UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, California 94105

IN THE MATTER OF:	)	DOCKET NO. CWA-09-2020-0061
	)	
Airtech International, Inc.	)	
Huntington Beach, CA	)	**COMPLAINT, CONSENT AGREEMENT AND FINAL ORDER**
	)	
Respondent.	)	
	)	*Class II Administrative Penalty Proceeding under Section 309(g) of the Clean Water Act, 33 U.S.C. § 1319(g), and 40 C.F.R. §§ 22.13(b) and 22.18*
	)	
	)	
	)	

CONSENT AGREEMENT AND FINAL ORDER

I. AUTHORITY AND PARTIES

1. This is a Class II civil administrative penalty proceeding under Section 309(g)(1)(A) and 2(B) of the Clean Water Act (CWA), 33 U.S.C. § 1319(g)(1)(A) and 2(B), and 40 C.F.R. Part 22 (*Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits*).

2. Pursuant to Section 309(g) of the CWA, 33 U.S.C. § 1319(g), the Administrator of the United States Environmental Protection Agency (EPA) is authorized to assess administrative penalties against persons who violate Section 301(a) of the Act, 33 U.S.C. § 1311 (a). The Administrator has delegated this authority to the Regional Administrator of the EPA Region IX, who in turn has delegated this authority to the Director of the Enforcement Division, hereinafter "Complainant."

3. Respondent is Airtech International, Inc.

4. This Consent Agreement and Final Order (CA/FO), which contains the elements of a complaint required by 40 C.F. R. § 22.14(a), simultaneously commences and concludes this penalty proceeding, as authorized by 40 C.F.R. §§ 22.13(b) and 22.18(b)(2) and (3).

NOW THEREFORE, before the taking of any testimony, without adjudication of any issue of fact or law, and upon consent by the EPA and Respondent, it is hereby STIPULATED, AGREED, AND ORDERED:

II. STATUTORY AND REGULATORY FRAMEWORK

5. CWA Section 301(a), 33 U.S.C. § 1311(a), makes it unlawful for a person to discharge pollutants from a point source into waters of the United States, except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to CWA Section 402, 33 U.S.C. § 1342.

6. CWA Section 402, 33 U.S.C. § 1342, establishes the NPDES program and authorizes the EPA and authorized states to issue permits governing the discharge of pollutants from point sources into waters of the United States and CWA Section 402(p), 33 U.S.C. § 1342(p) requires that NPDES permits be issued for stormwater discharges "associated with industrial activity."

7. 40 C.F.R. § 122.26(b)(14)(xi) defines stormwater discharges associated with industrial activity to include plastic product manufacturing classified under SIC Major Group 30.

8. Pursuant to CWA § 402(p)(4), dischargers of stormwater associated with industrial activity are required to seek coverage under a promulgated general permit or seek individual permit coverage.

9. The State of California has an EPA-authorized NPDES program and issues permits, including industrial stormwater permits, through its State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards. On April 17, 1997, the State Water Board adopted General Permit No. CAS000001 for *Discharges of Stormwater Associated with Industrial Activities Excluding Construction Activities*, Water Quality Order No. 97-03-DWQ, which was in effect through June 30, 2015 and subsequently revised by the State Water Board on April 1, 2014, Water Quality Order No. 2014-0057-DWQ, which became effective on July 1, 2015 (hereinafter, "General Permit").

10. Pursuant to CWA Section 309(g)(2)(B), 33 U.S.C. § 1319(g)(2)(B), and 40 C.F.R. Part 19.4, EPA may assess a Class II civil administrative penalty of up to $16,000 per day of violation, not to exceed $187,500 in total, against a person for CWA Section 301(a) violations that occurred after December 6, 2013. For violations that occurred after November 2, 2015, where penalties are assessed on or after February 6, 2019, the EPA may assess a penalty up to $21,933 per day of violation, not to exceed $274,159 in total.

III. FINDINGS OF FACT, JURISDICTIONAL ALLEGATIONS, AND CONCLUSIONS OF LAW

11. Respondent is a California corporation and therefore, a person within the meaning of CWA § Section 502(5), 33 U.S.C. § 1362(5). Respondent operates a vacuum bagging and composite tooling materials facility located at 5700 Skylab Road, Huntington Beach, CA, hereinafter "Facility."

12. Respondent has been engaged in vacuum bagging and composite tooling materials at the Facility since at least August 1998, a date best known to Respondent. Respondent's

operations at the Facility fall within activities classified under SIC Code 3081 Unsupported Plastics Film and Sheet, and is therefore an "industrial activity" for purposes of CWA Section 402(p), 33 U.S.C. § 1342(p), and 40 C.F.R. § 122.26(b)(14)(xi).

13. Stormwater runoff from the Facility is a "stormwater discharge associated with industrial activity" as defined by 40 C.F.R. § 122.26(b)(14)(xi).

14. Stormwater runoff from the Facility discharges by way of an engineered conveyance into an on-site storm drain inlet connected to the City of Huntington Beach Municipal Separate Stormwater System ("MS4"). Such inlets and the City of Huntington Beach MS4 are "point sources" within the meaning of CWA § 502(14), 33 U.S.C. § 1362(14).

15. Stormwater discharges from the facility include waste from industrial processes, specifically plastic resin pellets, oil and grease, and scrap metal, and therefore contain "pollutants," as defined by CWA Section 502(6), 33 U.S.C. § 1362(6).

16. Discharges from the Facility enter a storm drain on the southeast side of the Facility and enters into the City of Huntington Beach MS4 flowing less than one mile into the Bolsa Chica Channel and then for three miles to the Bolsa Chica Ecological Reserve before entering the Pacific Ocean. The Bolsa Chica Channel, the Bolsa Chica Ecological Reserve, and the Pacific Ocean are "waters of the United States" within the meaning of CWA § 502(7), 33 U.S.C. § 1362(7) and implementing regulations.

17. Respondent's discharge of pollutants in stormwater into waters of the United States constitutes a "discharge of pollutants" within the meaning of CWA Section 502(12), 33 U.S.C. § 1362(12).

18. On March 14, 2018, representatives of EPA Region 9 inspected the Facility to evaluate Respondent's compliance with the General Permit. EPA inspectors found that Respondent had not submitted a Notice of Intent ("NOI") to the State Water Board seeking authorization to discharge industrial stormwater under the General Permit or an individual NPDES permit. During the inspection, EPA observed the following: (1) industrial materials stored in an outside area and exposed to stormwater, including a forklift battery, scrap metal, and a waste bin without a proper lid; (2) open waste containers that were overfilled with cardboard, foam debris and waste material stored outdoors near the Facility's shipping and receiving area; (3) plastic resin pellets scattered on the loading dock floor and around the outer landscaped perimeter; (4) industrial materials (e.g. plastic resin pellets) were observed in the engineered stormwater perimeter conveyance that flows toward one of the on-site stormwater drains at the Facility; and (5) plastic resin pellets at the opening of the on-site storm drain without the permit-required best management practices necessary to prevent plastic pellets from discharging with industrial stormwater.

19. On or around January 10, 2019, Respondent submitted an NOI to the State Water Board seeking coverage under the General Permit for the Facility. On January 15, 2019, the State Water Board granted Respondent coverage under the General Permit and assigned WDID Number 8 301028022 to the Facility. Prior to January 15, 2019, industrial stormwater

discharges from Respondent's Facility were not authorized by the General Permit or an individual NPDES permit.

