Marine Environmental Update

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Navy Wins Second Round In San Diego Bay Dredging Case

The Navy has won in court the right to continue a dredging project in the San Diego Bay in order to berth a NIMITZ-class nuclear aircraft carrier at the Naval Air Station North Island. On April 04, 1997, a U.S. district court rejected claims that the Navy inadequately considered the environmental impact of dredging on kelp beds, fish and benthic organisms in the area. The Navy began dredging in the bay in September 1996.

The decision from the U.S. District Court for the Southern District of California rejects the second claim environmentalists made against the Navy in the San Diego case. In addition to the April 04, 1997, district court decision, the 9th Circuit Court of Appeals in late March rejected claims that challenged a Superfund action by the Navy to house contaminated, dredged sediment in a confined disposal facility. The district court in the April 04 decision ruled that the Navy, in regard to the impact on nearby kelp beds, had satisfied the overall goals of the National Environmental Policy Act (NEPA).

The law required the Navy to prepare an environmental impact statement for the dredging. The court also found that the Navy and the Army Corps of Engineers "adequately considered the Project's impact on fish and benthic organisms," and that the Corps properly granted the Navy a Clean Water Act permit.

The plaintiffs in the case, *Environmental Health Coalition, et. al v. John Dalton, Secretary of the U.S. Navy*, charged that the Navy failed to disclose the potential impacts of dredging navigation channels on the Point Loma kelp forest, considered a sensitive

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habitat. The Environmental Health Coalition (EHC) argued that the Navy's final environmental impact statement (FEIS) "gave inadequate consideration to the kelp beds, an important commercial and environmental asset situated to the south and east of Point Loma, in San Diego," according to the decision.

The court found the EHC was not entitled to any relief with respect to the kelp beds. "Any deficiencies in the FEIS have been cured by the ongoing public participation during the preparation of the FEIS and over the course of the litigation itself, by the Navy's post-FEIS studies on turbidity and sedimentation, and by the comprehensive mitigation and monitoring plans, which ensure that the Navy has considered any potential threats to the kelp forest before the dredging commences and will continue to consider the threat to the kelp beds throughout the Project's operation," the court ruled.

The EHC also claimed that Navy and Army Corps documents failed "to address adequately the toxicity of contaminated sediment resuspension and disposition on the health and survival of certain fish and benthic organisms." But the court found that this impact was adequately considered, citing extensive testing done on dredged sediments. The court further rejected the plaintiff's arguments that the Army Corps erred in adopting Navy documents and issuing a Clean Water Act section 404 permit.

Defense Environmental Alert, Volume 5, Number 9, April 23, 1997.

Navy Exploring Use Of New Soil-Washing Technology For Faster Cleanups

A newly patented soil-cleaning technique recently demonstrated at a Navy shipyard in the San Francisco Bay area has the potential for faster, cheaper and more public relations-friendly cleanups at contaminated sites across the country, a Navy source says. The demonstration, applying volume reduction remediation, at Hunters Point at the end of January was coordinated by the Bay Area Defense Conversion Action Team (BADCAT) Environmental Technology Partnership but privately funded by the companies presenting their technologies. The demonstrations also showcased X-Ray fluorescence detection (XRF), a field measurement technology already in use at some sites to analyze soil for metal contaminants.

[EDITOR'S NOTE: X-Ray fluorescence has also been demonstrated as a precise, cost-effective and reliable method for field analysis of heavy metal concentrations in marine sediments. See *Marine Environmental Update*, Vol. FY96, No. 2 and *Marine Environmental Update*, Vol. FY97, No. 2.]

BADCAT—a private-public partnership of regulators, technical experts and the Navy—uses ongoing cleanup needs at the bay area's 12 closing military bases to highlight and explore the use of innovative technology. "The Navy looks at cleanup as a nationwide issue. We're looking for technology that is exportable," the Navy source says. "It's hard to find a base nationwide that doesn't have soil

contamination." Both XRF and volume reduction have the potential to save money through faster and a less costly cleanup process. "The ability to multiply those savings is pretty exciting," the source says.

XRF produces accurate results in 15 minutes, saving the time it would take to send the soil to an off-site laboratory and wait for results, the source says. However, the effectiveness of volume reduction is still being determined through scientific peer review, the source says. Results from last month's tests are expected in about three months, a second Navy source says. The technology has yet to be tested on a large, commercial scale, sources say. If volume reduction proves effective, "we'll trade off the old [technology] for the new [technology] in a heartbeat," the Navy source says, referring to current methods of treatment and stabilization.

Volume reduction takes large amounts of soil with low concentrations of metals or hydrocarbons and concentrates the contaminants, through a process of scouring and chemical leaching, in a small amount of soil, says a source with Klohn-Crippen, the Canadian company that developed the technique. Volume reduction can reduce the amount of contaminated soil by up to 90 percent, depending on how silty or sandy the soil is, a second Navy source says.

