for the Action: The FCS is intended to be used as an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging. The need for an antimicrobial to treat food contact surfaces of glass and plastic food packaging and their enclosures is to eliminate pathogenic and non-pathogenic microorganisms that may be present on the food packaging or on the enclosure surface. The action requested by this FCN addresses

current and future needs for processors and governmental agencies to respond to increased pressures to improve food safety.

- c. Brief Discussion of the Use and Disposal of the FCS: The FCS may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging. In a typical food processing facility, a fresh batch containing the FCS may be initially made prior to an eight (8) hour shift, and then completely disposed of after approximately 6 cycles of 8 hours each (48 hours total time) of use. Due to use of the FCS and loss of the FCS during treatment of the glass and plastic food packaging and their enclosures, it is often necessary to replenish the FCS containing reservoirs during the 6 cycles of use. The FCS used for replenishment is typically made at the beginning of an 8-hour shift during the 6 cycles of use. The reservoirs are then filled and re-filled as needed.

The batches containing the FCS are commonly blended in tanks filled to approximately 900 gallons. Typically, about 600 gallons of the FCS in a reservoir is intended for use in glass and plastic food packaging treatment operations and approximately 300 gallons of the FCS in a reservoir is used in enclosure treatment operations. During each 8-hour shift, the loss of the FCS solution due to its use, may be up to 50 percent or 450 gallons of the FCS. The FCS solution that is lost during use is diluted with other liquid waste products at the processing plant. The diluted FCS solution will be disposed of with processing plant wastewater according to National Pollutant Discharge Elimination System (NPDES) regulations. For processing plants that hold a NPDES permit (i.e., direct dischargers), the FCS-containing wastewater will be treated on-site before direct discharge

to surface waters. For processing plants without such NPDES permits (i.e., indirect dischargers), the FCS containing wastewater would travel through the sanitary sewer system into Publicly Owned Treatment Works (POTWs) for standard wastewater treatment processes before movement into aquatic environments.

The FCS is initially made up at the target PAA concentration. For each 8-hour shift the total amount of FCS that may be typically disposed of in an on-site pretreatment facility or wastewater discharge system is 450 gallons based on a total of 900 gallons of FCS. For two 8 hour shifts consisting of a typical day, the total amount of the FCS that may be disposed is 900 gallons. The FCS solution will be disposed of with processing plant wastewater according to National Pollutant Discharge Elimination System (NPDES) regulations. For processing plants that hold a NPDES permit (i.e., direct dischargers), the FCS-containing wastewater will be treated on-site before direct discharge to surface waters. For processing plants without such NPDES permits (i.e., indirect dischargers), the FCS containing wastewater would travel through the sanitary sewer system into Publicly Owned Treatment Works (POTWs) for standard wastewater treatment processes before movement into aquatic environments. The potential use and disposal of the FCS is discussed below and describes worst case scenarios and associated potential risks along with the Environmental Introduction Concentration (EIC) and Expected Environmental Concentration (EEC) calculations.

5. Identification of Substance:

The FCS is a liquid equilibrium mixture of peroxyacetic acid, hydrogen peroxide and acetic acid. It is made by blending acetic acid, hydrogen peroxide, HEDP (as a chelating agent), optionally sulfuric acid (to speed the reaction process) and reverse osmosis purified water.

Ingredients:

Chemical Name	CAS#
Peroxyacetic acid	79-21-0
Hydrogen peroxide	7722-84-1
Acetic acid	64-19-7
Sulfuric acid (optional)	7664-93-9
HEDP (1-hydroxyethylidene-1,1-diphosphonic acid)	2809-21-4
Water	7732-18-5

The basic reaction by the above combination is as follows:



6. Introduction of Substance into the Environment:

a. Introduction of substances into the environment as a result of manufacture:

The FCS is currently manufactured in EPA approved facilities at the addresses listed below and no unusual or factual threat to the environment exist.

Establishment Number	Establishment Name	Establishment Site Address
63838-CA-01	Enviro Tech Chemical Services, Inc.	500 Winmoore Way, Modesto CA
63838-AR-01	Enviro Tech Chemical Services – Plant 6	724 Phillips County Road 411, Helena, AR 72342

Attached are the Facility Registry Service (FRS) website pages that document the EPA Establishment Numbers at the addresses listed above.

