PUBLIC NOTICE FACT SHEET – RESEARCH PERMIT

FACT SHEET

RESEARCH OCEAN DUMPING PERMIT

STARKIST SAMOA (OD 2020-01 RESEARCH)
LOCATED IN PAGO PAGO, AMERICAN SAMOA

I. SUMMARY

A research ocean dumping permit is being issued to StarKist Samoa Company (StarKist). The Regional Administrator of EPA Region 9 has determined that disposal of fish processing liquid wastes off American Samoa meets EPA's ocean dumping criteria at 40 C.F.R. Parts 227 and 228. This research permit authorizes the transportation and dumping into ocean waters of fish processing liquid wastes as described in the special conditions section pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (33 U.S.C. §§ 1401 *et seq.*) as amended (hereinafter referred to as "the Act"); regulations issued thereunder; and the terms and conditions stated below.

For this permit, the term "fish processing liquid wastes" shall refer to Dissolved Air Flotation (DAF) Sludge, Press Water, and Pre-Cooker Water generated at the permittee's plant in Pago Pago, American Samoa; or any combination of the three liquid waste streams pumped from StarKist Samoa's onshore holding tanks into the ocean disposal vessel for transportation to the ocean disposal site. This research permit will be evaluating StarKist's proposed three liquid wastes, comparing them to the three historic liquid wastes from the previous permits, and determining if there are any significant differences; fish processing methodology and facility waste stream management infrastructure has changed since mid-2012 when waste treatment was upgraded, and ocean disposal was discontinued. This research permit does not allow the disposal of other fish processing liquid wastes (i.e., butcher water), fish concentrate, other fish processing solid wastes (i.e., carcasses, entrails), or other solid materials generated from the StarKist Facility.

Disposal operations will occur under this research permit at a designated site located 5.45 nautical miles from land (14° 24.00' South latitude by 170° 38.20' West longitude) with a radius of 1.5 nautical miles in about 9,000 feet (1,500 fathoms) water depth. The location of this EPA-designated ocean disposal site was chosen to minimize cumulative impacts to the marine environment. During disposal of the historic fish processing liquid wastes, no significant long-term environmental impacts were found at the site during monitoring of the upper water column and the disposal plumes were shown to disperse rapidly within the ocean disposal site boundaries. StarKist will be allowed to dispose a maximum of 300,000 gallons per day of the proposed combined fish processing liquid wastes.

This research permit will require the permittee to conduct the following activities, including but not limited to field sampling, laboratory analysis, and record-keeping to be submitted for EPA Region 9 review and consideration for a future special permit:

1. Monitor the combined fish processing waste streams relative to constituent limits listed in the research permit, including - Total Solids, Total Volatile Solids, 5-Day Biological Oxygen Demand (BOD), Oil and Grease, Total Phosphorus, Total Nitrogen, Ammonia, pH, and Density;
2. Maintain disposal vessel navigation logs;
3. Conduct field observations during disposal trips;
4. Regulate fish processing liquid waste discharges in accordance with seasonal discharge rate requirements;
5. Conduct ocean disposal site monitoring on a monthly basis;
6. Conduct periodic confirmatory bioassays (at least two rounds of bioassays in the 18 months); and
7. Conduct confirmatory discharge plume dispersion modeling with updated ocean current data.

Information compiled during the term of this research permit and any other information collected about the ocean disposal of fish processing liquid wastes off American Samoa will be used by EPA Region 9 to compare these proposed fish processing liquid wastes to the historic fish processing liquid wastes, and to determine compliance with EPA's Ocean Dumping Regulations defined at 40 C.F.R. Parts 220 through 228 in consideration of issuing a future Special MPRSA Section 102 permit.

Updated compliance monitoring of ocean disposal operations will be required and implemented for this research permit, including installation of a secure (black box) system to record the total volume loaded and discharged, record continuous GPS locations during transit to and within the ocean disposal site, and monitoring the discharge rate as required by seasonal restrictions. The compliance monitoring data will be uploaded to a website database maintained by a third-party compliance monitoring contractor for review by EPA Region 9. These updated compliance monitoring requirements will replace the spreadsheet and paper-based record system employed in the past.