Current procedures—capping, solidification, incineration or removal—all have drawbacks, the source says. The public is wary of capping because, the source says, citizens wonder, for example, if a weed can grow through a crack in their driveway, what is to stop contaminated soil from escaping through a concrete cap? Solidification is expensive, and leaves the problem of what to do with the contaminated mass. Excavating the dirt takes much time and effort and requires the dirt to be taken somewhere else. "No one wants to haul dirt" because of all the monitoring required, the source says, and "incineration on site is not popular" with surrounding communities.

If volume reduction proves effective, the Navy would distribute the results service-wide, and perhaps to the other services, through a two-page technical data sheet.

Defense Environmental Alert, Volume 5, Number 4, February 12, 1997.

EPA Reports To Congress On TBT Boat-Bottom Paint

The Environmental Protection Agency sent a report to Congress on May 30, 1997, detailing the status of environmental monitoring for tributyltin (TBT), an organometallic pesticide used in boat-bottom paint to prevent growth of fouling marine organisms. TBT antifouling paints and their adverse effects on the environment are the target of Organotin Antifouling Paint Control Act (OAPCA) of l988 and other federal and state restrictions.

TBT has been shown to cause reproductive and other adverse effects to shellfish and other non-target aquatic organisms at very low levels. OAPCA requires that the EPA and the Navy report annually on monitoring; this particular report also includes the results of research into chemical and non-chemical alternatives to TBT, and the EPA's evaluation of the effectiveness of laws and regulations in reducing the risks of TBT. Both the EPA and the Navy have concluded that TBT levels in the water column are dropping.

Despite this decline, the EPA reported that the levels are still too high. The status of TBT levels in the sediment, where many affected species dwell, is less certain. The reduction of TBT concentrations in domestic waters is due to restrictions on the use of anti-fouling paints in the United States: use is prohibited on non-aluminum hulls and vessels less than 82 feet in length; a limit has been established on the release rate of TBT from paint; application is limited to applicators specifically trained and certified (or to persons under their direct supervision); and a requirement that all paint waste be disposed in sanitary landfills and not in the water. The Navy no longer uses TBT antifouling paints. The continued hazard TBT poses is tied to remaining domestic use and to the use of TBT on ocean-going vessels which are painted overseas and which travel to American ports.

The EPA has determined that additional restrictions are need to reduce levels in water and suggests to Congress that the manufacture and use of TBT anti-fouling paints be phased out in this country, to be replaced by safer alternatives. Some alternatives are currently available and others are being developed. The EPA is cooperating with the International Maritime Organization on a proposal for a global phase-out and is refining its TBT risk assessment for use in pursuing appropriate action under the Federal Insecticide, Fungicide and Rodenticide Act.

EPA Press Release, Friday, June 20, 1997.

EPA Proposes Revised NPDES Permits For Storm Water Discharges From Construction Activities

The Regional Administrators of the Environmental Protection Agency are proposing to re-issue general permits to authorize storm water discharges associated with construction activity disturbing five or greater acres. The EPA is expanding coverage in this proposal to also provide for coverage for construction sites under five acres of disturbed land where designated by the Director for coverage under 40 CFR 122.26(a)(1)(v) or 122.26(a)(9) and 122.26(g)(1)(i). These proposed permits will take the place of the existing construction storm water general permits, which, in almost all cases, were issued for five year terms in September 1992.

The most significant changes include:

- expanded conditions to protect endangered and threatened species;
- new conditions to protect historic properties;
- a new requirement to post a copy of the permit coverage confirmation and a brief description of the project; provide for public access to copies of a pollution prevention plan on the site, or in another nearby location where it can be viewed by the public, if they request; terms for construction activities transitioning from the existing permit;
- clarification of who must be a permittee and their requirements;
- a streamlined permitting option for utility companies;
- the requirement to submit a notice of permit termination when construction is completed;
- the ability to acquire permit coverage for other construction dedicated industrial activities (*e.g.* concrete batching plant) under this one permit; and
- pollution prevention plan performance objectives.

Point source discharges of storm water associated with industrial activity are prohibited unless authorized under a National Pollutant Discharge Elimination System (NPDES) permit by the Clean Water Act. In 1990, the EPA promulgated the storm water permit application rule (55 FR 47990), which defined what types of industrial activity are subject to this requirement. The EPA defined storm water discharges associated with industrial activity to include construction activity disturbing five or more acres of land.

