

**CALIFORNIA COASTAL COMMISSION**

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Staff: Tiffany S. Tauber  
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Hearing Date: January 9, 2009  
Commission Action:

## STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **1-08-032**

APPLICANT: **Abbie M. Colbert**

AGENT: Streamborn – Juli Brady

PROJECT LOCATION: 19290 South Harbor Drive, Fort Bragg, Mendocino County (APN 018-150-21)

PROJECT DESCRIPTION: (1) Excavate approximately 850 cubic yards of contaminated soil from within an approximately 1,920 square foot area to a depth of approximately 12 feet; (2) install temporary sheet piling around the perimeter of the excavated area; and (3) install four 2-inch diameter groundwater monitoring wells.

LOCAL APPROVALS RECEIVED: None Required.

OTHER APPROVALS RECEIVED: North Coast Regional Water Quality Control Board

OTHER APPROVALS REQUIRED: (1) Mendocino County Department of Environmental Health; (2) RWQCB Notice of Intent to Comply with General Waste Discharge Requirements

SUBSTANTIVE FILE DOCUMENTS: (1) “*Workplan for Excavation and Subsequent Groundwater Monitoring, 19290 South Harbor Drive, Fort Bragg, CA (RWQCB Case No. 1TMC577)*,” prepared by Streamborn, dated July 28, 2008; and (2) “*Letter Report - Supplemental Soil and Groundwater Investigation Conducted 9-10 October 2008, 19290 South Harbor Drive, Fort Bragg CA (RWQCB Case No. 1TMC577)*,” prepared by Streamborn, dated October 24, 2008.

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**SUMMARY OF STAFF RECOMMENDATION:**

Staff recommends that the Commission approve with conditions the coastal development permit for the proposed contaminated soil remediation project. The proposed project involves removing contaminated soil impacted by former underground gasoline and diesel storage tanks at the subject site by excavating approximately 850 cubic yards of soil from within an approximately 1,920 square foot area to a depth of approximately 12 feet. Temporary sheet piling would be installed around the perimeter of the excavated area to stabilize the walls of the excavation. Due to the high groundwater level at the site, the excavation area would be dewatered. The water would be pumped into above-ground storage tanks, sampled, profiled, and disposed of at an appropriately permitted facility. The applicant proposes to add approximately 550 pounds of oxygen-release compound within the backfill material and install a 2-inch diameter slotted PVC infiltration pipe embedded within the backfill for potential future treatment of residual contamination. Additionally, four 2-inch diameter groundwater monitoring wells would be installed to a depth of 12 feet in accessible areas surrounding existing structures to monitor long-term residual groundwater concentrations, temporal trends, and attenuation parameters.

The subject site is located at the north end of South Harbor Drive, on the southern bank of the Noyo River in an unincorporated area of Fort Bragg, Mendocino County. The site is located approximately 30 feet from the edge of the Noyo River and is developed with an existing warehouse structure previously used for commercial fishing activities that is currently vacant. The surrounding harbor area is comprised of mixed uses including a marina, boat repair facilities, and recreational and commercial fishing facilities.

The proposed excavation is intended to remove the most heavily contaminated soil to minimize the health and safety hazards and environmental impacts associated with contaminant migration to the Noyo River and vapor intrusion at adjacent structures. Overall, the proposed project is protective of water quality and the biological productivity of the Noyo River, as the proposed excavation and removal of the contaminated soil would minimize environmental and water quality impacts associated with potential contaminant migration to the Noyo River. However, as the proposed project involves ground disturbance and excavation of contaminated soils as close

as 30 feet from the Noyo River, potential adverse impacts to coastal water quality could occur in the form of contaminated runoff and sedimentation. Staff is recommending several special conditions described below to minimize potential adverse impacts to water quality and the biological productivity of the Noyo River.

A workplan was prepared for the proposed project that lays out the scope of work for excavation of the contaminated soil and groundwater monitoring at the site. The workplan was reviewed and approved by the Regional Water Quality Control Board. Additionally, the Commission's Water Quality unit staff reviewed the proposed workplan and determined that the proposed method of excavation and offsite disposal is generally acceptable and, with recommended special conditions, would not result in significant adverse impacts to coastal water quality.

The proposed excavation workplan includes measures that would minimize the potential for contaminated runoff to reach the Noyo River, including (1) all excavated soil would be placed directly in transport vehicles to be immediately taken offsite rather than being stockpiled onsite, which would minimize the potential for contaminated runoff and sedimentation, (2) groundwater from within the dewatered excavation area would be pumped into an onsite storage tank/truck and disposed of offsite at an appropriate disposal facility, and (3) four groundwater monitoring wells would be installed to monitor long-term residual groundwater impacts. To ensure that the applicant carries out the proposed project consistent with the workplan prepared for the project, staff recommends Special Condition No. 2 that requires the applicant to undertake the excavation, disposal, and monitoring activities in accordance with the workplan prepared for the project.

The water quality of the Noyo River could also be adversely affected by the introduction of potentially hazardous materials, such as fuels and oils associated with excavation and transport equipment and from sediment leaving the site during excavation work. To ensure that adverse water quality impacts associated with construction equipment and sedimentation are minimized, Special Condition No. 3 imposes certain construction-related responsibilities requiring the implementation of Best Management Practices as proposed by the applicant pertaining to construction equipment, dewatering, soil management, and repaving. To further minimize potential significant adverse impacts to the water quality of the Noyo River from runoff and sediment mobilization, staff recommends Special Condition No. 1 that requires the proposed excavation to be conducted during the dry season between May 1 and October 1.

The proposed excavation would not remove all of the contaminated soil present at the site because the contamination has spread beneath existing surrounding structures. Therefore, the proposed workplan involves adding an oxygen-releasing compound to the backfill following excavation and installing infiltration piping for potential future treatment of residual contamination. Special Condition No. 5 expressly requires that any future remedial actions proposed at the site shall not be performed until the applicant obtains an amendment to this coastal development permit or a new permit to ensure that the Commission would have the ability to review all future proposed remedial activities on the site to ensure that such activities

would not be designed or conducted in a manner that would result in significant adverse impacts to water quality or other coastal resources.

The applicant indicates that a permit is required from the Mendocino County Department of Environmental Health (DEH) for the proposed contaminated soil excavation. To ensure that the proposed project has been reviewed and approved by DEH, the Commission attaches Special Condition No. 6 requiring the applicant to submit evidence of approval of the proposed excavation from DEH prior to issuance of the coastal development permit, or evidence that no further review and approval is required by DEH.

As conditioned, staff believes that the project is fully consistent with the Chapter 3 policies of the Coastal Act.

**The Motion to adopt the Staff Recommendation of Approval with Conditions is found on page 4 below.**

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**STAFF NOTES:**

1. Standard of Review

The proposed project is located within an unincorporated area of Mendocino County in an area of the Commission's retained permit jurisdiction. The County of Mendocino has a certified LCP, but the proposed project is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

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**I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION:**

The staff recommends that the Commission adopt the following resolution:

**Motion:**

I move that the Commission approve Coastal Development Permit No. 1-08-032 pursuant to the staff recommendation.

**STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

**RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

**II. STANDARD CONDITIONS: See Attachment A.**

**III. SPECIAL CONDITIONS:**

**1. Timing of Construction**

All development authorized by Coastal Development Permit No. 1-08-032 shall be performed between May 1 and October 1.