Below are the website links:

http://iaspub.epa.gov/enviro/fii_query_detail_disp_program_facility?p_regist

[ry_id=110024498890](#) and

https://iaspub.epa.gov/enviro/fii_query_detail_disp_program_facility?p_registry_id=110063867383. No extraordinary environmental circumstances would apply to the continued on-going manufacture of the FCS.

b. Introduction of substances into the environment as a result of use/disposal:

The FCS is proposed to be used as an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging. The FCS is provided as a concentrate that is diluted on site. The maximum concentrations of the FCS by use are as follows:

Use	PAA (ppm)	H2O2 (ppm)	HEDP (ppm)
As an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging.	4500	6600	180

Based on the described use pattern above, the primary pathway for the FCS to reach the environment is by the use and disposal of the FCS. Following use or disposal of the FCS, the FCS enters the processor's on-site pretreatment facility before discharging to the local publicly-owned

treatment works (POTW) and surface waters, depending upon whether the facility has an individual NPDES permit.

Treatment of the process water at an on-site waste water treatment facility and then at a POTW and surface waters is expected to result in a complete degradation of PAA, hydrogen peroxide and acetic acid. The PAA will breakdown into oxygen and acetic acid while hydrogen peroxide will breakdown into oxygen and water⁽¹⁾. PAA, hydrogen peroxide and acetic acid all rapidly degrade on contact with organic matter, transition metals and upon exposure to sunlight. The half-life of PAA in buffered solutions was 63 hours at pH 7 for a 748 ppm solution, and 48 hours at pH 7 for a 95 ppm solution⁽²⁾. The half-life of hydrogen peroxide in natural river water ranged from 2.5 days when initial concentrations were 10,000 ppm and increased to 15.2 days when the concentration decreased to 250 ppm⁽³⁾.

Biodegradation is the most significant removal mechanism for acetic acid. In biodegradation studies with acetic acid, 99% degraded in 7 days under anaerobic conditions⁽⁴⁾. Acetic acid is not expected to concentrate in the wastewater discharged to the POTW and surface waters. Therefore, these substances are not expected to be introduced into the environment to any significant extent as a result of the proposed use of the FCS.

Sulfuric acid is an optional ingredient in the FCS formulation and is used to catalyze the reaction between acetic acid and hydrogen peroxide to more rapidly produce a stable PAA solution. Sulfuric acid is GRAS for use in or on food as listed under Title 21 C.F.R. § 184.1095. Sodium sulfate is an inorganic salt with a melting point of approximately 884 °C., a relative density of 2.7 g/cm³ at 20°C and a water solubility of 161 g/l at 20°C⁽¹⁰⁾. Sulfuric acid is a strong mineral acid that dissociates readily in water to sulfate ions and hydrated protons and is totally miscible with water⁽¹¹⁾. With a pKa of 1.92 at 25C, the dissociation of sulfuric acid is 99% at pH 3.92 for example. At environmentally relevant concentrations, sulfuric acid

is practically totally dissociated. In water, sodium sulfate completely dissociates into sodium and sulfate ions. Total ionization of sulfuric acid implies that sulfuric acid, itself, will not adsorb on particulate matters or surfaces and will not accumulate in living tissues.

In anaerobic conditions, sulfate is biologically reduced to hydrogen sulfide by sulfate reducing bacteria or incorporated into living organisms and included in the sulfur cycle. Sodium sulfate is not reactive in aqueous solution at room temperature. Sodium sulfate will completely dissolve, ionise and distribute across the entire planetary "aquasphere"⁽¹⁰⁾. Some sulfates may eventually be deposited, but the majority of sulfates participate in the sulfur cycle in which natural and industrial sodium sulfate is not distinguishable. Sodium sulfate is widely distributed in nature; it occurs as mineral salts (e.g. thenardite, mirabilite), it is present in almost all fresh and salt waters, and sulfate as such is normally present in almost all natural foodstuffs. Both sodium and sulfate ions are among the most common ions found in all living organisms. In mammals, sulfate is a normal metabolite of sulfur-containing amino-acids, it is normally incorporated in a variety of body compounds and it plays an important role in detoxification/ excretion processes due to sulfoconjugation. Sodium sulfate is a substance with a favorable ecological profile. Due to the low aquatic toxicity and the natural recycling that occurs in the sulfur cycle, wide dispersive use of sodium sulfate does not present a major hazard to the environment ⁽¹⁰⁾.