EPA Region IX has tentatively decided to proceed with issuance of this research permit. Comments on our proposed action will be requested from the permit applicants, the American Samoa Government, Federal agencies, and the public as required under EPA's Ocean Dumping Regulations at 40 C.F.R Parts 220 through 228. The Administrative Record, which includes the application package submitted by the applicant and the draft research permit, and a fact sheet, is available on the EPA Region 9 website (https://www.epa.gov/ocean-dumping/managing-ocean-dumping-epa-region-9) and for public review Monday to Friday from 9:00 a.m. to 4:00 p.m. at the: EPA Region 9 Library, 11th Floor, 75 Hawthorne Street, San Francisco, CA, (415) 947-4406; and EPA Pacific Island Contact Office, 300 Ala Moana Boulevard, Room 5124, Honolulu, HI, (808) 541-2710.

II. TENTATIVE DECISION

On February 23, 1996 and February 26, 1996, respectively, StarKist Samoa and VCS Samoa Packing Company applied for ocean dumping permits to dispose of their fish cannery liquid wastes at a designated ocean disposal site near Pago Pago, American Samoa. Fish processing liquid wastes were disposed at the designated site located 5.45 nautical miles from land (14° 24.00' South latitude by 170° 38.20' West longitude) with a radius of 1.5 nautical miles in 9,000 feet (1,500 fathoms) water depth [40 C.F.R. 228.12(b)(74)] until mid-2012 when ocean disposal was discontinued. EPA Region 9 is planning to grant the StarKist application by issuing a research ocean dumping permit which will last for 18 months. Current information indicates that disposal of fish processing liquid wastes at the designated site would comply with EPA's Ocean Dumping Regulations at 40 C.F.R. Parts 227 and 228. The StarKist waste management infrastructure was modified when waste treatment upgrades were implemented and ocean disposal was discontinued, so the research permit will now allow collection of data of the proposed fish processing liquid wastes, comparison of the data of these liquid wastes to that of the historic fish processing liquid wastes, and evaluation of whether the disposal of proposed fish processing liquid wastes continues to comply with criteria defined in EPA's Ocean Dumping Regulations. The permittee must also conduct a monitoring program at the ocean disposal site, including field and laboratory analyses. Results of the site monitoring program, cumulative liquid waste stream data, confirmatory bioassays, and confirmatory modeling will be used to document the extent of effects at the ocean disposal site and whether the dumping continues to comply with EPA's Ocean Dumping Regulations. The proposed dumping during the term of the research permit, if the proposed fish processing liquid wastes are substantially the same as the historic liquid wastes, is expected to have minimal impacts on human health and/or the marine environment. The primary environmental impact of the proposed discharges would be short-term increases in turbidity, inorganic nutrients, oil and grease, and ammonia during the dumping events. Past monitoring studies on the disposal of fish processing liquid wastes off American Samoa show that water quality parameters return to ambient conditions at the boundary of the disposal site following the four-hour period of initial mixing (40 C.F.R. 227.29). To be certain that American Samoa Water Quality Standards would not be violated by the disposal of fish processing liquid wastes, the center of the disposal site was designated 5.45 nautical miles offshore, and restrictive navigation requirements, disposal rates and limitations on the liquid waste material constituents are included in the research ocean dumping permit.

III. TERMS OF THE PERMIT

The research permit will be effective for an 18-month period from the start date. The conditions and special conditions of the research permit will be similar to previous permits; however, there will be some differences based on expected operational maximum capacities and updated compliance monitoring requirements.

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A. Volumes of Liquid Waste Material Proposed for Ocean Disposal Under OD2020-01

Table 1. Volume of Fish Processing Liquid Waste Authorized for Daily Disposal

Fish Processing Liquid Waste	**StarKist Samoa Company (gallons/day)**
Daily Maximum - Combined Waste Stream from Onshore Storage Tank	300,000 * (vessel tank capacity relative to the smaller onshore storage tank at 250,000 gallons)

*- Ocean disposal trips may occur every other day, depending on volumes of liquid waste generated from onshore fish processing operations.

B. Liquid Waste Material Limitations in the Proposed Permit OD2020-01

Table 2. Fish Processing Liquid Waste Constituent Limits

Storage Tank Physical or Chemical Parameter (units)[a]	**StarKist Samoa Company**
Total Solids (mg/L)	101,800
Total Volatile Solids (mg/L)	84,100
5-Day BOD (mg/L)	129,390
Oil and Grease (mg/L)	62,940
Total Phosphorus (mg/L)	1,750
Total Nitrogen (mg/L)	10,980
Ammonia (mg/L)	11,810
pH (pH units)	6.2 to 7.1
Density (g/mL)	0.97 to 1.03

a = All calculated values were rounded to the nearest 10, except the density and pH ranges.