**2. Conformance of the Remediation Activity to the Workplan**

The permittee shall undertake the excavation, disposal, and monitoring activities as proposed in accordance with (a) the workplan entitled "*Workplan for Excavation and Subsequent Groundwater Monitoring, 19290 South Harbor Drive, Fort Bragg, CA (RWQCB Case No. ITMC577)*," prepared by Streamborn, dated July 28, 2008, and as modified by the supplemental plan entitled "*Letter Report - Supplemental Soil and Groundwater Investigation Conducted 9-10 October 2008, 19290 South Harbor Drive, Fort Bragg CA (RWQCB Case No. ITMC577)*," prepared by Streamborn, dated October 24, 2008, and (b) the other Special Conditions of Coastal Development Permit No. 1-08-032. Any proposed changes to the workplan as modified shall be reported to the Executive Director. No changes to the workplan as modified shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

**3. Hazardous Materials and Sediment Control Responsibilities**

The permittee shall comply with the following work-related requirements:

A. Construction Equipment Practices.

These practices shall apply to all equipment mobilized to the site, including sheet pile driving equipment, excavation equipment, and soil transport equipment:

1. Prior to mobilization to the site, all equipment shall be operated in a controlled environment and examined for potential and actual leaks of hazardous materials (such as hydraulic fluid leaks). Any observed leaks shall be repaired. Any potential leaks shall be rectified by replacing or repairing the suspect fittings or equipment;
2. Periodic (daily or more frequent as appropriate) inspections shall be conducted for equipment operated at the site. Any potential or actual releases of hazardous materials (such as hydraulic fluid leaks) shall be immediately corrected or the equipment shall be immediately demobilized from the site;
3. Any actual releases of hazardous materials (such as hydraulic fluid leaks) shall be immediately contained and cleaned up.

B. Dewatering Equipment Practices.

1. Prior to mobilization to the site, the water storage tank shall be examined and tested by the tank rental agency and certified "leak free;" and
2. Periodic (daily or more frequent as appropriate) inspections shall be conducted for the dewatering pump and piping at the site. Any potential or actual leaks shall be immediately corrected or the equipment shall be immediately demobilized from the site.

C. Contaminated Soil Management

1. Contaminated soil shall be transferred directly from the (sheet pile enclosed) excavation to the transport vehicle. Stockpiling of contaminated soil shall not be permitted outside the (sheet pile enclosed) excavation;
2. Transport vehicles shall be staged on paved areas during loading with contaminated soil;
3. Any spills or releases of contaminated soil shall immediately be contained and cleaned up using brooms and shovels. The clean up debris shall be returned to the (sheet pile enclosed) excavation; and

4. At the end of each day, the transport vehicle staging area shall be cleaned up using brooms and shovels. The clean up debris shall be returned to the (sheet pile enclosed) excavation.

D. Repaving

1. Concrete paving at the site shall be conducted (only) within formwork. Concrete shall not be placed unless formwork has been constructed to prevent the migration of concrete to the adjacent Noyo Harbor; and
2. Concrete clean up shall not be permitted at the site. Ready-mix trucks shall be cleaned up offsite at appropriately-permitted facilities or shall return to the ready-mix plant for clean up.

**4. Excavated Material and Dewatering Disposal Plan**

- A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit for the review and approval of the Executive Director a plan for the disposal of the contaminated soil and wastewater removed from the excavation area. The plan shall identify all disposal sites that will be utilized and shall demonstrate that all disposal sites are in upland areas where the contaminated soil and water resulting from the project may be lawfully disposed.
- B. The permittee shall undertake development in accordance with the approved plan. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

**5. Future Development Limitations**

This permit is only for the development described in Coastal Development Permit No. 1-08-032. Any proposed future remedial activities at the site will require a permit amendment or a new coastal development permit, unless the Executive Director determines that no amendment is legally required.

**6. Department of Environmental Health Approval**

**PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director a copy of the final, approved excavation permit issued by Mendocino County Department of Environmental Health (DEH) to implement the proposed project, or evidence that no permit is required. The applicant shall inform the Executive Director of any changes to the project required by DEH. Such changes shall not be incorporated into the

project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

#### **IV. FINDINGS AND DECLARATIONS**

##### **1. Site Description**

The subject site is located at the north end of South Harbor Drive, on the southern bank of the Noyo River in an unincorporated area of Fort Bragg, Mendocino County (see Exhibit Nos. 1-3). The site is located approximately 30 feet from the edge of the Noyo River and is developed with an existing warehouse structure previously used for commercial fishing activities that is currently vacant. The surrounding harbor area is comprised of mixed uses including a marina, boat repair facilities, and recreational and commercial fishing facilities.

##### **Site History**

The subject property was operated as a commercial fishing facility (Alito Fish House) from 1946 until circa the 1970's. Three underground storage tanks (550 gallon diesel, 550 gallon gasoline, and 500 gallon gasoline) were installed in the 1950's to provide fuel for fishing vessels. The former underground storage tanks were located in the southeastern portion of the subject property. Use of the underground storage tanks was reportedly discontinued in 1972 when a concrete slab was constructed over the tanks.

In June 2006, the underground storage tanks were removed pursuant to Coastal Development Permit Waiver No. 1-08-009-W. The underground storage tanks were disposed of offsite and the area was backfilled with excavated material. Four soil samples were collected and analyzed for total petroleum hydrocarbons as diesel (TPH-diesel), TPH-gasoline, benzene, toluene, ethylbenzene, total xylenes (BTEX), and volatile organic compounds. The soil sampling results indicated that the soil had been impacted by releases of fuel from the former underground storage tanks. No remediation of contaminated soil was performed as part of the underground tank removal.

In February 2008, an additional soil and groundwater investigation was performed by conducting five direct-push borings pursuant to Coastal Development Permit Waiver No. 1-08-002-W. Soil and grab groundwater samples were collected and analyzed for TPH-diesel and TPH-gasoline/BTEX/fuel oxygenates, volatile organic compounds, total dissolved solids, chloride, and salinity. The February 2008 investigation revealed high concentrations of TPH-diesel, TPH-gasoline, and benzene contamination resulting in risks to human health and the environment via vapor intrusion and migration of contaminants to the adjacent Noyo River.

A workplan for the removal of the contaminated soil was prepared by the applicant's agent, Streamborn, entitled, "*Workplan for Excavation and Subsequent Groundwater Monitoring 19290 South Harbor Drive, Fort Bragg CA, (RWQCB Case No. 1TMC577)*," and dated July 28, 2008.

The workplan lays out a scope of work for excavation of the contaminated soil and groundwater monitoring at the site. The workplan dated July 28, 2008 was reviewed by the Regional Water Quality Control Board (RWQCB) and the proposed scope of work was approved by the RWQCB in a letter dated August 11, 2008. The July 2008 workplan included measures to more precisely determine the lateral and vertical extent of the contamination and the limits of the proposed excavation by conducting cone penetrometer testing (CPT) and membrane interface probe (CPT/MIP) soundings.

In October 2008, the cone penetrometer testing (CPT) and membrane interface probe (CPT/MIP) soundings were conducted at eight locations at the site pursuant to Coastal Development Permit Waiver No. 1-08-027-W. Based on the results of the CPT/MIP testing, it was determined that the area requiring excavation was more extensive than originally-anticipated during preparation of the July 2008 workplan. The originally-anticipated area was approximately 1,380 square feet and involved excavating approximately 400 cubic yards of soil, while the revised area is approximately 1,920 square feet and involves excavating approximately 850 cubic yards of soil. A supplemental report dated October 24, 2008 was prepared by Streamborn entitled, "*Letter Report Supplemental Soil and Groundwater Investigation Conducted 9-10 October 2008, 19290 South Harbor Drive, Fort Bragg CA (RWQCB Case No. 1TMC577)*". The supplemental report incorporates the revisions to the proposed workplan and scope of excavation. In a letter dated November 7, 2008, the RWQCB indicates that RWQCB staff has reviewed the October 2008 supplemental report and concurs with the revised proposed excavation plan to remove heavily impacted soils at the subject site. (See Exhibit Nos. 5-7.)

## **2. Project Description**

The proposed project involves removing contaminated soil impacted by former underground gasoline and diesel storage tanks at the subject site by excavating approximately 850 cubic yards of soil from within an approximately 1,920 square foot area to a depth of approximately 12 feet (see Exhibit No. 4). Temporary sheet piling would be installed around the perimeter of the excavated area to stabilize the walls of the excavation. Due to the high groundwater level at the site, the excavation area would be dewatered. The water would be pumped into above-ground storage tanks, sampled, profiled, and disposed of at an appropriately permitted facility.