20. Between December 15, 2014 and January 14, 2019, at least twenty-one (21) days with rainfall in excess of 0.5 inches were recorded at the John Wanye Airport in Santa Ana, California. Upon information and belief, each of these twenty-one (21) rainfall events resulted in a discharge from the Facility.

IV. ALLEGED VIOLATIONS

21. Between December 15, 2014 and January 14, 2019, Respondent violated CWA Section 301(a), 33 U.S.C. § 1311(a) on at least twenty-one (21) days by discharging pollutants from a point source into waters of the United States without NPDES permit authorization.

V. ADMINISTRATIVE PENALTY

22. In consideration of the penalty factors of CWA Section 309(g), 33 U.S.C. § 1319(g) and Respondent's performance of the tasks set forth in Section VI of this CA/FO, Respondent shall pay to the United States a civil administrative penalty in the amount of $95,208 within thirty (30) calendar days of the Effective Date, as defined in Section XIII below, of this CA/FO.

23. Respondent shall make penalty payment by one of the options listed below:

a. Check Payment. Payment by a cashier's or certified check shall be made payable to "Treasurer, United States of America" and be mailed as follows:

i. *If by regular U.S. Postal Service Mail*:

U.S. Environmental Protection Agency
Fines and Penalties
PO BOX 979077
St. Louis, MO 63197-9000

ii. *If by overnight mail:*

U.S. Environmental Protection Agency
Government Lockbox 979077
USEPA Fines and Penalties
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101

b. Automated Clearinghouse Payment: Payment by Automated Clearinghouse (ACH) via Vendor Express shall be made through the U.S. Treasury as follows:

U.S. Treasury REX/Cashlink ACH Receiver
ABA: 051036706
Account Number: 310006, Environmental Protection Agency
CTX Format Transaction Code 22 – checking

c. Fedwire: Payment by wire transfer to the EPA shall be made through the Federal Reserve Bank of New York as follows:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
(Field Tag 4200 of the Fedwire message should read: D 68010727 Environmental Protection Agency)

d. Online Payment: This payment option can be accessed from the information below

Go to www.pay.gov
Enter "SFO Form Number 1.1." in the search field
Open "EPA Miscellaneous Payments – Cincinnati Finance Center" form and complete required fields

Payment instructions are available at: http://www2.epa.gov/financial/makepayment. If clarification regarding a particular method of payment remittance is needed, contact the EPA Cincinnati Finance Center at (513) 487-2091.

24. To ensure proper credit, Respondent shall include the following transmittal information with the penalty payment: (i) Respondent's name (as appeared on the CA/FO), complete address, contact person, and phone number; (ii) the EPA case docket number; (iii) the EPA contact person; and (iv) the reason for payment.

25. Concurrent with the payment, Respondent shall send a true and correct copy of the payment and accompanying transmittal information to the following addresses:

Regional Hearing Clerk
Office of Regional Counsel (ORC-1)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Desean Garnett
Office of Regional Counsel, ORC 2-4
U.S. Environmental Protection Agency, Region 9

75 Hawthorne Street
San Francisco, CA 94105

26. Respondent shall not, and shall not allow any other person to, deduct any penalties and interest paid under this CA/FO from federal, state, or local taxes.

27. Pursuant to CWA Section 309(g)(9), 33 U.S.C. § 1319(g)(9), if Respondent fails to pay the assessed penalty on time, the EPA may request the U.S. Department of Justice to bring a civil action to recover the overdue amount, plus interest at currently prevailing rates from the Effective Date of this CA/FO. In such an action, the validity, amount, or appropriateness of the assessed penalty shall not be subject to review. In addition to any assessed penalty and interest, Respondent shall pay attorney fees, costs for collection proceedings, and a quarterly nonpayment penalty, which shall equal 20% of the aggregate amount of Respondent's penalties and nonpayment penalties that are unpaid as of the beginning of such quarter, for each quarter during which such failure to pay persists. The EPA may also take other debt collection actions as authorized by law, including, but not limited to, the Debt Collection Act, 33 U.S.C. § 3711, and 33 C.F.R. Part 13.

VI. SUPPLEMENTAL ENVIRONMENTAL PROJECT

28. As part of the settlement of this administrative civil penalty action, Respondent shall perform an Environmental and Restoration and Protection Supplemental Environmental Project, as described in Paragraph 29 and Attachment A of this CA/FO. The EPA has taken Respondent's commitment to complete the following SEP into consideration in determining the assessed penalty amount.

29. By December 31, 2020, Respondent shall complete the following tasks, as described in further detail in Respondent's Proposal, entitled "Proposed Supplemental Environmental Project to Support Restoration of the Local Marine Environment," which is included as Attachment A to this CA/FO and is hereby incorporated by reference:

Beach Clean-ups

a. By December 31, 2020, Respondent shall perform five beach clean-up events encompassing the specified areas within Huntington Beach, as described in Attachment A;

b. All garbage and debris thus removed shall be disposed of using waste bins provided by Huntington State Beach (California Department of Parks and Recreation).

Oyster Bed Survey and Shell Replacement

a. By December 31, 2020, sample eight restoration plots to assess abundance of Olympia oysters in the Upper Newport Bay and add Pacific oyster shells to bring the coverage of the shell substrate in the plots to a target of 70% to 80%, as described in Attachment A;

Eelgrass Replanting

a. By December 31, 2020, survey the extent of eelgrass in the Upper Newport Bay living shorelines restoration sites maintained by Orange County Coastkeeper, measured by density and replant eelgrass plots with less than 60% overall total cover to improve sustainability, as further described in Attachment A;

30. Respondent is responsible for ensuring that the entity or entities performing any portion of the SEP comply with the applicable terms of this CA/FO.

31. In performing this SEP, Respondent shall spend a minimum of $66,120 in costs for the tasks described in Paragraph 29 and Attachment A of this CA/FO.

32. By July 2, 2020, Respondent shall submit a SEP progress report detailing the progress Respondent has made toward SEP completion. The progress reports shall provide, at a minimum, documentation of:

    a. The dates, times, locations, volume or weight of debris collected;

    b. The dates and number of oyster restoration plots sampled and quantity of shell replacement; and

    c. The number of plots replanted and the total square meters of eelgrass habitat surveyed.

33. Within thirty (30) calendar days of completing the SEP tasks described in Paragraph 29 and Attachment A of this CA/FO, and incurring the SEP costs set forth in Paragraph 31, Respondent shall submit to EPA a SEP Completion Report that includes the following information:

    a. A detailed description of the work undertaken to complete the SEP, including:

        i. photographic and/or video documentation of each of the five beach clean-up events, the date and area cleaned, volume or weight of debris collected;

        ii. documentation of oyster sampling and shell replacement tasks; and

        iii. documentation of eelgrass sampling and replanting tasks;

    b. A description of any problems encountered in completing the SEP and the solutions thereto;

    c. An itemized list of all eligible SEP costs expended to implement the SEP, including supporting documentation verifying Respondent's expenditures for this project. This documentation shall include, but is not limited to, proof of any amount paid to a contractor or entity to implement the project;

d. Certification by Respondent that the SEP has been fully implemented pursuant to the provisions of this CA/FO; and

e. A description of the specific environmental and/or public health benefits resulting from implementation of the SEP, including a quantification of pollutant reduction achieved as a result of the project.