The public comment period for this proposed permit will be from the date of publication until August 01, 1997. All public comments shall be submitted to: ATTN: CBGP—Comments, W-97-01, Water Docket MC-4101, U.S. EPA, Room 2616 Mall, 401 M Street SW., Washington, DC 20460. The original and three copies of comments and enclosures (including references) must be received by the EPA or post-marked by midnight no later than August 01, 1997. No facsimiles (faxes) will be accepted. Comments may also be submitted electronically to: ow-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file, avoiding the use of special characters and forms of encryption and must be identified by the docket number W-97-01. Comments and data will also be accepted on disks in WordPerfect® 5.1 or ASCII file format.

The complete text of the proposed NPDES general permit is available in PDF® format from MESO at http://environ.nosc.mil/MESO/Newsltr/fy97_no3.html.

Federal Register, Volume 62, Number 105, June 02, 1997, pp. 29785-29825.

EPA Revises Application Process For Approval Of Alternate Test Procedures

On June 05, 1997, the Environmental Protection Agency (EPA) announced an internal transfer of administrative responsibilities for the evaluation of alternate test procedures under Clean Water Act section 304(h). The EPA transferred responsibilities from the Environmental Monitoring Systems Laboratory in Cincinnati (EMSL-Ci), now called the National Exposure Research Laboratory (NERL), in the Office of Research and Development (ORD) to the Office of Science and Technology in the Office of Water (OW).

Applications for alternate test procedures should be sent to the Director, Analytical Methods Staff, Office of Science and Technology (4303), Office of Water, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. For further information contact: Ben J. Honaker, Analytical Methods Staff, Office of Science and Technology (4303), USEPA, 401 M Street, SW., Washington, DC 20460; phone: (202) 260-2272.

Federal Register, Volume 62, Number 108, June 05, 1997, pp. 30761-30763.

Interim Guidance Issued Regarding Wetland Excavation Activity Discharges

A formal interim guidance was issued to the field staffs of the U.S. Army Corps of Engineers (ACOE) and the Environmental Protection Agency on April 11, 1997, regarding the federal government's authority to regulate certain excavation activities in wetlands. The guidance directs ACOE and EPA staff not to take administrative or enforcement actions related solely to the "incidental feedback" of dredge or fill materials in wetlands.

The guidance was developed in response to a January 23, 1997, federal district court ruling that the ACOE and the EPA lack authority under the Clean Water Act to require permits for wetlands excavation activities that result in incidental fallback of dredged material (*American Mining Congress v. Army Corps of Engineers*, DC, No. 93-1754 SSH; 27 ER 2008, 27 ER 2279). the court declared the rule invalid and barred the ACOE and the EPA from applying or enforcing it.

The interim guidance specified that activities involving incidental fallback of dredge or fill material do not require a permit and provided examples of the types of discharges that are affected by the ruling. Such discharges would include dredged material that falls from a dredge bucket as it is raised up through

the water column, material that falls from a dredge cutterhead or clamshell bucket as it moves through sediment, and a movement of dredged material around a backhoe bucket.

According to the guidance, types of activities involving discharges other than incidental fallback would include ditching activities where the excavated material is sidecast into U.S. waters and activities that result in the temporary or permanent stockpiling or disposal of dredged material into such waters. Sidecasting involves placing removed soil along a ditch, or sloppy disposal practices involving significant discharges into waters, the corps said.

The guidance also listed several activities that would require case-by-case examination to determine whether they are affected by a court decision. These include ditching and draining, including ditching to lower the water table, ditching to drain the wetlands, and removal of beaver dams; and maintenance dredging activities and excavation for currently used flood control projects and for previously abandoned flood control , and irrigation or drainage projects.

Environment Reporter, Volume. 27, Number 50, April 25, 1997, p.2654.

Cal/EPA Issues New Industrial Activities Storm Water General Permit

On April 17, 1997, the State of California Environmental Protection Agency (Cal/EPA) State Water Resources Control Board (SWRCB) adopted a new statewide Industrial Activities Storm Water General Permit. This General Permit replaces the now expired SWRCB statewide General Permit (No. 91-013-DWQ) and the San Francisco Bay Regional Water Quality Control Board General Permit for Santa Clara County (No. 92-11).

New facility operators seeking coverage under the General Permit must submit a Notice of Intent (NOI) and first annual fee at least 14 days prior to the beginning of industrial activities. Facility operators previously covered by the now expired General Permits are required to submit a special NOI form mailed to them in May 1997.

