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Ser 1811RP/00522

● ● NOV 1990

Mr. Mark Malinowski
Department of Health Services
State of California
Toxic Substances Control Division
Region 2
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, CA 94710

Dear Mr. Malinowski:

In accordance with the Remedial Action Order (Docket No. HSA87/88-134RA) for Naval Station, Treasure Island, Hunters Point Annex, the following report is forwarded as enclosure (1):

Summary of October 24, 1990 Technical Review Committee (TRC) Meeting

Should you have any questions regarding this matter, the point of contact is Commander, Western Division, Naval Facilities Engineering Command (Attn: Louise T. Lew, Code 1811, (415) 244-2551).

Sincerely,

~~Original~~ signed by:

MICHAEL A. MIGUEL
Head, Environmental Restoration Branch

Encl:

(1) Summary of October 24, 1990 TRC Meeting

Copy to:

Regional Water Quality Control Board (Attn: Steve Ritchie)
Bay Area Air Quality Management District (Attn: Scott Lutz)
U.S. Environmental Protection Agency (Attn: Chuck Flippo)
California Dept. of Fish & Game (Attn: Mike Rugg)
U.S. Fish & Wildlife Service (Attn: Steve Schwarzback)
National Oceanic & Atmospheric Administration (Attn: Chip Demarest)
Hunters Point Technical Review Committee Public Member (Attn: Rev. Arelious Walker)
City and County of San Francisco (Attn: David Wells)
San Francisco District Attorney (Attn: Steve Castleman)
Blind copy to: (w/o encl) 09C9, 202, 09A2A.20, 181, 1811, 1811JC, 18111RC
(w/ encl) Admin. Record, 1811RP, COMNAVBASE S.F.,
Harding Lawson Associates (Attn: Mary Lucas), PWC S.F. BAY (Code 420)
COMNAVSEASYSCOM (Attn: Robert Milner)
OIC Treasure Island, HPA Writer: Rich Powell, 1811RP, x2555
NAVSTA Treasure Island, Typist: B. Palmer, 9 Nov. 90, TRC Mtg
PRC (Attn: Gary Welshans) File: HP/DOHS

N/D 191

TECHNICAL REVIEW COMMITTEE
PROGRESS REPORT
FOR
OCTOBER 24, 1990
Naval Station, Treasure Island, Hunters Point Annex

1. The following documents are undergoing regulatory consistency review.
 - A. Draft Environmental Sampling Plan.
 - B. Draft Reconnaissance Report.
 - C. Work Plan, Volume I, Project Management Plan.
 - D. Workplan for removal action at Tank Farm (IR-6)/Asbestos Addenda.
 - E. Workplan for removal action at Tank S-505/Asbestos Addenda.
 - F. Draft Closure Plan/Removal Action Plan (Underground Storage Tanks).
 - G. Draft Work Plan, Volume 2F, IR-12, 13, 14, 15, 17 Sampling Plan.
 - H. Draft Background Sampling Plan.
 - I. Draft PA-Utilities/Other Areas Report.
 - J. Draft Benchscale Treatability Test Plan for Recycling Sandblast Grit into Asphalt.
2. The following documents are being revised to address regulatory agency comments:
 - A. Workplan for removal action at Pickling and Plate Yard (IR-9) with supporting documents.
3. Response to review comments received are being prepared for the following:
 - A. Draft Interim Report, Phase I Primary RI at IR-9, IR-8 and IR-6.
4. The following documents are being prepared:
 - A. Site Wide Tidal Influence Plan.
 - B. Pilot Tidal Influence Plan.
 - C. Content Characterization Report for various USTs at HPA.