The substances discussed above (PAA, hydrogen peroxide, acetic acid and the optional ingredient sulfuric acid) are not expected to be introduced into the environment to any significant extent as a result of the proposed use of the FCS. The remainder of this section will therefore consider only the environmental introduction of HEDP.

The Environmental Introduction Concentration (EIC) may be calculated by multiplying the concentration of HEDP in the FCS by the estimated

percentage of degradation associated with use of the FCS. The worst-case concentration of HEDP will be used to calculate the EIC. The Human and Environmental Risk Assessment Project (HERA) report showed that HEDP adsorption to wastewater sludge is greater than 90%⁽⁷⁾. To be conservative, an estimate of 80% adsorption to wastewater sludge in sewage treatment plants will be used for the below Estimated Environmental Concentration (EEC) calculations.

The environmental introduction concentration (EIC) of HEDP is based on use and disposal of the FCS at the end of a work day into the food processor's on-site pre-treatment facility assuming no degradation of the FCS components. The subsequent EECs including EEC_{sludge} and EEC_{water} are calculated below using the 80:20 partition factor arrived at in the HERA report. With respect to the EEC_{water} calculation, a 10 fold dilution factor is recommended for use when estimating surface water concentrations⁽⁶⁾.

Below are the worst-case EIC and EEC_{sludge} and EEC_{water} calculations for HEDP:

$$\text{HEDP EIC} = 180 \text{ ppm HEDP} \times 100\% \text{ remaining} = 180 \text{ ppm}$$

$$\text{EEC}_{\text{sludge}} = 180 \text{ ppm HEDP} \times 80\% \text{ partition to sludge} = 144 \text{ ppm}$$

$$\text{HEDP EEC}_{\text{water}} = (180 \text{ ppm HEDP} \times 20\% \text{ partition to water}) / 10 \text{ fold dilution factor} = 3.6 \text{ ppm}$$

7. Fate of the Substance in the Environment:

It is well documented and accepted in the scientific community that PAA and H₂O₂ are short lived in the environment, do not bioaccumulate, have innocuous degradation byproducts, and are of no toxicological or ecotoxicity concern^(1, 2, 3).

Peroxyacetic acid and hydrogen peroxide are not expected to survive treatment at the primary wastewater treatment facility due to their reactivity and pH sensitivity⁽¹⁾. Both compounds are rapidly degraded on contact with organic matter, transition metals, and upon exposure to sunlight^(2, 3). The half-life of PAA in buffered solution solutions was 63 hrs at pH 7 for a 748 ppm solution, and 48 hrs for a 95 ppm solution, also at pH 7⁽²⁾.

The half-life of hydrogen peroxide in natural river water ranged from 2.5 days when initial concentrations were 10,000 ppm, and increased to 15.2 days when the concentration decreased to 250 ppm⁽³⁾. In filtered lake water the half-life of H₂O₂ (initial concentration 3.4 ug/l) was 8.6 hrs-31 hrs. (page 21 reference #3).

Since PAA and H₂O₂ rapidly degrade, they will not be introduced into the natural environment in wastewater at toxic levels. Therefore toxicity and fate data should not be required for these compounds. Biodegradation is the most significant removal mechanism for acetic acid. In biodegradation studies with acetic acid, 99% degraded in 7 days under anaerobic conditions⁽⁴⁾.