34. Respondent agrees that failure to submit the SEP Completion Report required by Paragraph 33 shall result in Respondent's liability for stipulated penalties pursuant to Paragraph 39.a of this CA/FO.

35. With regard to the SEP, Respondent certifies the truth and accuracy of each of the following:

a. That all cost information provided to the EPA in connection with the EPA's approval of the SEP is complete and accurate and that the Respondent in good faith estimates that the cost to implement the SEP, exclusive of Respondent's internal labor costs, is $66,120;

b. That, as of the date of executing this CA/FO, Respondent is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

c. That the SEP is not a project that Respondent was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this CA/FO;

d. That Respondent has not received and will not have receive credit for the SEP in any other enforcement action;

e. That Respondent will not receive reimbursement for any portion of the SEP from another person or entity;

f. That for federal income tax purposes, Respondent agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP;

g. That Respondent is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in Paragraph 29 and Attachment A to this CA/FO; and

h. Respondent shall inquire of any contractor or entity employed to implement the SEP whether it is a party to an open federal financial assistance transaction that is funding or could fund the same activity as the SEP. Respondent shall not use any contractor or entity that is a party to such a transaction to implement the SEP.

36. The SEP shall be deemed to be "satisfactorily completed" when Respondent has completed the tasks described in Paragraph 29 and Attachment A to this CA/FO, expended the minimum amount identified in Paragraph 31, and submitted the SEP Completion Report to EPA in accordance with Paragraph 33. The determination of whether Respondent has satisfactorily complied with the terms of this Consent Agreement is within the sole discretion of the Complainant, but will be made in good faith. The decision of the Complainant is not reviewable in any forum. EPA shall notify Respondent whether the SEP has been satisfactorily completed following submission of the SEP Completion Report, and Respondent shall have the SEP Cure Period of sixty (60) days from the receipt of such notice (or such other time period as the Parties agree upon) to address any alleged deficiencies. If Respondent does not address the alleged deficiencies within the SEP Cure Period, penalties shall accrue in accordance with Paragraph 39.a of this CA/FO.

37. Respondent shall maintain legible copies of all documentation relevant to the SEP or reports submitted to the EPA pursuant to this CA/FO and shall provide such documentation or reports to the EPA not more than seven (7) days after a request for such information.

38. Any public statement, oral or written, in print, film, or other media, made by Respondent or a representative of Respondent making reference to the SEP must include the following sentence: "This project was undertaken in connection with the settlement of an enforcement action taken by the U.S. Environmental Protection Agency for alleged violations of the Clean Water Act."

VII. STIPULATED PENALTIES

39. If Respondent violates any requirement of this CA/FO relating to the SEP, Respondent shall pay stipulated penalties to the United States as follows:

    a. If Respondent fails to satisfactorily complete the SEP by December 31, 2020 or within the SEP Cure Period, whichever is later, then Respondent shall pay stipulated penalties for each day for which it fails to satisfactorily complete the SEP, or cure any deficiencies as noted by EPA under Paragraph 36, as follows:

Period of Failure to Comply	Penalty per day, per violation
1st through 30th day	$ 500
31st through 59th day	$1,000
60th day and beyond	$1,500

    b. If Respondent fails to timely submit the SEP Completion Report or the SEP progress report, then Respondent shall pay a stipulated penalty of $250 per day that the SEP Completion Report or SEP progress report is submitted late to EPA.

    c. If Respondent fails to implement the SEP or abandons work on the SEP prior to its completion, then Respondent shall pay a stipulated penalty of $66,120 together with interest accruing from the Effective Date of this CA/FO.

d. If Respondent does not expend the entire amount specified in Paragraph 31, while otherwise meeting the requirements of the SEP, then Respondent shall pay a stipulated penalty equal to the difference between the amount expended as demonstrated in the SEP Completion Report and the amount specified in Paragraph 31, plus an additional Stipulated Penalty of 10% of the remaining balance paid. Respondent shall pay the stipulated penalty using one of the methods of payment specified in Paragraph 23, above, and will pay interest, handling charges, and nonpayment penalties on any overdue amounts.

e. Notwithstanding anything herein to the contrary, if the SEP is not completed but EPA, in its sole discretion, determines that Respondent made good faith and timely efforst to complete the SEP, and Respondent certifies, with supporting documentation, that a least 100 percent of the amount of money which was required to be spent was expended on the SEP, Respondent shall not be liable for any stipulated penalty.

f. If the SEP is not satisfactorily completed by December 31, 2020, or such later date as is mutually agreed to in writing among the Parties, Respondent shall pay a stipulated penalty of $82,650, less any eligible SEP costs incurred that EPA determines were expanded on the SEP in a manner consistent with this CA/FO and Attachment A. If Respondent does not address allege deficiencies in SEP performance during the SEP Cure Period, as described in Paragraph 38, penalties under this paragraph shall accrue. The penalties under this paragraph for failure to accomplish satisfactory completion of the SEP may accrue regardless of whether Respondent has spent $66,120 on the SEP. If EPA elects to seek a stipulated penalty under this Paragraph, the obligations of the Respondent to complete the SEP shall terminate upon payment of the stipulated penalty under this Paragraph.

40. Notwithstanding any other provision of this Section, the EPA may, in the unreviewable exercise of its discretion, waive stipulated penalties otherwise due under this CA/FO.

41. Respondent shall pay any stipulated penalties within thirty (30) calendar days of receiving the EPA's written demand for such penalties. All penalties shall begin to accrue on the first date of noncompliance, and shall continue to accrue through the date of completion. Respondent shall use one of the methods of payment specified in Paragraph 23, above, and will pay interest, handling charges, and nonpayment penalties on any overdue amounts.

42. The payment of stipulated penalties shall not alter in any way Respondent's obligation to complete the requirements of this CA/FO.

VIII. APPLICABILITY

43. This CA/FO shall apply to and be binding on Respondent, Respondent's officers, directors, partners, agents, employees, contractors, successors and assigns. Action or inaction of any persons, firms, contractors, employees, agents, or corporations acting under, through, or for

Respondent shall not excuse any failure of Respondent to fully perform its obligations under this CA/FO. Changes in ownership, real property interest, or transfer of personal assets shall not alter Respondent's obligations under this CA/FO.

IX. RESPONDENT'S ADMISSIONS AND WAIVERS

44. In accordance with 40 C.F.R. § 22.18(b), for the purpose of this proceeding, Respondent:

    a. admits the jurisdictional allegations of the complaint;

    b. neither admits nor denies specific factual allegations contained in the complaint;

    c. consents to all conditions specified in this CA/FO and to the assessment of the civil administrative penalty set forth in Section V above;

    d. waives any right to contest the allegations set forth in this CA/FO; and

    e. waives its right to appeal this proposed Final Order.

X. RESERVATION OF RIGHTS

45. In accordance with 40 C.F.R. § 22.18(c), full payment of the penalty set forth in this CA/FO only resolves Respondent's CWA civil penalty liabilities for the violations specifically alleged herein and does not in any case affect the right of the EPA to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violations of law.

46. This CA/FO is not a permit or modification of any existing permit issued pursuant to any federal, state, or local laws or regulations, and shall in no way relieve or affect Respondent's obligations under any applicable federal, state or local laws, regulations, or permits.