**TECHNICAL REVIEW COMMITTEE
PROGRESS REPORT
FOR
OCTOBER 24, 1990
Naval Station, Treasure Island, Hunters Point Annex**

5. The following documents satisfied regulatory consistency review this month:
 - A. Response to comments on the Draft Work Plan for Sampling and Analysis of Untreated and Treated Sandblasting Grit.
 - B. Preliminary Draft Approach to the Background Sampling Plan at Hunters Point Annex.
 - C. Draft Amendment to Community Relations Plan.
6. The following field tasks were performed:
 - A. Inventory and Assess Existing Monitoring Wells.
 - B. Preparation for RI Field Work at OU-1.
7. The following tasks are underway:
 - A. Continue Review/Analysis/Planning for sandblast grit fixation.
 - B. RI Field work associated with Operable Units I, III and IV.
8. Documents to be Submitted for Regulatory Review in October :
 - A. Pilot Tidal Influence Plan.
 - B. Site Wide Tidal Influence Plan.
 - C. Existing Well Survey.
9. Problems Encountered:
 - A. Set up problems with all terrain drill rig.
 - B. Landfill gases encountered at IR-1. Rig moved to IR-2.

Meeting Minutes
Hunters Point Annex
Technical Review Committee
October 24, 1990
Treasure Island, California

Agenda: See attached.

Attendees: See attached.

Approval of Minutes of Last Technical Review Committee Meeting:

The minutes of the last Technical Review Committee (TRC) meeting, which was held on August 15, 1990, were approved.

Federal Facility Agreement (FFA) and Technical Assistance Grant (TAG):

The FFA was signed on September 28, 1990. The Navy issued a public notice and initiated the 45-day comment period; the public comment period is scheduled to end on November 29, 1990. It is anticipated that the EPA, DHS and the Navy will meet at the close of the public comment period to discuss and review the comments received and to assess if revisions to the FFA are required.

The public comment period will be capped by a community meeting on November 20, 1990 as agreed by those attending. The meeting will be held from 2 to 4 p.m., followed by an open house from 4 to 6 p.m., at the Bay View Opera House. Potential topics for the meeting are presented on the attached handout.

Applicable or Relevant and Appropriate Requirements (ARARs):

The DHS has been compiling a list of ARARs. The BAAQMD has given some input regarding air ARARs for air stripping, soil aeration, and solid waste disposal (see attached).

Removal Actions:

Sandblast Grit. The draft bench-scale treatability testing plan for the treatment of the sandblast grit has been distributed and the Navy is awaiting regulatory comment.

Pickling and Plate Yard. Comments were received from the BAAQMD, EPA, DHS, and the City and County of San Francisco at the end of September. HLA, ATT, and the Navy are currently evaluating these comments and revising the air model using revised data.

Asbestos. The asbestos-containing material (ACM) removal action which started in late April was completed on September 4, 1990. The activities included removal of ACM at 22 sites at HPA. Approximately 244 cubic yards of ACM, weighing 35 tons, was disposed of at the Anderson Solid Waste Site, Anderson, California. A large portion of the volume and weight was from 4 tanks which were removed in bulk; this method was deemed less hazardous than dismantling of the tanks. A comprehensive removal action report describing the abatement activities, including all air monitoring results and completed manifests, is being prepared by Versar,

Inc. and PRC. Submittal of this report to the regulatory agencies is anticipated by December 10, 1990.

Tank S-505. The draft final workplan for the removal action at tank S-505 was sent to the regulatory agencies on September 5, 1990. DHS approved this portion of the Removal Action Work Plan in their letter dated October 16, 1990. EPA comments received by the Navy on October 18 are being evaluated. The Navy proposed to address EPA's comments in the plans and specifications, which will be prepared for the removal action. It is anticipated that the plans and specifications will be submitted to the regulatory agencies near the end of December 1990 for the first round of regulatory review. A draft addendum which addresses asbestos abatement was submitted for regulatory agency review on October 11, 1990.

Tank Farm. The draft final workplan for the removal action at the tank farm was sent to the regulatory agencies on September 18, 1990. A draft addendum which addresses asbestos abatement was submitted for regulatory agency review on October 22, 1990.

Underground Storage Tanks (USTs). A revised draft closure plan/removal action plan (RAP) for 23 USTs was submitted to the regulatory agencies on September 13, 1990. This revised report reflects comments generated by various agencies during the review of the preliminary draft report submitted May 30, 1990. The Navy is currently awaiting comments on this report. The contents of the 23 USTs were removed by H&H Environmental Services during July and August 1990. Historical data suggest that as many as 37 additional USTs may exist at HPA. Nine of these additional tanks have been located and sampled. A characterization report of the contents of those tanks is being prepared by PRC. The remaining tanks are not directly accessible; locations will need to be verified through geophysical methods and/or trenching. Negotiations for this additional work are currently underway with PRC. The removal of the original 23 USTs identified by Martin Marietta will not be impacted by the discovery of the additional/suspected tanks. The Navy plans to keep these projects moving on separate timelines.