When wastewater from food processing operations described above is released to a POTW and surface waters, the concentration of HEDP will be further diluted by the additional waters processed by the POTW and surface waters. The maximum HEDP EEC_{water} will be 3.6 ppm and the maximum HEDP EEC_{sludge} will be 144 ppm based on the above calculations using the 10-fold dilution factor for the EEC_{water} and the 80:20 partition ratio to wastewater sludge and wastewater, respectively. The chelating agent, HEDP, is added to the FCS to sequester transition metal ions in solution. HEDP increases shelf life of the product significantly by preventing metal ions from breaking down PAA and H₂O₂. HEDP is in a class of compounds known as a phosphonates. HEDP slowly biodegrades into phosphates at a rate of about 1% per day when chelated with transition metal ions⁽⁵⁾. Because of the nature of the carbon-phosphorus bond in HEDP, it adsorbs very strongly to mineral surfaces and rarely exists free in solution⁽⁵⁾. The HERA report shows that HEDP adsorption to sludge is greater than 90%⁽⁷⁾. Our calculations used a conservative estimate of 80% adsorption to sludge in sewage treatment plants.

In wastewater, sulfuric acid will completely dissociate into sulfate ions and hydrated protons, neither of which are a toxicological or environmental concern^(10, 11).

8. Environmental Effects of Released Substances:

The FCS is intended to be used as an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging. The concentrations of the proposed FCS are quite diluted, and once the FCS contacts the balance of the site's wastewater, and subsequently further downstream with the main body of discharge/waste water at the POTW and surface waters, the pH would be such that the peroxygens, PAA and H₂O₂, would degrade rapidly^(1,2,3).

a. Aquatic Environment

The FCS is intended to be used as an antimicrobial additive that may be used alone or in combination with other processes in the commercial sterilization of aseptic filling systems and glass and plastic food packaging and their enclosures prior to filling, except for use on food packaging used in contact with infant formula or human milk or on aseptic filling equipment used to fill such packaging.

Wastewater from such facilities contains liquid nutrient waste from the packaged food product and from disposal of ingredients. HEDP is a strong chelating agent and can result in adverse effects on environmental organisms by complexation of essential nutrients⁽⁷⁾. For strong chelating agents, it is suggested that two types of No Observed Effect Concentration's (NOEC's) be determined: an intrinsic NOEC (NOECi) measured with excess nutrients available and an NOEC measured to protect from the chelating effects in natural waters (NOECc)⁽⁹⁾. A realistic NOECc should be determined by testing in natural waters, by predicting metal speciation and algal trace element requirements, and/or using metal speciation modeling programs⁽⁹⁾. However, excess nutrients are expected to be present in industrial wastewater as eutrophication is a well-known phenomenon seen in industrial wastewaters from food processing facilities⁽⁸⁾.

Aquatic toxicity of HEDP is summarized and shown in the following table below.

Table 1: Environmental Toxicity Data for HEDP

Species	Endpoint	mg/L
Short Term		
<i>Lepomis macrochirus</i> ⁹	96 hr LC ₅₀	868
<i>Oncorhynchus mykiss</i> ⁹	96 hr LC ₅₀	360
<i>Cyprindon variegates</i> ⁹	96 hr LC ₅₀	2180
<i>Ictalurus punctatus</i> ⁹	96 hr LC ₅₀	695
<i>Leciscus idus melanatus</i> ⁹	96 hr LC ₅₀	207 - 350
<i>Daphnia magna</i> ⁹	24 – 48 hr LC ₅₀	165 - 500
<i>Planemonetes pugio</i> ⁹	96 hr EC ₅₀	1770
<i>Crassostrea virginica</i> ⁹	96 hr EC ₅₀	89
<i>Selenastrum capricornutum</i> ⁷	96 hr LC ₅₀	3
<i>Selenastrum capricornutum</i> ⁷	96 hr NOEC	1.3
Algae ⁷	96 hr EC ₅₀	0.74
<i>Chlorella vulgaris</i> ⁹	48 hr NOEC	≥100
<i>Pseudomonas putida</i> ⁹	30 minute NOEC	1000
Long Term		
<i>Oncorhynchus mykiss</i> ⁹	14 day NOEC	60 - 180
<i>Daphnia magna</i> ⁹	28 day NOEC	10 - <12.5
Algae ⁷	14 day NOEC	13