XI. ATTORNEY FEES AND COSTS

47. Unless otherwise specified, each party shall bear its own attorney fees and costs.

XII. NOTICES

48. Respondent shall send all required submissions and any other written communications via email to each of the following individuals:

    Lawrence Torres
    Life Scientist
    U.S. Environmental Protection Agency, Region 9
    Enforcement and Compliance Assurance Division
    torres.lawrence@epa.gov

and

Desean Garnett
Attorney-Advisor
U.S. Environmental Protection Agency, Region 9
Office of Regional Counsel
garnett.desean@epa.gov

49. Respondent's submissions must be signed and certified, using the language below, by a person described by 40. C.F.R. § 122.22(3)(b):

> *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

XIII. EFFECTIVE DATE AND TERMINATION

50. In accordance with 40 C.F.R. §§ 22.18(b)(3) and 22.31(b), the Effective Date of this CA/FO is the date that the Final Order, having been signed by the Regional Judicial Officer, is filed with the Regional Hearing Clerk. This CA/FO shall terminate when Respondent has complied with the requirements of this CA/FO in full.

XIV. PUBLIC NOTICE

51. Pursuant to CWA Section 309(g)(4), 33 U.S.C. §1319(g)(4), and 40 C.F.R. § 22.45(b), this Consent Agreement is subject to public notice and comment prior to issuance of the proposed Final Order. Complainant reserves the right to withhold or withdraw consent to this Consent Agreement if public comments disclose relevant and material information that was not considered by Complainant in entering into this Consent Agreement. Respondent may withdraw from this Consent Agreement only upon receipt of written notice from the EPA that it no longer supports entry of this Consent Agreement.

52. Pursuant to CWA Section 309(g)(1), 33 U.S.C. § 1319(g)(1), the EPA has consulted with the State of California regarding this penalty action.

For Complainant the U.S. Environmental Protection Agency, Region 9

Amy C. Miller
Director
Enforcement and Compliance Assurance Division

12/12/19
Date

For Respondent Airtech International, Inc.

Name: John Maligie
Title: Senior Vice President, Manufacturing

11 December 2019
Date:

FINAL ORDER

It is Hereby Ordered that this Consent Agreement and Final Order (U.S. EPA Docket No. CWA-09-2020-0001) be entered and that Respondent shall pay a civil penalty in the amount of $95,208 and complete the Supplemental Environmental Project described in Paragraph 29 and Attachment A to this CA/FO by December 31, 2020, in accordance with the terms of this Consent Agreement and Final Order.

02/03/20
Date

Steven L. Jawgiel
Regional Judicial Officer
U.S. EPA, Region IX

CERTIFICATE OF SERVICE

I hereby certify the attached copy of the Consent Agreement and Final Order was sent to Respondent by U.S. Certified Mail, Return Receipt Requested this 7th day of February, 2020 to:

Airtech International, Inc.
5700 Skylab Road
Huntington Beach, CA 92647

Certified Mail Number: 7019 0700 0001 7652 8322

I hereby certify a copy of the Consent Agreement and Final Order was delivered to the following Agency attorney:

Desean Garnett
Office of Regional Counsel
U.S. EPA, Region IX
75 Hawthorne St., ORC-2-4
San Francisco, CA 94105

Feb. 7, 2020
Date

Steven Armsey

Steven Armsey
~~Acting~~ Regional Hearing Clerk
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

AIRTECH
ADVANCED MATERIALS GROUP

PROPOSED SUPPLEMENTAL ENVIRONMENTAL PROJECT TO SUPPORT RESTORATION OF THE LOCAL MARINE ENVIRONMENT

Understanding of the Problem and Proposed Remedies

The Clean Water Act regulates plastics and suspended solids as pollutants through its NPDES permitting process and, in particular, its storm water pollution prevention regulations as implemented in the case by Airtech through the California Water Resources Control Board's Industrial General Permit.

Discharges of plastic pellets and suspended solids can cause significant harm to the marine environment, as has been observed in the Orange County coast area, including significant loss of eelgrass and oyster habitat. Such damage due to regulated pollutants discharged from industrial facilities can be reduced through Best Management Practices (BMPs), administrative controls and monitoring required of facilities operating under the State Industrial General Permit. However, as discussed in this SEP proposal, there are actions that can be taken to mitigate currently existing harm to the marine environment.

This SEP arises out of observations made by the U.S. EPA Region IX Office of Water Programs, which identified the presence of plastic pellets and other pollutants—primarily suspended solids—potentially in contact with storm water at the Airtech facility, which is in the plastics industry. In response to the Agency's Administrative Order for compliance, Airtech achieved compliance with the State Industrial General Permit and the Order was terminated on June 3, 2019. Monitoring results indicate the facility is a source of Total Suspended Solids (TSS) and, based on its presumed historical discharge of plastic pellets and TSS, has contributed to the damage to the coastal marine environment.

To remediate environmental harm and to further reduce pollutant discharges at the source, Airtech proposes an environmental restoration project to be performed under contract by the Orange County Coastkeeper organization.

The SEP will include three distinct aspects of marine restoration in the Huntington Beach—Newport Beach coastal area:

One, Orange County Coastkeeper's Marine Restoration Program will conduct five Huntington Beach clean-up events;

Two, Orange County Coastkeeper will perform a project to enhance its oyster habitat restoration activities by sampling followed by replacing more oyster shells than removed to promote greater future habitat density; and

Three, Orange County Coastkeeper will survey eelgrass density in selected areas or plots and replant underpopulated plots of this critical component of the coastal ecosystem to assure a 60% density target for sustainability.

Each of these projects have a nexus to the type of Clean Water Act violations observed at the Airtech facility as it manufactures plastic products, which are part of beach litter and handles plastic pellets, which, if discharged with storm water are harmful to oysters, and its facility is a source of suspended solids adversely affecting eelgrass.

These three projects in tandem will help restore the damaged marine environment and support Orange County Coastkeepers' mission of community involvement in protection of the coastal ecosystem, and to substantially reduce the adverse effects of storm water pollution.

A full description of the Orange County Coastkeeper's Agreement with Airtech to accomplish the SEP's objectives and its cost details are included in Attachment 1. The proposed SEP cost, which is dedicated solely to fund Coastkeeper's marine restoration projects, is $66,120.

Coastkeeper Projects Meet SEP Guidelines

- *A SEP must improve, protect, or reduce risks to public health or the environment, although in some cases a SEP may, as a secondary matter, also provide the violator with certain benefits.*

  This SEP proposal will improve the currently damaged coastal environment by removing beach contamination, including plastic materials, and restoring oyster and eelgrass habitat through contracted services performed by Orange County Coastkeeper.

- *A SEP must be in settlement of an enforcement action.*

  This SEP is proposed in connection with an enforcement action by U.S. EPA.

- *A SEP is not otherwise legally required to perform.*

  Airtech is not otherwise legally required to perform the proposed SEP.

  This proposal also meets all guidelines a SEP must meet.

- *All projects must have sufficient nexus, a relationship between the violation and the proposed project.*

  The enforcement action alleges violation of § 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a) due to discharge of water pollutants without NPDES permit authorization. This SEP would directly benefit the marine coastal environment impacted or potentially impacted by the alleged violations by removing and properly disposing of plastic and other debris from local beaches and mitigating damage to eelgrass and oyster habitats damaged by plastic and suspended solids or turbidity.

- *The SEP may not be inconsistent with any provision of the underlying statutes that are the basis of the enforcement action and must advance at least one of the objectives of the environmental statutes that are the basis of the enforcement action.*

  The objective of the Clean Water Act's storm water pollution prevention regulations is to improve environmental quality of affected waters by reducing discharges or the threat of discharges of pollutants carried by storm water run-off into those waters. This SEP is not inconsistent with the Clean Water Act and will directly improve water quality by removing coastal debris and potential pollutants from waterways and restoring compromised marine ecosystems.