Preliminary Assessment (PA), Other Areas:

The draft report was submitted for regulatory agency review on October 19, 1990. The PA does not address offshore areas; these areas are addressed in the Environmental Sampling and Analysis Plan.

Environmental Sampling and Analysis Plan (ESAP):

This subject will be discussed at the October 25, 1990 Ecological Assessment Group Meeting to be held at Fort Cronkite. Comments from all agencies have not yet been received.

RI Activities:

Reconnaissance Activities Report. The draft report is in agency review; no written comments have been received to date.

Operable Unit (OU) V. The draft sampling plan is in agency review.

OU-II. At least one round of groundwater sampling has been completed at the OU-II sites. A third round is needed at IR-10 and IR-11; the second and third rounds are needed at the remaining OU-II sites.

OU-I. Field activities at IR-1 and IR-2 started on October 8, 1990. On October 15, 1990, field work at IR-1 was halted because landfill gas was encountered at a depth of 15 feet below ground surface during drilling of one of the borings. For safety reasons, the work area was evacuated; HLA safety personnel equipped in Level B personal protective equipment collected samples of the gas on that same day. Initial results from the chemical analyses indicated that the gas is predominantly methane, with some straight chain aliphatic hydrocarbons; these compounds are typically encountered in landfills. Additional analytical results have not yet been received. The drill rig was removed the following day (October 16) after the explosive levels had decreased to acceptable levels. The boring was located near the center of the landfill; elevated levels of methane were identified in this and other areas of the landfill during the reconnaissance soil gas survey. Future drilling in these areas will be accomplished using mud rotary drill rigs; this method was identified as an option in the OU-I Sampling Plan. Mud rotary drilling operations are scheduled to be performed during the second phase of field work.

Groundwater sampling activities at IR-1, IR-2, and IR-3 were begun on October 22. Trenching activities were anticipated to start during early November at the Oil Reclamation Ponds (IR-3). However, the applicability of surface geophysical methods at this site will be assessed prior to trenching. If geophysical methods successfully delineate the extent of the former oil reclamation ponds, only a limited number of trenches will need to be excavated to confirm the finding of the geophysical survey. HLA proposes to perform the surface geophysics and excavate confirmatory trenches during the second part of the primary phase work.

OU-III and OU-IV. Field work is scheduled to begin in mid-November for OU-III. The start date for OU-IV has not been determined.

Onsite Wells HLA has reviewed the status, location, and usability of the existing onsite wells and has drafted a proposal for a pilot tidal study. These documents are in internal review.

Formerly Used Defense Sites:

The Navy is awaiting action by the Army Corps of Engineers.

Progress Report for TRC:

The Navy distributed the first TRC progress report (attached) as required by the FFA.

RI Quality Assurance Program:

The Navy is assessing the current quality assurance/quality control (QA/QC) program for the laboratory analyses. Because of the large number of QC samples required resulting from the EPA Contract Laboratory Procedures and the Navy certification program, the Navy is reexamining the requirements to see if reductions can be proposed; the Navy anticipates proposing discussions regarding this subject in the next two weeks.

Leasing of HPA:

The Navy anticipates that Congress will be approving an amendment to the Defense Authorization Bill that will require the Navy to lease 260 acres for 30 years to the City of San Francisco. This will require a master plan for the use of the facility and environmental impact documentation. The effect on the IR Program will need to be considered. By February 1, 1991, the Navy will need to submit a status report and final action is anticipated within 1 year of the date of passage of the amendment.

Modeling:

The need for risk assessments and/or air modeling activities for future removal action projects was discussed. The consensus was that such models are not required routinely. The BAAQMD feels that risk assessments and models would be required if there was some treatment process (e.g., incineration, air stripper). If the removal action involved excavation and if normal dust minimizing controls were exercised, a model would not be needed.