Excavated soil would be loaded directly onto vehicles and transported to an offsite disposal facility. The proposed excavation includes measures that would minimize the potential for contaminated runoff to reach the Noyo River. The plan proposes that all excavated soil would be placed directly in transport vehicles to be immediately taken offsite rather than being stockpiled onsite, which would minimize the potential for contaminated runoff and sedimentation. Additionally, groundwater from within the dewatered excavation area would be pumped into an onsite storage tank/truck and disposed of offsite at an appropriate disposal facility. The excavated area would then be backfilled with approximately 500 cubic yards of clean, imported fill and a separation geotextile liner would be installed. The excavated area would be repaved following completion of remediation activities.

The proposed excavation is intended to remove the most heavily contaminated soil to minimize the health and safety hazards and environmental impacts associated with contaminant migration to the Noyo River and vapor intrusion at adjacent structures. The proposed excavation would not remove all of the contaminated soil present at the site because some of the contamination has spread beneath existing structures, which would not be removed at this time. To counteract this limitation, the applicant proposes to add approximately 550 pounds of oxygen-release compound within the backfill material and install a 2-inch diameter slotted PVC infiltration pipe embedded within the backfill for potential future treatment of residual contamination.

Additionally, four 2-inch diameter groundwater monitoring wells would be installed to a depth of 12 feet in accessible areas surrounding existing structures to monitor long-term residual groundwater concentrations, temporal trends, and attenuation parameters. The wells would be monitored quarterly for the first year and twice-per-year thereafter pursuant to groundwater sampling and testing requirements set forth in the proposed workplan. The monitoring results would indicate whether additional investigation is needed (such as wells inside the existing structures, tidal influence studies, etc.) and/or whether additional future remediation is needed.

It is anticipated that the proposed excavation would be completed within three days. No work would occur within the Noyo River or within any other environmentally sensitive habitat areas.

### **3. Protection of Water Quality**

Section 30230 of the Coastal Act states, in applicable part:

*Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Discussion:

Coastal Act Sections 30230 and 30231 protect the biological productivity and quality of coastal waters, streams, and wetlands through, among other means, minimizing adverse effects of waste water discharges and entrainment, and controlling runoff.

As described above, the proposed project involves removing approximately 850 cubic yards of contaminated soil from the subject site. Overall, the proposed project is protective of water quality and the biological productivity of the Noyo River, as the proposed excavation and removal of the contaminated soil would minimize environmental and water quality impacts associated with potential contaminant migration to the Noyo River. However, as the proposed project involves ground disturbance and excavation of contaminated soils as close as 30 feet from the Noyo River, potential adverse impacts to coastal water quality could occur in the form of contaminated runoff and sedimentation.

A workplan for the proposed contaminated soil removal was prepared by Streamborn consultants entitled, "*Workplan for Excavation and Subsequent Groundwater Monitoring, 19290 South Harbor Drive, Fort Bragg, CA,*" dated July 28, 2008 (RWQCB Case No. 1TMC577). A supplement to the workplan dated October 24, 2008 was prepared following further soil and groundwater investigations at the site to determine the lateral and vertical limits of contamination. The workplan sets forth the proposed scope of work for excavation and subsequent groundwater monitoring, including the installation of sheet piling, dewatering, soil disposal, backfilling and repaving, installation of monitoring wells, and groundwater sampling. As discussed in Finding 2 above regarding site history, the workplan was reviewed and approved by the Regional Water Quality Control Board (RWQCB). In a letter from the RWQCB dated November 7, 2008, the RWQCB states that "*staff concurs with the proposed excavation plan to remove heavily impacted soils as a cost-effective and expedited remedial measure.*" Additionally, the Commission's Water Quality unit staff reviewed the proposed workplan and determined that the proposed method of excavation and offsite disposal is generally acceptable and, as conditioned as described herein, would not result in significant adverse impacts to coastal water quality. (See Exhibit Nos. 6 & 7.)

The proposed excavation includes measures that would minimize the potential for contaminated runoff to reach the Noyo River. The plan proposes that all excavated soil would be placed directly in transport vehicles to be immediately taken offsite rather than being stockpiled onsite, which would minimize the potential for contaminated runoff and sedimentation. Additionally, groundwater from within the dewatered excavation area would be pumped into an onsite storage tank/truck and disposed of offsite at an appropriate disposal facility. The proposed project also involves the installation of four groundwater monitoring wells to monitor long-term residual groundwater impacts. The wells are proposed to be monitored quarterly for the first year and twice-per-year thereafter pursuant to groundwater sampling and testing requirements set forth in the proposed workplan. The monitoring results would be used to determine whether additional investigation and/or additional future remediation are needed. To ensure that the applicant carries out the proposed project consistent with the workplan prepared for the project, the Commission attaches Special Condition No. 2 that requires the applicant to undertake the

excavation, disposal, and monitoring activities in accordance with the workplan and supplemental report prepared for the project.

The water quality of the Noyo River could also be adversely affected by the introduction of potentially hazardous materials, such as fuels and oils associated with excavation and transport equipment and from sediment leaving the site during excavation work. The applicant proposes to employ Best Management Practices (BMPs) pertaining to construction equipment, dewatering, soil management, and repaving. The proposed BMPs include, for example, (1) inspecting and maintaining construction equipment to avoid fuel leaks and releases of hazardous materials, (2) inspecting the dewatering pump and piping for leaks, (3) prohibiting stockpiling of contaminated soil outside the sheet pile-enclosed excavation area, (4) containing and cleaning any spills or releases of contaminated soil immediately using brooms and shovels, (5) limiting concrete paving to within formwork, and (6) cleaning all concrete equipment off-site at an appropriate facility. To ensure that adverse water quality impacts associated with construction equipment and sedimentation are minimized, Special Condition No. 3 requires that these BMPs be implemented as proposed.

The proposed project involves disposing of the excavated material and water generated from the dewatering of the excavation area at appropriately-licensed disposal facilities. The proposed workplan does not specify the particular disposal location for either the contaminated soil or the wastewater. Therefore, to ensure that the soil and water removed from the excavated area is adequately disposed of at an approved location, the Commission attaches Special Condition No. 4 requiring the applicant to submit a disposal plan that identifies the disposal sites that would be utilized and demonstrates that all disposal sites are in upland areas where contaminated material generated from the proposed project may be lawfully disposed.

The Commission finds that conducting the proposed excavation of contaminated soils during the rainy season would increase the risk of contaminated sediments from the exposed excavation site to be entrained in runoff that could potentially reach the Noyo River, especially given the close proximity of the excavation area to the river (approximately 30 feet away). The applicant has not specified when the proposed excavation would occur. Thus, to further minimize potential significant adverse impacts to the water quality of the Noyo River from runoff and sediment mobilization, the Commission attaches Special Condition No. 1 that requires the proposed excavation to be conducted during the dry season between May 1 and October 1.

The proposed excavation would not remove all of the contaminated soil present at the site because the contamination has spread beneath existing surrounding structures. Therefore, the proposed workplan involves adding an oxygen-releasing compound to the backfill following excavation and installing infiltration piping for potential future treatment of residual contamination. Special Condition No. 5 expressly requires that any future remedial actions proposed at the site shall not be performed until the applicant obtains an amendment to this coastal development permit or a new permit to ensure that the Commission would have the ability to review all future proposed remedial activities on the site to ensure that such activities

would not be designed or conducted in a manner that would result in significant adverse impacts to water quality or other coastal resources.

The applicant indicates that a permit is required from the Mendocino County Department of Environmental Health (DEH) for the proposed contaminated soil excavation. To ensure that the proposed project has been reviewed and approved by DEH, the Commission attaches Special Condition No. 6 requiring the applicant to submit evidence of approval of the proposed excavation from DEH prior to issuance of the coastal development permit, or evidence that no further review and approval is required by DEH.