Jaworska *et. al.* showed that the acute toxicity endpoints for HEDP ranged from 0.74 – 2,180 mg/L while the chronic NOECs ranged from 10 mg/L for the 28 day NOEC for *Daphnia magna* to 60-80 mg/L for the 14 day NOEC for *Oncorhynchus mykiss*. Although a chronic NOEC of 0.1 mg/L was reported for reproductive effects in *Daphnia magna*, it is inconsistent with other toxicity data and Jaworska *et. al.* The relevant endpoint for a high orthophosphate environment is 10mg/L (28 day) NOEC for *Daphnia magna* as published by Jaworska *et al.* The values calculated herein of HEDP EEC_{water} = 3.6 ppm fall below these limits so no significant adverse impacts are expected.

b. Terrestrial Environment

HEDP accumulated in wastewater sludge is eventually discharged to land and is not expected to have any adverse environmental impact on the terrestrial toxicity endpoints for plants, earthworms or birds. The NOEC for soil-dwelling organisms was 1000 mg/kg soil dry weight for red worms in soil⁽⁷⁾. The 14 day median lethal dose (LD₅₀) for birds was greater than 284 mg/kg body weight⁽⁷⁾. As a comparison,

the HEDP EEC_{sludge} is 144 ppm which is less than the LD_{50} for birds at 248ppm so no significant adverse impacts are expected.

9. Use of Resources and Energy:

The proposed FCS would not pose any significant additional burden on existing resources or energy in the manufacture, transport, use or disposal of the FCS above and beyond those already existing, and the proposed use will not create any significant additional burden on resources or energy. The FCS is made in a PAA manufacturing facility with existing fixed costs that would not be increased in a significant way by the manufacture of this FCS. The ingredients used in the manufacture of the FCS are purchased in bulk quantities for several products and this FCS would not pose a significant additional burden on those requirements. The transportation of the FCS is similar to other PAA products at the facility and would only increase the cost of transportation by the weight and incremental fuel required for transport. The disposal of the FCS would not significantly increase any wastewater usage or processing costs any more than a similar volume of a product.

10. Mitigation Measures:

The proposed FCS is not reasonably expected to result in any significant adverse environmental impacts that would require mitigation measures of any kind.

11. Alternatives to Proposed Action:

There are no potential adverse environmental effects that would necessitate alternative actions to that proposed in this FCN. The alternative of not approving the action proposed herein would simply result in the continued use of the materials that the FCS would otherwise replace, and such action would have no significant environmental impact.

12. List of Preparers:

- a. Michael Harvey, President & CEO, Enviro Tech Chemical Services, Inc.
Education: B.S. Cal. State University, Chico (Chemistry)

Experience: 30 years of experience conducting ecological risk assessments and preparing regulatory submissions that have been submitted to the EPA and FDA

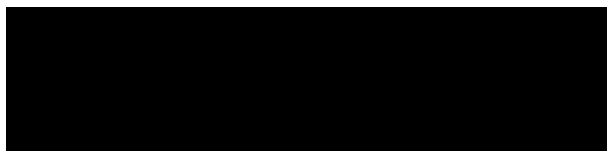
- b. Brent Bankosky, Sr. Vice President, Business Operations, Enviro Tech Chemical Services, Inc.
Education: BS., MBA, Pennsylvania State University, MS, Lehigh University
Experience: 12 years of experience preparing EPA and FDA regulatory submissions
- c. Jonathan N. Howarth, Sr. Vice President, Technology, Enviro Tech Chemical Services, Inc.
Education: Ph.D., Physical Chemistry, Univ. of Southampton, England; BS (Honors), Applied Chemistry, Leicester Polytechnic, England
Experience: 25 years of experience preparing EPA and FDA regulatory submissions
- d. Joseph Donabed, R&D Manager, Enviro Tech Chemical Services, Inc.
Education: BS, Cal. State Stanislaus University
Experience: 3 years of experience preparing EPA and FDA regulatory submissions
- e. Tina Rodrigues, Director, Regulatory Affairs, Enviro Tech Chemical Services, Inc.
Education: BS, Cal. State Stanislaus University
Experience: 8 years of experience preparing EPA and FDA regulatory submissions

13. Certification:

The undersigned official certifies that the information presented is true, accurate, and complete to the best of the knowledge of Enviro Tech Chemical Services, Inc.