The regulatory agencies indicated that if the removal action was consistent with the anticipated overall site remediation, a risk assessment for that removal action would not be required. The DHS will not require a risk assessment for the UST work. If onsite treatment is selected as an interim measure, DHS believes that sites having similar contaminants could be remediated in a centralized area. The DHS example was hydrocarbon contaminated soil at the Tank Farm, UST areas and the Oil Reclamation Ponds could be taken to a centrally located bioremediation area or thermal degradation area. A risk assessment could be performed, if needed, for that location, and all of the treatment could be performed at one time, if also approved by the EPA.

Interim Remediation:

The DHS would like to expedite remediation of those areas which are contaminated by petroleum hydrocarbons (e.g., the Tank Farm, the Oil Reclamation Ponds, the USTs). In particular, the DHS felt that the floating product at the Oil Reclamation Ponds could be pumped as an interim cleanup measure. The EPA considers the product removal at IR-3 to be a time-critical removal action and, therefore, an engineering evaluation/cost analysis (EE/CA) would not be required. The Navy will develop a plan of action, and as suggested by the DHS and EPA, anticipates meeting with the pertinent agencies to obtain agreement on proposed cleanup activities and the documentation that would be required.

Next Meeting:

January 10, 1991, 0930 hours, Treasure Island.

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AGENDA

**Technical Review Committee Meeting
Hunters Point Annex
October 24, 1990
Treasure Island, California***

- I. Approval of minutes of last meeting**
- II. Federal Facility Agreement/Technical Assistance Grant**
- III. Removal Action Status Report**
 1. Pickling and Plate Yard
 2. Asbestos
 3. Tank S-505
 4. Tank Farm
 5. Sandblast Grit Fixation
- IV. Preliminary Assessment Other Areas**
- V. RI Activities**
 1. Reconnaissance Report
 2. Status of Operable Unit II
 3. Status of Operable Units I, III, and IV
 4. Status of Operable Unit V
- VI. Underground Tanks**
- VII. Environmental Sampling and Analysis Plan/Storm Water Sampling**
- VIII. Formerly Used Defense Sites**
- IX. Next Meeting**
- X. Summary of Notes**

* Meeting will be held in Building 1, Naval Station Treasure Island Conference Room which is at the south end of Building 1.

Technical Review Committee Meeting
 Hunters Point Annex
 Treasure Island, California
 Attendance List

October 24, 1990

<u>Name</u>	<u>Affiliation</u>
L.S. Teague	HLA 899-7356
Julie Carter	WESTDIV 244-2551
Grant L. Ohland	HLA 899-7387
HSHOK Verma	HLA 899-7386
Patricia Madenia	BECHTEL 768-7766
Chuck Flippo	EPA 744-2388
Dave Wells	SFDPH 554-2796
CHIP DEMAREST	NOAA 744-2317
Wm. C. Allan	DOI 556-8200
Scott Lutz	BAAQMD 771-6000 X212
David Wilson	WEST DIV 244-2551
Gary Welshans	PRC 543-4880
Emir Utush	PRC 543-4880
Santiago Lee	PRC 543-4880
RICHARD POWELL	WESTDIV 244-2551
RAY CHIANG	WESTDIV 244-2554
Louise Lew	WESTDIV 244-2551
EDDIE V. SARMIENTO	NAVSTAT 399-5452
Mark Malinowski	DHS 540-5816
Rex Block	ATT 934-4884

POTENTIAL TOPICS & DATES FOR PUBLIC MEETING, HUNTERS POINT ANNEX ENVIRONMENTAL CLEAN-UP

Dates:

Thursday, 8 November

Tuesday, 20 November (preferred)

Tuesday, 27 November

Wednesday, 28 November

Topics:

- 1. Federal Facility Agreement**
- 2. Presentation on OU 1 Field Work (slide show?)**
- 3. Discussion of NPL listing**
- 4. Discussion of TAG**
- 5. Update on removal actions**
- 6. Community Relations Activities**
- 7. Overview of future activities (FFA schedule)**
- 8. Documents completed**
- 9. Other . . .**