As discussed above, the Regional Water Quality Control Board has reviewed the proposed project and approved the proposed workplan. In the letter to the applicant dated August 11, 2008, the RWQCB stated that *“staff finds that this scope of work is generally acceptable with the following comments...”* (see Exhibit No. 7). The comments included (1) that a groundwater sample should be collected from each of the CPT borings to obtain vertical characterization of the groundwater at the site, (2) that the applicant may want to consider obtaining a permit to dispose of the water from dewatering the excavation area to the sanitary sewer, and (3) that the proposed addition of an oxygen-releasing compound to the backfill would require a Notice of Intent (NOI) to comply with the General Waste Discharge Requirements Order No. R1-2004-0021. The applicant adhered to the comment regarding groundwater sampling during the CPT borings conducted in October 2008 described above. The RWQCB did not require any additional mitigation measures or revisions to the workplan as proposed. Section 30412 prevents the Commission from modifying, adopting conditions, or taking any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality. As discussed above, the Commission is imposing several special conditions that require mitigation measures to ensure the protection of coastal water quality and biological productivity as required by Coastal Act Sections 30230 and 30231. These measures are consistent with, and further the goals of the RWQCB comments identified above. Commission staff has discussed the requirements of the special conditions with RWQCB staff who concur with Commission staff regarding the additional water quality mitigation measures. Therefore, conditions and/or BMPs required by the Commission to minimize adverse impacts to water quality from the proposed excavation activities would not conflict with actions of the RWQCB pursuant to the requirements of Coastal Act Section 30412.

Therefore, as conditioned, the Commission finds that the biological productivity and quality of coastal waters will be maintained and the project, as conditioned, is consistent with Sections 30230, 30231, and 30412 of the Coastal Act.

#### **4. Public Access**

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or adequate access exists

nearby. Section 30211 requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214 of the Coastal Act, the Commission is also limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on public access.

Although the project is located between the first public road and the Noyo River, an inlet of the sea, the proposed project would not adversely affect public access. The project site is within an area adjacent to the Noyo River that supports mixed harbor-related uses. There are no public access areas or trails at the vicinity of the project site that would be affected by the proposed project. Furthermore, the proposed project would not create any new demand for public access or otherwise create any additional burdens on public access.

Therefore, the Commission finds that the proposed project does not have any significant adverse effect on public access, and that the project as proposed without new public access is consistent with the requirements of Coastal Act Sections 30210, 30211, 30212, and 30214.

## **5. California Environmental Quality Act**

Mendocino County is the lead agency for purposes of CEQA review. The County determined that the proposed project is categorically exempt (Class 1) from CEQA requirements.

Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirement of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

### Alternatives Analysis

Two alternatives in addition to the proposed excavation and off-site disposal alternative were evaluated for the remediation of the contaminated soil at the site, including (1) the no project alternative, and (2) on-site consolidation and capping. As explained below, each of these alternatives is infeasible and/or does not result in a project that is less environmentally damaging than the proposed project. The Commission finds, as discussed below, that as conditioned, there are no other feasible alternatives available which would lessen any significant adverse impact that the proposed activity would have on the environment.

(1) No Project

The No Project alternative would involve leaving the contaminated soil on-site in the current condition. The No Project alternative would provide no long-term risk reduction, or reduction of mobility or volume of contaminated soils known to be present at the site. Due to the close proximity of the site to the Noyo River and the high groundwater level, leaving the contaminated soil in place would continue to pose a threat to the water quality and biological productivity of the Noyo River. This alternative would not meet the objective of reducing potential migration of contamination to the Noyo River and reducing vapor intrusion to surrounding structures and thus, would not be protective of human health or the environment. Therefore, the Commission finds that the No Project alternative is not a feasible alternative to the proposed excavation and off-site disposal of the contaminated soil, which would lessen any significant adverse impact that the proposed activity would have on the environment.

(2) On-Site Consolidation and Capping

A common remediation practice involves consolidating contaminated soils in a lined, underground storage cell and capping the material on-site. Given the limited size of the subject parcel, which is largely developed with an existing structure, there would be limited area to construct an underground consolidation cell large enough to properly contain and store the volume of contaminated soil. More significantly, as the site is directly adjacent to the Noyo River and the groundwater level is very high, storing the contaminated soil underground on site would continue to pose significant risk of contamination migration to the river. A failure of the liner or cap could allow consolidated contaminants to quickly reach the river. While excavating the contaminated soil and consolidating it into one area with a protective liner would provide greater protection to the river and groundwater than the contaminated soils that currently extend underground without a protective barrier, the long-term risk of contamination migration to the river and groundwater would not be minimized. Unlike sites where on-site consolidation and capping can be achieved with a significant setback from coastal waters and adequate groundwater separation, the consolidation and capping technique at the subject site directly adjacent to the Noyo River would not provide increased protection of water quality and coastal resources. Therefore, the Commission finds that the on-site consolidation and capping alternative is not a feasible alternative to the proposed excavation and off-site disposal of the contaminated soil which would lessen any significant adverse impact that the proposed activity would have on the environment.

(3) Proposed Excavation and Off-site Removal

As described in the project description finding, the proposed project involves excavating approximately 850 cubic yards of contaminated soil and transporting the material to an off-site, appropriately licensed disposal facility. Removal and offsite disposal is an effective and implementable alternative that would be protective of human health and the environment. Excavation and off-site disposal would also provide an expeditious means of removing the contaminated soil from the site, as the material would be directly loaded into transport trucks and

taken to the disposal facility without need for temporary on-site stockpiling of the soil, thereby limiting the duration of exposure to humans and the environment. Truck transportation has inherent impacts associated with carbon emissions. However, the proposed project is relatively small in scale and it is estimated that only approximately 25 truckloads would be necessary, or about one truckload per hour over the course of three days of excavation. For comparison, the Commission recently reviewed the proposed on-site consolidation and capping of contaminated soils at the former Georgia Pacific (GP) California Wood Products Manufacturing Facility located in Fort Bragg (A-1-FTB-05-053-A6). In reviewing project alternatives it was determined that off-site disposal of contaminated soils from just one area of the former GP site (Operable Unit A) would involve approximately 1,000 truck trips. Therefore, the Commission finds that given the smaller scale and extent of the proposed project, the benefits to water quality and the biological productivity of the Noyo River from excavating the contaminated soil and disposing of it off site would exceed the potential impacts associated with approximately 25 truck trips.

As discussed above in the findings about Coastal Act consistency, the Commission has imposed special conditions to avoid and mitigate all significant adverse impacts that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be found consistent with the policies of the Coastal Act. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As specifically discussed in these above findings which are incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impact have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

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**Exhibits:**

1. Regional Location Map
2. Vicinity Map
3. Aerial Site Photo
4. Site Plan
5. Sampling Map & Contamination Measurements
6. Excerpts from October 24, 2008 Workplan
7. RWQCB Correspondence