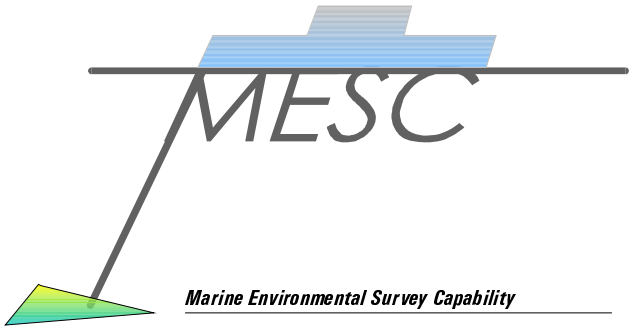
The following table lists some of the important differences between this General Permit and the two expired General Permits:

Expired Permit	New Permit
Non-Storm Water Discharges	
• Distinction between authorized and unauthorized non-storm water discharges unclear. Fact Sheet Guidance and Permit Language not entirely consistent.	• Provides a specific list of non-storm water discharges that are authorized when certain conditions are met (see pages 5-6, D. Special Conditions)
Storm Water Pollution Prevention Plan (SWPPP)	
• Provided basic description of steps necessary to develop an effective SWPPP. • Authorized non-storm water discharges are not addressed. • No deadline to implement SWPPP revisions in response to violations.	• Provides a better description of the steps necessary to develop an effective SWPPP. • Requires BMPs for authorized non-storm water discharges. • Requires SWPPP revisions within 90 days after a violation is found. • Requires an Annual Comprehensive Site Compliance Evaluation (formerly called an annual site inspection that was included in the Monitoring Program).
Monitoring Program and Reporting Requirements	
• Visual Observation for the presence of unauthorized non-storm water discharges twice/year during dry season. • No requirement to observe unauthorized non-storm water discharges. • Wet Season October 1-April 30. • Sampling required in first ½ hour. • Sampling of storms that produce 1 hour of discharge. • Analyze four basic parameters and toxic chemicals and other pollutants. • Sample two storm events/year.	• Quarterly visual observations for the presence of unauthorized non-storm water discharges. • Quarterly visual observations of unauthorized non-storm water discharges. • Wet season October 1-May 31. • Sampling required in first hour. • In addition, analyze listed Table D parameters. • Sample two storm water events/year. Facility operators who have sampled six storm events are eligible for reduced sampling.

The complete text of the new Industrial Activities Storm Water General Permit is available from the State of California Environmental Protection Agency, State Water Resources Control Board, Division of water Quality, P.O. Box 1977, Sacramento, CA, 95812-1977.

California State Water Resources Control Board, April 17, 1997.

R/V *ECOS* Marine Environmental Survey Capability Upgraded



The Marine Environmental Survey Capability (MESC) aboard NRaD's R/V *ECOS* has been significantly upgraded with new real-time data acquisition and processing capabilities for marine environmental assessment. These new capabilities can be used for: environmental monitoring, contaminant and dye dispersion mapping, time series measurements, remote sensing applications, and hydrographic and wake dispersion modeling validation.

Hardware upgrades include a new tow cable, a SeaBird Electronics® 911+ CTD, a Chelsea Instruments® *in situ* oil fluorometer, a Metals Analyzer, and a high-flow submersible pumping system. Upgrading to the 911+ CTD allows for the interface of sensors that had previously been required to run independently such as the photosynthetically-active radiation sensor, multispectral upwelling radiometer, particle sizer, and a multi-wavelength spectral absorption-attenuation transmissometer.

The software has been upgraded to a Microsoft Visual Basic® program that has an easy-to-use interface, and provides flexibility for sensor inputs, data storage, and real-time data presentation. The system currently handles 64 channels of input data at up to 24Hz. Real-time displays include multiple strip chart plots, multiple X-Y plots, and spatially mapped data.

For more information see: http://www.spawar.navy.mil/sti/publications/pubs/td/2789/index.html or contact Chuck Katz, NCCOSC RDTE DIV D362, 53475 Strothe Road, San Diego, CA, 92152-6310; telephone (619) 553-2773; email d362@nosc.mil.

No "Message From The Judge Advocate General, Part III" Yet

For those expecting to see the third installment of **A Message From The Judge Advocate General** in this issue (see *Marine Environmental Update*, Vol. FY97, No. 2, Spring 1997 and *Marine Environmental Update*, Special Edition, 07 April 1997); the Marine Environmental Support Office had not yet received the text at publication deadline. As soon as MESO receives the third installment, a "special edition" will be prepared and distributed with the complete text. We apologize for the inconvenience.

ABOUT THE *MARINE ENVIRONMENTAL UPDATE*

This newsletter is produced quarterly by the Marine Environmental Support Office (MESO), and is dedicated specifically to inform the Navy about marine environmental issues that may influence how the Navy conducts its operations. MESO is located at the Naval Command, Control and Ocean Surveillance Center Research, Development, Test and Evaluation Division (NRaD) in San Diego, California. The mission of MESO is to provide Navy-wide technical and scientific support on marine environmental science, protection and compliance issues. This support covers a broad spectrum of activities, including routine requests for data and information, technical review and consultation, laboratory and field studies, comprehensive environmental assessments, and technology transfer. Significant developments in marine environmental law, policy, and scientific advancements will be included in the newsletter, along with references and points of contact for further information.

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