REGULATION 8
ORGANIC COMPOUNDS
RULE 34
SOLID WASTE DISPOSAL SITES

INDEX

8-34-100	GENERAL
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8-34-111	Exemptions
8-34-112	Limited Exemption
8-34-200	DEFINITION
8-34-201	Disposal Site
8-34-202	Solid Waste
8-34-203	Nondecomposable Inert Solid Waste
8-34-204	Landfill Gas
8-34-300	STANDARDS
8-34-301	Operating Requirements
8-34-302	Emission Control Requirement
8-34-400	ADMINISTRATIVE REQUIREMENTS
8-34-401	Compliance Schedule
8-34-402	Solid Waste Exemption Petition
8-34-403	Compliance Schedule, Limited Exemption Sites
8-34-500	MONITORING AND RECORDS (Not Included)
8-34-600	MANUAL OF PROCEDURES
8-34-601	Determination of Emissions

8-34-204 Landfill Gas: Any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a solid waste disposal site or from the evolution of volatile species in the waste.
(Adopted September 17, 1986)

8-34-300 STANDARDS

8-34-301 Operating Requirements: A person responsible for a landfill shall collect landfill gases through a gas collection system approved by the APCO.
(Amended September 17, 1986)

8-34-302 Emission Control Requirement: A person responsible for a landfill shall process all landfill gases, collected pursuant to Section 8-34-301, using one of the following techniques:

- 302.1 Burn the gases in a flare or internal combustion engine approved by the APCO, or
- 302.2 Process the gases by a control device or facility demonstrated to the satisfaction of the APCO to reduce the amount of organic compounds in the collected gases by at least 90% weight, or
- 302.3 Collect and process the gases for delivery to a fuel distribution pipeline.
(Amended September 17, 1986)

8-34-400 ADMINISTRATIVE REQUIREMENTS

8-34-401 Compliance Schedule: A person subject to the requirements of Sections 8-34-301 and 302, unless exempted by Section 8-34-122, shall comply with the following increments of progress:

- 401.1 Submit a control plan on how the source intends to comply with this regulation on or before July 1, 1985.
- 401.2 Apply for an Authority to Construct on or before July 1, 1986.
- 401.3 Complete construction or installation of the processing system, flare, IC engine or any other combustion device or control device on or before January 1, 1987.
(Amended September 17, 1986)

8-34-402 Solid Waste Exemption Petitions: Any person seeking to satisfy the conditions of Section 8-34-111 shall comply with the following requirements:

- 402.1 A written petition for exemption shall be submitted to the APCO, and
- 402.2 The petitioner shall submit copies of all permits, waste discharge requirements pertinent to the site disposal records, and any other data necessary for the APCO to determine whether an exemption should be granted.
- 402.3 The APCO shall provide a written notice of exemption, if appropriate.
(Adopted September 17, 1986)

8-34-403 Compliance Schedule, Limited Exemption Sites: Any person seeking to satisfy the condition of Section 8-34-112 shall comply with the following increments of progress:

- 403.1 Apply for an Authority to Construct on or before January 1, 1987.
- 403.2 Complete construction or installation of the processing system, flare, IC engine or any other combustion device or control device on or before July 1, 1987.
- 403.3 Comply with the requirements of Sections 8-34-301 and 302 on or before August 1, 1987.
(Adopted September 17, 1986)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 40
AERATION OF CONTAMINATED SOIL
AND
REMOVAL OF UNDERGROUND STORAGE TANKS**

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 - 8-40-404 Reporting, Soil Excavation During Pipeline Leak Repairs
 - 8-40-405 Reporting, Soil Excavations Unrelated to Underground Storage Tank Activities

**REGULATION 8
ORGANIC COMPOUNDS
RULE 40
AERATION OF CONTAMINATED SOIL
AND
REMOVAL OF UNDERGROUND STORAGE TANKS
(Adopted July 16, 1986)**