- *A SEP may not be an agreement to spend a certain amount on a project that will be defined later. Type and scope of the project must be clearly defined for a case team to establish nexus.*

  This SEP is a clearly defined three-part project that will restore the Orange County coastal environment through specified project elements to be performed under contract between Airtech and Orange County Coastkeeper.

Qualifying Categories of Acceptable SEPs

Of the seven qualifying categories of acceptable SEPs, this SEP would primarily qualify as an Environmental Restoration and Protection Project.

Environmental Restoration and Protection (Category D)

This SEP's Environmental Restoration component is a three-part project to conduct beach plastic and debris clean-ups and restore the ecosystem directly affected by historical discharges of plastic pellets and TSS particulate through the eelgrass and oyster bed habitat restoration project designed by Orange County Coastkeeper under contract with Airtech. This project meets the SEP guidelines definition of an Environmental Restoration and Protection category.

Goals and Success Criteria for SEP

The goals of this aspect of Airtech's SEP as set forth in Coastkeepers' project description [Attachment 1] are to 1) conduct five additional Huntington Beach clean-up events to remove a substantial amount of plastic and other types of debris from the beach area and properly dispose it; 2) extend and expand Newport Bay marine ecosystem restoration and expansion of oyster habitats through sampling and replacing oyster shells to maintain this marine resource; and 3) survey and replant deficient eelgrass plots. An additional benefit of this overall project is to expand outreach activities to include more educational opportunities and participation by volunteers and other participants interested in monitoring and maintaining restored marine habitats.

Success of the project will be measured by the monitoring process and its projected results, which are expected to show a statistically greater density of native oysters in restored plots where shell habitat has been added compared to non-enhanced control plots. The project will result in enhancement of significant areas of oyster shell coverage and eelgrass beds over the course of the project. The critical need for marine restoration projects as proposed by this SEP has been identified by NOAA Fisheries West Coast Region, which, in response to damage of eelgrass habitats crucial to the marine ecosystem has adopted an Eelgrass Mitigation Policy to study and implement restoration projects similar to this SEP. Contaminated storm water has been identified as a cause of eelgrass along with oyster habitat deterioration. As a further linkage to the storm water pollutants involved in this SEP, the *Los Angeles Times* reported on February 9, 2016 the extent to which plastic pellets and microplastic pollutants adversely affect oyster populations based on several studies in both laboratory and marine settings. [*See* Attachments 2 and 3.]

Measurement of success of the Airtech-sponsored Orange County Coastkeeper project will be shown by the following goals, which have a high probability of success given Coastkeeper's experience and track record, and Airtech's oversight.

Beach Clean-ups: This aspect of the SEP will support five beach clean-up events located between Huntington Beach and the mouth of the Santa Ana River, which is a point of a large accumulation of trash and debris, as more fully explained in Coastkeeper's work agreement (Attachment 1). Based on past beach clean-ups, hundreds of pounds of litter, including particularly harmful small items like cigarette butts, will be collected and properly disposed. The project's progress reports provided to Airtech for oversight will document the times, locations, volume of debris gathered and the disposal method.

Oyster Bed Survey and Shell Replacement: As explained in Attachment 1, Orange County Coastkeeper's oyster bed restoration project will sample oysters in newly-created oyster restoration sites in Upper Newport Bay, including collecting oysters and examining them to determine their size and condition, which is necessary to determine success of existing repopulation efforts, plus adding replacement oyster shells to restore habitat for future oyster population expansion. Approximately 80 oysters, representative of eight plots will be sampled and shells added to bring the coverage of shells in plots from 70 to 80%. Success of this aspect of the SEP will be measured by periodic reports directed to Airtech's attention describing the day, number of oyster harvests and shell replacements, and other relevant information.

Eelgrass Replanting: As described in Orange County Coastkeeper's Work Agreement at Attachment 1, eelgrass is a critical component of the marine habitat in terms of sheltering and providing food for fish and invertebrates, birds and sea turtles. In addition, eelgrass improves water quality by filtering polluted storm water run-off and by absorbing carbon dioxide and excess nutrients, thereby reducing adverse effects of these pollutants. However, eelgrass presence has been severely harmed by such pollutants and other human activities to where its coverage and density has been significantly diminished in the Orange County coast marine environment. This aspect of Coastkeeper's work for Airtech will include surveys of extent of eelgrass deterioration measured by density and will replant eelgrass plots with less than 60% density to improve sustainability. Measurement of success of this aspect of the SEP will include documentation in progress reports provided to Airtech for oversight of the number of plots replanted; it is expected that up to 320 square meters of eelgrass habitat will be affected.

AIRTECH
ADVANCED MATERIALS GROUP

SEP Cost/Budget

The total SEP cost proposed is $66,120, which is the cost of the three elements.

Orange County Coastkeepers Restoration Project

Orange County Coastkeeper's September 25, 2019 project description explains these costs in detail. The following is a summarized breakdown of this sum, which is described more fully in Attachment 1.

Beach Clean-Ups (5 Events):

• Staff Time	$5,000
• Vehicle Expense	2,000
• Clean-up Supplies	2,000
• Other Material Costs	1,000
SUBTOTAL	$10,000

Oyster Bed and Eelgrass Restoration:

• Staff Project Manager	$30,750
• Professional Diver Support	1,000
• Communication Services	2,500
• Field Supplies	2,850
• Boat and Related Supplies	7,500
• Travel Costs	500
SUBTOTAL	$45,100
Administrative Indirect Costs	$11,020
COASTKEEPER SEP COSTS TOTAL	**$66,120**

Note: The project, although managed by Coastkeeper under contract to Airtech, relies to a significant extent on unpaid volunteer participants, which will maximize the true value of the project. In addition, Airtech will offer incentives for its own employees to participate in beach clean-ups.

Reports and Deliverables

Pursuant to requirements of the contract between Airtech and Orange County Coastkeeper, periodic progress reports will be required and reviewed by Airtech. These reports will describe tasks completed and measurable results; for example, after a beach clean-up, the date and area cleaned, volume or weight of debris collected and its disposal location. Similarly, the oyster sampling and shell replacement tasks will be reported with quantitative results. Airtech will keep records of these activities under the SEP to assure and document performance and facilitate the final report.

All work pursuant to this SEP can be completed in Calendar Year 2020. A mid-2020 report on progress is proposed, and any other conditions included in the Consent Agreement and Final Order incorporating the SEP will be satisfied.

ATTACHMENT 1

ORANGE COUNTY
COASTKEEPER®

Costa Mesa, CA 92626
Phone 714-850-1965
www.Coastkeeper.org

September 25, 2019

Work Agreement with Airtech and Orange County Coastkeeper

Mission of Orange County Coastkeeper:

Founded in 1999, Orange County Coastkeeper (Coastkeeper) promotes and restores water resources that are Drinkable, Fishable, Swimmable, and Sustainable. Coastkeeper is a nonprofit clean water organization that serves as a proactive steward of our fresh and saltwater ecosystems. We have successfully restored habitats in southern California, engaged thousands of K-12 students in hands-on watershed education, and provide scientific data to governmental agencies at every level to advocate for clean water. We work collaboratively with diverse groups in the public and private sectors to achieve accessible and sustainable water resources for the region. We implement innovative, effective programs in education, advocacy, restoration, research, enforcement, and conservation.