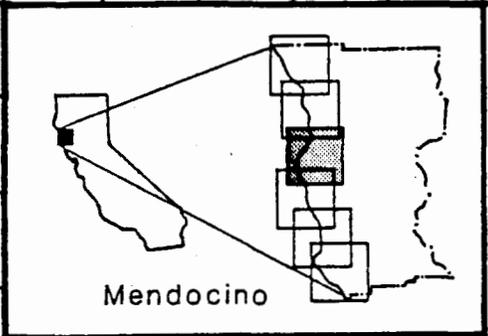
## ATTACHMENT A

### Standard Conditions:

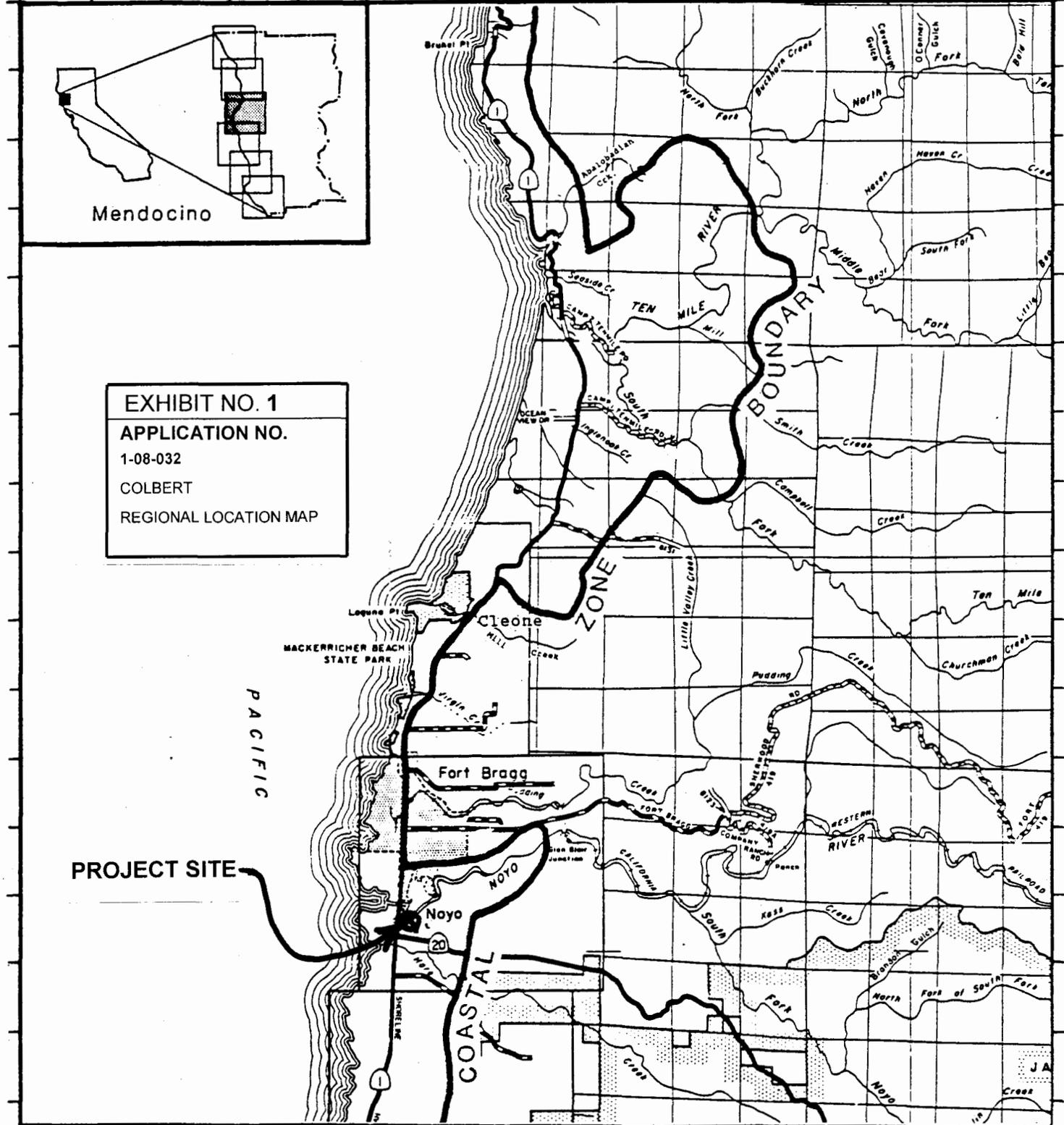
1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

A B C D E F G H I J K L M N O

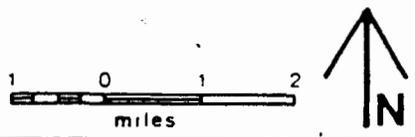
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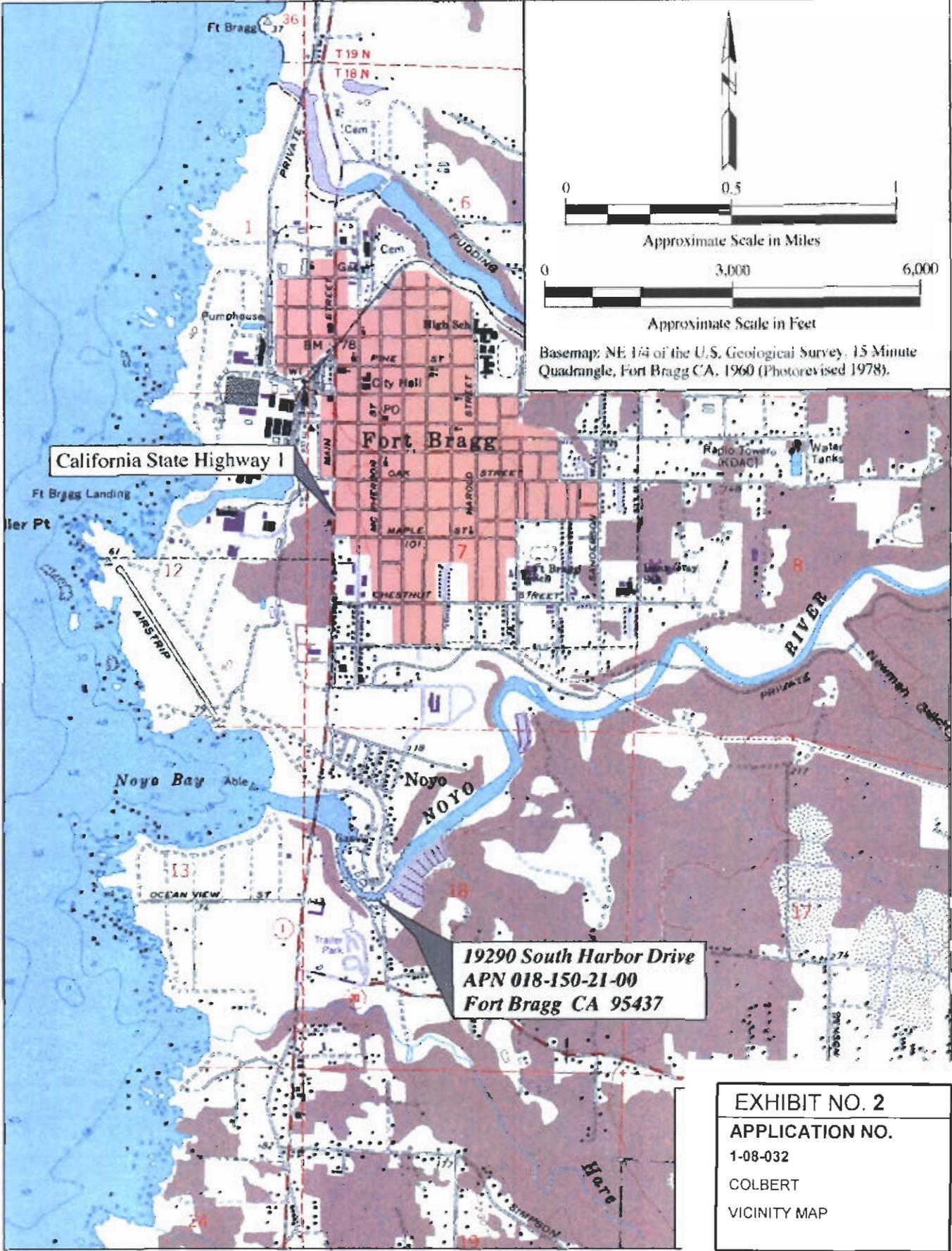


**EXHIBIT NO. 1**  
**APPLICATION NO.**  
 1-08-032  
 COLBERT  
 REGIONAL LOCATION MAP



**LOCATION MAP**





0 0.5 1  
Approximate Scale in Miles

0 3,000 6,000  
Approximate Scale in Feet

Basemap: NE 1/4 of the U.S. Geological Survey, 15 Minute Quadrangle, Fort Bragg CA, 1960 (Photorevised 1978).