8-40-100 GENERAL

- 8-40-101 Description:** The purpose of this Rule is to limit the emission of organic compounds from soil that has been contaminated by organic chemical or petroleum chemical leaks or spills; to describe an acceptable soil aeration procedure; and to describe an acceptable procedure for controlling emissions from underground storage tanks during removal or replacement. (Amended February 15, 1989)
- 8-40-110 Exemption, Storage Piles:** Calculations of aeration volume under Section 8-40-204 shall not include storage piles that are covered per Section 8-40-303; nor shall they include active storage piles.
- 8-40-111 Exemption, Excavated Hole:** The exposed surfaces of an excavated hole shall not be included in calculations of aerated volume under Section 8-40-204.
- 8-40-112 Exemption, Sampling:** Contaminated soil exposed for the sole purpose of sampling shall not be considered to be aerated. Removal of soil for sampling shall not qualify a pile as "active."
- 8-40-113 Exemption, Non-volatile Hydrocarbons:** The requirements of all sections of this Rule shall not apply if the soil is contaminated solely by a known organic chemical or petroleum liquid, and that chemical or liquid has an initial boiling point of 302°F or higher, provided that the soil is not heated. (Amended February 15, 1989)
- 8-40-114 Exemption, Soil Excavation During Pipeline Leak Repairs:** The requirements of Section 8-40-402 shall not apply if soil is being excavated in order to repair leaking pipelines and if no more than 5 cubic yards are generated, and provided the requirements in Section 8-40-404 are satisfied. (Adopted February 15, 1989)
- 8-40-115 Exemption, Soil Excavation Unrelated to Underground Storage Tank Activities:** The requirements of Section 8-40-402 shall not apply where contaminated soil is discovered during excavations unrelated to underground storage tank activities, and provided the requirements in Section 8-40-405 are satisfied. (Adopted February 15, 1989)

8-40-200 DEFINITIONS

- 8-40-201 Active Storage Pile:** A pile of contaminated soil to which soil is currently being added or from which soil is currently being removed. Activity must have occurred or be anticipated to occur within one hour to be current.
- 8-40-202 Aeration:** Exposure of excavated contaminated soil to the air.
- 8-40-203 Aeration Depth:** The smaller of the following: the actual average depth of contaminated soil; or 0.15 meters (0.5 feet) multiplied by the daily frequency with which soil is turned. (Amended February 15, 1989)
- 8-40-204 Aeration Volume:** The volume of soil being aerated shall be calculated as follows: the exposed surface area (in square feet or square meters) shall be multiplied by the aeration depth. The exposed surface area includes the pile of excavated soil unless the pile is covered per Section 8-40-303. (Amended February 15, 1989)
- 8-40-205 Contaminated Soil:** Soil which has an organic content, as measured using the procedure in Section 8-40-602, exceeding 50 ppm(wt).

310.2 All liquids and sludges shall be removed, to the extent possible, from the tank. A hand pump shall be used to remove the bottom few inches of product if necessary.

310.3 Vapors shall be removed from the tank using one of the following three methods:

3.1 The tank may be filled with water, displacing vapors and hydrocarbon liquids. Water used for this purpose must be collected and/or disposed of in a manner approved by the APCO.

3.2 Vapor freeing.

3.3 Ventilation.

(Amended February 15, 1989)

8-40-311 **Vapor Freeing:** No person shall vapor free a tank containing more than 0.001 gallons of liquid organic compounds per gallon of tank capacity unless emissions of organic compounds to the atmosphere are reduced by at least 90%.

8-40-312 **Ventilation:** No person shall ventilate a tank containing more than 0.001 gallons of liquid organic compounds per gallon of tank capacity unless emissions of organic compounds to the atmosphere are reduced by at least 90%.

8-40-400 ADMINISTRATIVE REQUIREMENTS

8-40-401 **Reporting, Removal or Replacement of Tanks:** The person responsible for the removal or replacement of tanks which are subject to the provisions of Sections 8-40-310 shall provide written notice to the APCO of intention to remove or replace tanks. The written notice shall be postmarked at least 5 days prior to commencement of such removal or replacement. In the case of emergency removal or replacement of tanks, notice shall be provided as early as possible prior to the commencement of such emergency removal or replacement, to be followed by written verification. The written notice of intention shall include:

401.1 Names and addresses of persons performing and responsible for the tank removal or replacement

401.2 Location of site at which tank removal or replacement will occur

401.3 Scheduled starting date of tank removal or replacement. The scheduled starting date may be delayed for no more than 5 working days, provided the APCO is notified by telephone as early as possible prior to the new starting date.