Program and Project Description:

Since its founding in 1999, Coastkeeper has been putting advocacy into action to protect Orange County's watersheds, harbors, and coastal waters and has spearheaded multiple habitat restoration projects. These include eelgrass restoration since 2012 in Upper Newport Bay, giant kelp restoration from 1999 to 2005, green abalone restoration from 2010-2012, and native Olympia oyster restoration in 2012 and 2017. In 2017, along with collaborators, Coastkeeper restored 240 square meters of oyster habitat and has restored almost an acre of eelgrass in Upper Newport Bay (UNB) in one of the largest attempted oyster and eelgrass restoration projects in Southern California to date. The creation of the oyster habitat along with additional planted eelgrass will provide benefits extending well beyond its size in the bay. We see this project as instrumental in fulfilling the core of our mission of improving water quality so that our community can enjoy this important resource.

Our Upper Newport Bay project utilizes a living shoreline approach through integrated restoration of the native Olympia oyster and eelgrass. As foundation species, oyster and eelgrass populations are crucial habitat for many important species, including commercial fishery species. Oyster beds and eelgrass meadows provide habitat and foraging grounds for a diverse community of fish, invertebrate, and bird species, dramatically increasing biodiversity. They also deliver several ecosystem services such as improving water quality, cycling nutrients, sequestering carbon, stabilizing sediments, and attenuating wave energy. This project was created out of the critical need to protect, enhance and restore these habitat forming species to increase their resiliency to future change and preserve the ecosystem benefits they provide.

Cleanup OC is Coastkeeper's volunteer-led trash removal and community involvement program. Coastkeeper coordinates 2 monthly beach cleanups, quarterly Adopt-A-Channel cleanups, and seasonal creek cleanups. Cleanup OC reaches an average of 5,000 volunteers annually. The trash found along our coast and within our aquatic ecosystems, often referred to as marine debris is an ever-growing concern for ecosystem vitality, recreational and cultural importance and food system reliability.

Scope of Project:

Coastkeeper will enter into a contract with Airtech to provide three coastal projects, including: beach cleanups and two marine restoration projects as described below. Airtech's SEP Project will contribute 5 additional community beach cleanups at Huntington State Beach and an assessment of a recent oyster restoration effort to determine the effectiveness and answer key unresolved questions around the success of integrated habitat restoration while providing additional shell to supplement the Olympia oyster restoration project, and supplement planted eelgrass restoration area.

Beach Cleanup:
So far this year, we've collected 1,087 lbs. at Huntington Beach and have had roughly 9 cleanups there - the average is about 100+ lbs. per cleanup; however there can be a large range with one cleanup collecting 325 lbs. and others low as 55lbs. The proximity of our Huntington Beach site to the mouth of the Santa Ana River creates a large point source of trash and debris, particularly during wet and rainy seasons. Additionally, vehicles traveling on Pacific Coast Highway, beachgoers using picnic areas and fire pits, as well as pedestrians utilizing the bike trail, are all additional sources of debris. The focus of our cleanup program is not necessarily in the quantity of pounds or volume of items collected but in the types of objects that often go unnoticed such as cigarette butts, plastic bottle caps, and food wrappers. This contract will increase our ability to capture more of these items per cleanup (see supplies budget below).

Oyster Bed Survey and Shell Replacement:
Micro plastics are known to damage marine life, and oysters as filter feeders are particularly vulnerable to these anthropogenic inputs of pollutants. In addition to providing increased habitat resilience, oyster restoration provides enhanced habitat for species and considerable shoreline protection benefits. One of the goals of our habitat restoration project is to demonstrate the effectiveness of innovative oyster bed creation to provide shoreline protection and climate change adaptation, along with greater ecological benefits than traditional shoreline stabilization techniques. Airtech will provide additional instrumentation to tease out the factors associated with oyster and eelgrass restoration success. This project will support an assessment of newly created oyster restoration sites in upper Newport bay and sampling of the beds via hand excavation of 1-gallon Zip loc bags to sort and count juvenile oysters. When the plots are excavated the shell is then replaced in each plot (8 plots, 10 samples per plot for a total of 80 samples). This project will support the staff time, transport and materials for this work (see budget below).

Eelgrass Replanting:
In addition to the oyster restoration work this project will support an eelgrass density survey and replanting of plots with coverage below our target density. According to NOAA Fisheries West Coast Region, eelgrass is one of nature's most valuable and productive habitats in the marine environment: "Eelgrass provides a number of important ecosystem functions, including foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and sea turtles, and spawning surfaces for species such as the Pacific herring. By trapping sediment, stabilizing the substrate, and reducing the force of wave energy, eelgrass beds also reduce coastal erosion. In fact, eelgrass forms the base of a highly productive marine food web. [This] unique habitat also produces food and oxygen, improves water quality by filtering polluted runoff, absorbs excess nutrients, stores greenhouse gases like carbon dioxide, and protects the shoreline from erosion. There has been significant degradation of eelgrass, primarily from human impacts such as urban development, dredging, pollution, and sediment runoff from upland areas."

As part of the survey, additional eelgrass restoration in plots with less than 60% cover will be re planted providing additional restoration acreage to our living shorelines project in Upper Newport Bay. Each plot is 20 x 8 meters, and we anticipate re planting of up to 6 plots, for additional coverage of up to 320 square meters.

Budget Description:

Beach Cleanup Activities:
The following is a detailed description of the costs of this beach cleanup program. Costs include staff time ($5,000), allowing for 235 hours and would provide time for planning, coordinating, and executing 5 beach cleanups. Another portion of the funding ($2,000) would support routine upkeep and maintenance of Coastkeeper's vehicle (insurance, fuel). Additionally, a share of the project funds would allow Coastkeeper staff to purchase and replenish their current supply of latex gloves, reusable bags, sand sifters, trash grabbers, storage bins, pens, and paper ($2,000). Material costs for educational displays include glass jars and promotional materials leaflets & pamphlets to be incorporated into cleanup and outreach efforts ($1,000).

Restoration Activities:
A portion of the project funds will go to support staff time of the project manager ($30,750), Coastkeeper's marine restoration program director who is responsible for monitoring field work, project oversight, reporting, and coordinating volunteers and interns. While most of our field work is conducted by students and volunteers, $1,000 will support occasional dive support assistance from trained professional scientific divers. The other portion of personnel cost is associated with maintaining communications about the project including outreach to stakeholders, media, website, and social media posts ($2,500). We have minimal costs associated with expendable field supplies (clip boards, counters, probes, quadrat materials, stakes, transect tapes and shell transport materials, $2,850). Other supply costs for our restoration project include costs associated with using and maintaining our boat; occasional captain fees, storage and launch fees, maintenance and fuel ($7,500). Travel costs include attending local outreach events and mileage to and from the field sites which is billed at a cost of .58 cents per mile ($500).

Our total direct costs are $55,100 and indirect costs for administration are included at 20% ($11,020) for a total request of $66,120.

Goals and Criteria to measure success:

Coastkeeper will endeavor to remove as much plastic and debris as possible with this agreement and will track the total number of pounds of debris removed per cleanup. Periodic reports will demonstrate to Airtech successful completion of beach clean-ups and amount of debris collected and disposed.