IV. CALCULATION OF PERMIT LIMITS

Data from previous ocean dumping permits issued for ocean disposal of fish processing liquid wastes were used to calculate all permit limits - using maximum and minimum levels, mean, standard deviation and the number of data points. Any data values greater than or less than the mean plus or minus 2 standard deviations, were considered to be outliers. Outlier data points were not used in the permit limit calculations. All procedures for calculating permit limits are discussed in EPA's Guidance Document for Ocean Dumping Permit (January 30, 1988).

V. FACTORS CONSIDERED IN REACHING THE PERMIT DECISIONS

Overview of Disposal Operations

StarKist Samoa Company propose to dispose of fish processing liquid wastes at an ocean dump site centered approximately 5.45 nautical miles south of Tutuila Island in about 9,000 feet (1,500 fathoms water depth. The center coordinates of the site are: 14° 24.00' South latitude by 170° 38.20' West longitude. The fish processing liquid wastes (maximum of 300,000 gallons per day) will be transported to the upcurrent quadrant of the site and discharged at a rate less than or equal to 1,400 gallons per minute, depending on the season, at a maximum speed of 10 knots, in accordance with special conditions in the draft research permit. The disposal vessel will discharge the fish processing liquid wastes within a target area defined by an oval-shaped track with the center axis of the oval perpendicular to the current direction. This target area for disposal is located within the boundary of the designated ocean disposal site. On each trip, the master of the disposal vessel will document current direction at the center of the disposal site. He will then proceed to a point 1.1 nautical miles upcurrent of the prevailing surface current to discharge the liquid waste. The fish processing liquid wastes may be discharged only after this procedure has been conducted to ensure that the liquid waste plume has an adequate area for mixing within the disposal site boundary. Even though the ocean disposal site is outside of the American Samoa territorial sea, the MPRSA 102 research permit is designed to comply with oceanic water quality standards defined in § 24.0207(g)(1-7) of the American Samoa Water Quality Standard. This will ensure that oceanic waters inside American Samoa's territorial sea are not affected by the ocean disposal operations. Within four hours after dumping has ceased, concentrations of the fish processing liquid wastes must reach ambient levels at the disposal site boundary. After four hours, these concentrations must not exceed ambient levels at any point in the marine environment (40 C.F.R. section 227.29). There are disposal site monitoring requirements in the research permit. EPA Region 9 will evaluate potential impacts to water quality based on the site monitoring data and reports.

Compliance Monitoring under the Proposed Research Permit

The ocean disposal vessel is yet to be identified but will require the following specifications for compliance monitoring, including installation of a secure (black box) system to record the total volume loaded and discharged, record continuous GPS locations during transit to and within the ocean disposal site, and monitoring the specified discharge rate as required by seasonal restrictions in the permit. The compliance monitoring data will be uploaded to a website maintained by a third-party compliance monitoring contractor for review by EPA Region 9. These updated compliance monitoring requirements will replace the paper record-based system employed in the past.

Prior to commencement of ocean disposal operations, the permittee must submit documentation of installation of all required instrumentation and the black box system as well as proper operation within the specifications required by EPA Region 9. The US Coast Guard must inspect and confirm vessel will operate in accordance with the research permit conditions. All the documentation on compliance monitoring equipment, coordination with the third-party compliance monitoring contractor, and vessel specifications and ability to operate in accordance with the research permit conditions will be reviewed by EPA Region 9 before ocean disposal operations can occur.

StarKist will be required collect liquid waste stream samples to analyze for the required list of analytes in the research permit and to collect additional samples to run at least two sets of confirmatory bioassays on the combined three fish processing liquid wastes using composited samples collected from the onshore storage tank. Results of these confirmatory suspended phase acute toxicity bioassays will be used to calculate Limiting Permissible Concentration (LPC) values. The LPC values will be used to rerun the dilution model and confirm compliance with water quality standards at the ocean disposal site. All of this data will be uploaded to the third party compliance monitoring contractor website database. In addition, a report will be prepared by the permittee discussing the test procedures and results of the bioassay tests and model runs. EPA Region 9 will review the report to determine whether any changes in future ocean dumping permits are necessary.