401.4 Procedures to be employed to meet the requirements of Sections 8-40-310.

401.5 If applicable, name, title and authority of the state or local government representative who has ordered a tank removal or replacement which is subject to emergency procedures.

(Adopted, February 15, 1989)

8-40-402 **Reporting, Excavation of Soil:** The person responsible for the excavation of soil subject to the provisions of Sections 8-40-301 or 302 shall provide written notice to the APCO of intention to excavate. The written notice shall be postmarked at least 5 days prior to commencement of such excavation. In the case of emergency excavations, notice shall be provided as early as possible prior to the commencement of such emergency excavation, to be followed by written verification. Written notice of intention to excavate may be submitted to the APCO at the same time written notice of intention to remove or replace tanks is submitted provided that such notification precedes the commencement of either tank removal or replacement or soil excavation by at least 5 days as indicated by postmark. The written notice of intention shall include:

402.1 Names and addresses of persons performing and responsible for excavation.

402.2 Location of site at which excavation will occur.

601.2 Each 50 cubic yard pile for which a composite sample is required shall be considered to have four equal sectors. One sample shall be taken from the center of each sector. Samples shall be taken from at least three inches below the surface of the pile. Samples shall be taken using one of the following methods:

1.1 Samples shall be taken using a driven-tube type sampler, capped and sealed with inert materials, and extruded in the lab in order to reduce the loss of volatile materials; or

1.2 Samples shall be taken using a clean brass tube (at least three inches long) driven into the soil with a suitable instrument. The ends of the brass tube shall then be covered with aluminum foil, then plastic end caps, and finally wrapped with a suitable tape. The samples shall then be immediately placed on ice, or dry ice, for transport to a laboratory.

(Amended February 15, 1989)

8-40-602 **Measurement of Organic Content:** Organic content of soil shall be determined by the Regional Water Quality Control Board's Revised Analytical Methods, Attachment 2, 11/8/85, any other method approved by the APCO, or EPA Reference Method 8010 or 8015.

(Amended February 15, 1989)

8-40-603 **Determination of Emissions:** Emissions of organic compounds as specified in Sections 8-40-302, 8-40-311 and 8-40-312, shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7.

(Amended February 15, 1989)

REGULATION 8
ORGANIC COMPOUNDS
RULE 47
AIR STRIPPING AND SOIL VAPOR EXTRACTION OPERATIONS
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- 8-47-111 Exemption, Industrial Wastewater Treatment Facilities
- 8-47-112 Exemption, Specified Operation
- 8-47-113 Exemption, Air Stripping and Soil Vapor Extraction Operations less than 1 Pound Per Day

8-47-200 DEFINITIONS

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- 8-47-202 Soil Vapor Extraction
- 8-47-203 Active System
- 8-47-204 Organic Compound

8-47-300 STANDARDS

- 8-47-301 Emission Control Requirement, Specific Compounds
- 8-47-302 Organic Compounds

8-47-400 ADMINISTRATIVE REQUIREMENTS

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8-47-500 MONITORING AND RECORDS

- 8-47-501 Records

8-47-600 MANUAL OF PROCEDURES

- 8-47-601 Air Stripper Water Sampling
- 8-47-602 Measurement of Organic Content
- 8-47-603 Determination of Emissions

REGULATION 8
ORGANIC COMPOUNDS

RULE 47

AIR STRIPPING AND SOIL VAPOR EXTRACTION OPERATIONS

(Adopted December 20, 1989)

8-47-100 GENERAL

8-47-101 Description: The purpose of this Rule is to limit emissions of organic compounds from contaminated groundwater and soil. The provisions of this rule shall apply to new and modified air stripping and soil vapor extraction equipment used for the treatment of groundwater or soil contaminated with organic compounds.

8-47-109 Exemption, Small Operations: The provisions of Section 8-47-301 shall not apply to operations that satisfy both of the following requirements:

109.1 Operations that emit no more than one of the following compounds: benzene, vinyl chloride, trichloroethylene, perchloroethylene or methylene chloride, and

109.2 Benzene emissions do not exceed 0.05 pounds per day, vinyl chloride emissions do not exceed 0.2 pounds per day or trichloroethylene, perchloroethylene or methylene chloride emissions do not exceed 0.5 pounds per day.