**19290 South Harbor Drive  
APN 018-150-21-00  
Fort Bragg CA 95437**



Approximate Scale in Feet

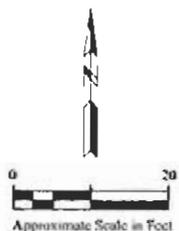
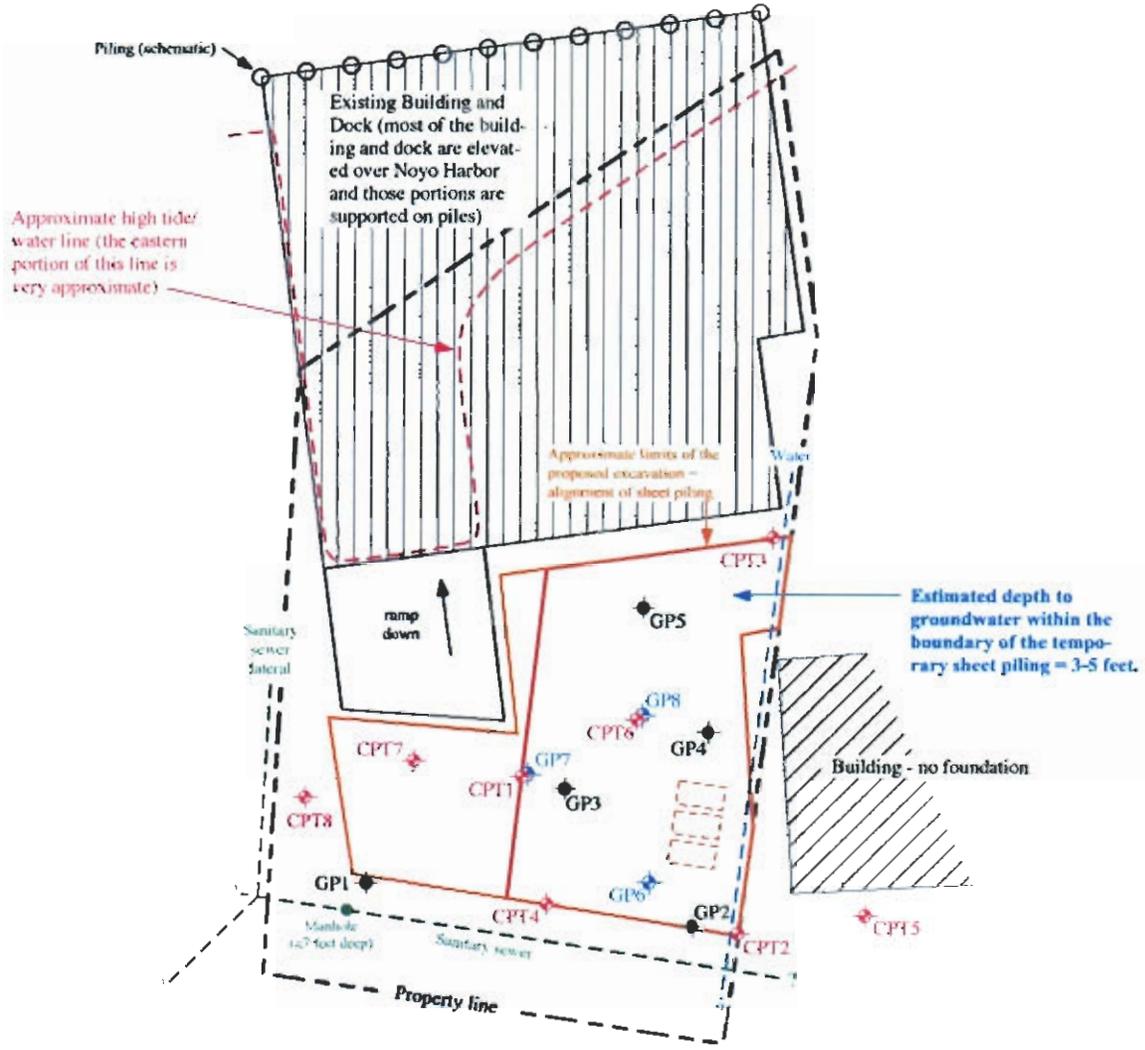
Aerial Photo: 3 September 1989.  
Photo 880184-Noyo Bay, Radman  
Aerial Surveys, Sacramento CA.

**EXHIBIT NO. 3**  
**APPLICATION NO.**  
1-08-032  
COLBERT  
AERIAL SITE PHOTO

Legend

- Former Gasoline and Diesel Under-ground Tanks (removed Jul 2006)
- ◆ Direct-Push Boring (Feb 2008) (Depth = ±15 feet)
- ◆ Direct-Push Boring (Oct 2008) (Depth = ±12 to 16 feet)
- ◆ Cone Penetration Test / Membrane Interface Probe (CPT/MIP) Sounding (Oct 2008) (Depth = ±17 to 36 feet)
- Initially-Proposed Excavation / Sheet Pile Limits (±1,380 square feet)
- Revised Excavation / Sheet Pile Limits (±1,920 square feet)

**Noyo Harbor/Noyo River**



Basemap: Survey by Richard Allen Scale, circa November 2005.

**EXHIBIT NO. 4**  
**APPLICATION NO.**  
 1-08-032  
 COLBERT  
 SITE PLAN

Legend

- ◻ Former Gasoline and Diesel Under-ground Tanks (removed Jul 2006)
- ◆ Direct-Push Boring (Feb 2008) (Depth = ±15 feet)

- ◆ Cone Penetration Test / Membrane Interface Probe (CPT/MIP) Sounding (Oct 2008) (Depth = ±17 to 36 feet)
- ◆ Direct-Push Boring (Oct 2008) (Depth = ±12 to 16 feet)



- Initially-Proposed Excavation / Sheet Pile Limits (±1,380 square feet)
- Revised Excavation / Sheet Pile Limits (±1,920 square feet)