Date: November 29, 2017

Signature: Name and Title: Michael S. Harvey, President & CEO




14. BIBLIOGRAPHY and LITERATURE CITATIONS

- (1) EPA: Reregistration eligibility Decision: Peroxy compounds; EPA Case 4072. Doc #738-F-93-026; Dec. 1993.
- (2) ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals, JACC No. 40, "Peracetic Acid and its Equilibrium Solutions"; January 2001
- (3) ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals, JACC No. 22, "Hydrogen Peroxide"; January 1993
- (4) U.S. High Production Volume (HPV) Chemical Challenge Program: "Assessment Plan for Carboxylic Food Acids and Salts Category." Acetic Acid and Salts Panel, American Chemistry Council, June 28, 2001

- (5) NOWACK, B. (2003) "Environmental chemistry of phosphonates"; Water Research, 1-14.
- (6) Rapaport, Robert A., 1988. Prediction of consumer product chemical concentrations as a function of publically owned treatment works treatment type and riverine dilution. Environmental Toxicology and Chemistry 7(2), 107-115. Found online at: <http://onlinelibrary.wiley.com/doi/10.1002/etc.5620070204/abstract>
- (7) HERA – Human & Environment Risk Assessment on Ingredients of European Household Cleaning Products: Phosphonates. 06/09/2004. www.heraproject.com – Phosphonates.
- (8) US EPA. Fact Sheet: Ecoregional Nutrient Criteria EPA-822-F-02-008, <http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/jan03frnfs.pdf>
- (9) Jaworska, J.; Van Genderen-Takken, H.; Hanstveit, A.; van de Plassche, E.; Feijtel, T. Environmental risk assessment of phosphonates, used in domestic industry and cleaning agents in the Netherlands. Chemosphere 2002, 47, 655-665. Chemosphere. 2002, 47 655-665.
- (10) Human and Environmental Risk Assessment (HERA) on ingredients of Household Cleaning Products, Sodium Sulfate, January 2006. http://www.heraproject.com/files/39-F-06_Sodium_Sulfate_Human_and_Environmental_Risk_Assessment_V2.pdf
- (11) The Organisation for Economic Co-operation and Development (OECD) SIDS Voluntary Testing Program for International High Production Volume Chemicals (OECD SIDS), Sulfuric Acid, 2001. <http://webnet.oecd.org/HPV/UI/handler.axd?id=248f397d-64b3-4e14-8be9-473974e8dfdb>

EPA FRS Facility Detail Report Exhibit



United States Environmental Protection Agency

LEARN THE ISSUES | SCIENCE & TECHNOLOGY | LAWS & REGULATIONS | ABOUT EPA

iaapub.epa.gov

FRS Facility Detail Report | Envirofacts | US EPA


ALL EPA | THIS AREA | Advanced Search

Envirofacts

You are here: EPA Home » Envirofacts » Facility Registry Service (FRS) » FRS Facility Query

FRS Facility Detail Report

[Home](#) | [Multisystem Search](#) | [Topic Searches](#) | [System Data Searches](#) | [About the Data](#) | [Data Downloads](#) | [Widgets](#) | [Services](#) | [Mobile](#) | [Other Datasets](#)



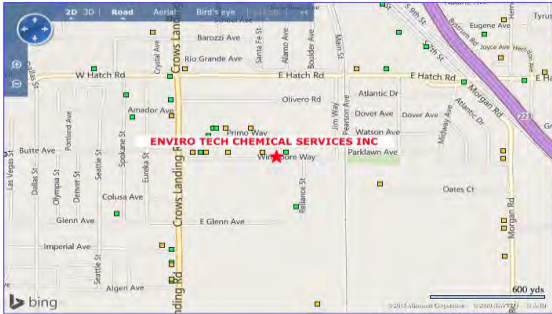
ENVIRO TECH CHEMICAL SERVICES INC

500 WINMOORE WAY
MODESTO, CA 95358
EPA Registry Id: 110024498890

Facility Registry Service Links

- Search
- FRS Facility Query
- FRS E2 Search
- Organization Search
- FRS Physical Data Model
- FRS Geospatial Model
- Contact Us
- Facility Registry Service (FRS) Home