8-47-110 Exemption, Sewage Treatment Facilities: The requirements of this rule shall not apply to aeration of wastewater at sewage treatment facilities.

8-47-111 Exemption, Industrial Wastewater Treatment Facilities: The requirements of this rule shall not apply to industrial wastewater treatment facilities.

8-47-112 Exemption, Specified Operation: This rule shall not apply to operations that are subject to the requirements of Regulation 8, Rule 40.

8-47-113 Exemption, Air Stripping and Soil Vapor Extraction Operations Less than 1 pound per day: The provisions of Section 8-47-301 shall not apply to operations with total emissions of less than 1 pound per day of benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene provided the requirements of Section 8-47-402 are satisfied. Once an exemption pursuant to this section is granted, if the emissions of an operation exceed 1 pound per day, then that operation is subject to Section 8-47-301. The operator of the source may submit a petition to the APCO in writing requesting review under this exemption if uncontrolled emissions have been shown, due to sustained remediation activities, to have dropped to a constant emission rate of less than 1 pound per day.

8-47-200 DEFINITIONS

8-47-201 Air Stripping: Equipment which is used to transfer organic compounds from contaminated water to the atmosphere by bringing water into intimate contact with air.

8-47-202 Soil Vapor Extraction: An underground and/or above ground active system installed to extract organic compounds from the soil and vent them to the atmosphere. Operations subject to Regulation 8, Rule 40 are not subject to this rule.

8-47-203 Active System: A system which forcibly aerates soil by mechanically drawing air through the soil or applying heat to the soil.

8-47-204 Organic Compound: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

8-47-300 STANDARDS

8-47-301 Emission Control Requirement, Specific Compounds: Any air stripping and soil vapor extraction operations which emit benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene shall be vented to a control device which reduces emissions to the atmosphere by at least 90% by weight.

8-47-302 Organic Compounds: Any air stripping and soil vapor extraction operations with a total organic compound emission greater than 15 pounds per day shall be vented to a control device which reduces the total organic compound emissions to the atmosphere by at least 90% by weight.

8-47-400 ADMINISTRATIVE REQUIREMENTS

8-47-401 Reporting, Superfund Amendments and Reauthorization Act (SARA) Sites: Any person responsible for air stripping or soil vapor extraction operations which have not applied for a District Permit shall provide written notification to the APCO of intention to operate. This notice shall include:

401.1 Address of the remediation site.

401.2 Schedule of starting date 30 days prior to start-up.

401.3 Written certification that the proposed operation will be in compliance with the requirements of this Rule.

401.4 Any person seeking to satisfy the conditions of Section 8-47-113 shall submit the risk analysis for APCO approval as required in Section 8-47-402.

8-47-402 Less Than 1 Pound Per Day Petition: Any person seeking to satisfy the conditions of Section 8-47-113 shall:

402.1 Submit a petition to the APCO in writing requesting review and written approval of a risk analysis for the benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene organic compound emissions that are less than 1 pound per day.

8-47-500 MONITORING AND RECORDS

8-47-501 Records: Any person subject to the requirement of this rule shall keep records of the following:

501.1 Any water analysis results as required by Section 8-47-601.

501.2 Any vapor monitoring results that have been collected to monitor the performance of a control device. Such records shall be retained for a minimum of two years from date of entry and be made available to District staff upon request.

8-47-600 MANUAL OF PROCEDURES

8-47-601 Air Stripper Water Sampling: For each of the first three days of operation at least one sample of influent water into the air stripper shall be collected and analyzed. At least one sample shall be collected and analyzed thereafter for each calendar month of operation. Samples shall be collected in accordance with the EPA's or the Regional Water Quality Control Board's Analytical Methods or any other method approved by the APCO

- 8-47-602 Measurement of Organic Content:** Organic compound concentration in the water shall be determined by the Regional Water Quality Control Board's Analytical Methods or any other method approved by the APCO.
- 8-47-603 Determination of Emissions:** Emissions of organic compounds as specified in sections 8-47-301 and 8-47-302 shall be measured as prescribed in the Manual of Procedures, Volume IV ST-7.