VI. EPA'S AUTHORITY TO ISSUE OCEAN DUMPING PERMITS

EPA's authority to issue research ocean dumping permits is defined under Title I of MPRSA and at 40 C.F.R. 220.4. The authority to issue research permits was delegated to the Regional Administrator on January 11, 1977 (42 FR 2462). Section 102 of MPRSA authorizes EPA to issue permits for ocean dumping. The Agency must determine that the proposed dumping will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. In addition to these requirements, EPA must evaluate each permit application to determine whether the dumping will

comply with the criteria at 40 C.F.R. Part 227 and whether the designated site complies with the criteria at 40 C.F.R. Part 228. The American Samoa Fish Processing Waste disposal site was designated, through the publication of a Final Rule, on February 6, 1990 (55 FR 3948) at 40 C.F.R. 228.12(b)(74). The designation process consisted of publication of an environmental impact statement (EIS) according to EPA's voluntary EIS policy. The draft EIS for this project was published on September 16, 1988 (53 FR 38118) and a final EIS was published on March 3, 1989 (54 FR 9083). The final rule designating the ocean disposal site was published on February 6, 1990 (55 FR 3948). EPA Region 9 will periodically evaluate all of the data and associated information to determine whether the fish cannery disposal operations comply with the research permit conditions; this evaluation will inform any additional conditions or special conditions for a future special permit (for ongoing disposal operations after conclusion of research permits). If unacceptable impacts are detected at the site (40 C.F.R. §§ 228.10), or significant permit violations are found, EPA will determine whether use of the site should be restricted (40 C.F.R. §§ 228.10 and 228.11), or whether enforcement actions should be initiated under MPRSA.

VII. ADMINISTRATIVE PROCEDURES AND THE PUBLIC HEARING PROCESS

The processing of an ocean dumping permit consists of the following actions. EPA receives a completed application (40 C.F.R. §§ 221). EPA issues a tentative decision whether to grant or deny the research permit (40 C.F.R. §§ 222.2). A draft permit is the means by which EPA documents the intent to grant an ocean dumping permit. A public notice is issued to announce EPA's intent to issue the permit (40 C.F.R. §§ 222.3). The notice contains the following elements: summary, tentative determination, factors considered in reaching the tentative determination, hearing process, and the location of all information on the draft permit. Public notices describing EPA's intent to issue a permit are published in a daily newspaper in closest proximity to the proposed dump site. This proposed action has been published as a public notice by EPA Region 9, and the information and Administrative Record on this proposed action has also been posted on the EPA Region 9 website. Before a final decision can be made on the research permit, formal consultation must be documented with the following agencies: American Samoa Government, U.S. Army Corps of Engineers, U.S. Coast Guard, National Marine Fisheries Service, U.S. Fish and Wildlife Service and the Shellfish Sanitation Branch of the Food and Drug Administration.

Initiation of a Public Hearing

Within 30 days of the date of the public notice, any person may request a public hearing to consider issuance or denial of the research permit or conditions to be imposed upon this permit. Any request for a hearing must be made in writing; must identify the person requesting the hearing; and must clearly state any objections to issuance or denial of the permit or to the

conditions to be imposed upon the permit, and the issues to be considered at the hearing. According to 40 C.F.R. §§ 222.4, the Regional Administrator may schedule a hearing, at his discretion, based on genuine issues presented in the written request. Upon receipt of a written request presenting genuine issues amenable to resolution by a public hearing, the Regional Administrator may determine a time and place for the hearing and publish a notice of the hearing. All interested parties will be invited to express their views on the proposed issuance or denial of the permit at the hearing if one is held. If a request for a public hearing is made within 30 days of the date of this notice and does not meet the above criteria, the Regional Administrator must advise the requesting person of his decision to deny the hearing in writing and proceed to rule on the application. Following adjournment of the public hearing, the Presiding Officer, appointed by the Regional Administrator, prepares written recommendations about the issuance, denial or conditions to be imposed upon the permit after full consideration of the views and arguments expressed at the hearing (40 C.F.R. §§ 222.6 through 222.8). The Presiding Officer's recommendations and the record of the hearing are forwarded to the Regional Administrator within 30 days of the hearing. The Regional Administrator makes a determination whether to issue, deny or impose conditions on the permit within 30 days of receipt of the Presiding Officer's recommendations. He must give written notice of the decision to any person appearing at the public hearing (40 C.F.R. §§ 222.9). A research permit becomes effective 10 days after issuance, if no requests for an adjudicatory hearing are received. Requests for an adjudicatory hearing may be made to the Regional Administrator within 10 days of receipt of the notice to issue or deny the permit (40 C.F.R. §§ 222.10 and §§ 222.11). An appeal of the Regional Administrator's adjudicatory hearing decision may be made in writing to the Administrator of EPA within 10 days following receipt of the Regional Administrator's determination on the need for an adjudicatory hearing (40 C.F.R. §§ 222.12).

VIII. ADDITIONAL INFORMATION

For further information on the research permit or questions pertaining to MPRSA or the EPA Ocean Dumping Regulations, please contact EPA Region 9: Allan Ota, Water Division (WTR-2-2), U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, California 94105-3901, (415) 972-3476.