Report Error



Legend

- Selected Facility
- EPA Facility of Interest
- State/Tribal Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

Environmental Interests

Information System	System Facility Name	Information System Id/Report Link	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests
TOXIC RELEASE INVENTORY SYSTEM	ENVIRO TECH CHEMICAL SERVICES INC	95337NVTCS.DOWI	TRI REPORTER	TRI REPORTING FORM	04/16/2014	
INTEGRATED COMPLIANCE INFORMATION SYSTEM	ENVIRO TECH CHEMICAL SERVICES INC	2600013093	FORMAL ENFORCEMENT ACTION	ICIS	06/20/2011	ICIS-09-2011-4078
CA-CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM	ENVIRO TECH CHEMICAL SERVICES INC	10179035	STATE MASTER	CA-CERS		FORMAL ENFORCEMENT ACTION CERS2-10179035-10 RMP REPORTER CERS2-10179035-02 EPCSA
INTEGRATED COMPLIANCE INFORMATION SYSTEM	ENVIRO TECH CHEMICAL SERVICES, INC.	2200007711	ENFORCEMENT/COMPLIANCE ACTIVITY	ICIS	09/28/2010	
INTEGRATED COMPLIANCE INFORMATION SYSTEM	ENVIRO TECH CHEMICAL SERVICES, INC.	7424297	ENFORCEMENT/COMPLIANCE ACTIVITY	ICIS	05/23/2005	
SECTION SEVEN TRACKING SYSTEM	ENVIRO TECH CHEM SVC, INC.	063838CA001	PESTICIDE PRODUCER	SSTS	10/11/2006	
INTEGRATED COMPLIANCE INFORMATION SYSTEM	ENVIRO TECH CHEMICAL SERVICES INC	2200007285	FORMAL ENFORCEMENT ACTION	ICIS	09/27/2010	ICIS-09-2010-4058 FORMAL ENFORCEMENT ACTION

Additional EPA Reports: [MyEnvironment Enforcement and Compliance Site Demographics Report](#) | [Facility Coordinates Viewer](#) | [Environmental Justice Map Viewer](#) | [Watershed Report](#)

Standard Industrial Classification Codes (SIC)

Data Source	SIC Code	Description	Primary
CA-CERS	0000		

Facility Codes and Flags

EPA Region	09
DUNS Number	
Congressional District Number	10
Legislative District Number	
HUC Code/Watershed	18040002 / MIDDLE SAN JOAQUIN-LOWER MERCED-LOWER STANISLAUS
US Mexico Border Indicator	NO
Federal Facility	NO
Tribal Land	NO

Alternative Names

Alternative Name	Source of Data
ENVIRO TECH CHEMICAL SERVICES INC	CA-CERS
ENVIRO TECH.	TRIS
ENVIRO TECH CHEM SVC, INC.	SSTS
AMCOR MFG, INC	SSTS

Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OWNER/OPERATOR		805860483	TRIS	
OWNER	ENVIRO TECH CHEMICAL SVC, INC.		SSTS	View

National Industry Classification System Codes (NAICS)

Data Source	NAICS Code	Description	Primary
TRIS	325998	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING.	

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
FACILITY MAILING ADDRESS	500 WINMOORE WAY	MODESTO	CA	95358	SSTS
FACILITY MAILING ADDRESS	500 WINMOORE WAY	MODESTO	CA	95358	TRIS
FACILITY MAILING ADDRESS	500 WINMOORE WAY	MODESTO	CA	95358	CA-CERS
OWNER	713 FAUST RD	MODESTO	CA	95358	CA-CERS
OPERATION MANAGER	500 WINMOORE WY	MODESTO	CA	95358	CA-CERS
OWNER	500 WINMOORE WAY	MODESTO	CA	95358	SSTS
ENVIRONMENTAL CONTACT	500 WINMOORE WAY	MODESTO	CA	95358	CA-CERS
SECONDARY EMERGENCY CONTACT	500 WINMOORE WY	MODESTO	CA	95358	CA-CERS
OPERATOR	500 WINMOORE WY	MODESTO	CA	95358	CA-CERS