Notes

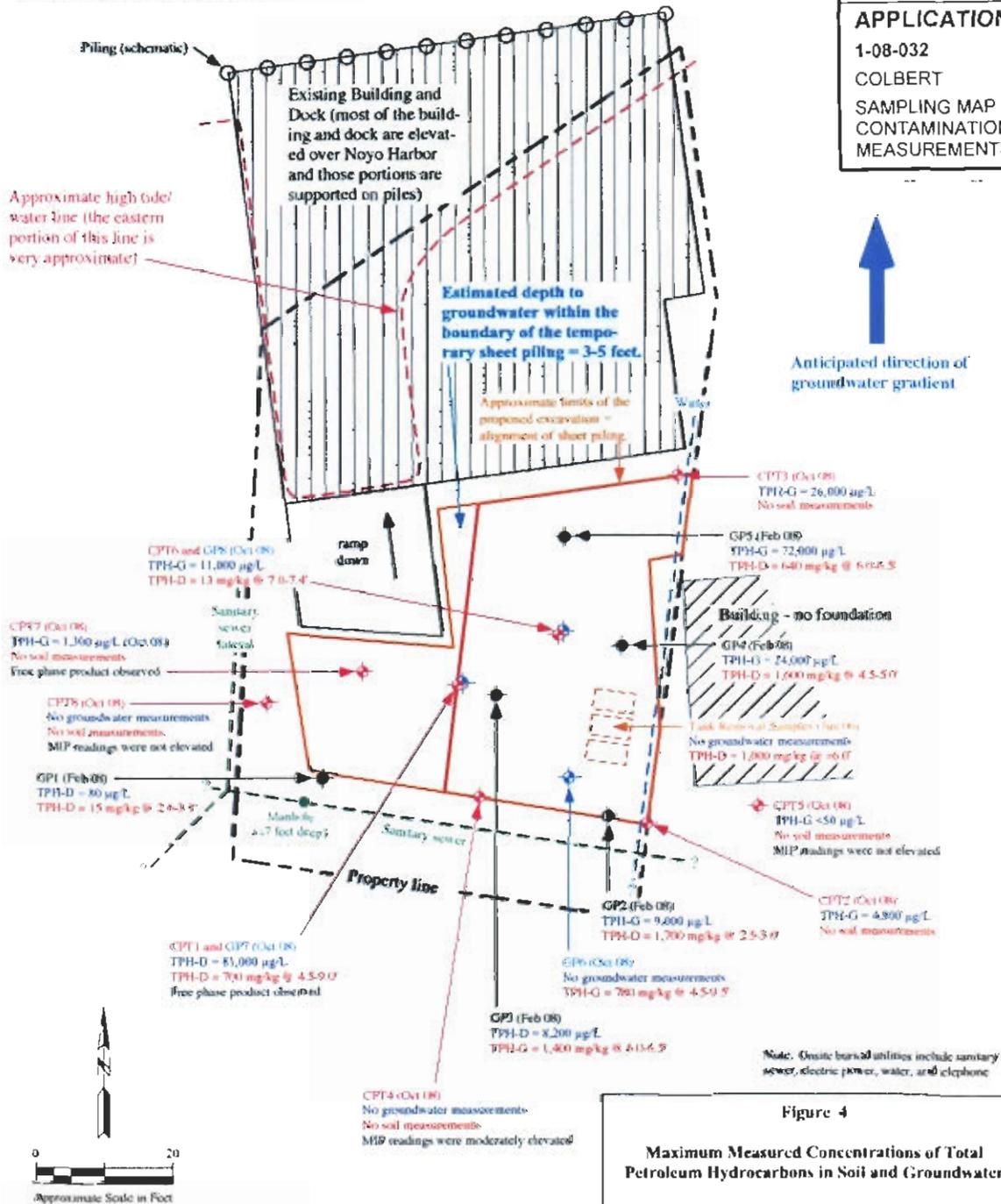
- (1) TPH-G = total petroleum hydrocarbons as gasoline.
- (2) TPH-D = total petroleum hydrocarbons as diesel.
- (3) Groundwater concentrations cited in units of µg/L (ppb).
- (4) Soil concentrations cited in units of mg/kg (ppm).
- (5) Maximum measured concentrations cited at each location.
- (6) MIP = membrane interface probe.
- (7) Where appropriate, MIP results are also cited.

**Noyo Harbor/Noyo River**

**EXHIBIT NO. 5**

**APPLICATION NO.**

1-08-032  
COLBERT  
SAMPLING MAP &  
CONTAMINATION  
MEASUREMENTS



Basemap: Survey by Richard Allen Seale, circa November 2005

Abbie M. Colbert  
18530 North Highway 1  
Fort Bragg CA 95437

24 October 2008

Project No. P308

Letter Report  
Supplemental Soil and Groundwater Investigation Conducted 9-10 October 2008  
19290 South Harbor Drive  
Fort Bragg CA  
RWQCB Case No. 1TMC577

Dear Ms. Colbert (ecopy):

This report describes our supplemental soil and groundwater investigation conducted 9-10 October 2008 at 19290 South Harbor Drive, Fort Bragg CA. The supplemental soil and groundwater investigation was performed pursuant to our workplan dated 28 July 2008 (Streamborn 2008c).

The purpose of the supplemental investigation was to:

- Confirm the cost-effectiveness of excavation as an expedited remedial measure.
- Define the depth and lateral extent of soil needing excavation.
- Collect and analyze samples of soil representative of the soil proposed for excavation. The sample analyses would be used for profiling the soil for landfill disposal.
- Define the lithology/stratigraphy below the base of the proposed excavation in order to evaluate excavation-dewatering requirements. If possible, identify continuous, low-permeability soil layers beneath the excavation into which sheet piling should be driven in order to minimize groundwater inflow during excavation.
- Collect geotechnical information for use in design of the sheet pile bracing system.

### EXECUTIVE SUMMARY

The results of our work are summarized in the following:

- Table 1 provides an environmental chronology.
- Table 2 provides a bibliography.

<b>EXHIBIT NO. 6</b>
<b>APPLICATION NO.</b>
1-08-032
COLBERT
EXCERPTS FROM OCTOBER 24, 2008 WORKPLAN (1 of 4)

### REVISED EXCAVATION PLAN (Figure 4)

Figure 4 contains a plot of the maximum measured concentrations of total petroleum hydrocarbons in soil and groundwater. Either TPH-diesel or TPH-gasoline was plotted on Figure 4; whichever was greater. Based on these results, we determined that the western boundary of the planned excavation should be moved approximately 24 feet west (compared to the previously-anticipated excavation limits). This will allow the excavation to incorporate contaminated soil in the vicinity of CPT1 and CPT7 (both of which contained free phase product).

Contaminant migration toward the west could be attributed to the loading dock ramp, which could have provided a local depression in the groundwater table, inducing groundwater flow toward the loading dock at certain times of the year.

The limits of the planned excavation skirt the existing loading dock ramp. The ramp is bordered on either side by  $\pm 3$ -foot high retaining walls. Reportedly, no plans exist for the ramp or retaining walls. Given this uncertainty, we believe the excavation should avoid the ramp and retaining walls, despite the likelihood that soil contamination exists beneath at least part of the ramp.

Expanding the western boundary of the excavation will increase the footprint of the excavation from approximately 1,380 square feet to approximately 1,920 square feet. The excavation remains on the property (itself) and the excavation does not encroach on the harbor (same as before).

The revised limits of the excavation (sheet piling limits) are based on the following:

- The southern limits are constrained by the existing sanitary sewer - although contamination likely exists south of the sewer, it would not be cost-effective to reroute the sewer or otherwise extend the sheet piling further south.
- The eastern limits are constrained by the existing structures. Excavation further east would require dismantling and reconstructing at least some of the structures on the neighboring property.
- The eastern portions of the northern limits are constrained by the existing onsite structure. Excavation further north would require dismantling and reconstructing the structure.
- The western portions of the northern limits are constrained by the concrete retaining walls that form the loading dock ramp. There reportedly are no plans available for these retaining walls; accordingly, the excavation has skirted the loading dock ramp. It may be necessary to offset the excavation further from the retaining walls if extended footings exist (which will not be known until sheet piles are driven).
- The western limits are not physically constrained; the western limits correspond to the estimated extent of contamination.

2 of 4

Based primarily on the membrane interface probe (MIP) results (Attachment 3), along with the soil sampling results (Table 4) and the boring logs (Attachment 4), we believe the majority of significant soil contamination begins at a depth of approximately 4 feet and extends to a depth of approximately 10 feet. Accordingly, we recommend increasing the maximum depth of the excavation from approximately 8 feet (previously anticipated) to approximately 11 feet (current recommendation).

Based on the testing results obtained to date, we estimate that excavation to a depth of approximately 11 feet will achieve a soil cleanup level of approximately 10 mg/kg TPH-diesel and/or 10 mg/kg TPH-gasoline, or less. This estimate is very approximate.

During excavation, uncontaminated surface soil should be initially excavated and segregated for reuse during backfill. The total depth of the excavation should be adjusted based on observations and additional testing during the excavation process; not all of the excavation necessarily needs to extend to the maximum depth of 11 feet.

We previously anticipated that approximately 400 (bank) cubic yards of soil would be excavated; all of which would be disposed of offsite. Based on the described changes, we now estimate that approximately 780 (bank) cubic yards ( $1,920 \times 11 / 27$ ) will be excavated. Of this, approximately 280 (bank) cubic yards ( $1,920 \times 4 / 27$ ) will be reused as backfill and the remainder, approximately 500 (bank) cubic yards will require offsite disposal. The contaminated soil will still be disposed of offsite at an appropriately-licensed landfill. Approximately 500 (bank) cubic yards of imported soil will be needed, compared to the previously-anticipated 400 (bank) cubic yards.