For the oyster restoration project we are endeavoring to maintain statistically greater density of native oysters in restored plots where shell habitat has been added, relative to densities present pre-construction and in control plots where habitat has not been manipulated. We also endeavor to maintain at least 70% shell cover and 80% of the original oyster restoration area. Regarding eelgrass, this aspect of the restoration project will increase the density of eelgrass in established plots to at least 60%. We will measure progress and success towards these metrics via regular visits and annual in depth sampling of the restored habitat. Periodic reports will provide updates and a summary of progress and accomplishments to Airtech.

Reports and Deliverables:

Airtech will be responsible for project completion and success through communications and review of progress reports and preparation of a final report on deliverables. Coastkeeper will provide periodic reports on a schedule as determined by the contract, reporting on activities of cleanups and restoration.

For Orange County Coastkeeper

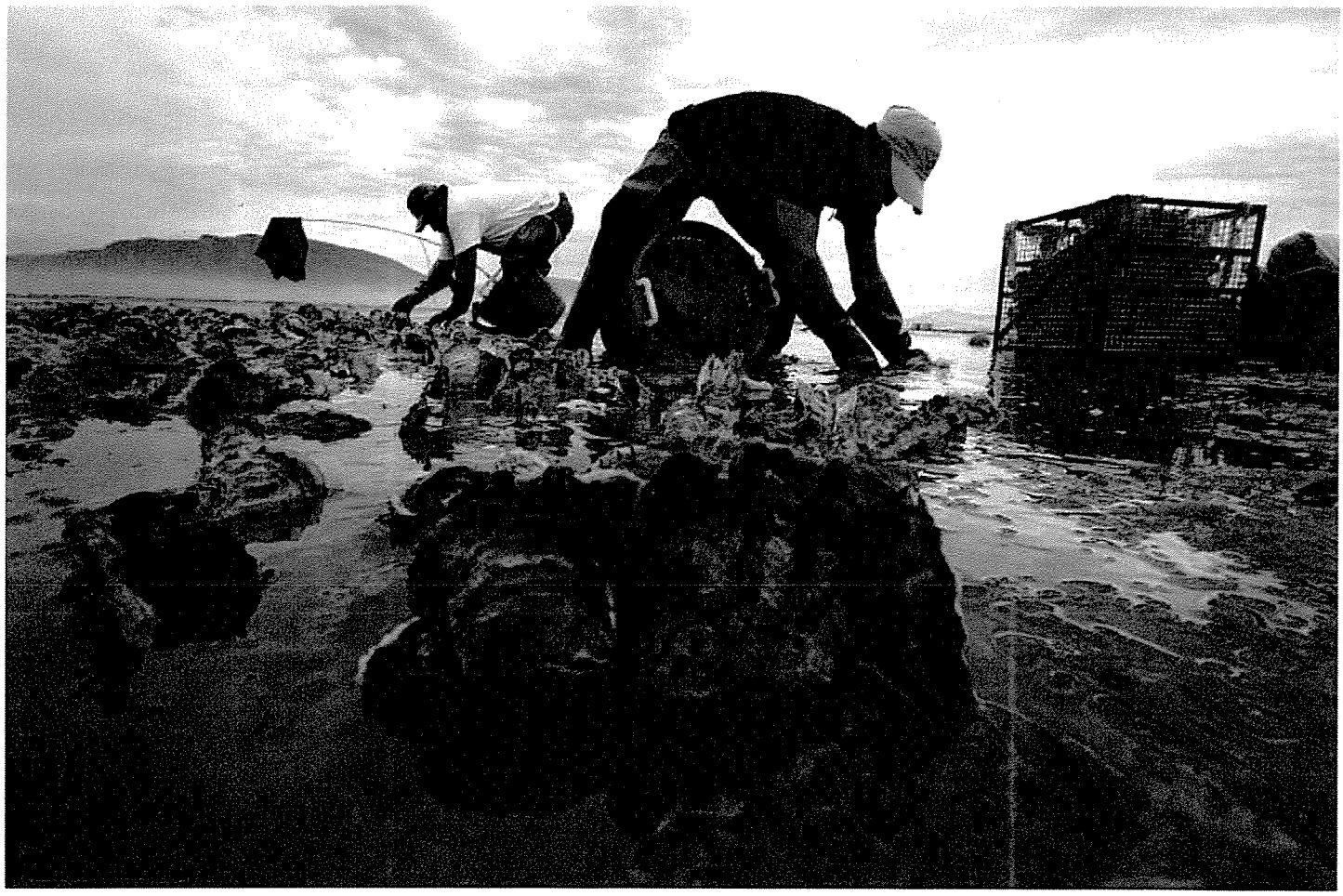
Katie Nichols

Katie Nichols
Marine Restoration Director

ATTACHMENT 2

SCIENCE

Plastic microbead pollution harms oysters, the ocean's critical ecosystem engineers, study finds



Farmers harvest oysters in Samish Bay, Wash., in 2008. A recent study found microplastic pollution harms Pacific oysters, which are grown for food on the West Coast. (Liz O. Baylen / Los Angeles Times)

By SEAN GREENE
DATA JOURNALIST

FEB. 9, 2016
11:25 AM

Oysters eat by filtering the water around them and digesting anything small enough to trap, whether that's algae, phytoplankton — or tiny pieces of plastic floating in the ocean.

It stands to reason that the plastic isn't good for them. Now scientists know why: It takes such a toll on their digestive systems that their ability to reproduce is cut almost in half, according to a study published this month in Proceedings of the National Academy of Sciences.

Scientists recently estimated that the world's oceans contain more than 5 trillion floating plastic particles, which have a combined weight of 250,000 tons.

Microplastic pollution "has been found on almost every beach worldwide, on polar icecaps and just about everywhere in the ocean," said Arnaud Huvet, a marine physiologist at the French Research Institute for Exploitation of the Sea. "It's a real concern for marine ecosystems."

The pollutants find their way to the ocean when cosmetics, hygiene products and toothpaste containing plastic microbeads wash down the drain or when larger plastic products break down in seawater. About 4 million to 12 million tons of plastic enters the ocean each year, and that amount is expected to increase tenfold by 2025, according to a 2013 study in Science.

How does all that plastic debris impact ecosystems?

To find out, Huvet and colleagues looked to the Pacific oyster (*Crassostrea gigas*), a species of commercial, ecological and culinary importance around the world.

The researchers set up experimental tanks in which half the oysters received a steady diet of microalgae (their normal food) and the other half, a combination of microalgae and polystyrene microspheres.

The oysters readily gobbled up the plastic particles, which were similar in size and shape to the phytoplankton they typically eat.

These oysters ate more algae — and absorbed it more efficiently — to compensate for eating so much plastic, the study authors wrote.

But that wasn't enough. The oysters spent so much energy dealing with the plastic in their digestive systems that they had less energy left over for reproduction.

For male oysters, that meant sperm cells were slower. For females, it meant fewer and smaller oocytes, which develop into egg cells. Compared to the oysters in the clean tanks, oysters exposed to the plastic produced 41% fewer offspring, and they were 20% smaller.

The researchers also found the plastic spheres did not stick inside the oysters' guts, suggesting much of the material passed through their systems undigested. In the real world, oysters would also ingest larger irregularly shaped particles, which could persist in their guts for longer, potentially causing damaging inflammation, the researchers wrote.

Huvet said more research is needed on both wild and farmed oysters to really measure the impacts of microplastic pollution, but he expects strong populations of the highly fertile oysters to withstand the reduction in offspring.