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
OWNER	MICHAEL HARVEY	2095309100	CA-CERS	View
COMPANY OFFICIAL	MICHAEL S HARVEY	20958195760104	SSTS	
OPERATOR	MIKE ARCHIBALD	2095819687	CA-CERS	View
ENVIRONMENTAL CONTACT	JON MACK	2095819576	CA-CERS	View
PUBLIC CONTACT	MICHAEL HARVEY	2095819576	TRIS	
OPERATION MANAGER	MIKE ARCHIBALD	2099857661	CA-CERS	View
SECONDARY EMERGENCY CONTACT	MICHAEL HARVEY	2097657729	CA-CERS	View

Query executed on: JAN-22-2015

Additional Information for CERCLIS or TRI sites:
 This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

- National Library of Medicine (NLM) [SDS](#) TOXMAP

[News Feeds](#) | [Podcasts](#) | [EPA Mobile](#) | [News by Email](#) | [Widgets](#)

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

Related Topics: Envirofacts | FRS

FRS Facility Detail Report

ENVIRO TECH CHEMICAL SERVICES-PLANT 6
 EPA Registry Id: 110063867383
 724 PHILLIPS COUNTY ROAD 411
 HELENA, AR 72342



Legend
 * Selected Facility
 ■ EPA Facility of Interest
 ■ State/Tribe Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

- Facility Registry Service Links:**
- [Facility Registry Service \(FRS\) Overview](#)
 - [FRS Facility Query](#)
 - [FRS Organization Query](#)
 - [EZ Query](#)
 - [FRS Physical Data Model](#)
 - [FRS Geospatial Model](#)

Environmental Interests

Information System	System/Facility Name	Information System ID/Report Link	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)	ENVIRO TECH CHEMICAL SERVICES-PLANT 6	AR0001410	ICIS-NPDES NON-MAJOR	ICIS		ICIS ENFORCEMENT/COMPLIANCE ACTIVITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)	ENVIRO TECH CHEMICAL SERVICES-PLANT 6	AR0001410	STORM WATER INDUSTRIAL	ICIS		ICIS ENFORCEMENT/COMPLIANCE ACTIVITY
TOXIC RELEASE INVENTORY SYSTEM	ENVIRO TECH CHEMICAL SERVICES-PLANT 6	72342W00172409	TRI REPORTER	TRIS	06/13/2016	

Additional EPA Reports: [MyEnvironment](#) [Enforcement and Compliance](#) [Site Demographics](#) [Facility Coordinates Viewer](#) [Environmental Justice Map Viewer](#) [Watershed Report](#)

Standard Industrial Classification Codes (SIC)

Data Source	SIC Code	Description	Primary
NPDES	2869	INDUSTRIAL ORGANIC CHEMICALS, NOT ELSEWHERE CLASSIFIED	
NPDES	2818	INDUSTRIAL INORGANIC CHEMICALS, NOT ELSEWHERE CLASSIFIED	

National Industry Classification System Codes (NAICS)

Data Source	NAICS Code	Description	Primary
TRIS	325998	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING	
NPDES	325100	OTHER BASIC INORGANIC CHEMICAL MANUFACTURING	

Facility Codes and Flags

EPA Region: 06
 Dates Number:
 Congressional District Number: 01
 Legislative District Number:
 HUC Code/Watershed: 08020303 / LOWER WHITE
 US Mexico Border Indicator:
 Federal Facility: NO
 Tribal Land: NO

Facility Mailing Address

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
MAILING ADDRESS	500 WINDHOORE WAY	MODESTO	CA	95358	NPDES
MAILING ADDRESS	500 WINDHOORE WAY	MODESTO	CA	95358	TRIS
OPERATOR	500 WINDHOORE WAY	MODESTO	CA	95358	NPDES

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
OPERATOR	PHILLIP HARVEY	8885632254	NPDES	View

Alternative Names
 No Alternative Names returned.

Organizations
 No Organizations returned.

Query executed on: NOV-11-2016

Additional information for CERCLIS or TRI sites:

This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

- National Library of Medicine (NLM) [CERCLIS](#) [TOXMAP](#)