The analytical testing of the composite soil samples from GP6 and GP7 revealed concentrations of TPH-diesel between 310 and 700 mg/kg and TPH-gasoline between 130 and 780 mg/kg. Assuming the contaminated soil horizon exists between approximately 4 and 11 feet, assuming the area to be excavated encompasses approximately 1,920 square feet, assuming the average unit weight of soil = 110 pounds per cubic foot (1.5 tons per cubic yard), and assuming an average soil concentration of 505 mg/kg TPH-diesel and 455 mg/kg TPH-gasoline (the numeric average of the concentrations measured in GP6 and GP7), we estimate excavation will remove approximately 750 pounds of TPH-diesel and approximately 670 pounds of TPH-gasoline. These calculations help confirm the cost-effectiveness of excavation.

The sheet pile bracing system should be designed assuming an outside water depth of approximately 3 feet, an inside water depth of approximately 12 feet, and a maximum excavation depth of approximately 11 feet. The sheet pile bracing system should extend to a depth of at least 25 feet to encounter sufficiently low-permeability strata to minimize dewatering inflows. Additional embedment may be needed to satisfy piping concerns. Additional embedment will likely be needed to satisfy stability concerns for cantilevered piling. The contractor should retain an appropriately-licensed professional to design the sheet pile bracing system.

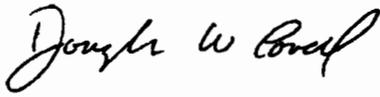
We believe that excavation will be cost-effective as an expedited remedial measure. Excavation should be conducted now, before monitoring wells are installed. If wells were to be installed before excavation, the wells would likely be disturbed by excavation activities and rendered useless.

It is Streamborn's professional opinion that the proposed excavation will remove the vast majority of the mass of contamination; however, physical constraints prevent exploring and excavating in all areas suspected to contain contamination. Streamborn believes there is a reasonable probability that the planned excavation, in combination with monitored natural attenuation, will be sufficient to protect human health and the environment at this site. In case these measures are insufficient, an infiltration gallery will be constructed within the excavation backfill to help facilitate further remediation.

Please contact us with any questions or comments.

Sincerely,

STREAMBORN



Douglas W. Lovell, PE  
Geoenvironmental Engineer



Attachments

- cc: Beth Lamb/North Coast Regional Water Quality Control Board, Santa Rosa CA (ecopy)
- Annette Poteracke/Underground Storage Tank Cleanup Fund (ecopy)
- Bryan Paulson/Paulson Construction, Albion CA (hardcopy)

This report was uploaded to Geotracker ([geotracker.swrcb.ca.gov](http://geotracker.swrcb.ca.gov))



**California Regional Water Quality Control Board  
North Coast Region  
Bob Anderson, Chairman**



Linda S. Adams  
Secretary for  
Environmental Protection

www.waterboards.ca.gov/northcoast  
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403  
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold  
Schwarzenegger  
Governor

November 7, 2008

Mr. Larry Colbert  
Mrs. Abbie Colbert  
18350 North Highway 1  
Fort Bragg, CA 95482

Dear Mr. and Mrs. Colbert:

Subject: Revised Excavation Work Plan

File: Colbert Property, 19290 South Harbor Drive, Fort Bragg, Case No.  
1TMC577

North Coast Regional Water Quality Control Board (Regional Water Board) staff has reviewed *Supplemental Soil and Groundwater Investigation Conducted 9-10 October 2008* (Letter Report) dated October 24, 2008, and prepared by Streamborn for the Colbert property at 19290 South Harbor Drive, Fort Bragg, California. The Letter Report included results of sampling from shallow groundwater at seven locations and from soil at three additional locations. Results of this sampling show that contamination is more extensive than previously believed. The Letter Report recommends expanding the western limits of the planned excavation and increasing the depth of the excavation from 8 feet to 11 feet. Staff concurs with the proposed excavation plan to remove heavily impacted soils as a cost-effective and expedited remedial measure.

If you have any questions, please call me at (707) 576-2669.

Sincerely,

Beth Lamb, C.E.G.  
Engineering Geologist

BML 110708\_Colbert4.doc

EXHIBIT NO. 7
APPLICATION NO. 1-08-032
COLBERT
RWQCB CORRESPONDENCE (1 of 3)

cc: Pete Lohman, Mendocino County, Division of Environmental Health, 501 Low Gap Rd., Rm 1326, Ukiah, CA 95482-3734  
Doug Lovell, P.O. Box 8330 Berkeley, Ca 94707-8330  
Howard Makela, 19335 Benson Lane, Fort Bragg, CA 95437

**California Environmental Protection Agency**

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**California Regional Water Quality Control Board  
North Coast Region  
Bob Anderson, Chairman**



Linda S. Adams  
Secretary for  
Environmental Protection

[www.waterboards.ca.gov/northcoast](http://www.waterboards.ca.gov/northcoast)  
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403  
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold  
Schwarzenegger  
Governor

August 11, 2008

Mr. Larry Colbert  
Mrs. Abbie Colbert  
18350 North Highway 1  
Fort Bragg, CA 95482

Dear Mr. and Mrs. Colbert:

Subject: Workplan for Excavation and Groundwater Monitoring

File: Colbert Property, 19290 South Harbor Drive, Fort Bragg, Case No.  
1TMC577

North Coast Regional Water Quality Control Board (Regional Water Board) staff has reviewed for *Workplan Excavation and Subsequent Groundwater Monitoring* (Workplan) dated July 28, 2008, prepared by Streamborn for the Colbert property at 19290 South Harbor Drive, Fort Bragg, California. The Workplan outlines a scope of work to excavate the area of highly impacted soil and groundwater to a depth of 8 feet. The limits of the excavation will be determined by the results from cone penetrometer (CPT) and membrane interface probe (MIP) soundings done prior excavation. In addition, the groundwater will be extracted during the excavation. Backfilling of the excavation will include emplacement of an oxygen-releasing compound (ORC Advanced) and installation of an infiltration pipe for anticipated further in-situ remediation. Also included in the workplan is the installation of four monitoring wells both on and off site.

Staff finds that this scope of work is generally acceptable with the following comments:

- A grab groundwater sample should be collected from each of the CPT borings in order to obtain vertical characterization of the groundwater at this site.
- Considering the proximity of the excavation to the Noyo River (approximately 30 feet) it may be necessary to extract a large volume of groundwater to dewater the excavation. It may be prudent to obtain a permit to discharge this water to the sanitary sewer, instead of containing the water on-site to be disposed after excavation at an appropriate facility.
- The addition of an oxygen-releasing compound (ORC) to the subsurface will require coverage under the General Waste Discharge Requirements (WDRs) Order No. R1-2004-0021 for *In Situ Bioremediation of Petroleum Hydrocarbons by the Addition of Nutrients, Microorganisms and/or an Oxygen Source to Groundwater and/or Soil*. A Notice of Intent (NOI) to comply with WDR Order

**California Environmental Protection Agency**

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2 of 3

No. R1-2004-0021 must be submitted to the Regional Water Board prior to adding ORC to the excavation.

In staff's previous letter dated June 23, 2008 we requested a sensitive receptor assessment of the area potentially impacted by the release on the Colbert property. This assessment was not included in with the work plans and is still due by September 1, 2008.

If you have any questions, please call me at (707) 576-2669.

Sincerely,



Beth Lamb, C.E.G.  
Engineering Geologist

BML 081108\_Colbert3.doc

cc: Pete Lohman, Mendocino County, Division of Environmental Health, 501 Low Gap Rd., Rm 1326, Ukiah, CA 95482-3734  
Doug Lovell, P.O. Box 8330 Berkeley, Ca 94707-8330  
Howard Makela, 19335 Benson Lane, Fort Bragg, CA 95437

**California Environmental Protection Agency**

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3 of 3