Native to the east coast of Asia, Pacific oysters have traveled the world with humans looking to establish farmed populations. In some places, introduced Pacific oysters have fully taken up residence in local estuaries — so much so in Northern Europe that they're regarded as pests, Huvet said.

However, for weaker populations of Pacific oysters — or for sparser native species such as Europe's flat oyster, the West Coast's Olympia and the East Coast's eastern oyster — the decrease in quality offspring could pose a problem, Huvet said.

On the West Coast, the larger and more appetizing Pacific oysters were introduced to the waters off California, Oregon and Washington after the native Olympia oyster all but disappeared. These waters are too cold for Pacific oysters to really take off, and populations tend to be sparser and more disconnected.

As oysters live and reproduce, their shells stick together and build reefs off the shoreline. These reefs protect coastlines from floods and provide habitat for commercially important species.

But plastic pollution makes that essential work more difficult, said George Waldbusser, an ocean ecologist and biogeochemist at Oregon State University who was not involved in the study. And it adds to a growing list of stressors impacting oyster populations.

The bivalves are also threatened by ocean acidification, oxygen dead zones, rising temperatures and climate change — all of which can be traced back to humans, he said.

"I am wondering when the bivalves will decide to go on strike for better working conditions when you consider all the things we throw at them in our estuaries," Waldbusser said. "They are essentially critical ecosystem engineers that do many positive things for

humanity and our coastal waters, and yet we just continue to make it harder and harder for them to continue."

ATTACHMENT 3

West Coast Region Home
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- Learn more about ESA Section 7 consultations
- Learn more about the Pacific Coastal Salmon Recovery Fund
- Log into my IFQ account
- Find a biological opinion
- Report a stranded or entangled marine mammal
- Report a violation
- Find grant opportunities

The importance of Eelgrass

Fall 2014

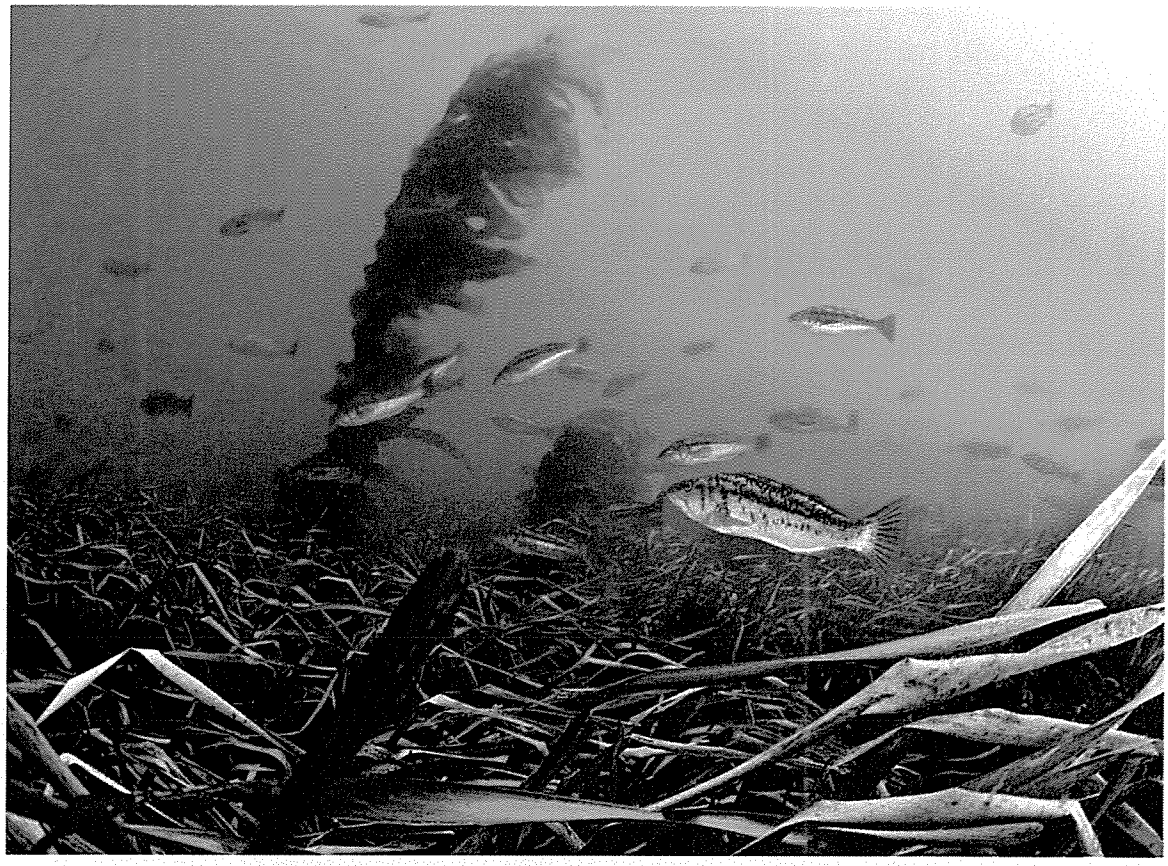
NOAA Fisheries is providing guidelines to prevent further loss of one of nature's most valuable and productive habitats in the marine environment—eelgrass.

Eelgrass provides a number of important ecosystem functions, including foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and sea turtles, and spawning surfaces for species such as the Pacific herring. By trapping sediment, stabilizing the substrate, and reducing the force of wave energy, eelgrass beds also reduce coastal erosion. In fact, eelgrass forms the base of a highly productive marine food web.

Pacific halibut resting on a bed of eelgrass. NOAA photo by Adam Obaza.

The unique habitat also produces food and oxygen, improves water quality by filtering polluted runoff, absorbs excess nutrients, stores greenhouse gases like carbon dioxide, and protects the shoreline from erosion.

Many people are unaware of the importance this plant plays in the marine environment. As a result, there has been significant degradation of eelgrass, primarily from human impacts such as urban development, dredging, pollution, and sediment runoff from upland areas.



Eelgrass along the bottom provides foraging areas and shelter for fish. NOAA photo by Adam Obaza.

The federal government designated eelgrass as Essential Fish Habitat (EFH) and a Habitat of Particular Concern under the Magnuson-Stevens Fishery Conservation and Management Act in 1996. The designation as EFH requires federal agencies to consult with NOAA Fisheries on ways to avoid or minimize the adverse effects of their actions on eelgrass. The consultation process does not apply to state or private projects.

The new guidelines – called the *California Eelgrass Mitigation Policy and Implementing Guidelines*, or CEMP – provides federal agencies consulting with NOAA Fisheries with comprehensive and consistent information to ensure their actions result in "no net loss" of eelgrass habitat function. This is an important goal for one of California's most productive and rare marine habitats.

Using this new policy, biologists will help federal agencies mitigate for unavoidable impacts and create 20 percent more eelgrass habitat than was destroyed. The additional habitat would not only replace the original eelgrass but also compensate for the loss of the beneficial properties of the eelgrass as it matures over the next several years.

The CEMP also provides information on how to avoid or lessen impacts to eelgrass and for considering different options for mitigation. This flexibility provides an opportunity to protect and restore eelgrass, a key foundation to a healthy marine habitat, and to preserve the basic ecosystem functions along the California coast.

More information about seagrasses and California Eelgrass Mitigation Policy

Frequently Asked Questions

Home page NOAA photo by Adam Obaza.